Customer relationship management as a business process

Douglas M. Lambert
Department of Marketing and Logistics, Fisher College of Business, The Ohio State University, Columbus, Ohio, USA

Abstract

Purpose – Increasingly, customer relationship management (CRM) is being viewed as a strategic, process-oriented, cross-functional, value-creating for buyer and seller, and a means of achieving superior financial performance. However, there is a need for a more holistic view of cross-functional as it relates to CRM. The purpose of this paper is to describe a macro level cross-functional view of CRM and 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 CRM 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 CRM practices.

Findings – The research resulted in a framework that managers can use to implement a cross-functional, cross-firm, CRM process in business-to-business relationships. Also, it should be useful to researchers interested in broadening their view of CRM.

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 Australasia with very positive feedback.

Practical implications – The framework can be used by managers. The view of CRM presented involves all business functions which extends the current thinking in the marketing literature.

Originality/value – The most common view of CRM involves fewer business functions than the one identified in this research.

Keywords Customer relations, Buyer-seller relationships, Competitive advantage, Cross-functional integration

Paper type Research paper

An executive summary for managers and executive readers can be found at the end of this article.

Introduction

In a business-to-business environment, customer relationship management is the business process that provides the structure for how relationships with customers are developed and maintained. Increasingly, customer relationship management (CRM) is being viewed as strategic (Lambert, 2004; Payne and Frow, 2005; Zablah *et al.*, 2005), process-oriented (Lambert, 2004; Payne and Frow, 2005; Zablah *et al.*, 2005), cross-functional (Lambert, 2004; Payne and Frow, 2005; 2006), value-creating for buyer and seller (Lambert, 2004; Boulding *et al.*, 2005; Payne and Frow, 2005), and a means of achieving superior financial performance (Lambert, 2004; Boulding *et al.*, 2005; Bohling *et al.*, 2006; Payne and Frow, 2005). Management identifies key customers (Pels, 1992) and customer groups to be targeted as part of the firm's business mission (Sanchez and Sanchez, 2005). The decision regarding who represents key customers includes evaluation of the profitability and potential profitability of individual customers (Turnbull *et al.*, 1996). Often it is assumed that the marketing function is responsible for creating, maintaining and strengthening relationships with business-to-business customers because it does this with consumers. However, for two large organizations to be able to coordinate their complex operations, all corporate functions must be involved and actively participate in the relationship in order to align corporate resources with the profit potential of each relationship (Ryals and Knox, 2001). For example, in complex business relationships such as the one between The Coca-Cola Company and Cargill, Incorporated there is broad cross-functional representation and CEO-to-CEO involvement. The collaborative activities worked on by the teams have included: joint research and development on a new, natural, zero-calorie sweetener; logistics managers from the two companies working to reduce global transportation footprints; and, joint communication and cooperation on sustainability issues (Buffington *et al.*, 2007). The benefits for each company are substantial. For example, in the case of the new sweetener; "The Coca-Cola Company has exclusive rights to develop and market the partnership's product in beverages, and Cargill has exclusive rights to develop and market it in foods" (Buffington *et al.*, 2007).

CRM can be viewed as a macro-level process. A macro-level process is highly aggregated and is comprised of

The current issue and full text archive of this journal is available at **www.emeraldinsight.com/0885-8624.htm**

Journal of Business & Industrial Marketing
25/1 (2010) 4–17

[DOI 10.1108/08858621011009119]

This paper is based on Chapter 2, "The customer relationship management process", in Lambert (2008a). See: www.scm-institute.org

Accepted: February 2009

numerous sub-processes (Srivastava *et al.*, 1999). These sub-processes can be separated into micro-level processes. CRM is one of the eight macro business processes identified by the Global Supply Chain Form research team of academics and executives (Lambert and Cooper, 2000) (see Figure 1 and the Appendix for a brief description of each) and it must interface with each of the other seven. Each process to be properly implemented requires the active participation of members of every business function, as well as customers and suppliers. The processes shown in Figure 1 and the supporting materials described in Lambert (2008a) were developed over a period of 16 years, starting in 1992, with a team of researchers working with executives from 15 multi-national companies that support the Global Supply Chain Forum at The Ohio State University.

In this paper, CRM is described as a macro-business process and then the research methodology is presented. Next, a description of the strategic and operational processes that comprise CRM is provided along with the sub-processes and the activities that comprise each sub-process. Limitations and opportunities for future research are considered. Finally, conclusions are presented.

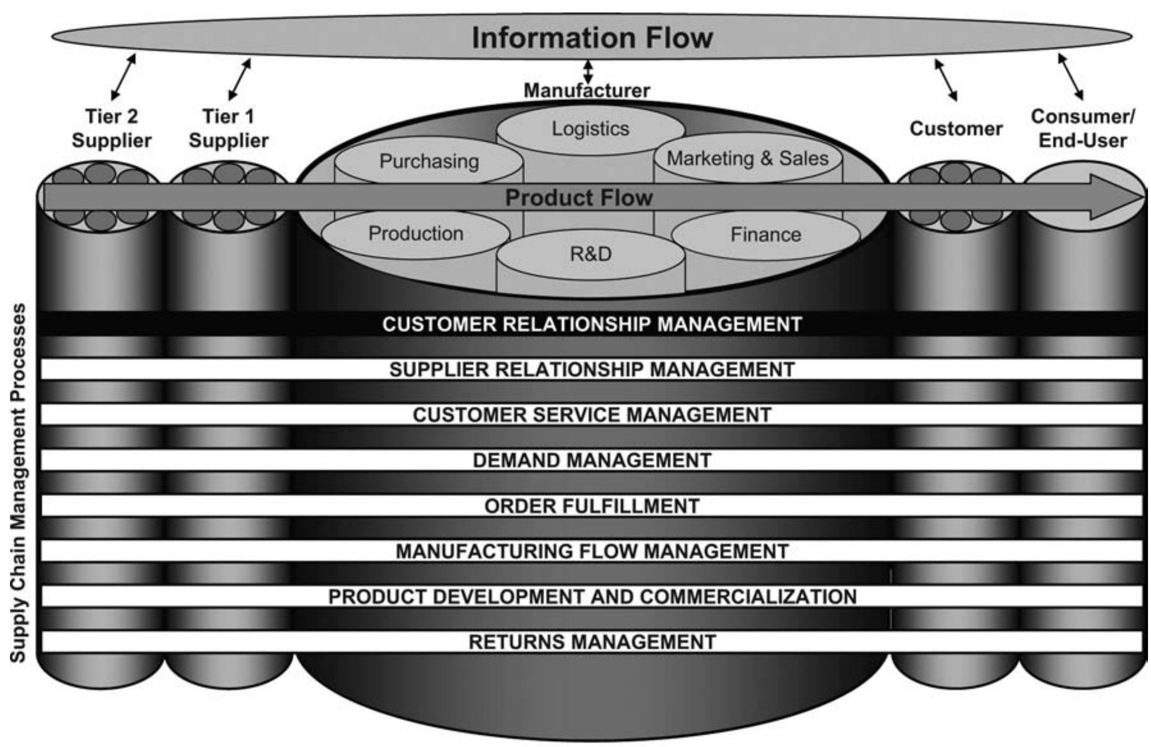
CRM as a macro-business process

Typically, large sums of money are spent to attract new customers; yet management is often complacent when it comes to nurturing existing customers to build and strengthen relationships with them (Berry and Parasuraman, 1991). However, for most companies, existing customers represent the best opportunities for profitable growth. There are direct and strong relationships between profit growth; customer loyalty; customer satisfaction; and, the value of goods delivered to customers (Heskett *et al.*, 1997). "Relationship marketing concerns attracting, developing, and retaining customer relationships" (Berry and Parasuraman, 1991).

CRM has become a critical business process as a result of: competitive pressures; the need to achieve cost efficiency in order to be a low-cost, high-quality supplier; a recognition of the fact that customers are not equal in terms of their profitability; and, knowledge that customer retention can significantly affect profitability. CRM and supplier relationship management provide the critical linkages throughout the supply chain (see Figure 2). For each supplier in the supply chain, the ultimate measure of success for the CRM process is the growth in profitability of an individual customer or segment of customers over time. In addition to trends in past profitability, "current and projected profits of customers (existing and potential) need to be analyzed and forecast" (Turnbull *et al.*, 1996). 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. The goal is to increase the joint profitability through the co-production of value (Ramirez, 1999; Lusch and Vargo, 2006). A potential roadblock is failure to reach agreement on how to split the gains that are made through joint process improvement efforts. The overall performance of the supply chain is determined by the combined improvement in profitability of all of its members from one year to the next.

While there are a great number of software products that are being marketed as CRM (Reinartz *et al.*, 2004), these

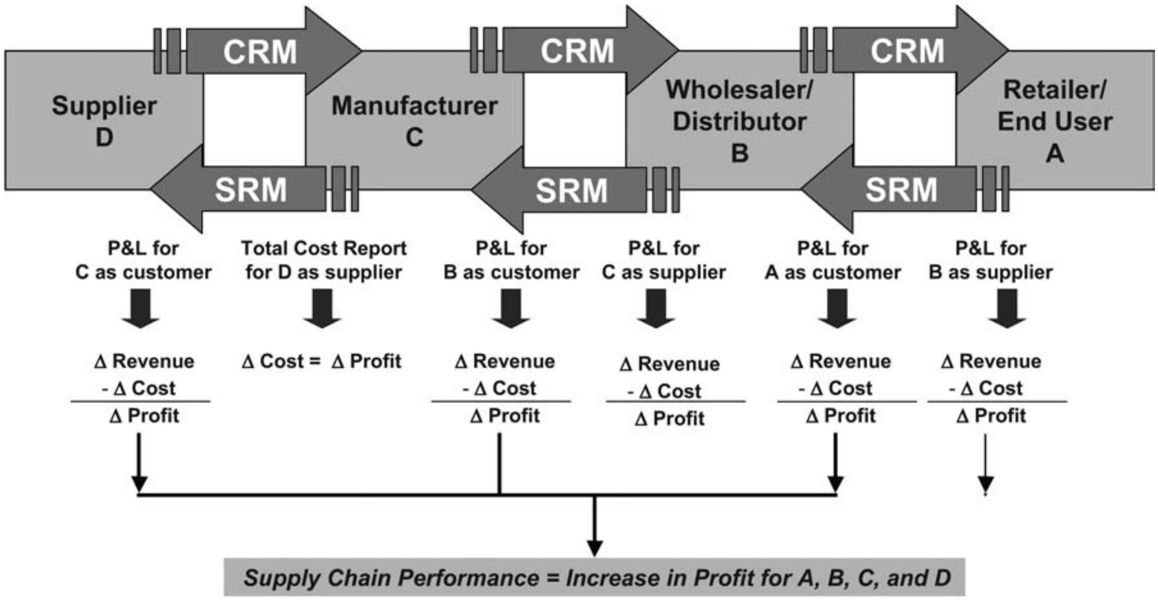
Figure 1 The eight macro-business processes: integrating and managing relationships across the supply chain



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

Journal of Business & Industrial Marketing
Volume 25 · Number 1 · 2010 · 4–17

Figure 2 CRM and supplier relationship management form the links in the supply chain



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

technology tools should not be confused with the relationship-focused, macro-business, CRM process (Kale, 2004; Payne and Frow, 2005). CRM software has the potential to enable management to gather customer data quickly, identify the most valuable customers over time, and provide the customized products and services that should increase customer loyalty (Rigby *et al.*, 2002). When it works, the costs to serve customers can be reduced making it easier to acquire more, similar customers. However, according to Gartner Group, 55 per cent of all CRM (software solutions) projects do not produce results (Rigby *et al.*, 2002). In a Bain Survey of 451 senior executives, 25 per cent reported that these software tools had failed to deliver profitable growth and in many cases had damaged long-standing customer relationships. One firm spent over $30 million only to scrap the entire project (Rigby *et al.*, 2002). There are four major reasons for the failure of CRM software projects:

1 implementing software before creating a customer strategy;
2 rolling out software before changing the organization;
3 assuming that more technology is better; and
4 trying to build relationships with the wrong customers (Rigby *et al.*, 2002).

To be successful, management must place its primary focus on the CRM process and the people and the procedures that make the technology effective. The technology is simply a tool. Relying on the technology by itself will most often lead to failure (Turchan and Mateus, 2001).

Unfortunately, there are a wide range of views as to what constitutes CRM (Zablah *et al.*, 2005). At one extreme, it is about the implementation of a specific technology solution and, at the other, it is a holistic approach to selectively managing relationships to create shareholder value (Payne and Frow, 2005). It is the former perspective that results in so many failures. In order to develop mutually beneficial business relationships, CRM should be positioned in a broad strategic context and be consistently implemented throughout the organization (Swift, 2000). According to Payne and Frow (2005), CRM must be viewed as strategic, cross-functional and process-based in order to avoid the potential problems associated with a narrow technology oriented definition. However, the functions that they included appear to be limited to executives working in sales, marketing, and information technology. There was no indication that managers from finance, research and development, production/operations, purchasing, logistics, or other functions are involved in complex, high-value business relationships. Without the involvement of all functions, promises may be made to customers that cannot be profitably fulfilled. For example, sales people may sell in volumes the plants can not profitably produce. As identified in *The Service-dominant Logic of Marketing*, knowledge is the fundamental source of competitive advantage, the customer is a co-producer, and a service-centered view is customer oriented and relational (Lusch and Vargo, 2006). In order to generate knowledge of the customer that will lead to the co-production of value, internal skills, activities and resources must be linked to those of the customer (Awuah, 2001). For maximum results all business functions should be involved in the relationship.

While there is recognition in the marketing literature that a cross-functional approach to customer relationships is desirable, it seems that this, in many cases is, limited to having the "functions" of marketing, such as marketing communications and personal selling, become integrated (Grönroos, 2004). But this view of cross-functional should be broadened: "customer value and satisfaction cannot be delivered by one function alone and it is not only the responsibility of those with direct customer contact. For example, production workers rarely have a direct contact with a customer, yet interruptions in the production schedule can have detrimental effects on customer satisfaction" (Tzokas and Saren, 2004). This example builds the case for having production represented on cross-functional customer teams. The more business functions that are involved in key customer relationships, the more useful the knowledge that will be generated (Enz, 2009).

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; Krueger and Casey, 2000; Morgan, 1997). 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 eight meetings over a period of 28 months from July 2001 to October 2003. In the first three meetings, the executives provided the research team with input on the sub-processes that should comprise each of the eight business processes, including CRM, that had been identified in our research. The last five meetings reported here were specifically devoted to identifying the detailed activities and implementation issues related to CRM. The first session for the CRM 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 CRM. During the second session, in October, 2002, in which 18 executives participated, slides were presented which summarized the results of the previous session and the learnings from company visits. Following the 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 three meetings, 16, 17, and 21 executives respectively participated in open discussion and after each session, the manuscript was revised. Additional revisions have been made to the material as experience has been gained working with member companies of The Global Supply Chain Forum on implementation of the CRM process.

The CRM process

The CRM process has been divided into 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 3). The strategic process is led by the chief executive officer and a management team that is comprised of executives from the typical business functions such as: marketing, sales, finance, production, purchasing, logistics and research and development. The team is responsible for identifying which customers are key to the company's success now and in the future and for making decisions about how relationships with customers will be developed and maintained. At the operational level, there will be a customer team for each key account and for each segment of other customers. The goal is to segment customers based on their value over time and increase customer loyalty by providing customized products and services (Selden and Colvin, 2003).

Customer teams tailor product and service agreements (PSAs) to meet the needs of key accounts and segments of other customers (Seibold, 2001). 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 profitability of individual customers as well as the firm's financial impact on those customers.

Teams calling on key customers 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 customer. It is important to reach agreement on what data to share and there is a fine line between using process knowledge gained versus using competitive marketing knowledge gained from a customer. The account 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 CRM process

At the strategic level, the CRM process provides the structure for how relationships with customers will be developed and managed. An objective is to align functional expertise from the supplier and the customer to support implementation of the other seven macro-business processes. This alignment is necessary in order to identify and achieve improvement opportunities. The strategic CRM process is comprised of five sub-processes (see Figure 3).

Review corporate and marketing strategies

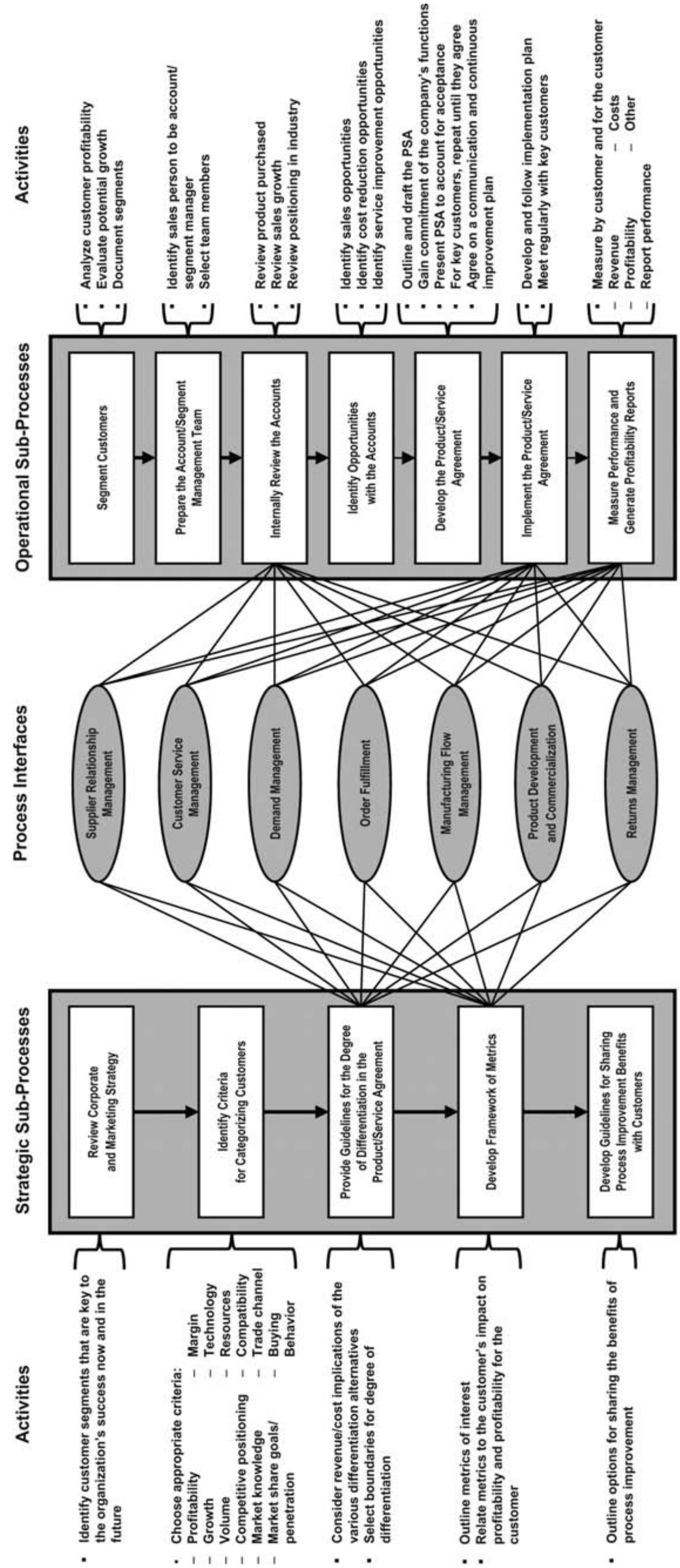
The CRM process team reviews the corporate strategy and the marketing strategy in order to identify markets and target segments that are critical to the organization's success now and in the future (Freytag and Højbjerg Clarke, 2001). Strategies are directional statements that provide guidance in terms of:

- the markets to serve and customer segments to target;
- the positioning theme that differentiates the business from its competitors;
- the channels used to reach the market; and
- the appropriate scale and scope of activities to be performed (Day, 1990).

Identify criteria for segmenting customers

In the second sub-process, the team identifies the criteria that will be used to segment customers within the markets and target segments identified in the first sub-process. For example, grocery retail may be viewed as an important segment, but all grocery retailers will not be of equal importance to the organization's success. This second level of segmentation provides guidelines for determining which customers qualify for tailored PSAs and which customers will be grouped into segments and offered a standard PSA that is developed to provide value to the segment and meet the firm's profit goals for that segment. Potential segmentation criteria include: profitability, growth potential, volume, competitive positioning issues, access to market knowledge, market share

Figure 3 CRM



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

goals, margin levels, level of technology, resources and capabilities, compatibility of strategies, channel of distribution and buying behavior (what drives their buying decision). As part of this sub-process, the team develops the firm's strategy for dealing with segments of customers who do not qualify for individually tailored PSAs.

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

In the third sub-process, the team develops guidelines for the degree of differentiation in the PSA. This involves developing the differentiation alternatives and considering the revenue and cost implications of each. The output is the degree of customization that can be offered to customers based on the potential of the customer(s). The goal is to offer PSAs that enhance the profitability of the firm and its customers. For some customers, resources will be increased and in other cases they will be trimmed. It is a matter of matching the company's resources to the customers' short-term and long-term value to the firm. Profitability reports by customer are a key input when making these decisions (Lambert and Sterling, 1990; Turnbull *et al.*, 1996). In order to find and understand the opportunities to customize the PSAs, in this sub-process the team will interface with the other seven process teams.

At 3M, PSAs contain: the contacts including name, title, telephone, e-mail for both 3M and the customer representatives; details related to transportation including deliveries, order minimums, driver instructions, will calls and appointments; bills of lading (combine or do not combine purchase orders); pallets to be used; purchase order confirmations; order status including names of contact individuals, Internet order status web site with user name and password; details related to pricing inquires; availability of market development funds; marketing promotional allowances; acceptability of backorders and how they will be handled; and contract items. PSAs also may include goals with regard to joint development of new products or joint marketing programs. For key customers, the PSAs are customized and for segments of other customers standard values are provided for each parameter. For customers who are not meeting profit goals, services may be offered but at a price.

Develop framework of metrics

Developing the framework of metrics involves outlining the metrics of interest and relating them to the customer's impact on the firm's profitability as well as the firm's impact on the customer's profitability (Lambert and Burduroglu, 2000; Zablah *et al.*, 2005; Payne and Frow, 2005). The CRM process team has the responsibility for assuring that the metrics used to measure performance of the other processes are not in conflict. Management needs to insure that all internal and external measures are driving consistent and appropriate behavior (Lambert *et al.*, 1998).

Figure 4 shows how the CRM process can affect the firm's financial performance as measured by economic value added (EVA). It illustrates how CRM can impact sales, cost of goods sold, total expenses, inventory investment, other current assets, and the investment in fixed assets. For example, CRM can lead to higher sales volume as a result of strengthening relationships with profitable customers, selling higher margin products, increasing the firm's share of the customer's expenditures for the products/services sold, and/or improving the mix, that is, aligning services and the costs to serve.

Cost of goods sold can be reduced, as a result of the better planning that comes from collaboration with customers. Cost savings occur due to fewer last-minute production changes and, less expediting of inbound materials and shipments to customers. For wholesalers significant cost savings can occur as a result of fewer order changes.

CRM leads to better targeting of marketing expenditures (Turnbull *et al.*, 1996). A number of expenses can be reduced as a result of better tailoring of the firm's marketing and logistics programs to customer needs while giving full consideration to the profitability of each customer. Trade spending also can be improved. Services to low profit customers can be eliminated or reduced and reallocated to more profitable customers to drive revenue growth. Better knowledge of customer requirements and the reduction of services to low-profit customers can lead to a reconfiguration of the physical network of facilities resulting in cost savings. Less profitable customers may be served using wholesalers/distributers, which may represent a new channel of distribution (Lambert and Sterling, 1990). Reductions are also possible in the costs of customer service and order management, human resources, and general overhead and administrative. In addition to reducing expenditures, there is the opportunity through CRM to better allocate resources to customers which can be measured in terms of increased revenue.

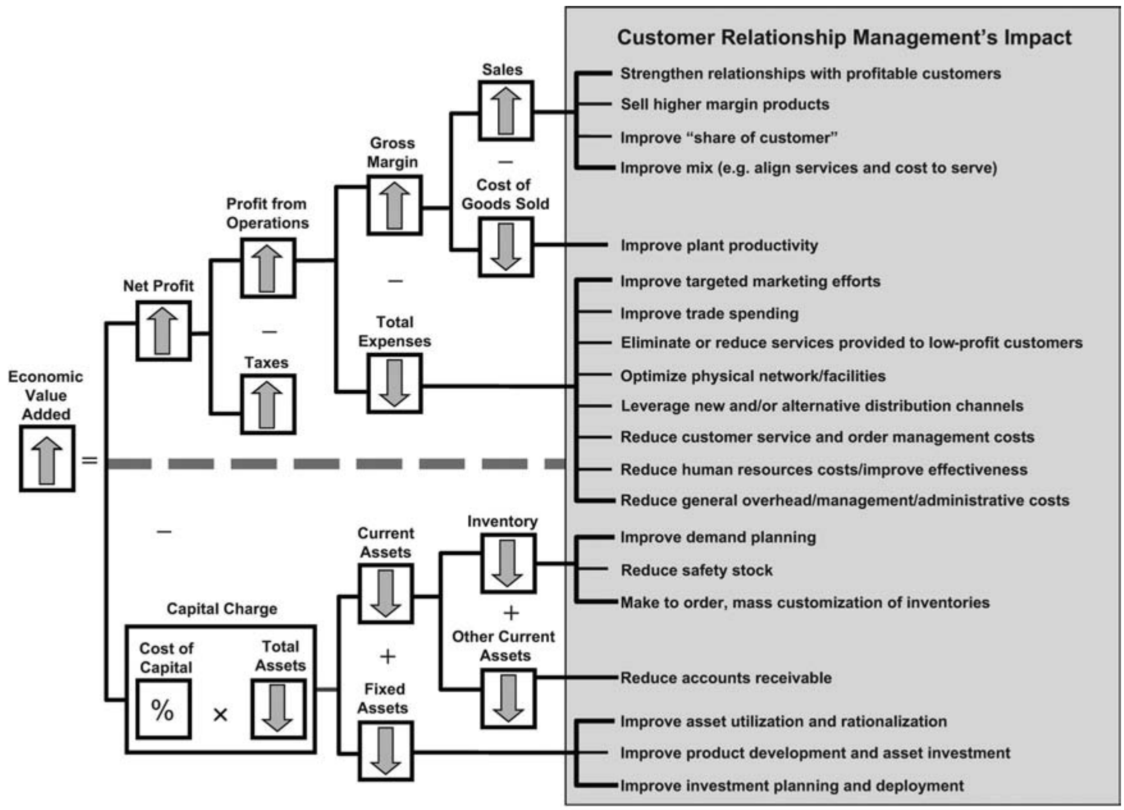
Properly implemented, CRM can result in reductions in current assets such as inventories and accounts receivable as well as fixed assets. Inventories can be reduced as a result of improved demand planning, lower safety stocks, and/or the shift to a make-to-order manufacturing environment. Accounts receivable can be reduced as a result of fewer disputed invoices that typically are caused by incomplete orders, missed deliveries, incorrect pricing, and/or products shipped in error. Finally, successful CRM can lead to lower fixed assets as a result of improved utilization/rationalization of plant and warehousing facilities, and improved investment planning and deployment.

Once the team has an understanding of how CRM affects the firm's financial performance as measured by EVA, metrics must be developed for each of the individual activities performed and these metrics must be tied back to the firm's financial performance. Management should focus on those activities that increase the profitability of the total supply chain not just the profitability of a single firm. Management's goal should be to encourage actions that benefit the supply chain network while at the same time equitably sharing in the risks and the rewards. If the management team of a firm makes a decision that positively affects that firm's EVA at the expense of the EVA of customers or suppliers, every effort should be made to share the benefits in a manner that improves the financial performance of each firm involved so all involved parties have an incentive to improve overall supply chain performance.

The development of customer profitability reports enables the process team to track performance over time. If calculated as shown in Figure 5, these reports reflect all of the cost and revenue implications of the relationship (Lambert and Sterling, 1990; Mossman *et al.*, 1978). Variable manufacturing costs are deducted from net sales to calculate a manufacturing contribution. Next, variable marketing and

Journal of Business & Industrial Marketing
Volume 25 · Number 1 · 2010 · 4–17

Figure 4 How CRM affects economic value added (EVA®)



Source: Lambert (2008a)

Figure 5 Customer profitability analysis: a contribution approach with charge for assets employed

	CUSTOMER A	CUSTOMER B	CUSTOMER C	CUSTOMER D
NET SALES				
COST OF GOODS SOLD (VARIABLE MFG. COST)				
MANUFACTURING CONTRIBUTION				
VARIABLE MARKETING & LOGISTICS COSTS:				
SALES COMMISSIONS				
TRANSPORTATION				
WAREHOUSING (HANDLING IN AND OUT)				
SPECIAL PACKAGING				
ORDER PROCESSING				
CHARGE FOR INVESTMENT IN ACCTS. REC.				
CONTRIBUTION MARGIN				
ASSIGNABLE NONVARIABLE COSTS:				
SALARIES				
SEGMENT RELATED ADVERTISING				
SLOTTING ALLOWANCES				
INVENTORY CARRYING COSTS				
CONTROLLABLE MARGIN				
CHARGE FOR DEDICATED ASSETS USED				
NET MARGIN				

Source: Lambert (2008a)

logistics costs, such as sales commissions, transportation, warehouse handling, special packaging, order processing and a charge for accounts receivable, are deducted to calculate a contribution margin (Lambert and Sterling, 1990; Mossman *et al.*, 1978). Assignable non-variable costs, such as salaries, customer-related advertising expenditures, slotting allowances and inventory carrying costs, are subtracted to obtain a segment controllable margin. The net margin is obtained after deducting a charge for dedicated assets. These statements contain opportunity costs for investment in receivables and inventory and a charge for dedicated assets. 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 if the revenue disappears (Lambert, 2008a).

At Sysco, a $23.4 billion food distributor, profitability reports by customer were implemented in 1999. These reports enabled management to make strategic decisions about the allocation of resources to accounts including which customers receive the preferred delivery times and which customers must pay for value added services if they want to receive them. The results are illustrated in Figure 6. The five year cumulative annual growth rate for the period 1999 to 2003 was 11.3 per cent for sales and 19.1 per cent for net earnings. Net earnings growth improved sharply after the profitability reports were implemented. In addition to measuring current performance, these reports can be used to track the profitability of customers over time and to provide a foundation for generating pro-forma statements that estimate the impact of potential process improvement projects. Decision analysis can be performed to consider what-if scenarios such as best case, worst case and most likely case.

Develop guidelines for sharing process improvement benefits with customers

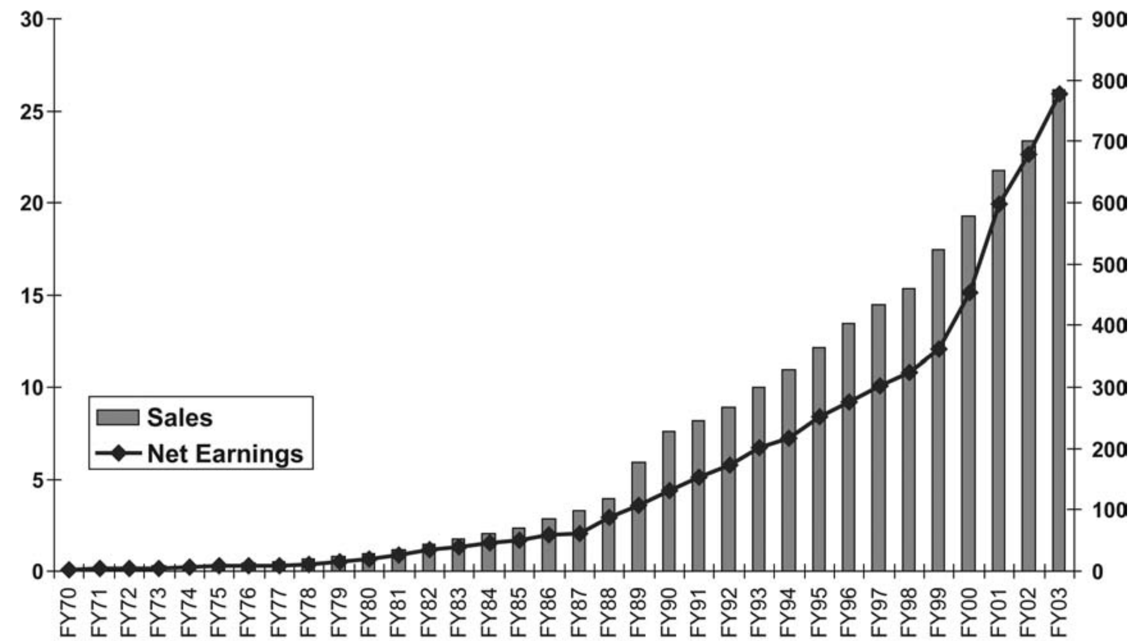
In the final sub-process, the team develops the guidelines for sharing process improvement benefits with customers. The goal is to make process improvements win-win solutions for both the firm and the customer. If all of the parties involved do not gain from process improvement efforts, it will be difficult obtain their full and sustained commitment. The CRM team must quantify the benefits of process improvements in financial terms.

For example, in a project that involved Cargill and a key customer, representatives from the two firms decided that a 50/50 split would motivate both parties to maximize the opportunities and would acknowledge that neither party could achieve the savings without the other party. The teams agreed that benefits should be explicitly recognized and be in excess of a predetermined "baseline". The costs to be considered should be directly related to the recommended initiatives (capital costs, transaction costs, system related costs, etc.), and represent only incremental, full-time staff adds, and be documented costs, greater than an agreed on minimum dollar amount.

In the view of Cargill's management, it was important to identify the range of expectations that each team brought to the project. It was also necessary to agree on specific shared, realistic objectives with regard to process efficiency, growth/profit stability, costs savings, improved customer service, organizational alignment, clear metrics, and any other areas that were viewed as important by the parties.

In summary, the objective of CRM at the strategic level is to identify markets and target segments, provide criteria for segmenting customers, provide customer teams with guidelines for customizing the product and service offering, develop a framework for metrics, and provide

Figure 6 Sysco sales and earnings history



Source: Lambert (2008a)

guidelines for the sharing of process improvement benefits with the customers. Next, the operational CRM process is described.

The operational CRM process

At the operational level, the CRM process deals with segmenting customers as well as writing and implementing the PSAs. It is comprised of seven sub-processes: segment customers, prepare the account/segment management team, internally review the accounts, identify opportunities with the accounts, develop the product and service agreement, implement the product and service agreement, and measure performance and generate profitability reports (see Figure 3).

Segment customers

All customers do not contribute equally to the firm's success and the goal is to identify those customers who desire and deserve special treatment so that offerings can be tailored to meet their needs while achieving the firm's profit goals for the customer (Mossman *et al.*, 1978; Lambert and Sterling, 1990; Zablah *et al.*, 2005; Sanchez and Sanchez, 2005). In the first sub-process, customers are segmented based on the criteria that were established in the strategic process. A key measure is the current profitability of each customer measured as showed in Figure 5 combined with growth potential (Mossman *et al.*, 1978; Turnbull *et al.*, 1996). Other criteria for segmenting customers might include: competitive positioning, market knowledge, market share goals/penetration, margin, technological capabilities, resources, compatibility, and class of trade.

Table I shows how one major corporation has segmented customers based on profitability. The most profitable customers were classified as Platinum followed by Gold, Silver, Bronze and Lead (unprofitable). Platinum customers only represented 13.4 per cent of the accounts but they produced 65 per cent of the pre-tax earnings. At the other extreme, unprofitable customers represented 34.3 per cent of the accounts and actually reduced overall pre-tax earnings by 6 per cent. Management must determine which of the unprofitable customers have the potential to become profitable and which ones will likely remain unprofitable (Turnbull *et al.*, 1996). This information is used to prioritize customers for the CRM process. Table II shows how the profitability and thus segments can change from year to year. Not only did some Platinum customers turn to Gold, Silver, Bronze and Lead in 2003, but unprofitable customers became profitable with some becoming Platinum. The goal is to understand what is driving the numbers and reassign resources on that basis.

Table I Customer segmentation based on pre-tax profit contribution

Classification	Percentage of accounts	Percentage of pre-tax earnings
Platinum	8.4	65
Gold	17.1	25
Silver	18.2	11
Bronze	22.0	5
Lead (Unprofitable)	34.3	−6
Total	100	100

Source: Lambert (2008a)

Prepare the account/segment management teams

In this sub-process, the account or segment management teams are formed. The teams are cross-functional with representation from each of the functional areas including marketing, sales, research and development, logistics, production, information systems, purchasing and finance. Members from each function, contribute their expertise to the team. As an example, marketing provides the knowledge of customers and marketing programs as well as the budget for marketing expenditures, sales provides the person who will be the account or segment manager, research and development provides the technological capabilities to co-create product solutions with customers, logistics provides knowledge of logistics and customer service capabilities, production provides the manufacturing capabilities, information systems provides the data collection and software that converts customer information into knowledge (Kale, 2004), purchasing provides knowledge of supplier capabilities, and finance provides customer profitability reports and access to working capital. Some team members may be more important to a specific customer relationship. For example, if the business drivers for both firms are to collaborate on the development of new products, personnel from research and development will play a key role on the teams. In the case of key accounts, each team is dedicated to a specific account and meets regularly with the customer's team. In most instances, the team members, with the exception of the account representatives, will have full-time positions in one of the functions. For very large customers, such as Wal-Mart, suppliers such as Colgate-Palmolive have dedicated team members who work full-time on the customer team and are located near the customer's corporate headquarters. In the case of customer segments, a team develops and manages a standard PSA for a group of customers and it is delivered to a buyer in a traditional manner.

Internally review the accounts

Each team reviews their account or segment of accounts to determine the products purchased sales growth and their position in the industry. The CRM team must have the ability to understand and meet the customers' priorities as well as identify opportunities to co-create value. The customers' top priorities are so important that they will pay a premium for them or, when they are not being provided, they will switch some or all of their business to another supplier (Slywotsky and Morrison, 1997). The link between understanding customers' priorities and the firm's profitability is established by the following sequence of activities:

1. Understand priorities (the objective of the next sub-process).
2. Design products and services that address these priorities.
3. Sell the value proposition to the customers and within the firm.
4. Measure the impact on the profitability of customers and customer segments.

Identify opportunities with the accounts

In order to understand the customer, the team must ask the right people the right questions. With a business-to-business customer, there are many individuals throughout the

Table II Customer segmentation for 2002 and 2003

	2002 segmentation Mix (%)	2003 segmentation Platinum (%)	Gold (%)	Silver (%)	Bronze (%)	Lead (unprofitable) (%)	Total (%)
Platinum	7.71	5.89	1.35	0.21	0.09	0.15	7.71
Gold	6.49	1.74	10.44	2.82	0.79	0.70	16.49
Silver	17.90	0.26	3.61	8.79	3.47	1.77	17.90
Bronze	22.05	0.15	0.93	4.37	11.59	5.02	22.05
Lead (unprofitable)	35.85	0.32	0.80	2.04	6.06	26.04	35.85
Total	100	8.36	17.13	18.23	21.99	34.29	100

Source: Lambert (2008a)

customer's organization who must be identified in order to gain knowledge about the customer's needs, behavior, decision-making process, price sensitivities and preferences (Slywotsky and Morrison, 1997). A major part of this effort is to identify customer priorities that are being ignored and find a way to profitably respond to them. Once the team has an understanding of the customer(s), they work with each account or segment of accounts to develop improvement opportunities in sales, costs and service. These opportunities might arise from any part of the business, so the account teams need to interface with each of the other seven macro-business process teams (see Figure 1 and the Appendix). Since the teams are cross-functional in nature, each team member provides the linkage to the expertise in his/her function.

In a supply chain context, it is also important to understand what brings value to customers beyond Tier 1. For example, referring to Figure 2, "a component supplier must understand the economic motivations of the manufacturer who buys the components, the distributor who takes the manufacturer's products to sell, and the end-use consumer" (Slywotsky and Morrison, 1997).

Develop the product and service agreements

In the fifth sub-process, each team develops the PSA for their account or segment of accounts. The PSA is an agreement that matches the requirements of the customer with the capabilities of the firm and the firm's profit goals for the customer. Each team first outlines and drafts the PSA, and then gains commitment from the internal functions. For key accounts, they present the PSA for acceptance, and work with the customer until agreement has been reached. It is important that the PSA for key accounts include a communication and continuous improvement plan. For other accounts, the PSA is presented to the customer by a salesperson. This sub-process aligns the business goals of the customer and the firm so that the expectations of each side are realistic and understood by both organizations.

Implement the product and service agreements

In the sixth sub-process, the teams implement the PSAs, which includes holding regular planning sessions with each key customer. The CRM teams provide input to each of the other seven macro-business processes that are affected by the customizations that have been made in the PSAs. CRM teams must work with the other process teams to make sure that each PSA is being implemented as planned, and schedule regular meetings with customers to review progress and performance. Implementation of the PSAs might require an investment in new information systems, the re-engineering of a transactional activity, or a new employee such as a dedicated person for planning.

Measure performance and generate profitability reports

In the last operational sub-process, the teams capture and report the process performance measures and make certain that they are not in conflict with metrics from each of the other processes. Customer profitability reports are also generated. These profitability reports provide information for measuring and selling the value of the relationship to each customer and internally to upper management. Value should be measured in terms of costs, impact on sales, and associated investment, or the efforts incurred will go unrewarded (Lambert and Burduroglu, 2000).

The other process teams communicate customer-related performance to the CRM teams who tie these metrics back to the profitability of the firm as well as to the profitability of the customer. For example, Heinz in the UK has the capability of generating reports that show the profitability of customers such as Tesco and Sainsbury to Heinz (Lambert, 2004). Also, reports are provided to key customers that show how much Heinz has contributed to their profit. The ability to generate profitability reports of this type is a powerful tool that enables fact-based negotiation between the process teams of each firm.

Limitations and future research opportunities

The research is based on eight focus groups that took place over a 28 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 28 month period when the CRM 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 CRM framework is being validated is in executive development programs. Since 2004, the framework has been presented in Argentina, Australia, Chile, China, England, Mexico, New Zealand, Uruguay and USA and the feedback from the executive delegates has been very positive. The framework is being implemented in numerous organizations around the world which will provide additional validation.

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