VERSION 4.4

MODULE 2
SUPPLY CHAIN PLANNING AND EXECUTION

Section B: Manage the Relationship with Supply Chain Partners

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This section focuses on customer relationship management (CRM) and supplier relationship management (SRM). CRM is developed and implemented as a social relations strategy that has some enabling technologies. It fulfills requirements for improved demand management, customer service, and alignment of customer-facing processes and resources. CRM helps create and maintain demand for the products and services being produced. SRM requires an understanding of the underlying concepts, the enabling technologies, and the requirements for improved management of sources of supply. While CRM focuses on creating demand, SRM helps ensure that this demand can be fulfilled in a way that delivers profit to all members of the supply chain and satisfaction to the supply chain customers.

Managing relationships begins as soon as the organization has customers and suppliers. Customer and supplier relationship management are important tools for maintaining any level of relationship, but they are very powerful tools to get a relationship to the next level and keep it on that path. These tools are vital for enacting supply chain strategy over the long term.

Processes for managing the relationship with supply chain partners

The key processes that supply chain managers need to be able to perform related to managing the relationship with supply chain partners are

- Managing relationships with customers
- Managing relationships with suppliers.

The following is a general overview of these processes. The information required to plan and execute these processes is presented in this section's chapters.

Managing relationships with customers

The process of managing relationships with customers involves the following steps:

- Using change management to develop a culture, organizational structure, and philosophy of putting the customer first and deepening customer relationships whenever possible
- Acquiring customer relationship management software to capture data on every interaction with the customer regardless of point of contact
- Grouping customers into meaningful segments to target communications and prioritize level of service toward the most profitable customers
- Understanding each segment's needs and wants by
  - Capturing data on customer interactions and preferences
  - Analyzing data to design product/service packages for each given customer segment
  - Producing segment-tailored product/service packages
  - Learning how wants and needs differ during the product life cycle
  - Gathering feedback for a continuous improvement cycle
- Listening to and talking with customers to develop lifetime relationships
- Sharing information on customer constraints, priorities, and wants and needs with extended supply chain partners

- Eliminating non-value-added products, features, or services
- Tailoring messages to improve prospect conversion, vulnerable customer retention, customer win-back, and customer loyalty
- Capturing customer service measurements to measure overall program success
- Using metrics in a feedback loop to improve the CRM program

Managing relationships with suppliers

The process of managing relationships with suppliers involves the following steps:

- Using change management to internally align the organization to promote information sharing, collaboration, and mutual profitability
- Acquiring supplier relationship management software to automate transactional interactions, monitoring, measurement, and analysis with any level of supplier and information sharing with key suppliers
- Calculating total cost of ownership for key supplier materials
- Selecting the right partners for the given strategy
- Developing goals with suppliers for achieving a desired relationship type
- Negotiating mutually profitable contracts and ground rules
- Appointing managers for key supplier relationships or alliances
- Developing long-term relationships with key material suppliers
- Working with strategic allies to add value to products, reduce operational costs, enable strategic or market growth, and hone each party's expertise
- Realigning processes, information flows, and workflows to eliminate your or your suppliers' redundancies or non-value-added work
- Measuring or auditing supplier performance and compliance with voluntary requirements or certifications
- Conducting periodic course corrections based on performance
- Reevaluating selected suppliers periodically for strategic fit

Chapter 1: Segmentation

This chapter is designed to

- Describe reasons to identify and understand market segments
- Define the concepts behind customer-focused marketing
- Describe the benefits of market segmentation
- Describe how markets can be segmented by demographics, attitudes, or psychological profiles or by customer value, customer needs, or preferred contact channel
- Describe the Pareto effect in relation to customer value
- Explain how customer information can be used to understand the wants and needs of each segment.

Topic 1: Segmentation and Customer-Focused Marketing

Potential customers form a very large group that can be segmented based on market analysis and information from existing customers. Segmentation can be based on any number of criteria selected to suit a particular purpose, and each class may be segmented in more than one way. Market segments can be defined by demographic characteristics such as gender, geography, age, occupation, and wealth. Demographic categories can also be refined or customized. For example, geographic segmentation could be based on the likelihood of visiting a particular retail location, by ZIP or area code, or by zones that contain relatively equal demand (i.e., the size of each zone would vary). Customers can also be segmented by attitudes or psychological profiles, such as willingness to engage in social media or self-identification in a social group such as a biker or a wine lover.

During product or service design or redesign, marketing can ask more specific questions about the potential market. As always, the basic questions are the best questions: Who? Where? When? Why? What? How many? In other words, who is interested in the new product, and where are they located? Are they low-income urban apartment dwellers, suburban homeowners, or farmers and ranchers? The answers to such questions constitute segmentation.

The primary reason to identify and understand market segments is to increase the organization's profits (or its equivalent) over the long term.

According to the *APICS Dictionary,* 16th edition, **customer segmentation** is

> the practice of dividing a customer base into groups of individuals that are similar in specific ways relevant to marketing. Traditional segmentation focuses on identifying customer groups based on demographics and attributes such as attitude and psychological profiles.

When discussing market segments in a supply chain, there may be more than one perspective of who the customer is. For example:

- Intermediate customers are not at the end of the supply chain. A raw material supplier may count several manufacturers among its intermediate customers, and one or more of these manufacturers could be grouped by similar requirements.
- Ultimate customers are the final recipients of the products or services. The ultimate customer could be

an organization that is purchasing goods or services for its employees or constituents, in which case segmentation must also differentiate between organizational customers and end users.

In this chapter we will focus primarily on the ultimate customer. However, the concepts can be carried back through the supply chain to decisions regarding intermediate customers.

Because it has such a large impact on profitability, segmenting customers is the primary purpose of segmentation. However, organizations can segment suppliers and other stakeholders using very similar methods. This chapter addresses some of these other applications of segmentation where appropriate.

Customer-focused marketing

Most organizations now recognize that successful business strategy is customer-focused, and customer-focused marketing typically requires identifying and understanding market segments. According to the *APICS Dictionary,* 16th edition, **customer-driven** (another term for customer-focused) is "a company's consideration of customer wants and desires in deciding what is produced and its quality."

Customer-focused marketing is based on several fundamental marketing concepts:

- **Customer requirements must drive product and service design.** Rather than designing a product or service with multiple varieties in features, colors, and prices, design should start with analysis of actual customer requirements or needs. For example, the results could show that color is irrelevant but a particular design feature is worth a premium.
- **All products and services have more than one market segment.** The primary justification for defining market segments is the marketing assertion that no single set of customer requirements describes all potential customers. Each customer will have unique requirements, but groups of customers with similar requirements can be discovered. For example, a homeowner may require that a new heating system be delivered as soon as possible to replace a broken unit, while a home builder may order in bulk and always order with lead time, valuing consistency over fast delivery.
- **Logistics and marketing strategy must focus on customer segments.** In addition to designing the form of a product or service to meet customer requirements, marketing must enable possession of the product or service by providing marketing information in a manner likely to reach and be appreciated by that segment. Logistics must then make that product or service available to the customer at a time and place the customer segment finds convenient. This often involves developing multiple supply chains tailored to specific customer segments.
- **Profitability is more important than sales volume.** All strategic decisions on product form, marketing expense, and logistical timing and placement have an associated cost. Each additional cost must be justified by incremental increases in profits. An essential benefit of customer segmentation is an identification of the size and value of each segment, which can help predict whether a given change in strategy will increase profits.

What has driven the change to a customer- focused business environment?

Businesses need to understand customer segments to improve two-way communication with customers and to fulfill customer segment needs because today's customer is harder and more expensive to win and to keep. Advances in technology and competition in a worldwide free marketplace have benefited customers by raising their expectations for quality, trouble-free products and services. For example, today’s automobile may be impossible for an amateur mechanic to repair, but it is also relatively trouble-free compared with the automobile of the 1950s. Car buyers today expect that their vehicles will last at least 10 years and will experience only minor problems for the first six years. Meeting those expectations raises the costs of design and production.

As customers begin to assume that products and services will be of high quality, the competitive differentiator becomes price or value. Technology like the internet makes it easy for customers to shop for lowest price. The market expands from the neighborhood retailer to a global marketplace of eager sellers. This creates further pressure on a business’s bottom line or profit. One way to respond to this pressure is to “niche market,” to develop and market products to specific customer segments that have shown they value and are willing to pay for what this product or service offers. This again raises the costs of doing business, since the business must design profitable but customizable products while it develops and executes multiple marketing plans.

The resulting pressure on profit makes it even more important that companies retain their customers, since customers become more profitable the longer they are retained. Turning one-time customers into customers for life has become a critical business goal. Reaching that goal requires understanding and then satisfying customer segment expectations and delivering greater perceived value than the competition.

Benefits of segmentation

Words like “niche” and “customization” reflect the fact that customers increasingly expect the market to come to them rather than for them to go to the market. In other words, they expect to have things their way. In a satellite/cable communications world, they expect to find 500 channels, one of which is aimed precisely at their own interests. Runners can expect to find a running shoe that exactly matches their own level of exercise, running style, terrain, and anatomical quirks. The marketplace is more segmented every day, which could be seen as a drawback due to its complexity. However, customer relationship management (CRM) philosophies and technology systems, discussed later, exist to help manage that segmentation.

Segmentation also benefits organizations. Lifetime customer relationships are more likely when customers feel that a business is meeting their unique needs. This is a mutual dependency/mutual gain relationship. Customer-focused businesses have the opportunity to learn more about their individual customers and to use that information to increase sales and profit. Segmentation also helps businesses get a better return on their promotional budgets. Businesses that used to advertise in daily newspapers have decreased or eliminated this form of advertising in favor of less expensive but more narrowly targeted channels, like special interest magazines or internet or phone app ads. Businesses can be more confident that they are reaching the right audience with the message that is most meaningful to that audience.

Topic 2: Customer Segmentation

Defining segments

The concept of segmentation has existed for some time, but the ways to segment markets have been evolving under customer-focused strategies.

Historically, market segments were based, in the worst case, on preconceptions about the behaviors or desires of certain groups or, in the best case, on research into small "representative" groups of customers. Household cleaning products, for example, were aimed at women and emphasized effectiveness and convenience. Clothing retailers aimed at price niches: inexpensive, moderate, designer. Entertainment producers aimed at age groups: children, adolescents, adults. This type of predictive segmentation can be inaccurate. For example, a large financial institution stereotyped young customers as being more interested in using the internet to fulfill their banking needs, and they directed most of their promotional efforts for online banking to this group. In fact, customers over age 50 (who tended to have more assets and were therefore more valuable to the bank) were increasingly turning to the internet for a host of uses, including banking. The bank was missing a more valuable market segment.

Today, segments can be defined by customers' actual buying behaviors, and the result is more accurate segmentation. Customers for household cleaning products might be divided by a variety of factors other than effectiveness and convenience: customers who want ecologically oriented products, who need products free of scents and dyes for health reasons, who want to buy all of their products at the same time from a distributor who can offer savings or rewards. Clothing retailers have subdivided the youth market into four or five segments, each with its own buying habits and preferences.

Segmentation may occur in a customer-focused strategy by customer value to the business, by customer needs, and by preferred contact channel.

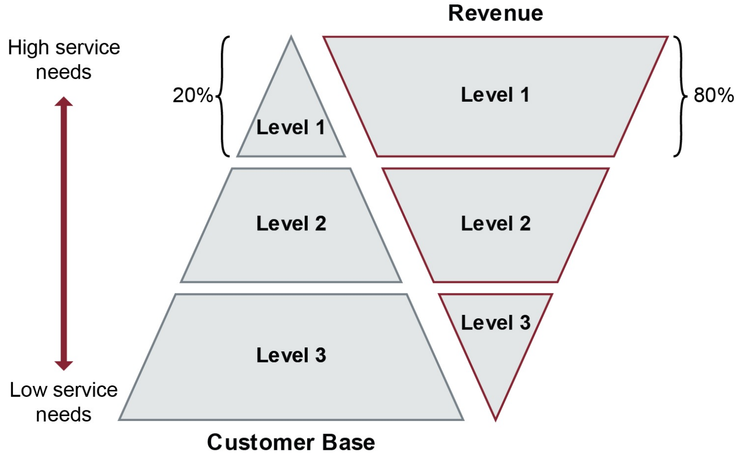
Segmentation by customer value

Customer value is defined as the measure of a company's contributions to its customers, based on the variety of products, services, and intangibles the company offers. In the past, organizations treated customers as if they were all the same. Each received the same level of service and was charged the same fees for the products they purchased, regardless of how they affected the organization's profit. Today more and more organizations are treating customers differently based on the differences in the customers' contributions to the bottom line.

A large computer manufacturer, for example, does not treat all customers equally. Their database tells them who their largest customers are and how much profit they represent. The greater the customer's value, the better the treatment the customer receives. For example, someone who buys multiple servers is more likely to be offered special package pricing or be sent a postcard thanking the customer for their business. The computer manufacturer may decline to offer discounts to smaller businesses that don't generate the profit opportunities that larger businesses do.

Leading-edge organizations are driving to increase value generation from high-yield customers. They aim to acquire and retain profitable customers and get them to spend more. According to the Pareto principle, a small percentage of the customer base—about 20 percent or less—provides a significantly higher percentage of revenue when compared to the rest. Exhibit 2-103 depicts how a small number of customers can generate a disproportionately large amount of revenue.

Exhibit 2-103: Pareto Effect in Customer Segments



Segmentation by customer needs

When we begin to discuss what services or product features profitable customers desire, we are moving into the second form of segmentation—segmentation by customer needs. These needs may refer to specific product or service features, contact channels, or logistics channels (time and placement).

The challenge of defining what customers value is a good example of the benefits of customer-focused segmentation based on analyzing actual buying behaviors. When purchasing a product, most customers will search for the best value, but value does not equal price for all customer segments. Customers may perceive some purchases as commodities and for those items will seek the lowest price. Other items or services may be perceived as more critical. For these buying decisions, other factors, such as trust in reliability or the convenience of the purchasing and postpurchase experiences, may be as or more important than price. It is important for businesses, therefore, to understand what the customers want, why, and how much. This is called a value profile. Once the value profile has been created, a value proposition can then be drafted that details how each segment's perception of value will be fulfilled by the product or service. The value proposition is a key part of the promotional strategy and customer relationship.

For example, customers who choose to shop in a retail environment for items they could obtain over the internet at a lower price value something more than economy. It may be the sensory experience of seeing and touching the product or of the retail store itself. The internet may offer too many choices for some. It may be the personal service received in the retail environment and the relationships formed with sales or service staff. It may be that they don't trust the internet; they may have been disappointed in the quality of products or services that they have received or doubtful of the security of online financial transactions. These are the kinds of values that must be identified for the targeted segments and addressed in the customer-focused strategy, often in the form of segment-specific supply chains.

Segmentation by preferred channel

Over the past few years, technology has given customers more options and better service and has lowered the costs of doing business for organizations. Customers are increasingly comfortable making purchases or obtaining service without a “live” customer service representative and may prefer that contact point, or channel, for specific types of purchases or services. Organizations may allow customers to shop online catalogs, track order progress, and view account histories. Customers may use websites to obtain installation instructions or user documentation. They may value and act on informational or promotional emails.

Because of potential savings, some business sectors have chosen to reward customers that use technology channels, such as a discount for setting up automated bill payment. Another option is to educate customers on the benefits of a particular channel. For example, automated call-answering systems usually refer callers to websites for faster service and a chance to avoid a lengthy wait in a phone queue.

Segmenting customers

To develop customer segments, one must first understand the wants and needs of individuals in terms of, for example, value or preferred contact channels, and then look for patterns that can become the basis for the segments. Customer information is the basis for customer segmentation and all marketing and sales strategies based on an understanding of the wants and needs of those segments. Acquiring this information involves market research and multiple sources, including the customers themselves.

Market research

Determining the wants and needs of prospective and existing customer segments may require phone surveys, questionnaires, focus groups, or a combination of these approaches.

Sources of customer information

Market intelligence can be purchased from outside sources but can also be derived from data gathered in every customer transaction. Different sources can provide different elements of the complete picture of each customer segment:

- **Transaction records** can show purchase frequency and volume, information on customer complaints and feedback, and how purchases are financed by the customer segment.
- **Sales representatives** can relay information about what various customer segments are asking for, what they’re not interested in, what concerns they have in making the purchase, and why they may or may not be considering the competition. In the business-to-business world, sales representatives hold the key to educating the organization about the customer’s business and its unique needs. (Each business client may be its own segment.)
- **Service representatives** can provide information about how products or services are being used currently and how specific customer segments would like to use them. Their experiences can help gauge segment attitudes toward the company and its products and how well it is managing customer

service.

- **Distribution points** (e.g., retailers, the internet, or self-serve kiosks) can provide information about customer segment values, purchasing habits, and preferences—information that can be valuable in understanding the values of customers in different contact channel segments.

- **Purchased data** from survey companies, database marketing companies, and service or finance bureaus can provide general customer information.

Voice of the customer

We shouldn't overlook customers themselves as a source of information. Successful organizations recognize research as a way not only to understand existing customer segments better but to increase loyalty and create mutually beneficial relationships. One way to involve the customer is by using the **voice of the customer (VOC).** VOC is defined in the *APICS Dictionary,* 16th edition, as

> actual customer descriptions in words for the functions and features customers desire for goods and services. In the strict definition, as relates to quality function deployment (QFD), the term customer indicates the external customer of the supplying entity.

In a broader context, the voice of the customer is a research and measurement tool used in complex selling situations when it may not be easy to ask the right questions. It can be used to understand why a customer has chosen a business or has chosen to leave a business. It can be used to gauge satisfaction with after-sales service, order processing, billing, or delivery or to design new products or services. VOC can help in developing solutions to problems with existing products or services; it can assist in continual improvement. It may be a response to a particular situation, but it is better used in a continual fashion as a way of keeping in touch with customers and their perceptions of the value they are receiving.

VOC allows customers to talk freely and identify topics for discussion rather than simply respond to topics chosen by the researcher. It may help businesses uncover previously unstated customer expectations or needs. The voice of the customer can be captured in a variety of ways: through direct discussion or interviews with individual customers; surveys and focus groups; customer-developed specifications or customer design groups; and collation of customer comments from warranty records, field reports, or complaint logs. This information can be collated by customer segment to help understand each segment's wants and needs. Author Jim Barnes states

> A Voice of the Customer (VOC) initiative should give voice to things that the firm would not normally hear. It should allow a firm to hear, straight from its customers, insightful things that do not surface through conventional marketing research.

By continually uncovering and responding to customer needs, organizations using VOC know their customers intimately. They are more able to anticipate desired products and services. They also demonstrate the customer segment focus that differentiates them from their competition.

Topic 3: Segmentation of Suppliers or Other Supply Chain Partners

Up to this point, we have focused on customer segmentation. However, organizations are learning that segmenting their suppliers or other supply chain partners can provide numerous benefits.

Supplier segmentation

Just as treating all of your customers as if they were the same can lead to poor marketing and selling strategies, treating all suppliers as if they were the same can lead to inefficiencies or poor supply chain responsiveness. The Pareto rule applies to suppliers: 20 percent of the suppliers or so will deliver 80 percent of the value to the organization's objectives or bottom line.

One traditional way of segmenting suppliers was to focus on those that did a lot of business with the organization. This may have prompted the organization to pursue strategic relationships with those suppliers. However, they might be supplying only commodities or could get a lot of orders due to inertia (e.g., established relationships or design specifications that would require redesigning other subcomponents) rather than because they deserved to have a strategic relationship. A more nuanced method of segmentation than total spend is often called for.

Supplier segmentation is a key tool to move an organization toward having a responsive supply chain. While many organizations used to base supplier selection on finding suppliers who could minimize costs, such as by leveraging economies of scale and low wages in one country, today's market is placing significant stress on responsiveness. For example, even when competing on cost, the country with the lowest labor cost may change quickly as the relative level of wealth in countries shifts. The result is that, instead of developing stable sources of lowest-cost, high-volume supply, organizations are faced with sources that may become less competitive sooner than expected. This means that even organizations with low-cost strategies need a certain level of responsiveness. However, since responsiveness has a cost, this becomes a dilemma for cost-competitive models. Here is where supplier segmentation can come to the rescue.

Supplier segmentation increases responsiveness without significantly increasing costs because it helps organizations with complex networks of suppliers manage their risks and responses. Cost and risk analyses can be simplified when suppliers with similar attributes can be analyzed together. Furthermore, a set of suppliers can be developed that can all be selected as a group when strategy needs to shift. For example, complexity may provide a competitive advantage in the early stages of a product's life cycle, but, as a product matures, it may be better to shift to suppliers who can eliminate unnecessary complexity and provide a standardized product.

Supplier segmentation is also ideal for organizations pursuing strategies other than low cost. For example, if quality will be the source of the organization's competitive advantage, suppliers can be segmented based on their ability to provide consistent high quality. Organizations can devise unique methods of segmentation that benefit their industry and business model.

The following are forms of supplier segmentation:

- **Ideal relationship type.** Segmenting suppliers by ideal relationship type involves analyzing what a supplier would bring to some form of partnership if one were to be pursued. The analysis might reveal that some suppliers should remain at arm's length while others would make great strategic partners. It could also show where a supplier was in the wrong category. For example, a supplier could be in a strategic relationship even though your organization is contributing far more than it receives from the relationship.
- **Supplier capabilities.** Segmentation by supplier capabilities will help organizations that compete on a focus or differentiation basis because here we are segmenting suppliers based their ability to deliver on the key business objectives at the core of these strategies. The complexity and quality examples above are segmenting by supplier capability. Another example is customer service. Suppliers who could impact customer service could be placed in one segment, suppliers who have marginal impact on customer service in another, and those who are very unlikely to impact customer service could go in a third category. Suppliers in the first category could receive the largest amount of attention: There would be an emphasis on regular communication of problems and customer feedback, an early warning system for shipping delays, and supplier selection criteria based more on quality and responsiveness than on cost. Suppliers in lower tiers would receive less attention and could have selection criteria that kept cost as a primary decision factor. When an organization has several strategic priorities, suppliers could be segmented for each capability separately. Those suppliers ranking high in each list would be preferred suppliers; suppliers who failed to provide the needed capabilities would be identified and replaced.
- **Customization versus standardization.** Some suppliers will specialize in being responsive and able to provide custom solutions, while others will specialize in providing standardized solutions at economies of scale. Grouping suppliers in this way can help organizations when they are shifting strategies. The earlier description of reducing complexity to suit a product's later life cycle stages is one example of how this type of segmentation could be employed.
- **Level of innovation.** Some suppliers are better partners when working to develop innovation in a product's design than others. Those suppliers who can contribute useful creative input to product designs can be given preferential early involvement in a product design.
- **Lead times.** Grouping suppliers by similar lead times might help organizations when scheduling orders for goods, when tracking supplier performance (it will highlight lead time consistency since they can be tracked against their peers in terms of average lead times), and possibly by allowing certain shipments to be grouped together (if feasible).

Segmenting other supply chain partners

Who are the organization's noncustomer, nonsupplier supply chain partners? Answering this question may result in some categories that can be used as segments. For example, these partners may include supply chains that produce complementary goods and services and that could be approached to pursue cross-selling opportunities.

Other stakeholders may not count as supply chain partners but could still benefit from segmentation:

regulatory bodies, auditors, the general public, specific communities, interest groups, unions, and so on. Segmentation could help the organization craft communications that are targeted toward the group. Segmenting these stakeholders by relative importance can help the organization decide how much time and money to devote to maintaining each relationship.

Chapter 2: Customer Relationship Management

This chapter is designed to

- Define customer relationship management (CRM)
- Explain why CRM is critical to a supply chain's success
- Describe the scope of CRM, including sales operations, analysis, customer information dissemination, relationship building, and collaboration
- Explain the relationship between CRM and the concept of the lifetime customer
- Describe the benefits of CRM, including increased customer retention
- Describe the need for and uses of customer information in CRM
- Discuss the components of a CRM strategy
- Trace the changes in CRM factors throughout the product life cycle
- Describe how CRM strategy can be formed around traditional demographic customer segmentation and segmentation by customer value, needs, or other factors.
- Describe the effect of customer type (prospects, vulnerable, win-back, loyal) on a CRM strategy

In this chapter we explore the need for CRM, its scope and benefits, and how companies develop and implement CRM strategies. In the prior chapter on segmentation we looked at how and why businesses segment their customers; in this section, we build on that by providing examples of how organizations use customer information in CRM.

Topic 1: Introduction to Customer Relationship Management

What is CRM?

The 16th edition of the *APICS Dictionary* defines **customer relationship management** as

> a marketing philosophy based on putting the customer first. The collection and analysis of information designed for sales and marketing decision support (as contrasted to enterprise resources planning information) to understand and support existing and potential customer needs. It includes account management, catalog and order entry, payment processing, credits and adjustments, and other functions.

The definition suggests that CRM starts with an adjustment of philosophy in an organization—the shift to a customer-centric way of doing business—and then moves to a retooling of all the business processes that touch on the relationship with the customer, from customer acquisition to order fulfillment.

CRM's focus on the customer is both broad and deep. It is broad in that it covers every interaction with customers; it is deep in that it focuses on the development of long-term relationships with customers whenever possible. A premise of lifetime customer value (discussed later) is that retaining customers is more profitable than finding new ones. While CRM is often identified with the software of the same name, the focus on long-term customer relationship building is one of the reasons why CRM is a philosophy first and not just a technology solution. While the software provides a repository for customer data to facilitate consistency in service interactions, ongoing communications with customers requires soft skills such as listening, the ability to demonstrate an understanding of the customers' perspectives, and the championing of customer needs to others in the organization.

Need for CRM

In his book *Business @ the Speed of Thought,* Microsoft founder Bill Gates comments that

> a manufacturer or retailer that responds to changes in sales in hours instead of weeks is no longer at heart a product company, but a service company that has a product offering.

This statement underscores some key points. First, responding to change quickly has become the differentiator between winners and losers in today's business world. Second, if businesses fail to understand that their prime mission is to satisfy their customers' needs and wants—to provide a product/service package rather than push boxes out the factory door—then those businesses will simply fail. CRM has been adopted as a competitive survival strategy.

By definition, if a firm embraces the philosophies behind CRM, it naturally must elevate customer-centric concepts above other considerations and engage in the difficult tasks of gathering, sharing, and acting on end customer information. Without embracing these supply chain changes wholeheartedly, a supply chain will remain a series of uncooperative and inefficient firms and will likely be bypassed by competitors who have embraced CRM (and other collaboration tools) to become more agile and efficient.

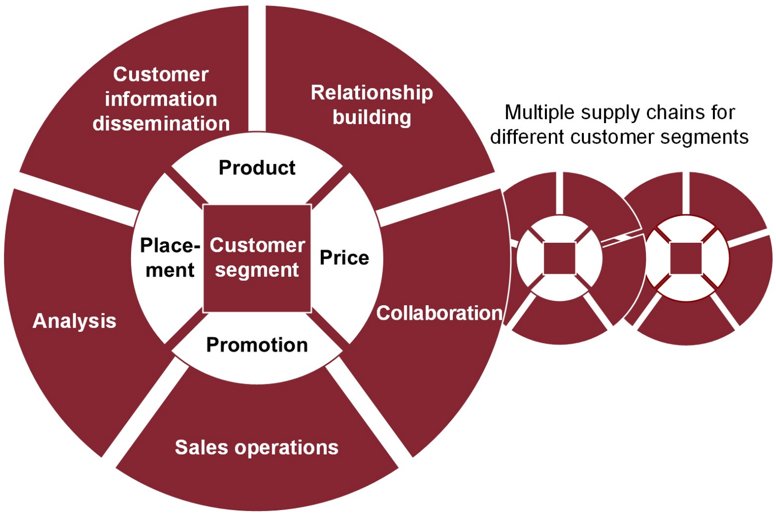
The focus on creating and sustaining more profitable relationships with customers has led organizations to transform themselves into customer-centric organizations. Customer-centric organizations

- Are easy to do business with…anytime, anywhere
- Add value to their products or services, integrating products and information so that customers feel more educated during and after the decision-making process
- Are innovative not only in their design of services and products but in their marketing, delivery, and customer care (An example may include how customer care strives to improve customer service while reducing costs and provides self-service and support so the customer feels in control.)
- Design all business contact points from the customer's perspective
- Share detailed insights about customers within the organization or supply chain.

Scope of CRM

Exhibit 2-104 shows that the scope of CRM involves sales operations (the most functional activity in CRM), analysis, customer information dissemination, and relationship building and collaboration (activities that require the most effort and skill to accomplish successfully). Each of these elements works toward a strategic focus on product, price, placement, and promotion (the four Ps of marketing). All of this is then focused toward one or more customer segments that can be served using a unique set of supply chain capabilities. The additional circles to the right of the graphic help illustrate that the organization may need multiple supply chains to serve other customer segments with their own distinct supply chain requirements.

Exhibit 2-104: Scope of CRM in a Supply Chain



Sales operations

Order taking, invoicing, billing, call centers, help desks, retail locations, customer service centers, field service visits, and product returns or recalls are sales operations that all existed prior to the customer-centric organization but now fall within CRM. Sales operations from a CRM perspective also involve

- Optimizing the customer's experience
- Collecting and storing comprehensive data on each transaction.

Optimizing the customer's experience requires providing each customer with what they value, which could include convenience, personalized service, guaranteeing a call back as promised, or the ability to customize a product/service package. From an economic perspective, it also requires providing these features at the lowest possible cost to the organization, such as by providing some of the more expensive services only to more profitable customer segments.

The data collected on customers can be used to inform every person who has contact with the customer of all prior transactions, including purchases, web visits, problems and complaints, and the status of problem resolution.

Since accomplishing a single virtual point of contact for each customer requires coordination with various departments, including customer service, credit checking functions, billing, accounts receivable, and so on, CRM sales operations rely heavily on technology.

Analysis

Analysis in CRM involves customer data validation and aggregation into segments as well as association of segments with specific products, services, or product/service packages. CRM can be used in some instances (e.g., automated website interactivity) to narrow the size of a segment to one (an individual customer). Another key element of analysis is the ability to query the data or build customized data searches to analyze the data in innovative ways. These types of analyses fall under the category of business intelligence tools. While these analyses can use transactional databases as their sources, often organizations set up a separate database, called a data warehouse, just for analysis.

Analysis also requires determining appropriate performance measurements for CRM initiatives and using the information to refine later initiatives, a subject also addressed later in this chapter.

Customer information dissemination

Customer information dissemination means getting timely, focused information to the right groups in the organization and the extended supply chain. In an age when too much information can be as harmful as not enough, a function of CRM is to provide customer information and analysis specific to the needs of executives, product and brand management, marketing (e.g., lists for a promotion), sales (e.g., channel preferences, buying habits), operations, and other functions. For example, providing the right analysis to web developers can help develop better-tailored recommendations for additional purchases on the web.

Customer information dissemination also requires integrating the information being disseminated to each group so that the overall organizational strategy is being supported. CRM helps turn analysis into action.

Relationship building and collaboration

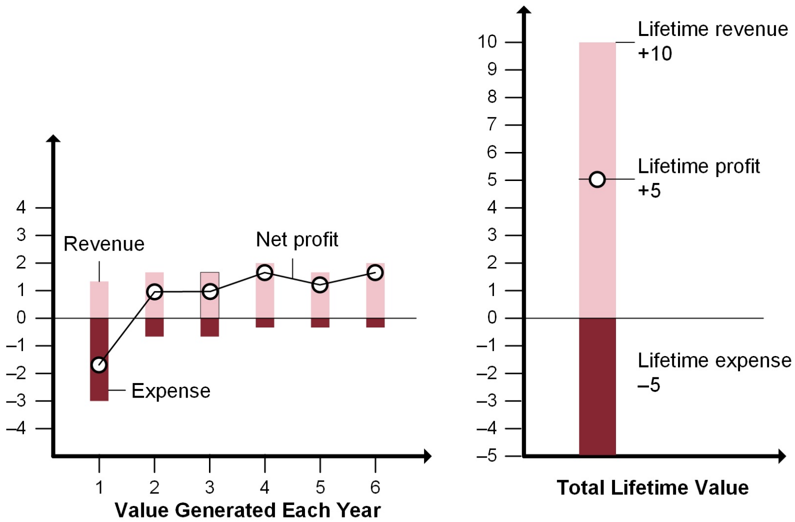
Relationship building is the development of lifetime customers by training staff to optimize each customer’s experience at each interaction. It also involves the use of customer data to design and focus initiatives to acquire and retain customers. Relationship building requires providing staff with information on what an individual or customer segment values and designing policies and procedures to help staff make wise customer management decisions. It may involve soliciting product development ideas from customers or working to devise mutually profitable solutions to actual customer problems.

The point of relationship building is to develop customer loyalty or even mutual dependence. The key to these initiatives is educating staff on the value of lifetime customers.

The CRM business model is not about single transactions but about sustained relationships. Businesses are increasingly interested in lifetime customer relationships because they enhance profit in various ways:

- **Lifetime customers lower total marketing costs.** As illustrated in Exhibit 2-105, the costs of acquiring new customers tend to be front-loaded in the relationship. As the relationship develops, the expenses of marketing and sales (in the left-hand graphic, the darkened bars illustrating the expenses below the zero revenue line) decline.

Exhibit 2-105: Development of Lifetime Value



- **It is increasingly easier to satisfy lifetime customers.** With improved technology, it becomes easier to retain customers through deeper knowledge of the customers' needs and buying habits. A learning relationship is formed through which companies build user profiles, track previous purchases, and anticipate trends. The longer one keeps a customer, the better one knows the customer and the greater the likelihood that one can fulfill the customer's needs and deliver satisfaction.

- **Lifetime customers offer increased revenue and profit opportunities.** As the relationship matures, the revenue from these customers generally increases as the result of increased customer satisfaction and confidence and larger orders or as the result of efforts to sell the customer related products or services (i.e., cross-selling). As revenue grows and the cost of customer acquisition decreases, profit increases. As shown in Exhibit 2-105, from a negative profit point in Year 1, the lifetime relationship yields sustained net profit over the lifetime of six years (the circles on each bar). Although specific profit margins may vary, the right-hand graphic suggests the ultimate profitability of lifetime customers.

Companies may also be better able to maintain profit margins with lifetime customers, who tend to value convenience and stability over price. Customers for whom time or quality is a major concern may be more inclined to rely on established relationships with suppliers or companies. They can save time or manage their risk better by not "shopping around." Often, loyal retail customers explain their behavior by saying, "I don't have time to waste driving all the way over to X only to find that they don't have what I'm looking for, or that their quality is terrible, or that the whole experience is just depressing. I'd rather just go to Y. I know what to expect."

Similarly, in the business-to-business relationship, business customers may look at the establishment of a buying relationship as an expense item (because of the required research, creation of requests for proposals, review of proposals, contracting, etc.) and a risk exposure. ("Yes, this company may give me a better price on this component, but what if shipments are late? What if their quality is poor and it damages our relationship with our end users?") This thinking underlies the creation of preferred vendor lists.

Topic 2: CRM Strategy

A CRM strategy indicates how an organization plans to initiate, develop, and sustain relationships with its customers. The CRM strategy must support the overall business strategy and financial goals.

CRM strategies will vary depending on

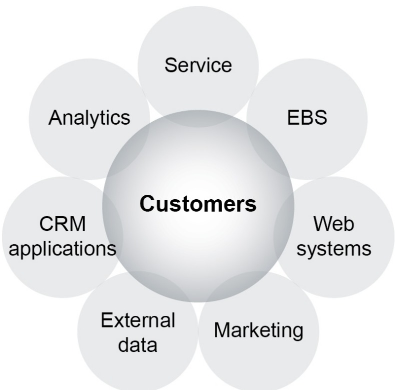
- The components of CRM strategy
- CRM processes
- CRM organizational structures
- CRM technologies
- The product's or service's stage in its life cycle
- The type of customer being approached (e.g., prospects versus loyal) and the customer segment being targeted.

Let's look at each of these factors.

Components of CRM strategy

Components of CRM strategy include those listed in Exhibit 2-106: enterprise business systems (EBS), web systems, marketing, external data, CRM applications, analytics, and service.

Exhibit 2-106: Components of CRM Strategy



The first component, EBS, is the technological backbone. EBS is the collective name for five critical applications a company uses:

- Customer database, which contains customer contact details, shipping preferences, and account information
- Transaction maintenance, which enables the electronic entry of sales orders, including those from the internet, and creation of sales history files
- Sales order status and updates
- Sales support data, including pricing, promotion, and inventory information
- Financial details of accounts receivables, interest, collections, and financial analysis

Quite often the data in EBS comes from an enterprise resources planning system.

The second component is the web system, which enables customers to use the organization's website to order products, peruse product photos and information, generate orders, and participate in online auctions and even online learning.

Marketing is the heart of customer management. Its critical role is to ensure that customers know about product, service, and company information that will lead them to making purchases. This component is pivotal when it comes to identifying the specific values a customer expects from the company's products and services.

Next, external data helps support the creation of collaborative partnerships among the company's suppliers, resellers, and channel partners. This information is used to generate highly desirable bundles of products and promotions, attractive packaging design, order fulfillment, and product merchandising. It is also used in determining transportation choices.

The CRM application, the fifth component, is actually made up of three elements: operations, collaborative, and analytical CRM. Operations CRM consists of web portals, email, customer service, ordering, invoicing and billing, and sales statistics from EBS. Collaborative CRM is used to do forecasting and design processes. Analytical CRM is focused on the analysis of historical information on customers and how that information is captured, stored efficiently, and reported.

Analytics includes the evaluation of sales activities and key databases tracking prospects, product lists, and payment data. The key here is having this information be "actionable" so that business processes are customer-centric.

Service is the final component in this model, and its focus is on follow-up with the customer after the sale. This support function is instrumental in enriching customer relationships and may include cyberagents who assist customers live while in the midst of ordering, electronic service surveys, automated contact centers, and web-based self-service.

Collectively, these components provide an organization with a 360-degree view of the customer.

CRM processes

CRM processes indicate how to execute marketing, sales, and customer service activities and specify the order in which the activities should occur. Process strategy should focus on improving time-to-market for these activities by

- Reducing specific tasks and activities for demand management (planning, communicating, influencing, and managing and prioritizing demand) to just those that are value-added
- Executing demand management tasks as quickly as is feasible
- Maximizing the number of tasks that can be performed concurrently rather than sequentially.

An essential element of CRM process strategy is a formal monitoring and feedback process. This will enable and require the strategy to adapt when actual results differ from planned results. The results of demand influencing and other CRM activities are difficult to accurately predict, so organizations should build in tolerances for sensing and responding to implementation difficulties or varying levels of customer awareness and demand for the product or service.

It is also important to review the metrics that are being used to assess performance. Sometimes organizations continue to use metrics that have not been revised to be more customer-centric. For example, a common metric used for call center performance evaluation is the number of win-back customers that have been convinced to continue as customers. (A win-back customer is one who is terminating or has terminated their relationship.) However, a better customer-centric metric would include the customer's value to the organization in the calculation.

Getting organizations to adopt process improvements can be challenging. One way to help drive process improvements in a busy environment where everyone is working on execution of CRM activities is to use a process such as the plan-do-check-action model so that plans can be linked to decisions and decisions linked to metrics and metrics linked to results and results fed back into plans. This will allow strategy improvements to be regularly implemented.

CRM organizational structures

Organizational structures are important to CRM because demand management efforts can differ widely and teams need to be formed to handle each different type of activity. For example, media-based marketing is a very different activity from direct marketing, and separate teams typically must be formed to handle these specialized tasks. Team members can focus on one type of marketing, and training can consist of job rotations (switching between jobs to learn each one) and mentoring so that teams can shift around to adapt to changes in demand plan priorities.

When organizations shift from traditional marketing and sales to customer-centric demand management, organizational structures will also need to be adapted to ensure that job descriptions, policies, workflow, and performance measurements reflect the focus on segmenting customers by organizational value and customer needs.

Finally, organizational structure is an issue for CRM strategy because of the different types of customers that each require different types of sales and marketing campaigns: prospective, vulnerable, win-back, and loyal. (These types are discussed later.) CRM teams can specialize in a type of campaign or perform job rotation to learn the most effective approaches to succeeding with each type. Note that when performing job rotations or other learning activities, a best practice is to get experience while working with the less profitable customer segments so as not to endanger the more profitable segments (except with win-back customers, where it is always a priority to contact the most profitable segments first and usually not as a training exercise).

CRM technologies

Here we will look at technologies at a strategic level. CRM technologies will be revisited later in more detail.

CRM strategy relies on proper collection, storage, and use of customer data. Storage of data is critical: All CRM transactional data should be stored in a single database that is integrated and capable of scaling up to handle a large amount of throughput from CRM operations. This database can also serve for data analysis and reporting purposes if it is robust enough to handle such demands, or a separate database for reporting and analysis can be developed, called a customer data warehouse (CDW). The important strategic choice is between a CDW and a single database. If a CDW is deemed necessary, it should be linked to the transactional database to receive regular automated batch updates so it can be kept synchronized. If the choice is to have a single integrated logical database, it can simplify reconciliation but must be robust enough not to slow down transactional processing tasks. Cloud-based CRM databases are typically used for both transactional and analysis purposes.

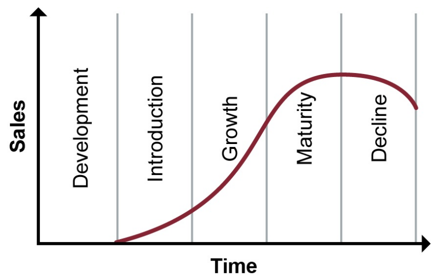
Data collection practices also need review in a CRM strategy. It is important to track results when they are both better and worse than what was planned and to verify that all data are being entered into the organization's database. For example, an organization can avoid common data collection issues by not allowing outbound call records to be deleted until they are first transferred to the CRM database.

Other technology requirements for a successful CRM strategy include selection of tools for effective data mining (the process of studying data to search for previously unknown relationships) along with decision support systems, call center applications, and campaign management tools. These tools will be discussed later in this section.

Product's or service's stage in life cycle

The product life cycle, shown in Exhibit 2-107, was introduced in an earlier section. Here we'll look at the life cycle stages from the point of view of how they intersect with CRM, and we'll use case studies to see how different businesses manage their CRM strategy relative to the stages of their products' lives.

Exhibit 2-107: Product Life Cycle



Development stage

New product development (or modifications to existing products) is essential to cultivating brand loyalty and developing lifetime customers. CRM makes it both possible and necessary to align product development with what customers actually want. Information gathered through CRM (e.g., customer feedback, focus groups, online customer chat room comments, data on customer buying behaviors and trends, blogs, and social networking sites such as Facebook or LinkedIn) can be used to identify an idea or concept that has the potential to meet customer needs and increase profits. Once customer desires have been identified, a successful product design must be measured against profit goals and the product's ability to meet those customer expectations and improve competitive position.

The next step is to gauge the success of the product in the actual marketplace. Here again, CRM can be employed to select test customer segments. Both the product and its promotional plan can be tested against key performance indicators such as cost and profit goals, customer satisfaction measures, market penetration, or improvement in competitive position. Testing should confirm the accuracy and completeness of the CRM strategy:

- Is the product what this segment is looking for?
- Is the pricing correct?
- Is this the correct channel?
- Is the audience hearing and responding to promotions?
- What customer care issues have arisen? What infrastructure will be needed to tend to those issues?

In some business types, the development stage offers an opportunity to create customer ownership. By involving key customers in the product- or service-crafting phase, the business creates a sense of partnership and mutual investment that will translate into greater potential for lifetime customers. These key customers will provide an early platform of sales to sustain the product until it begins to grow. They may become a source of recommendations, referrals, or good “word of mouth”—person-to-person advertising.

Case study: development in the clothing retail business. Here’s the background on the first case-study company, a clothing retailer that has outlets in major cities on three continents:

- This company targets the young shopper and offers a full line of clothing and accessories at moderate prices. Stores are designed to reflect the shoppers’ cultures.

- Currently, buyers order products at quarterly shows from a variety of vendors. The problem with this is that the retailer is always chasing changing trends. Stock must reflect the very latest fashions. If the shopper sees a new music video, he or she will want to buy that particular t-shirt right away, not next season. A complicating factor is the unpredictability of local markets. What’s “hot” in one area may not sell at all in another market.

- If the company guesses wrong on a fashion or if they take too long getting items into the stores, the stock must be moved to the deeply discounted sale racks. At best, the supply chain is wasting expensive floor space on items with little or no profit margin. At worst, items will have to be discarded or transported to other resellers.

- Profit margins are tight on some lines since price points (the points at which the young shopper with somewhat limited finances shrugs and goes somewhere else) dictate aggressive pricing. In spite of these challenges, competition is growing for this customer segment, and it is becoming more difficult to distinguish the value the retailer is delivering and to remain profitable.

Our case-study clothing company has a history of chasing trends and sticking reduced price tags on unsold clothing. It has always been customer-centric but not exactly from the right perspective. It responds to where its customers are right now by buying product designed and produced by other companies, but by the time product reaches the stores, the customers have moved on to new trends. The business needs to predict or even create trends.

Its existing data are not very helpful; the information can identify strong and weak sellers in the past, but there’s little predictive value. The company decides that to remedy that shortcoming in the future, it will establish its own credit card and frequent purchaser affinity card programs. This will ensure access to accurate data and also promotional access to targeted customers (through direct mailings, billing inserts, eco-friendly non-spam digital marketing, and so on). Working with marketing specialists, it uses focus groups of actual customers to explore how its young shoppers define style, what influences their judgments, what the anticipated product life is, how tastes may vary in different markets, and what restrictions may shape their decisions (like cost). With a better sense of what its customers want, the company can now work with designers and manufacturers to create lines of unique products and accessories that meet the customers' product requirements.

Introduction stage

CRM focus at the introduction stage is on supporting the promotional program. Advertising costs are typically high during this stage in order to rapidly increase customer awareness of the product. New customers must be supported to ensure a high level of satisfaction with the product and the business.

Case study: introduction in the leisure boat business. The next case-study company is a boat manufacturer that produces high-performance, complex, and expensive leisure watercraft aimed at very high-end consumers:

- The company was founded by an enthusiast who has always been focused on the boats' performance on the water, designing the best boats with cutting-edge materials and processes. The manufacturer designs its own distinctive hulls but outsources engine design to a well-respected designer whose name is important in the marketplace. Engines are built by three different subcontractors. Assembly and finishing is done in-house. The boats are sold through marinas, who act as distributors.
- The marinas sell more than one manufacturer line, so there is some competition for the hearts and minds of the marina owners and their salespeople. The marinas do a considerable amount of customizing at their end, adding different electronic systems and accessories, changing seating, and even reconfiguring the interiors. Sometimes, the original design and unique look that the manufacturer prizes are obscured in the process. Components of poorer quality are sometimes used in the customization process, and the customer may associate the problems with the boat manufacturer rather than the marina distributor or parts manufacturers.
- This is an expensive item to produce and a challenging item to ship and sell. Component expense limits the amount of inventory that can be manufactured before sale; product size limits how much can be displayed at the point-of-sale. Delays in delivery can mean that a customer loses the use of the boat for an entire season; customers may cancel purchases and the manufacturer then has to pay for floor space at a marina. If delays occur repeatedly, the manufacturer risks losing distribution at a marina. Boats also frequently incur minor damage during transportation to the marina and eventual owners. These are small details but can seem like major issues to a customer who has paid a premium price. Customer care during and after the sale is a constant concern for the marina owners, since this is a demanding customer segment. The marina owners frequently complain to the manufacturer's sales representatives that the company just isn't in touch with their needs or those of the customer.

Our leisure watercraft company has the challenge of becoming more customer-centric as well as more sensitive to the needs of its supply chain partners—the marinas that act as distributors of product. So it involves its distributors in developing a new model and a promotional program. Marketing targeted at affluent previous boat owners succeeds in producing more-than-satisfactory initial sales. Trends in customization requests and aftermarket customization are carefully tracked so that these customer interests can be reflected in future models. The boat company creates customer care teams. Each new boat owner is assigned a specific customer care representative who has been thoroughly trained on the product and is empowered to authorize rapid correction of any product flaws. All new boat owners are automatically registered in an exclusive club that offers discounts on related products and invitations to special events.

Growth stage

Customer care must be sustained during the growth phase. Information is used to identify strong and weak customer segments, and advertising messages must be tested for their effectiveness in reaching these groups.

Case study: growth in the financial services business. The third case study looks at a financial services company that offers a variety of products and services to a wide range of customers:

- Some products are their own; others are created by specialized investment or financial services companies—for example, socially conscious investment, insurance, or credit card programs. The company sells its products and services through independent financial consultants who agree to sell only the company's line of products and services.
- Tough markets and the internet have cut significantly into their business. Many people now handle their own investments. The market itself is almost too diverse. It is difficult to meet all the needs of these different customers and market to them successfully.
- The company also often loses lucrative high-value investors when financial consultants terminate their association and go off on their own. Generally, financial consultants leave when they become frustrated because they cannot offer the level of service or customer care that their clients expect because of limitations in the company's information systems architecture. At the same time, they are very sensitive to any infringement by the company into their relationships with clients. The financial consultants prefer that the clients think of them as the provider of product and service rather than the company itself.

Our financial services business has developed new products and services that have resulted in stronger relationships with both its distributing brokers and the end customers. One of its innovations is an information system that allows brokers access to various information sources, analytical capabilities, and promotional vehicles (like customized mass emails or print newsletters); it also provides customers with online access to real-time account status and history reports. The company is comparing the effectiveness of these newer promotional activities with the more traditional ones of cold-calling prospects to offer new products.

Maturity stage

During maturity, the organization focuses on using its dominant position to entice its competitors' customers to switch. At the same time, it must continue to attract new customers. Sales promotions may be increased to encourage retailers to give priority in merchandising. Customer care activities that affect brand image are especially important as an answer to increased competition.

Case study: maturity in the clothing retail business. Our clothing retailer (described above) knows that, for each product line, maturity arrives very quickly. Its strategy is to develop new product that is ready for introduction as soon as the old product has peaked. This requires careful tracking of purchasing numbers at all outlets. With real-time data, rather than weekly or monthly status reports, the company will be able to move quickly. It will identify those outlets in which sales numbers are strongest, move inventory to those outlets, and implement promotional programs to sell off stock at only modest discounts. Meanwhile new product will be introduced in the more mature markets.

Decline stage

In this stage, customer care is critical. Customers with soon-to-be-obsolete products must be assured that they can receive service and replacement parts. They can be provided a means of migrating to the newer products. Customer care now can promote lifetime customer development.

Case study: decline in the leisure boat business. Our leisure watercraft company is meeting the challenge of becoming more customer-centric. Its new model is well received by both marinas and customers. Unfortunately, it was also well observed by its competitors, who have copied some design elements. The company decides to keep its image as a leader by developing and introducing a model with even more innovative features. Customers who bought the first product are targeted for early promotions. A used boat program has been developed for marinas to handle the anticipated inventory of used boats. Meanwhile though, the company has worked through a plan with marina owners to ensure ample stock for repair and replacement. Customer care teams remain allocated to serving existing customers.

Customer type or segment

Creating a CRM strategy involves translating an organization’s overall strategic goals and business plans into customer-centric selections in the four Ps of product, price, placement, and promotion for each product family or product. A very important element of CRM strategy is pricing. It is a strategic and critical decision that may make the difference between an order winner and an order loser. Placement or channel strategy and segmentation are also important in terms of impact on the perceived value of an offer to a customer. In other words, the price must be right, and, if it is, the right customer segments must be made the offer and it must be conveyed in a manner that will be most likely to get and keep their attention. The marketing, branding, and advertising aspects of CRM promotional strategy and product design are also important.

However, there is one more key element in a CRM strategy that must not be forgotten: the customer. Specifically, a CRM strategy must factor in the customer’s segment, possibly leading to a different strategy for each of the organization’s targeted customer segments, and the customer’s type, or current relationship to the organization.

CRM strategies for customer segments

Customer segment strategies can be categorized by demographics, attitudes, or psychological profiles; as customer value, service-minded customer, retail customer, or B2B customer strategies; and as strategies for reaching customers via technology channels.

Strategies for segmentation by demographics, attitudes, or psychological profiles. When segmentation is performed based on demographics, attitudes, or psychological profiles, care must be taken not to make assumptions but to base the strategies on valid research. Some obvious demographic segmentation strategies can be valuable, such as for products designed only for women, but when it comes to more nuanced segmentation, published scientific studies, census information, or broad-based market research from respected sources should be sought to support intuitive opinions. For example, while traditional marketing wisdom states that repetitive marketing is necessary and effective in getting a brand message to sink in, a study from Exact Target and CoTweet listed on www.marketingcharts.com indicates some contrary research: 52 percent of Twitter users state that messages that get too repetitive or boring is a reason to stop following a brand on that messaging and networking site.

Customer value strategies. To retain the most profitable customers and increase business with high-value customers, businesses must develop customer-centric strategies that accomplish the following:

- **Define "valuable" customers.** Value may mean different things for different organizations, depending on their business goals. A business trying to establish dominance in a market may focus on customers it has converted from the competition. Volume may be meaningful to some businesses, while profit (perhaps subdivided into profitability in targeted products or lines) is meaningful to all for-profit organizations.

- **Deliver timely, detailed information that will help the organizations identify the most valuable customers.** CRM information systems must capture and yield the right information for analysis.

- **Define what features or services mean the most to the best customer segments.** Data may be analyzed to identify the most commonly used or requested features or services. For example, an examination of interactions with the most profitable customers for an online merchant may uncover that they tend to choose the most rapid form of shipping. The merchant might form a closer relationship with these profitable customers by offering free express shipping for larger orders.

- **Measure impact.** Are we dealing with customers without measuring the effectiveness of the segmented customer-centric strategy? Are the costs of providing improved service to customers more than balanced by increased profit or growth? Is there any value to a segmented strategy?

Service-minded customer strategies. For many customers who value service, the call center is the heart of the business with which they are dealing. While most organizations pride themselves on personalized service via the call center, the point of differentiation is often technology. Technology makes information available to the call center operator, who can then use this information to assist the individual customer and resolve issues in a timely fashion. CRM technology allows a customer service representative to view detailed information about the customer's history as well as the specific transaction during the call. A representative can see immediately if this is a high-value customer and escalate the service process (for example, by not placing the person on hold). The representative can demonstrate a high level of personal knowledge about the customer and the customer's business that is valued by the service-minded customer.

Retail customer strategies. Retail customers surveyed by a marketing research company reported that price was not the sole factor affecting their decision to purchase a product. Rather, customers actually were most influenced by the bundle of services surrounding the product, including in-store assistance, the availability of a website or toll-free number for preshopping research or postpurchase customer service, and product design that valued easy assembly of the product and integration of the product into existing systems. The second issue driving retail customers was product quality. Price, as measured by both actual price and anticipated product life, ranked in third place. Customer-centric strategies for retail customers should therefore consider and reflect this group's complex contact channel preferences.

B2B customer strategies. Business-to-business (B2B) customers (to be distinguished from customers buying products or services for personal use, or B2C) have three specific areas of expectations from the companies with which they do business:

- **Complementary core competencies.** Business customers want to focus their main resources on their own core competencies while turning over the balance of functions to businesses with expertise in those areas. They rely heavily on the expertise and reliability of their product or service providers, because a failure by the provider puts the business customer at risk with its own customers.
- **Knowledge of the customer's business requirements.** Business customers value a provider's understanding of how their business operates, what its limitations and concerns are, how the product or service fits into their business, and what requirements may be part of the purchasing process. Business customers would rather not educate or re-educate each provider. For example, a manufacturing company's vendor has full online service and specification information for the manufacturer's related products. The vendor is thus adding service as part of their CRM processes.
- **Continuous improvement.** In time, business customers will especially value suggestions regarding economic opportunities, improvements, and potential solutions to problems.

These business customer expectations suggest that a successful customer-centric B2B strategy must include extensive training of sales and service representatives, with great attention paid to profiling customer and end user needs, avoiding problems or remedying them quickly, and analyzing account data periodically to identify areas for improvement.

Strategies for reaching customers via technology channels. When developing a customer-centric strategy for reaching customers via technological channels, businesses must carefully test how receptive their own customers are to this contact point. Is this the type of purchase they feel comfortable making on their own? Is this a high-relationship, high-touch type of sale? How familiar is the targeted customer segment with the technology? How much are they willing to learn? Some B2B systems may require extensive training. Will the decision to use a more technologically advanced channel drive some customers away?

CRM strategies for customer relationship types

Just as products have a life cycle, so do customers. They progress in their relationship with a brand or a business, from prospect to customer, and then, at critical decision points, they consider whether to continue the relationship. Some customers may be vulnerable. For some reason, the likelihood of retaining their business is less than for other groups. Some customers may become ex-customers and will need to be won back. Other customers proceed to become loyal customers, the least vulnerable group and the foundation of successful businesses. The goal of any CRM strategy is to increase the number of loyal customers.

One of the key purposes of a CRM strategy is to allow an organization to address the various types of prospects and customers it serves at different stages in their particular life cycle. Very different marketing and customer care campaigns are developed based on these four types of customer relationships.

Prospective customers. CRM strategy related to prospective customers determines the market research, product pricing, audience segmentation, promotional message, and contact channel that should be selected for each customer segment. Captured data can help shape future prospecting activities. For example, our financial services case-study company may discover that contact with prospects from carefully researched sources yields more new customers than traditional cold-calling over the telephone, while referrals from current customers are the best source.

Vulnerable customers. Saving a customer who is about to discontinue service or stop purchasing product requires good target identification and prompt action. CRM data can be instrumental in early and accurate identification of vulnerable customers and in analyzing the most effective retention programs.

According to the 16th edition of the *APICS Dictionary,* **churn** is “the process of customers changing their buying preferences because they find better and/or cheaper products and services elsewhere.” The predictive churn model uses customer information (including factors such as demographics and individual customer purchasing history and trends) to anticipate in what groups and at what levels customer attrition may occur. The model may also be used to measure annual turnover in the customer base and set goals for replacing lost customers through acquisition of new customers.

The business may then decide to target special promotions to keep those customers they believe still have value. For example, credit card companies identify customers who have used their cards only minimally and offer them opportunities to transfer balances from other cards at no interest for a set period. Or they may institute a “frequent user” reward program. Service companies such as phone and cable companies who have a very low marginal cost for customers will often offer special deals to customers who want to cancel (e.g., 50 percent off for the next six months).

Win-back customers. To win back a customer, communication should be made as soon as possible, within the first week after the customer has discontinued service. Rapid communication between different parts of the company is essential. For example, a phone company discovered that it had lost 27 percent of its mobile phone customers to other mobile providers. They quickly offered a special program to the most valuable customers and were able to win back approximately 50 percent of its profitable customers within 48 hours. (They left the unprofitable customers with the competition.) After additional research, the phone company learned valuable information from the customers who had left the company, such as how the competition enticed them to switch carriers and how perception of the quality of the service had affected that decision. With this new information in hand, the phone company set out to make changes based on the information communicated to them. One change in the cell phone industry since that time is the use of contracts to keep customers long enough so they become profitable. However, this means that the opportunity to win back customers is often only before they leave and sign a competitor’s contract.

Automated CRM programs can trigger implementation of win-back programs as soon as the customer relationship is terminated or as it is being terminated. Customer data can support the decision to expend resources to win those customers back.

Loyal customers. It is obviously in the best interests of a business to cultivate customer loyalty. Loyal customers are less vulnerable to loss and will therefore not require the business to incur the costs of a win-back program.

According to a poll published in *USA Today,* 44 percent of U.S.–based CEOs list customer loyalty as their number-one management challenge. The CRM response to that challenge has been the development of customer loyalty programs—CRM programs that reward loyal customers, in a way meaningful to those customers, for their continued or increased business.

The following are some loyalty program design considerations:

- **Customer behavior.** What type of customer behavior does the organization want to increase? For example, does an airline company want to reward business travel more than leisure travel?
- **Targeting.** How should customers be segmented and how can their needs be addressed through the loyalty program? For example, a frequent purchaser of office supplies may be attracted through a program with less paperwork.
- **Positioning.** What are the implications of the loyalty program to other segments? How many resources should be directed toward these programs?
- **Program offer.** What will the program consist of? Bonus points? Higher discount levels? Additional services like free shipping or expedited service?
- **Cost and benefit structure.** What is the long-term net value of each program element? How will the value be sustained over the long term?
- **Communication.** How will customers be notified about the loyalty program?

A CRM program may also offer complementary products or services (cross-selling) or more profitable products or services (up-selling). With cross-selling, for example, if you buy a book or music from an online seller, you may automatically be shown a list of books or music that are similar or that have been purchased by customers with similar purchasing histories. If you order a part online or through a call center, the system or attendant may offer parts that could be required in the repair. Examples of up-selling include preferential ordering of offerings in an online setting (an automated computer manufacturer prompts purchasers to choose more expensive components by listing them as the default feature) or suggestions by a call center operator to consider the increased benefits of a slightly more expensive service program. (During an annual re-enrollment period, a credit card company offers a retail merchandiser a more expensive account program that will provide additional insurance against credit fraud.)

Effectiveness of CRM campaigns related to customer types. When CRM is used to focus campaigns on the four customer relationship types, it can result in a larger customer base. According to a study by PricewaterhouseCoopers based on independent research, organizational profitability was improved as described below when CRM was used to manage campaigns:

- More prospective customers resulted in a three to four percent increase in profits.
- More churn reduction in vulnerable customers resulted in a 15 to 20 percent increase in profits.
- More won-back customers resulted in a 10 to 20 percent increase in profits.

- More cross-selling and up-selling to loyal customers resulted in a two to three percent increase in profits.

Chapter 3: Customer Relationship Management Performance and Measurement

This chapter is designed to

- Explain the relationship between CRM, technology and establishing lifetime customers
- Describe the sources of customer information, including the voice of the customer
- Review some ways in which technology can be used to enhance the CRM process.

Topic 1: Performance Management

The effectiveness of the CRM strategy must be measured to ensure that the strategy and related technology are establishing lifetime customers and increasing profitability. In this topic, we'll look at measuring customer service and customer satisfaction.

Customer service

Some areas in which customer service can be measured include response to inquiries, order processing, level of service, and product or service quality.

- **Response to inquiries** should be prompt and accurate. Responses related to supplying information can be measured by the time delay between the initial contact and the response and the number of errors detected in responses. Another example of metrics in this area is executive complaints, complaints that are directed to higher-level managers and executives. (These sometimes are forwarded to a group of higher-level complaint handlers.) Performance measures include tracking the volume, response time, and trends of such complaints. For telemarketing, metrics may include the percentage of calls to 1-800 numbers getting a busy signal, the average answer time, the number of disconnected calls, or the percentage of repeat calls from a customer.

- **Order processing** should be fast and accurate. Delivery should be on time. Order processing metrics include order cycle time, the percentage of orders that were mechanically received, the percentage of orders with errors, and website ease of use.

- **Level of service** is measured by delivering the right product, in the right quantity, at the right time, to the right place, in the right condition, and with the right packaging and documentation. Level-of-service metrics may include the percentage of orders shipped complete and on time, the number of backordered items, the average age of backorders, and the value of backordered items.

- **Product or service quality** is measured by cost-of-quality issues. Product or service metrics may include the number of executive complaints, defect rates, warranty costs, product returns, and website downtime.

Customer service can also be measured using customer-facing SCOR® metrics, which assess supply chain reliability, responsiveness, and agility. SCOR metrics are discussed in greater detail elsewhere.

Customer satisfaction

The obvious way to gauge success at establishing loyal customers is to measure customer satisfaction. The

SCOR customer-facing metrics and other metrics described above can be used to measure likely customer satisfaction, but even perfect scores measure only the absence of issues; they can't guarantee customer satisfaction with products or services. A customer may get the correct product on time exactly as ordered and not return it, but this doesn't mean that the customer is satisfied.

Organizations have frequently used customer complaints as a proxy for measuring customer satisfaction. Although this method may bring to light some customer issues and complaints, it does not begin to accurately measure the satisfaction level of the customers. A recent study determined that manufacturers of large ticket goods or services hear less than five percent of the complaints of their unhappy customers. If organizations are going to move to a more customer-centric supply chain management model, they must measure more than customer complaints.

The question is, who assesses customer satisfaction—the organization or the customer? Organizations can use internal data to measure performance against common customer expectations, but external review data—the customer's own evaluation of the experience, such as the voice of the customer—are more meaningful.

If an organization leverages partner relationship management (PRM), it can better control how a customer is treated throughout the customer experience. According to Ross in his text *Introduction to Supply Chain Management Technologies,* PRM is a business strategy that includes tools to increase the long-term value of a company's channel network. Through the use of software toolsets, PRM enhances communications, processes, and transactions throughout the supply chain system. It also assists companies in selecting the right sales partners and facilitates the communication between them. It searches for ways to improve not only sales but also productivity and competitiveness of partners. The synergy created aids each trading partner in contributing positively to customer satisfaction.

The quality of the channels' service can be evaluated in many different ways. One is by evaluating the trustworthiness of the channel. Customers must trust the channel to deliver on time and in the way communicated. Next, customers should feel that they have been treated fairly, with respect, and in a competent, friendly manner. Finally, to evaluate the service channel, one must look at the effectiveness of problem resolution: Can customers quickly reach someone empowered to resolve the problem? Do customers feel that everything is being done to address the problem as quickly as possible? Are they satisfied with the solution?

Below are some approaches to begin measuring the customer satisfaction level within an organization:

- **Voice of the customer (VOC).** VOC can be used to gather unscripted customer feedback from interviews, conversations, and focus groups. This information may help discover hidden areas of satisfaction or dissatisfaction.
- **Transaction customer feedback questionnaires.** A transaction-based questionnaire measures customer satisfaction at each transaction point. Assessment tools must be brief, but they can be simple to implement. For example, a leading car rental company asks every customer returning a car whether the rental experience was satisfactory, either in writing or verbally. If a customer indicates dissatisfaction, employees are trained to address the problem or concern immediately. Many quality

certification systems such as ISO 9000 also require a documented closed-loop feedback system of customer improvement.

- **Monthly/quarterly customer feedback questionnaires.** This is a more detailed periodic questionnaire sent to customers regarding their overall experience over the last month/quarter. The technique can be expensive; however, the benefits can far outweigh the costs in terms of detailed customer information.
- **Participation in performance reviews.** This technique may be especially useful in the B2B setting. Key customers are asked to evaluate their account manager's or team's performance. The customer perspective complements the internal company focus on quotas and numbers. When reviews are solicited from these external perspectives, it resembles the 360-degree feedback system used for internal peer reviews.
- **Collecting and responding to negative comments on the internet and social networking sites.** Organizations can actively search for and respond to negative comments on the internet or on social networking sites such as Twitter or Facebook. According to a report by RightNow and Harris Interactive (discussed on www.marketingcharts.com), retailers contacted 68 percent of U.S. consumers who posted a negative review or complaint of their 2010 holiday shopping experience, and 67 percent of those contacted ended up taking an action that the retailer considered positive for the brand.

The feedback gained from these approaches can help improve customer service issues, order fill rates, etc., and will allow organizations to implement corrective action and improvement for customer satisfaction. The goal must be to give customers an acceptable level of service the vast majority of the time so as to achieve the targeted customer satisfaction rate.

Striving to continually improve customer satisfaction is a goal of customer-centric organizations, and they are continually searching for ways to further enhance their customers' overall experiences. New technologies enable them to take their efforts one step further.

Topic 2: CRM Technologies

Technology has driven the change toward a customer-centric and integrated marketplace, and it has also facilitated the way businesses can manage this change. If technology has made it easier for customers to shop for the best price, it has also made it easier for businesses to gather information about customer buying habits so that marketing programs can be adjusted to their targeted audiences. If electronic commerce has cut into the business of brick-and-mortar retailers, it has also improved cash flow and significantly reduced costs associated with invoicing. Similarly, technology has been used to accomplish the levels of integration necessary for CRM. Suppliers can communicate with customers in real time, and information can be shared so that systems show current status. Processes can be automated, saving valuable time. Alerts and notifications can be made instantly so that corrective actions can be taken immediately.

The CRM process depends on data, and technology can assist in its collection and analysis. An effective CRM system ensures that everyone who can influence the customer experience (e.g., sales, customer service, credit, accounts receivable) is provided with critical information about the customer, such as what the customer values and how each individual can help to provide a positive customer experience.

Here are a couple of examples of how technology can be employed to support CRM strategies:

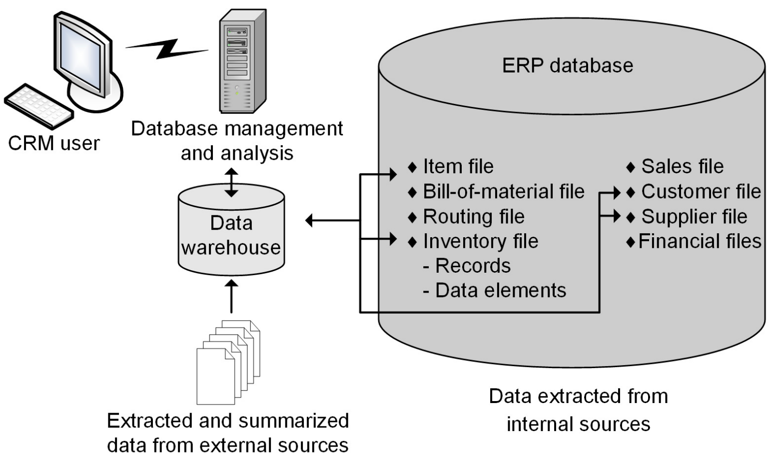
- Customer interaction centers (CICs) are a means of grouping service functions so that the overall customer experience can be better managed. CICs often use multimedia and other technology tools so that the customer service representative and the customer can engage in a highly personalized verbal, texting, or chat interaction. The representative can simultaneously pull up order and account status information as well as product warranty and maintenance information and account upgrades that are pertinent to the customer.
- Customer experience management (CEM) technologies have been developed in response to customers wanting more control over their buying experience and their desire to be treated as individuals with unique needs and wants. Organizations at the fulcrum of supply chains are using CEM to generate enhanced customer loyalty and a competitive advantage by listening to the subtle nuances of customer feedback. These technologies are intended to measure both tangible and intangible elements, such as customer feelings and expectations, so that the information can be used to create a superior buying experience.

This topic looks at a number of CRM technologies and how they are used in organizations. We'll also discuss technology integration and implementation, and we'll conclude with a case study on the use of CRM in dealing with challenges.

Customer data warehouses

A **data warehouse** is "a repository of data that has been specially prepared to support decision-making applications" (*APICS Dictionary,* 16th edition). We learned about the customer data warehouse (CDW), which contains information about an organization's customers, products, and marketplace, earlier. A CDW extracts information from internal and external sources, standardizes and consolidates the information, and stores it for easy access and retrieval. Organizations generally use CDWs in conjunction with their existing information technology infrastructures, which could be an enterprise resources planning (ERP) system or a dedicated CRM transactional system and database. Exhibit 2-108 shows how a customer data warehouse can interface with an organization’s ERP system to keep up to date with new transactions while providing a dedicated source for data analysis.

Exhibit 2-108: Example of a Customer Data Warehouse Interfacing with ERP



One alternative to using a CDW in conjunction with a transactional database is to use a cloud-based database for either transactional or analysis activities, or for both, as part of a software as a service (SaaS) or organization-hosted solution. A cloud-based database is a virtual database that can be accessed from anywhere over the internet. SaaS and cloud computing for CRM are discussed more later.

For organizations able to implement a customer data warehouse, there are many benefits:

- **Strategic marketing.** A CDW allows the organization to improve segmentation of the customer base by providing data about customers and their preferences and vulnerabilities. This helps make promotional programs more cost-effective. For example, the data can be used to identify and implement special offers to loyal customers while enticing prospects with low-cost introductory offers.
- **New product development.** Data on customer needs provide valuable input into product design and development decisions.
- **Channel management.** CDW data help compare the effectiveness of channels and the strength of the importance of the channel to the customer segments. Analysis of data on channels may indicate, for example, that moving certain customer segments to lower-cost channels will require incentives.
- **Sales productivity.** Human and technology resources can be allocated according to customers’ channel preferences and purchasing patterns to increase sales productivity.

- **One-to-one marketing.** The ability to customize programs and create a one-to-one marketing approach cannot be achieved without a CDW. One-to-one marketing and customer care greatly enhance overall customer satisfaction and loyalty.

Business systems

Business systems provide the backbone for customer management. An organization's business system consists of three critical areas:

- Transaction maintenance (order entry, status of open orders, sales history)
- Information (pricing, promotions, inventory balances)
- Financial details (account balance information, collections, payment records, financial analysis)

Segmentation technology

Creating useful segments often requires the use of CRM technology. Computer algorithms can be used to model customer behavior. A best practice is to base such algorithms on demographics and historical purchasing patterns and limit use of assumptions or projected behavioral traits. Once such a model is developed, it should be validated to make sure that prospective customers are being placed in the correct segments.

Customer care and marketing/sales technology

Web-enhanced customer service provides a variety of solutions to increased customer expectations in the areas of response, product customization, convenience, order status visibility, and returns processing. Solutions include online frequently asked questions and answers (FAQs), online customer service representatives, and online chat rooms dedicated to particular customer concerns. Customer service representatives are able to handle many complex issues immediately by accessing customer records or order status information and can resolve others via email. In addition, highly detailed product information that can be presented online (and may not be available in stores or catalogs) can actually reduce product returns.

Traditional phone-based care has also become more sophisticated. Customers waiting in a universal queue are greeted with choices, which alleviates the feeling of being trapped on hold. Callers who don't want to wait on hold can enter their phone number and request that they be called back when it's their turn in the queue. Callers with simple questions or issues can record a voice message, which is played back to the next available agent, along with a request for a return call if desired. Callers who choose to wait in the queue receive periodic announcements of expected hold time as well as targeted messages such as new product bulletins or holiday hours. They may also be directed to websites for faster service.

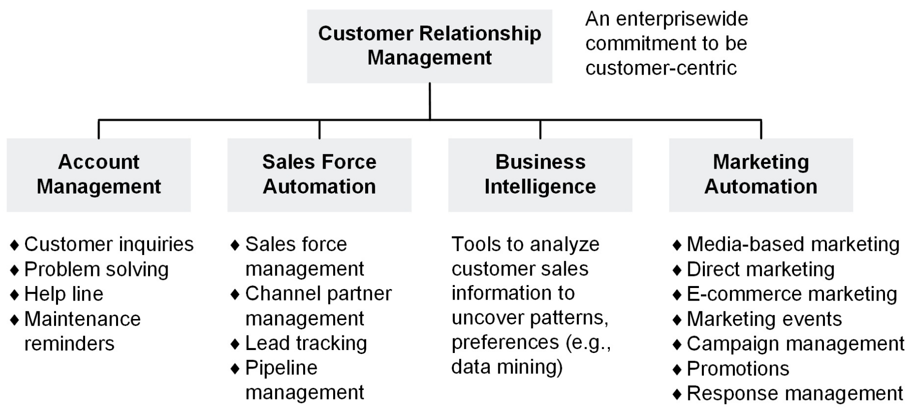
CRM marketing technology supports marketing's tasks: identifying the wants and needs of customers, determining which customer segments the business can best serve, and making decisions on the appropriate mix of products, services, and programs to offer to these markets. This component helps to identify what each customer considers as value, to set, track, and evaluate campaign and pricing strategies, and to assess customer satisfaction.

CRM technology provides sales personnel with access to order status, customer history, and product and customer information. A variety of software applications assist the sales function, including account/ territory management, contact management, campaign management, and field sales communication and management.

Some software/SaaS systems integrate sales and marketing uses. In one product, the marketing view provides the marketing group with a complete customer view that is shared with sales and support. Sales will better understand which marketing campaigns are active, the rationale behind them, and the types of leads they attract. The package may include other tools: lead management, auto-response and trackable emails, workflow automation, a marketing encyclopedia, marketing analytics, and direct, mass, and e-commerce marketing.

Exhibit 2-109 illustrates how various CRM technology tools can be used to support customer service, marketing, and sales. These tasks are divided into four areas: account management, sales force automation, business intelligence, and marketing automation.

Exhibit 2-109: CRM Technology Tools



Account management

Account management refers to managing and using customer information for the purposes of marketing and customer care. It includes such technology as call center automation (including automatic call distribution, interactive voice response, computer-telephony integration, and internet call management). Account management applications are designed to provide detailed information about account data and sales activity that can be accessed instantly. These tools support marketing tasks like segmentation and promotion and also permit managers to match sales representatives and marketing teams to customer characteristics.

Sales force automation

Sales force automation (SFA) is the core functionality of CRM technology because it collects customer data from transactions, customer service call centers, and marketing for use in customer acquisition and retention activities. Sales force automation allows salespersons and field sales agents to take ownership over maintaining and enhancing information on their customers, so it deepens relationships with customers. Salespersons can use it to schedule their next point of contact or collaborate with other salespersons.

Sales force automation can increase customer retention. It promotes more open relationships with customers by providing

- Sales promotion and discount management, including impact on pipelines and existing customer accounts
- Dashboards listing customer analytics such as forecasts and profit margins
- Data synchronization with mobile devices
- Calendars and contact lists that can be merged with automated workflow programs
- Real-time data visibility
- Online networking when offered as SaaS or cloud computing.

Sales force automation software usually includes the following tools:

- **Contact management** enables the organization to prospect from customer data such as name, address, phone numbers, titles; to create organization charts; to maintain marketing information; to identify decision makers; to identify customers by value; and to link to supplementary databases.

- **Account management** provides on-demand, detailed information regarding account data and sales activity that allows matchups between salesperson capabilities and customer attributes.

- **Sales activity management** provides customizable sales process methods. Sales representatives are given individualized steps to follow at each point in the sales cycle.

- **Event management** provides active notifications of sales event priorities such as proposal deadlines, campaign openings, closing dates, or product demonstration appointments.

- **Opportunity management** or **pipeline management** applications help turn leads into sales, possibly by distributing leads among salespersons. They help to define the sales team, the specific opportunity, the company involved, and the proposed closing date. They can also track win/loss ratios.

- **Quotation management** helps salespersons write quotations for complex orders requiring product configuration. It includes electronic reviews of proposals for capacity and feasibility.

- **Knowledge management** provides access to sources of information that are housed in each organization and are difficult to automate. This may include policy handbooks, sales and marketing presentation materials, forms and templates such as contracts, historical sales and marketing reports, and industry and competitor analysis. Knowledge management can act as a storehouse of all forms of information that can be easily added and referenced through online browsers.

Business intelligence

Business intelligence is “information collected by an organization on customers, competitors, products or services, and processes” (*APICS Dictionary,* 16th edition). This includes decision support systems (DSS) and data mining tools to generate customer segments and determine customer segment value.

Marketing automation

Marketing automation employs software applications to search, compile, and use customer databases to target customers and then generate a marketing campaign using mass media, direct marketing, the web, telephone, and other types of technology tools to reach customers. This is known as campaign management or enterprise marketing automation (EMA). Campaign management automates the campaign process through tools such as customer intelligence and data extraction, campaign definition, detailed campaign planning and program launch, scheduling of activities, continuous performance measurement, and response management. It uses the internet to capture, extract, and analyze campaign information. By doing this, marketing groups are better equipped to design future campaigns that enhance customer relationships and ultimately increase profits.

The following are the major components of marketing campaign management:

- **Media-based marketing.** Tools for launching, tracking, and budgeting for media-based advertising can help budget, manage, and time advertisement buys and track results.

- **Direct marketing.** Tools for telemarketing or sending direct mail or email can schedule and track prospect and customer contacts, responses, and success rates.

- **E-commerce marketing.** E-commerce marketing tools help organize online media advertising, sales, and catalog management. This technology manages websites or portals that allow customers to visit catalogs, enter orders, review pricing, configure orders, send emails, and perform other self-service functions from order status to review to online learning.

- **Marketing events.** Marketing events can be communicated through online newsletters, seminars, and Webcasts. (Traditionally, this approach was done through tradeshows and exhibitions.) With enhanced technology, customers can view new products and experience new services immediately.

- **Campaign management by customer type.** Marketing campaigns can be tailored to customer type:
    - **Prospecting campaigns.** Prospecting campaign tools include segmented contact databases, automated personalized responses to prospects, and sales leads and data on prospects.
    - **Vulnerable customer campaigns (customer retention).** It is estimated that businesses lose as much as 50 percent of their customers over a five-year period. By using campaign management tools, organizations can identify customers who are most likely to leave and weigh the possible impact of promotional efforts.
    - **Win-back campaigns.** Win-back tools include prioritized lists of customers to contact based on their value to the organization and metrics based on customer value.
    - **Loyalty campaigns (cross-selling and up-selling).** Loyalty campaigns include loyalty reinforcement such as personalized automated thank-you messages or affinity card bonus point systems. Tools must also be in place to analyze the customers' needs and offer cross-selling or up-selling alternatives that pique their interest.

- **Promotions.** Promotions include web-delivered giveaways, contests, or discounting that can immediately engage the customer. This eliminates the need for paper-based or telemarketing tools. Captured data can be directly input into the database and used for ongoing review and campaign modification.

- **Response management.** Response management uses marketing campaign information to determine the impact of the campaign by calculating actual customer profitability. Once this has been completed, the marketing automation tools can assist in refining and altering the course of the campaign, if necessary.

SaaS and cloud computing

The capabilities described above for CRM technologies are also available as SaaS, which typically uses cloud computing in its configuration. In addition to being a service that can be accessed immediately from anywhere upon paying the subscription fee, such services have benefits such as the ability to access large segmented prospect lists, to network and chat with other sales professionals (either within the organization or outside it), or to download mobile device applications such as for inventory checking.

Examples of integration among technological areas

CRM technology integrates data from different transaction points to anticipate customer needs and support CRM strategies. These integration points might include the following:

- **Online sales.** Not only do online sales lower business costs, they provide an opportunity to capture valuable customer information. This information may include the compiling of user profiles, site navigation preferences such as visits to a particular tool or link, and information on product preferences.
- **Order/provisioning system.** Customer orders and service interactions, occurring through all channels, are logged and used to update customer profiles. Customers can be targeted with products and offers based on transaction history.
- **Customer problem tracking.** Problems are logged for analysis and to predict specific customer needs. Unresolved problems generate a notification to a customer service representative to help rectify the issue with the customer.
- **Call center.** Contacts with call centers generate information that immediately updates the customer information profiles and any predictive model scoring in the CRM system. Information from a call center can be tracked in the same manner as online contacts.

Keys to successful CRM implementation

Why does CRM sometimes fail to provide the results a company needs? There are a number of potential causes. Often an organization is too focused on the CRM technology itself and doesn't spend sufficient time getting to know the customer. Organizations may also find it difficult to execute a paradigm shift from being focused on product marketing to being focused first on the needs, wants, and preferences of the customers who may buy those products. Sometimes even the metrics for measuring the success are not exactly on target in order to produce the desired effect. Failure may stem from poor, or nonexistent, testing of CRM software or applications. And, from the very start, company leaders and managers throughout the organization need to be on board and demonstrate their "customer-first" commitment in front of their employees so that it is voluntarily embraced by all employees in all aspects of the business.

Software systems may be powerful and functionally error-free, but if they cannot be easily implemented within the business and the limitations of its resources and culture, then the technology investment adds little value. Businesses implementing CRM technology should remember the following.

A thorough, well-thought-out architecture needs to be determined in the beginning stages of the process.

It is important to establish the information system infrastructure early rather than adding technology systems at random. Companies should assess their current level of infrastructure and plan ways to migrate toward higher levels of integration. If an SaaS solution is selected, the organization will still need to decide how to make use of its existing customer data and how to interface with its larger transactional systems, such as ERP, which may require middleware or a web services application programming interface from a vendor.

There are four levels of integration:

- **Disconnected technology.** The organization uses a variety of noninterfacing databases to house information. Data cannot be easily combined for deeper analysis or shared immediately throughout the organization.
- **Interfacing technology.** Various systems feed into each other, creating some capacity for integration of the data.
- **Internally integrated technology.** One main system captures and stores all the different data elements.
- **Multi-enterprise integrated technology.** Multiple business lines within a large, dynamic organization share captured and stored data centrally, allowing synergies to occur.

The system should enhance efficiency, not sacrifice it.

The system should make CRM tasks easier and faster, not more involved and difficult to accomplish.

Implementation should be coordinated throughout the organization.

Implementation teams should contain employee representatives from every area that will be using the system.

Everyone must know the extent to which he or she will use the system and must be trained accordingly.

Job processes must be redrawn to reflect the new CRM system. Training must be delivered to everyone according to level of involvement.

Technology implementation should be measured against customer needs and expectations.

Organizations should ask themselves the following questions:

- Will the customer use the technology as a common way of interacting with the organization? Is the customer ready to use the technology? How many customers have access to the internet based on their geographic location?
- How difficult will it be for the customer to learn the new technology? Does it build upon more familiar technologies or forms of interaction? This will make it easier for customers to migrate to automated CRM activities.
- Does the technology perform to customer expectations? Does it improve their experience or degrade it?
- Does the technology allow personalization and customization? The successful use of personalization technology provides a better customer experience and does not clutter customers' screens with irrelevant information.

Using technology to address CRM challenges

We learned earlier that the term "CRM" is often treated as synonymous with the software application of the same name. But remember that CRM is not just a software system. Technology alone cannot solve the challenges that businesses and supply chains face. Being able to anticipate the challenges that may arise will give an organization a competitive edge with its customer base. Let's take a look at an example of how CRM technology can work effectively within an organization and lead to a more customer-centric environment.

Case study: commercial airline

A large commercial airline company makes the decision to use CRM technology as a way to create stronger customer relationships. Working with its information technology group, the airline begins collecting data on incidents when customers are upset with the airline. According to the data, problems with delays affect 20 percent of the airline's 100 million annual customers. In order to decrease that percentage, the organization develops a customer care system for gate agents that links a graphical seating chart to an airline reservation system and data warehouse. In this system, passengers can be tracked in real time to determine whether they are on board, reducing confirmation time for standby passengers. Additionally, when planes are delayed, the system links flight arrival times with the reservation system to identify, before they even arrive, which passengers might miss their connecting flights because of a delay. Agents rebook delayed passengers and send an agent to the arrival gate to tell passengers where to go for their new connecting flight.

Chapter 4: Supplier Relationship Management

This chapter is designed to

- Trace processes for selecting and certifying suppliers
- Indicate how corporate social responsibility plays a role in supplier selection.

After introducing SRM and strategic sourcing, this chapter discusses supplier selection, including selection criteria and supplier certification. Alliances with suppliers are covered next, followed by a discussion of how to measure SRM. The chapter concludes with a look at SRM technologies.

Topic 1: Introduction to Supplier Relationship Management

What is SRM?

The *APICS Dictionary,* 16th edition, defines **supplier relationship management** as

> a comprehensive approach to managing an enterprise's interactions with the organizations that supply the goods and services the enterprise uses. The goal of SRM is to streamline and make more effective the processes between an enterprise and its suppliers. SRM is often associated with automating procure-to-pay business processes, evaluating supplier performance, and exchanging information with suppliers. An e-procurement system often comes under the umbrella of a supplier relationship management family of applications.

SRM is a methodology to structure and support relationships with suppliers that will assist in

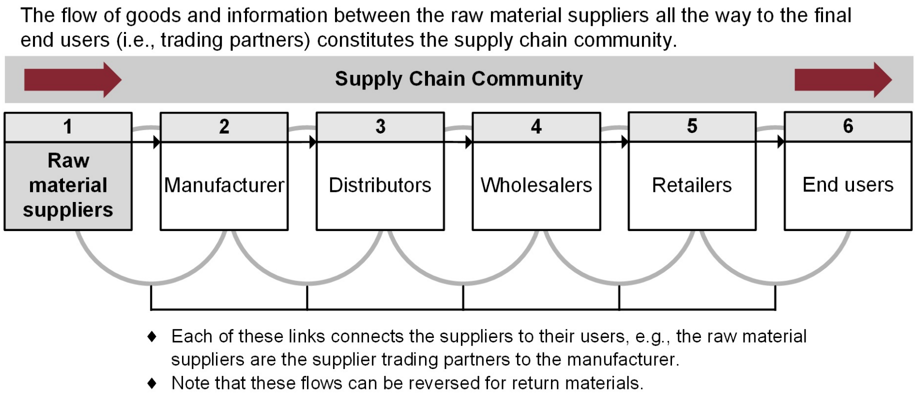
- Reducing procurement and inventory costs
- Supporting a customer-centric business that delivers product/ service customization and quality in the desired time frame
- Continuously improving supply processes.

Supplier relationship management helps in developing and maintaining relationships with suppliers to meet the general goal of ensuring mutual profitability while also meeting marketplace needs.

We should note that SRM applies only to higher levels of buyer-supplier relationships, except in the case of SRM technology enabling easier buy-on-the market transactions. SRM has its true strength in developing deeper relationships with suppliers that have been identified as key partners in the supply chain. These relationships entail a greater sharing of information, greater knowledge of suppliers and their needs, collaboration at certain points, and even integration of business processes.

If we view the supply chain as a series of actions intended to add value to the final product or service (as shown in Exhibit 2-110), supplier relationship management relates to all those upstream activities prior to one's own contact with the product or service. Note that Exhibit 2-110 assumes that the organization using SRM is a manufacturer; a distributor would use SRM to manage manufacturers, who are its suppliers.

Exhibit 2-110: Supply Chain Community



Strategic sourcing using SRM

Strategic sourcing involves identifying, evaluating, negotiating, and configuring supply across multiple geographies in order to reduce costs, maximize performance, and mitigate risks. It also involves periodically reassessing supply plans and strategic relationships so that the supply chain can be responsive to changing customer requirements, changing relative costs, and changing supplier capabilities.

The *APICS Dictionary,* 16th edition, defines **strategic sourcing** as

> a comprehensive approach for locating and sourcing key material suppliers, which often includes the business process of analyzing total-spend-for-material spend categories. There is a focus on the development of long-term relationships with trading partners who can help the purchaser meet profitability and customer satisfaction goals. From an IT applications perspective, strategic sourcing includes automation of request for quote (RFQ), request for proposal (RFP), electronic auctioning (e-auction or reverse auction), and contract management processes.

Strategic sourcing can be contrasted with **tactical buying,** which is defined by the *Dictionary* as

> the purchasing process focused on transactions and nonstrategic material buying. It is closely aligned with the "ordering" portion of executing the purchasing transaction process. The characteristics for tactical buying include stable, limited fluctuations, defined standard specifications, noncritical to production, no delivery issues, and high reliability concerning quality-standard material with very little concern for rejects.

While tactical buying could be buy-on-the-market transactions or could involve developing ongoing relationships to save money over the long term, strategic sourcing is for those critical materials or services that provide the characteristics to make the product into an order winner. Therefore, strategic sourcing requires finding and building ongoing relationships with those trading partners that provide materials or services that differentiate the organization's product or service from the competition. In other words, strategic sourcing in SRM helps align sourcing decisions with the organization's strategic vision and goals. This could be lowest overall cost relative to the competition, perfect delivery lead time, or exacting quality for a critical part.

The ultimate goal in strategic sourcing is controlling costs while providing essential goods and services throughout a wide-reaching supply chain network. Strategic sourcing can reduce costs by consolidating network demand: Multiple plants, supply chain partners, or divisions can allow SRM to consolidate purchasing power. Strategic sourcing could employ a single-source supplier or a small number of suppliers to get volume discounts or could perform multisourcing to optimize supplier capacities and lead times. However, there are sometimes situations when the organization has no choice but to use a sole-source supplier. The *APICS Dictionary,* 16th edition, defines these terms as follows:

> **Single-source supplier:** A company that is selected to have 100 percent of the business for a part although alternate suppliers are available.
>
> **Multisourcing:** Procurement of a good or service from more than one independent supplier.
>
> **Sole source:** The situation where the supply of a product is available from only one organization [sole-source supplier]. Usually technical barriers such as patents preclude other suppliers from offering the product.

Strategic sourcing differs in its focus and implementation from traditional purchasing, and it offers clear benefits.

- **Traditional purchasing focuses on landed cost; strategic sourcing focuses on total cost of ownership.** Landed cost is only a small component of total cost. For example, a manufacturer of computers may choose a component based on the lowest price, but that choice may translate into a very high cost if the low-priced components are not reliable and fail early. The savings in producing the computer will be offset by the costs of reverse logistics for returns and the loss of potential business and lifetime customers.

- **Traditional purchasing is transactional; strategic sourcing is collaborative.** Traditional purchasing sees each purchase as a discrete transaction, and adversarial relationships can occur as organizations fight over prices and other demands. Strategic sourcing involves ongoing relationships. There is opportunity for collaboration between the purchaser and the suppliers that can result in improving profitability for both parties and adding value to the final product or service. Under the SRM methodology, a company shares information with its suppliers in real time, cutting material costs, minimizing inventory, reducing shortages, and regulating deliveries. More importantly, the suppliers can participate in improving the system, which will result in better product, customer satisfaction, and customer retention.

- **Traditional purchasing never crosses the boundaries that distinguish the two business entities; strategic sourcing realigns processes, information flows, and workflows.** Strategic sourcing redesigns workflow and information flow to eliminate redundancies and non-value-added work, often allowing purchasers or suppliers to focus on more strategic issues. For instance, one U.S. company used more than 140 classifications of temporary help positions. After a strategic sourcing review that simplified job specifications, the number of temporary help positions was just 19.

- **Traditional purchasing does not increase the visibility of the entire supply chain the way strategic sourcing can.** Collaboration brings increased amounts of information about all the points in the supply chain. When information from suppliers, manufacturers, distributors, retailers, and customers is available for analysis, there is enhanced visibility of the supply chain and opportunities for improvement. Demand information, inventory status, capacity status, capacity plans, production schedules, promotion plans, and shipment and demand forecasts are all shared and ideally can be accessed by all parties on a real-time, online basis. Expanded information sharing can lessen the bullwhip effect and provide early problem detection, faster response, better contingency planning, and stronger relationships because of increased trust.

Does strategic sourcing in SRM work? Reports from mid-sized and large North American, European, and Asian companies that have adopted SRM strategic sourcing suggest that a business can reduce expenses by 10 to 30 percent. With strategic sourcing, major manufacturers, retailers, governments, and financial institutions are achieving significant savings while strengthening ties with suppliers that offer the best-quality products and customer service. Strategic sourcing also allows small and medium-sized businesses to compete against larger companies for major contracts.

While procurement may be a specific task for a purchasing department, today’s integrated plan, source, make, deliver, and return supply chains require collaboration on purchasing from marketers, engineers, and operations managers. Supply chain managers can help make connections between these interests both within the organization and with the extended supply chain.

Topic 2: Supplier Selection

Supplier selection is a necessary SRM task for implementing an organization's supply plans.

Optimizing the supply chain may require taking a nontraditional approach to selecting suppliers. Traditional thinking emphasizes making the greatest possible profit for the enterprise without regard to the impact on other parties. Suppliers look for the price that will yield the highest margin for them without regard to customer needs; buyers look for the lowest price without regard to the impact on the supplier. Contracts may cover only short-term transactional arrangements.

Supply chain thinking requires a strategic view of sourcing that focuses on the long-term success of all partners along the supply chain. Pricing, discounts, delivery timing, and related matters can be established cooperatively, taking into account the needs of supplier and buyer. The emphasis is on establishing ongoing relationships rather than simply making a series of transactions, pitting suppliers against one another to drive down prices. The pressures in contemporary markets, from both customers and suppliers, necessitate forming deeper relationships for many sourcing solutions. Deeper relationships contribute to the profitability of an integrated supply chain as well as each partner.

Once an organization knows what it plans to do itself (its core competencies) and what it plans to use suppliers for and the level of relationship it desires for each supply need, it engages in the supplier selection process. Supplier searches can use traditional methods—approved vendor lists, referrals or prior relationships, location-specific consulting organizations, formal requests for quotation (RFQs) or invitations to tender (ITTs)—or internet-enabled methods can be used.

Let's take a minute to look at more closely at internet-enabled sourcing. Many of the cost-saving initiatives surrounding purchasing have been enabled by internet sourcing or procurement technologies. A much larger number of sources located across the globe can be evaluated in a shorter span of time with this technology. Internet-enabled sourcing is available as a feature of purchased SRM software, through ERP systems, or through SaaS. SaaS vendors can host online bidding events while the organization's senior purchasing managers observe the action and make final decisions. Internet-enabled sourcing can make use of trading exchanges or online auctions (discussed later) to find suppliers. Negotiation automation tools include online RFQ or ITT submission and response gathering. An RFQ or ITT can be encoded so that the marketplace lists only qualifying vendors. Product searches don't need to rely on bulky paper catalogs but can take place across multiple vendor online catalogs. Even automated purchasing is possible.

Once an organization has applied its selection criteria (discussed below) to its supplier search, it will generate a short list of order qualifiers, or suppliers who meet all minimum criteria on technical specifications, price, delivery lead time, and terms of sale. The organization will then select a supplier based on best overall weighted value. After that, the process of negotiations can begin.

Selection criteria

An organization will use a range of criteria in conducting a supplier search with and may place more or less weight on particular criteria to emphasize strategic priorities. Possible criteria include strategic supply plans, technical specifications, desired quality, and supplier financial strength. Here we'll look at three other factors that can be used as selection criteria: costs, alignment with supply chain needs, and corporate social responsibility policies.

Costs

To remain competitive, organizations must develop supplier relationships that allow them to lower total costs and, consequently, increase profits. Businesses must be able to source products and services and operate at the lowest costs possible and partner with efficient and effective suppliers who can deliver goods and services on time and to specifications, especially when using lean or Just-in-Time production methods.

Two cost categories that can be used as selection criteria are total cost of ownership and cost of goods sold.

Total cost of ownership

Total cost of ownership (TCO) was discussed in detail elsewhere. A problem with TCO in a situation involving outsourcing is that too often companies look at the obvious—purchase price, transportation costs, duty costs associated with doing business on a letter of credit, etc.—but ignore the additional lead time and the associated carrying costs that go along with it. Longer lead times typically involve more inventory in the supply chain, and the carrying cost of that additional inventory needs to be included in the TCO analysis.

Let's look at an example. A company's initial analysis of copper tubing costs for Brazilian, Korean, Chinese, and U.S. suppliers showed that the supplier from China had the lowest costs, even after all landed costs were considered. However, when the inventory carrying costs due to the longer lead times were included, the U.S. supplier, located only three hours away, actually had the lowest costs. This example is illustrated in Exhibit 2-111.

Exhibit 2-111: TCO Comparative Example

CPC # PO332932 Description: 3/8″ Copper Tubing Type M, 10′ long

Suppliers	A (Brazil)	B (Korea)	C (China)	D (U.S.A)
Landed costs				
Price per unit	USD 9.800	USD 9.600	USD 8.200	USD 11.200
Inbound transportation	1.200	1.600	1.650	0.211
Total landed costs	11.000	11.200	9.85	11.411
Life-cycle costs				
Contracting	0.200	0.200	0.200	0.200
Business unit purchasing	1.488	0.880	0.990	0.790
Logistics administration	2.120	2.570	2.100	1.110
Receiving	0.027	0.032	0.054	0.012
Inspection	0.050	0.070	0.110	0.080
Cost of internal quality	0.430	0.540	0.520	0.780
Inventory carrying	1.200	1.600	1.650	0.08
Accounts payable	0.050	0.050	0.050	0.050
Exchange rate factor	0.057	2.000	0.003	0.000
Outbound transportation	0.100	0.100	0.100	0.100
Waste disposal	0.054	0.054	0.054	0.054
Cost of external quality	0.068	0.064	0.062	0.080
Total LCC	5.844	8.160	5.893	3.336
TCO (Landed + LCC)	USD 16.844	USD 19.360	USD 15.743	USD 14.747

Cost of goods sold

Lowering the total cost of goods sold (COGS) is of strategic importance to a company. Such costs exert a strong amount of leverage over profits. A dollar decrease in COGS will be reflected as a dollar increase in gross margin. A dollar increase of sales has to be offset by COGS, and only the net will be added to the gross margin. Therefore, reducing the costs of materials, labor, or overhead through efficient supply management is more effective. This point is illustrated in the scenario shown in Exhibit 2-112.

Exhibit 2-112: COGS Example

Assume the following:

- Product price is $1.00.
- Total COGS is $.95/unit = $.60/unit (material) + $.25/unit (labor) + $.10 (overhead).

(Note: All amounts are in U.S. dollars.)

Scenario:
Assume sale of 1,000 units.

Revenue			$1,000.00
Material	$600.00		
Labor	$250.00		
Overhead	$100.00		
COGS			$950.00
Gross margin			$50.00
GM %			5.00%

Situation 1:
Let's reduce the material cost by 5%. The cost of material is now $.57/unit. That's a $30 reduction in COGS for the 1,000 units, which goes right to the GM (gross margin) of $80 or 8%.

Revenue			$1,000.00
Material	$570.00		
Labor	$250.00		
Overhead	$100.00		
COGS			$920.00
Gross margin			$80.00
GM %			8.00%

GM % has increased by 60%. The $30 went right to profit.

Situation 2:
Now, let's build off the original scenario again and instead increase sales by $30. Revenue goes up by $30 by selling 30 more units. But GM goes up only by $1.50, because even though 30 more units were sold, we still spent $.95 for each unit in COGS.

Revenue			$1,030.00
Material	$618.00		
Labor	$257.50		
Overhead	$103.00		
COGS			$978.50
Gross margin			$51.50
GM %			5.00%

GM % is flat.

Situation 3:
This last situation shows how many units would have to be sold to match the GM dollar amount from the reduced materials cost (Situation 1). As you can see, an additional 600 units would need to be sold.

Revenue			$1,600.00
Material	$960.00		
Labor	$400.00		
Overhead	$160.00		
COGS			$1,520.00
Gross margin			$80.00
GM %			5.00%

Alignment with supply chain needs

Oftentimes, the focus on cost reduction leads to global sourcing and procurement. But in order for an organization to have a successful offshore partnership, the potential suppliers must have business processes and efficiencies that complement the strategic goals of the organization's supply chain, and they must be able to deliver on their capabilities to provide value for the customer. Successful offshore partnering does not happen by chance. Before entering into a strategic global alliance, both organizations need to lay the appropriate groundwork.

Site visits should be considered a requirement before establishing onshore or offshore partnerships. All key stakeholders who will be involved in the relationship should participate, and critical processes and technology should be reviewed for the ease of interfacing (i.e., cost and time required for interfaces).

Another supply chain factor to consider is the supplier's technical communications ability so that the supplier can receive real-time information on customer orders and thus reduce supply chain problems such as the bullwhip effect.

Corporate social responsibility policy

Since the organization that owns a product brand and image will be held responsible for the activities of its extended supply chain, most organizations consider how potential partners could affect their reputation. Prior to searching for suppliers, persons responsible for supplier selection should consult an organization's corporate social responsibility (CSR) policy for guidance.

CSR policy, also called corporate citizenship policy, is a type of organizational self-regulation that involves adding priorities to an organization's business model. The model still focuses on profits but also defines success as meeting the needs of the community and the environment. CSR and the related concept of the triple bottom line are discussed in detail elsewhere.

CSR policy requires that employees and suppliers hold themselves accountable for compliance, but the organization may need to audit prospective suppliers and monitor existing suppliers for compliance.

Topics of a CSR policy related to supplier selection could include

- Customer health and safety (e.g., supplier's product and service safety relating to legal liability, such as being nontoxic or defect-free)
- Employee health and safety (e.g., risk exposure of employees of supplier)
- Environmental sustainability (e.g., supplier's energy use, carbon footprint, use of recycled or reused materials)
- Maintainability (e.g., total cost of ownership of supplier's products)
- Employment policy (e.g., supplier's wages relative to regional averages, abstaining from exploitation such as child labor)
- Community reinvestment and use of local goods and services (e.g., requiring local supplier search, including transportation cost savings in selection criteria, or ranking local suppliers higher in evaluations).

CSR policy is often based in part upon compliance with international or home-country laws and regulations. Legal review will determine the extent to which such laws or regulations have jurisdiction over supplier methods or products.

Product design will also play a role in supplier selection and CSR. Products designed to minimize the need for hazardous materials are an example.

Supplier certification

Many organizations struggle to manage the supplier relationship systematically. Organizations tend to believe that their people skills are sufficient to generate and maintain relationships as well as react to problems as they arise. Attempts to become more systematic are often resisted out of fear of rigidity and bureaucracy. But positive relationships don't "just happen," and relationship management can't be left to "good chemistry," "compatible corporate cultures," or the talents of a single manager or dynamic leader. Rather, successful relationships arise from companywide commitments backed by a clearly defined process.

One way to promote good relationships is to work with suppliers who are willing to be certified. According to the *APICS Dictionary,* 16th edition, **supplier certification** is defined as

> certification procedures verifying that a supplier operates, maintains, improves, and documents effective procedures that relate to the customer's requirements. Such requirements can include cost, quality, delivery, flexibility, maintenance, safety, and ISO quality and environmental standards.

Certification is an extensive on-site evaluation of suppliers against agreed-upon performance levels in areas such as on-time delivery, quality, price reductions, and responsiveness. A certified supplier has shown a complete and thorough understanding of a third-party standard or of the organization's needs. Certification may occur as a prerequisite to selecting suppliers for a strategic relationship, it may be implemented after the selection process, or it may occur periodically. Certification is both a selection tool and a means to improve supplier performance, since the process of certification usually requires organizations to acquire new knowledge and abilities and improve existing performance.

Customer and supplier benefits

Supplier certification accrues benefits to both customers and to suppliers. It is important for organizations working with suppliers to highlight the benefits suppliers can achieve so they can see that it is in their best interests to become certified. This approach is likely to be more effective than simply mandating certification. The value proposition for customers and for suppliers is shown in Exhibit 2-113.

Exhibit 2-113: Customer and Supplier Benefits of Supplier Certification

Benefits for Customers	Benefits for Suppliers
• Helps to ensure the development, manufacture, and supply of products and services that are more efficient, safer, and cleaner. • Safeguards consumers and users of products and services. • Marketing assertions of corporate social responsibility can be extended to suppliers. • Helps both with supplier selection and with ongoing performance evaluation. • May be able to consolidate to fewer suppliers for significant savings. • Helps organizations trust their suppliers and thus share information.	• Provides access to wider market (organizations insisting on certification). • Helps market existing capabilities. • Higher quality can reduce overall costs (e.g., fewer defects, returns, lost customers). • Suppliers can use the process to learn more about their intermediate customers' needs. • Best practices can improve throughput and reduce costs, increasing profits. • Possible opportunity to be single-source provider with larger sales volumes. • Demonstrates commitment to partnership.

Third-party supplier certification

The primary form of third-party certification is ISO certification. (ISO—the International Organization for Standardization—will be discussed in more detail elsewhere. ISO provides an internationally recognized and broad set of standards. ISO certification is voluntary, but, if it is obtained, it must be renewed every three years to remain valid. Whether an organization achieves ISO registration (becomes certified) or merely implements and maintains ISO compliance, the results will be of benefit in supply chain management.

Because of its worldwide recognition, the ISO certification has achieved great reach. However, there are other certifications.

Social Accountability 8000 (SA8000) is an international standard for social accountability that cuts across multiple industries. The standard is a way for retailers, brand companies, suppliers, and other organizations to maintain just and decent working conditions throughout the supply chain. SA8000 sets basic standards for child labor, forced labor, health and safety, freedom of association and the right to collective bargaining, discrimination, disciplinary practices, working hours, compensation, and management systems.

Some industries and nonprofit organizations have created their own certification programs that more narrowly reflect the capabilities of the potential supplier. These programs tend to have more depth than ISO certification but lack its breadth. For example, engineering standards for measurement, terminology, test methods, or product specifications are quite different than the ISO series of quality management system standards. General industry groups have also collaborated in an effort to standardize their individual requirements. Automotive, telecommunications, and health care are examples of industries with unique regulations.

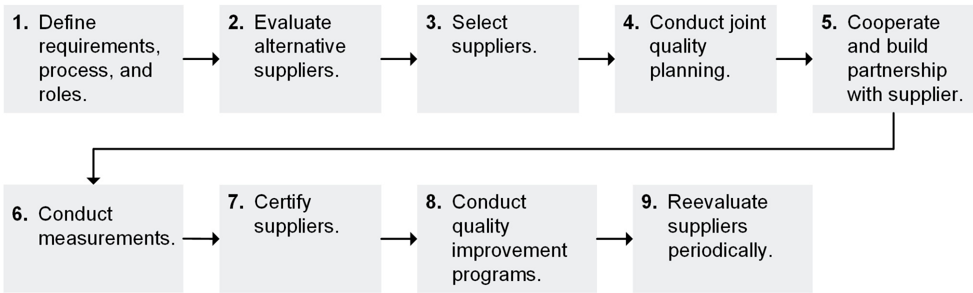
Large organizations may also devise their own unique certification system if they have a sufficient suppler base and enough clout with those suppliers to get them to adopt the standards. Organizations need to justify the expense of creating such a system.

Most certification bodies do not engage directly in registration or certification activities. Rather, they accredit third-party auditors, testing facilities, and laboratories to perform certification to a particular standard. The supplier (or possibly a customer) may contract with such a service to provide the proper level of testing. Organizations should verify that these services have proper accreditation. Organizations that have their own supplier certifications could do the certifying themselves or license third parties to perform the audits.

Supplier certification process

In order to certify a supplier, a consistent process must be in place. The process can be organized into a booklet or flowchart to help inform and educate management and suppliers. This is important, because both parties need to know and understand the specific requirements to complete certification. The certification process is illustrated in Exhibit 2-114.

Exhibit 2-114: Certification Process



Step 1: Define requirements, process, and roles.

Before the certification process begins, it is important to decide who will be carrying out each role. Third parties performing the testing or auditing should be identified. If the organization is performing some or all of the testing, the key players on the team must be identified and their tasks documented. For example, which functional areas will be included in the team that makes on-site visits to a supplier's factory (or warehouse or transportation depot)?

After the players and their roles have been identified, the next step in the documentation process is to establish measures, for example, an ISO standard or a custom scheme. Custom systems should include tolerance ranges, number of tests run, number of allowable flaws per unit or run, use of certain equipment, and so on. Procedures for documenting measurements must be established as well; these may include forms such as systems audit forms and process control detail forms. Once a documentation process is in place, the organization can implement orientation for managers to understand the process.

Step 2: Evaluate alternative suppliers.

Suppliers are screened through additional background research or requests for information.

Step 3: Select suppliers.

The organization determines which suppliers (existing or new) to certify. It may be best to pilot the certification process by beginning with a few good (or local) suppliers and then expanding the system to develop other suppliers needing improvement.

Step 4: Conduct joint quality planning.

The suppliers selected are clearly informed of the certification process and standards and measures. This can be communicated through supplier meetings, either in a group or individually.

Step 5: Cooperate and build partnership with supplier.

The supplier is asked to commit to a process defined in a formal agreement. The commitment agreement describes the certification parameters, methods, audits, process details, etc. To create a partnership with suppliers, an atmosphere of trust and commitment must be established. It must be made clear to suppliers that information arising from the certification process will be used for mutual benefits, not to place the supplier at a competitive disadvantage.

Step 6: Conduct measurements.

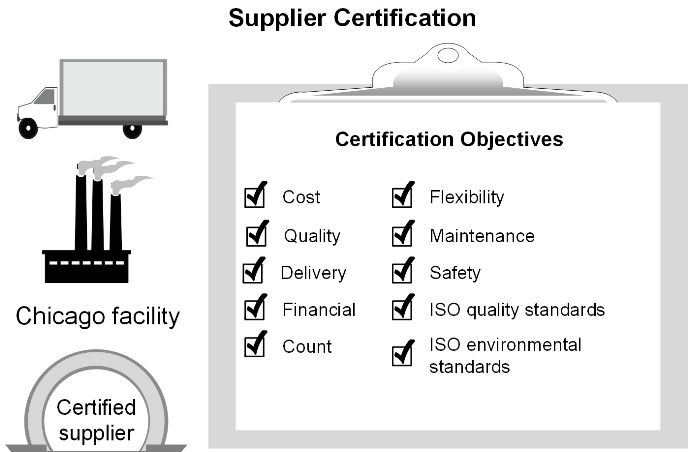
Suppliers are measured against the chosen performance standards, which may include cost, quality, delivery, and other attributes such as technical support and attitude. The organization will obtain qualified individuals to measure the system against the standards.

Step 7: Certify suppliers.

Typically, suppliers winning certification are either those that satisfy all objectives of the third-party standard or, for custom standards, those that are rated in the top 5 to 10 percent in performance and stand out in all areas of the relationship.

Exhibit 2-115 illustrates a certification award, one possible outcome of the certification process.

Exhibit 2-115: Certification Award



Advantages of certification:

- Incoming inspection may not be required.
- Receiving costs can be reduced.

Step 8: Conduct quality improvement programs.

Organizations may implement programs to bring suppliers who have not achieved certification up to the desired standards. In addition, all suppliers should have continuous improvement processes in place.

Step 9: Reevaluate suppliers periodically.

The recertification process and/or a benchmarking system may be used to reevaluate suppliers. This will confirm if the organization is obtaining expected returns and identify ways to improve the process. As supplier reviews are conducted, organizations must ensure that the supplier is maintaining the levels of performance expected and take corrective action if the supplier has fallen below certification standards. If a supplier is not performing at expected levels, a system must be in place to decertify the supplier or place them on probation. These are difficult steps to go through, and a well-thought-out process will help ensure fairness and consideration to both parties.

Supplier certification can be a long, winding process; however, there are rewards from both a management and human perspective. Organizations will see return on investment in improved quality, better customer satisfaction, and fewer returns/rejects. Suppliers will see the effect through recognition, longer-term and more profitable contracts, and improvement of their own organizations.

Chapter 5: Supplier Relationship Management Strategy

This chapter is designed to

- List the benefits and requirements of strategic alliances
- Describe the steps required to implement a strategic alliance
- Outline criteria and methods for measuring supplier performance
- Indicate ways that SRM can be measured, including use of supplier rating systems.

Topic 1: Strategic Alliances

The *APICS Dictionary,* 16th edition, defines a **strategic alliance** as

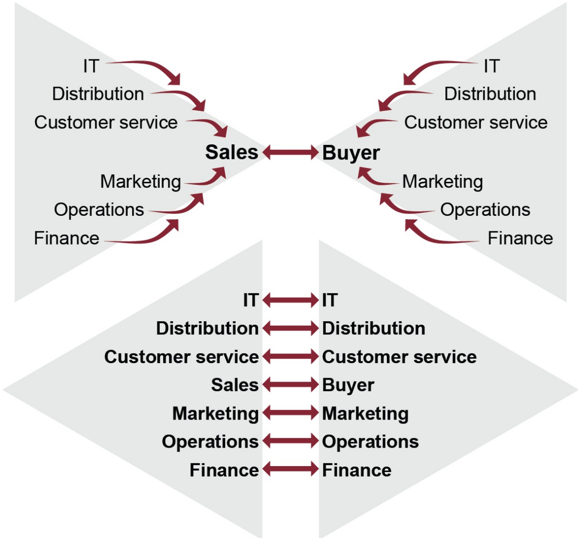
> a relationship formed by two or more organizations that share information (proprietary), participate in joint investments, and develop linked and common processes to increase the performance of both companies.

Many organizations form strategic alliances to increase the performance of their common supply chain. Over time there is **alliance development,** which “strengthen[s] the capabilities of a key supplier” (*APICS Dictionary,* 16th edition).

Strategic alliances can entail interaction between many functions, such as engineering, marketing, production planning, inventory, or quality management. Goals for these relationships may include cost reduction, quality improvement, better delivery performance, increased flexibility, or new product introduction. Alliances need to be flexible, and each partner must bring value to the relationship relative to the scope of collaboration.

Exhibit 2-116 emphasizes the difference between traditional purchaser-supplier relationships and strategic alliances. The butterfly shape depicts traditional relationships where there is one point of interaction between partners, typically those people making buying decisions and the supplier’s sales representative. The diamond represents the multiple points of interaction in a strategic alliance.

Exhibit 2-116: Traditional Purchaser-Supplier Relationship versus Strategic Alliance



Source: The Practice of Supply Chain Management, Terry P. Harrison, Hau L. Lee, and John J. Neale, editors

Alliances should not be confused with joint ventures. A **joint venture (JV)** is "an agreement between two or more firms to risk equity capital to attempt a specific business objective" (*APICS Dictionary,* 16th edition). In joint ventures, the parties typically agree to create a new entity by both contributing equity, and they then share in the revenues, expenses, and control of the enterprise. The venture can be for one specific project only or a continuing business relationship. In contrast, a strategic alliance involves no equity stake by the participants and is a much less rigid arrangement.

This area covers some characteristics of successful strategic alliances. It also examines reasons to form alliances, factors that must be considered in deciding to form an alliance, and the commitment required for a successful alliance. It also includes some steps for creating and maintaining strategic alliances.

Characteristics of a successful alliance

Successful alliances are more than the exchange of goods and services—they are true relationships. And the relationship side of the alliance must be as carefully managed as its business objectives. Rosabeth Moss Kanter has compared effective alliances between organizations to successful family relationships. They both require flexibility, listening, and involvement.

The most effective supplier relationships have similar characteristics:

- **Individual excellence.** Each partner has something to offer. The motive for the partnership is to pursue opportunity rather than to escape a problem.
- **Interdependence.** The partners' strengths are complementary. Although excellent individually, they are

stronger as a partnership than they are individually.

- **Importance.** The alliance figures significantly into each partner's business goals and strategies.
- **Investment.** The partners' commitment to the relationship is evidenced by their investment of time, personnel, and resources.
- **Information.** Communications are open, and both sides are honest and generous in providing information. Partners actively listen to each other.
- **Integration.** The partners have many connections and shared operational procedures at different levels. Effective partners develop a strategy to help determine the appropriate level of supplier integration based on their situations. The integration provides supply chain visibility without sacrificing autonomy.
- **Institutionalization.** The alliance is given formal status, with clear objectives and procedures.
- **Integrity.** Trust is an intangible but vital element of an alliance. Partners in effective supplier relationships do not violate that trust.
- **Interpersonal skills.** Even with technological advances that have changed the way we communicate in the workplace, basic interpersonal skills remain a critical component in building and sustaining a successful supplier relationship. People often get things done in teams—by working with each other. Without interpersonal skills, relationships can falter and fail. Interpersonal skills are especially important in culturally dissimilar global supply chains where people have differing perspectives of what is and is not appropriate.

Reasons to form strategic alliances

Reasons to form strategic alliances include the following:

- **To add value to products.** When an alliance improves time-to-market, gets product into the hands of customers more quickly, or helps ensure quality, it increases customer satisfaction, which leads in turn to greater customer loyalty and more lifetime customers. For example, a key supply chain issue is the selection of appropriate suppliers for the components of a new product. In the past, suppliers were selected after the design and manufacturing engineers determined the final design for the product. However, organizations have realized significant benefits when involving suppliers in the design process, including a decline in purchased material costs, an increase in purchased material quality, a decline in development and manufacturing time and cost, and an increase in final product technology levels. Similarly, a strategy for mass customization will give organizations a competitive advantage, but it requires the delivery of a wide variety of customized goods or services quickly and efficiently at a low cost. Early supplier involvement is critical to maximizing the potential of this strategy.
- **To enable strategic growth.** Alliances may enable organizations to combine resources to overcome barriers to entry and search for and develop new opportunities. Strategic alliances are common now in the pharmaceutical sector, where small biotech companies have the expertise to identify and develop new entities but lack the resources to test and market new drugs. By partnering, the biotech companies help their own businesses grow and the larger companies gain new product to support their brand and

their infrastructure of development, marketing, and sales personnel.

- **To increase market access.** Partnerships that lead to better advertising or increased access to new market channels can be beneficial. An appliance manufacturer who previously specialized in residential kitchen appliances might team with a manufacturer of professional kitchen equipment to design new equipment. The residential company gains valuable design input that helps it develop new and more profitable lines for serious home cooks.
- **To strengthen operations.** Building alliances between organizations can help improve operations by lowering system costs and using resources more effectively. For example, a summer garden tools manufacturer and a winter sporting goods manufacturer could share a warehouse to save on storage costs.
- **To increase organizational expertise.** Working with a partner that has expertise in a certain area can lead to increased knowledge and experience that will benefit the organization.
- **To build organizational skills.** Strategic alliances provide an excellent opportunity for learning within the organization. Not only will organizations learn from each other, they will also learn more about themselves and become more adaptable.
- **To enhance financial strength.** Alliances can help improve overall financial position by increasing revenue while sharing administrative costs.

When searching for a sourcing relationship, organizations should consider the depth of suppliers' competencies, their ability to deliver required services, product and service quality, capacity for innovation, willingness to collaborate, and, probably most important, customer focus. The ability to predict, appreciate, and deliver customer satisfaction drives the modern supply chain.

Factors to consider in deciding to form a strategic alliance

Alliances may have limitations. The consolidation of the supplier base may decrease the economic effects of competition. Alliances that dominate the marketplace can dull the competitive edge. Some alliances dull their organizations' core competencies. Not every relationship should be collaborative, and many organizations will continue to keep at least some suppliers at arm's length. But there will be situations in which alliances deliver substantial benefits. From a purely reactive stance, companies with certain types of supply situations may be able to manage risk better in a strategic alliance.

Organizations seeking alliances with suppliers must consider the following.

- **Strategic importance.** If a purchased component is critical to competitive differentiation or involves proprietary knowledge or processes, it is best to manufacture it in-house. If the organization cannot develop the in-house manufacturing capabilities, or if it decides that manufacturing the component calls for expertise that lies outside its core competencies, it should form a close alliance with its strategically valuable suppliers. Strategic services can also be assessed for their importance and whether they are core competencies.
- **Number of suppliers.** How many suppliers can provide the component or service? If only one supplier is available, the organization may need to maintain a close relationship with that supplier to ensure

availability and opportunities for developing individualized components that could provide competitive differentiation.

- **Complexity.** Complexity refers to the interfaces between the component procured and the final product as well as the complexity of the supply chain itself. The more complex the relationship between the component and the final product, the more value there will be in collaborative design. The more value-added points in the supply channel, the greater the opportunities for efficient management of supply and demand and SRM.

- **Uncertainty.** Uncertainty in supply includes changes in raw material or component cost, quality, or availability that can block a business from meeting its goals. Managing uncertainty through purchasing more than one needs or gambling on quality can be costly strategies. If a sourcing relationship has the potential to jeopardize attaining business objectives, the buying company should develop a closer relationship with that supplier (or find a different/alternate supplier).

- **New relationships.** If a supplier is new, especially one located in a region where the company is unfamiliar, the alliance must be managed carefully in the beginning until processes and working relationships are established.

Commitment required for a successful alliance

Despite their benefits, many strategic alliances fail. One of the main reasons is that the organizations involved may not understand the true purpose of the alliance. An alliance is an interaction between two or more organizations, and, instead, the organizations may treat it like a merger or an acquisition. Although there may be similarities, a merger is an event and an alliance is a process that requires continual monitoring and attention. Organizations that view alliances as events focus too much on the contract or on making the deal. Once the deal has been made or sold, the focus fades and the alliance may suffer.

Alliances may fail for other reasons: immature technology, uncertain marketplaces, shifts in corporate strategy, or external forces beyond the control of the alliance partners. Often, these reasons mask underlying problems in the alliance, such as ineffective management, inadequate resources and staffing, and a failure to honor commitments. Alliances may also fail if companies are too quick to partner with global suppliers without understanding cultural and process differences, especially when working with suppliers in new regions of the world.

Any supplier relationship will, in the normal course of events, undergo so many stresses, strains, and challenges that it is bound to fail unless each partner is thoroughly committed to its success. That general commitment to the success of the alliance must translate into specific kinds of commitment, each born of necessity.

Commitment to change

The commitment to change begins by recognizing that several key developments have united to ensure that constant change is inevitable in today's supply chain—for example, the high cost of inventory, shrinking margins due to online sellers and superstore discounters, shorter product life cycles, software that inundates trading partners with data, and the internet, which gives consumers a tremendous new array of choices. Pressure for and from change will grow more unyielding in the future. Technology aside, the customer will dictate how a company goes to market, and the winning supply chains will be those that can constantly reinvent themselves to match changing customer needs and wants.

Even without these forces at work, entering any alliance will result in changes in each partner organization. No two companies work the same way, so some adjustments are inevitable. What the dynamics of today's marketplace has done, however, is to eliminate the fiction that this ongoing process of mutual adjustment can be accomplished with a single static solution. No single restructuring of methodologies or processes will withstand the ongoing changes of the marketplace.

What is needed, then, is mutual commitment to ongoing change and recognition that change can take place incrementally, not just in colossal jumps. Organizations are realizing that making adjustments in response to changes in the priorities and strategies of supply chain partners is essential to the long-term success of the alliance. Of course, getting people to change without a crisis driving it can be difficult. The key is to keep moving forward.

Commitment to the relationship

Relationship commitment refers to a supply chain partner believing that an ongoing relationship with another organization is so important that maximum efforts are warranted in maintaining it.

In fact, anything less than that maximum commitment isn't really cost-effective. Significant time and resources are necessary to establish any alliance with a supply chain partner. As with customer relationships, developing a new alliance is more costly than retaining an existing one. Committing additional resources to foster a healthy, long-term commitment is thus well worth the ongoing investment.

In order to ensure long-term success with supply chain partners, a systematic process for developing and maintaining the relationship is necessary. To ensure ongoing effective and efficient collaboration, organizations must create

- Common models, techniques, and expectations for spotting, diagnosing, managing, and learning from conflict
- Structured methods for managing information flow
- Structure for decision making, including who will make decisions and how they will be communicated throughout the partnering organizations.

Successful organizations conduct periodic tests to review the quality of their working relationships. This process allows them to gauge the strength of each alliance, spot and diagnose current or emerging issues, and identify potential opportunities to enhance the alliance.

The tools used to assess the relationship may include online surveys and personal interviews. Those who interpret the responses follow guidelines for resolving the various types of interpersonal, strategic, structural, or organizational problems they uncover.

Commitment to communication

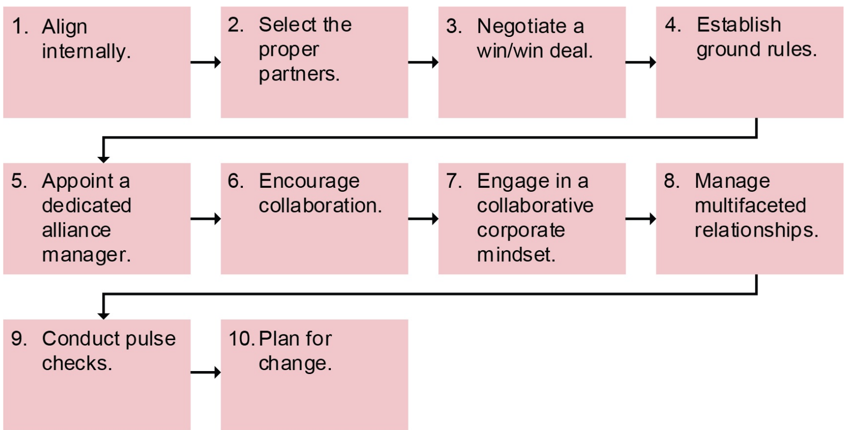
Open and continuous communication regarding joint objectives is vital to a successful supply chain relationship. Merely sharing data is not enough. What is necessary is a dynamic environment in which information flows in both directions on a real-time basis. Effective collaboration entails interaction at all points throughout the supply chain and well beyond the initial establishment of trading partnerships. It must involve everything from the design and introduction of new products to sales and marketing data management, order planning and fulfillment, and after-sales service.

Successful organizations promote the free flow of information among trading partners. The ideal collaborative relationship consists of supply chain partners who mutually decide on the value of a piece of information, develop it jointly, measure their performance against it, and get paid accordingly.

Steps in creating and maintaining an alliance

Commitment alone is not enough, however. The successful alliance is able to channel that commitment into concrete steps that make ongoing success possible. The process may differ from one organization to the next, but 10 essential steps (illustrated in Exhibit 2-117) can be isolated.

Exhibit 2-117: 10 Steps to Successful Alliances



Applying such a systematic process in global sourcing also makes sense. Defined steps can help to overcome many of the differences that exist across locations such as language, culture, social norms, laws, and personnel skills. Having planned actions in place helps to align participants and processes around the world with the broader organizational interests.

Let’s take a closer look at each of these steps. Note that this section revisits the case studies that were introduced earlier: a clothing retailer, a leisure boat manufacturer, and a financial services provider.

Step 1: Align internally.

Before entering alliances, start by identifying key issues and decisions and involving key stakeholders. The benefits are twofold: fewer surprises and greater buy-in by your organization’s key people.

For example, our case-study clothing retailer must recognize that its buyers will not be the only employees directly affected by each relationship it establishes with a clothing manufacturer. Its marketing decision makers will certainly want to raise issues about responsiveness and timing. Regional managers will want to know how flexible the supplier can be in responding to differences in local trends. Information technology will need to design methods for real-time sharing of information at all points in the supply chain, from placing purchase orders to tracking store deliveries and transfer of discounted goods. Other issues, such as quality control and shipping and delivery logistics, all need to be considered. In each case, the people most directly responsible—and those most directly affected—need to be brought into the process as early as possible.

Step 2: Select the proper partners.

When considering potential partners, look beyond strategic and financial fit. Evaluate differences in corporate culture, operating style, and business practices as well.

Consider our recreational boat manufacturer entering into its partnership with an engine design company. By definition, this will be an ongoing and intimate relationship. Ideally, each partner will be providing ideas and making suggestions to the other and changing its own designs to meet the other's needs. A high level of mutual trust will be required, since information shared has competitive implications. The partners must respect each other's expertise and contributions. In such a relationship, corporate culture and operating style are not just abstract concerns. If these partners don't share a common vision, their relationship won't work.

Step 3: Negotiate a win/win deal.

Negotiators must focus on their future working relationship as well as the immediate substance of their negotiations. A win/win proposal should be the goal, as this sets the tone for the future alliance.

In working through their contract with the engine designer, our boat manufacturer's immediate negotiation may be about the price of services, adherence to manufacturing goals such as cost and quality levels, and the proprietary nature of the design. But clearly, anything less than a win/win solution could lead to long-term conflicts. The manufacturer may recognize the involvement of the designer by including a designer nameplate on the hull. This will strengthen the designer's ability to attract new business. The need for win/win relationships is no less true for the clothing retailer. Inevitably, there will come a time when it will need a supplier to go the extra distance—to boost production to meet unexpected demand, for example. Negotiations will lay the groundwork for the supplier's willingness to respond when the time comes.

Step 4: Establish ground rules.

Guidelines, processes, and protocols must be developed for how the partners will work together, resolve conflict, and mutually manage the relationship.

To keep its independent financial consultants, our case-study financial services company must have flexible and functional relationship management tools. By definition, the connection is in a constant state of tension: The consultants want greater support from the financial services company but also greater independence in their own client relationships. In a dynamic financial marketplace, a static consultant contract without clear and flexible guidelines and processes to manage the relationship may encourage consultants to break their connection with the company rather than redefine it. For example, the partnership must develop an agreement about what will happen when a client needs a product that may be available from competitors but not from the financial services company. In that case, will the consultant be allowed to go outside the network of family products? And, if so, how will this other product be tracked within the broker and customer information systems?

Step 5: Appoint a dedicated alliance manager.

If possible, top management should designate a dedicated relationship manager to oversee and implement a specific methodology for managing the alliance relationships. The role of alliance manager may differ among organizations, but the intent is to promote partner relationships and build joint initiatives, bringing them to market to generate revenues and acquire customers.

This step is especially critical for the financial services company's relations with its independent financial consultants, since the consultants' own business is all about maintaining relationships. Like their own clients, they need to know that there is someone who values their relationship and works to maintain it—someone with real power and influence in the company who can relay their needs and ideas to the company's strategic managers.

Step 6: Encourage collaboration.

Collaboration skills may not come naturally to everyone. Skills for resolving conflicts, negotiating, solving problems jointly, and conducting difficult conversations must be developed in all alliance-involved employees.

Our clothing retailer identifies and consults up-front with every internal stakeholder who will need to work with the selected suppliers. For those relationships to succeed—especially in the company's tight deadline environment—the stakeholders need to acquire skills that enable them to become true collaborators. For example, both buyers and suppliers need to become more aware of data mining opportunities in the company's CRM system and the wealth of information for predicting and crafting new trends that such information contains.

Step 7: Engage in a collaborative corporate mindset.

For alliances to be successful, alliance managers must focus on joint goals and think in terms of the overall good of the alliance rather than that of the channel master (the dominant partner in the supply chain)

For example, weekly web conferences that focus on collaboration and problem solving have helped the boat manufacturer develop a strong collaborative ethic among its own people and the suppliers. These sessions focus on redefining the larger goals and discovering short-term strategies that will bring it closer to meeting those goals. Collaboration is always viewed in this strategic context—not simply as an abstract good.

Step 8: Manage multifaceted relationships.

Many alliances occur between organizations that have other business relationships with one another. A partner may also be a competitor, a customer, or a supplier. To manage the complex interactions, companies need the ability to identify, discuss, and track all relationships with a given partner and understand their potential interactions.

For example, as previously suggested, the engine designer for our boat manufacturer designs engines for competitors as well. The partners must understand potential conflicts of interest and have agreements about patents and licensing.

Step 9: Conduct pulse checks.

Auditing partner relationships is more than just ensuring that business objectives are met. It also includes formally monitoring the health and trust of the working relationship.

The financial services company holds annual conventions for its independent consultants. While these began solely as sales promotion and morale-boosting sessions ("Here are our new financial products for you to offer"), they have grown into more meaningful two-way communication opportunities. In small-group sessions, consultants and company representatives each get to report on what is and isn't working and create collaborative solutions.

Step 10: Plan for change.

There are two aspects to planning for change. First, partners must anticipate and plan for business changes, such as executive moves, organizational restructuring, or shifts in the competitive or regulatory environment. Second, partners must build continuous incremental improvements into the relationship. The information shared between partners should enable them to work more efficiently with one another.

The clothing retailer finds itself in an especially dynamic environment in which suppliers appear and disappear with startling frequency and in which key designers and purchasers often jump from one company to another. Its response has been multipronged. It has found ways to shift supply channels quickly when one supplier goes under. But it also continually looks for ways to help each supplier succeed. Finally, it has been careful to strengthen relationships with its suppliers' employees—not just with the companies themselves.

Topic 2: Supplier Performance Management

The best organizations don't monitor just the status of individual orders; they are compulsive about monitoring the overall performance of their suppliers in an ongoing manner. Consistent and continual measurement can help organizations focus on resources, determine performance missteps, develop strategies for supply chain improvement, and determine the overall cost of ownership of supply chain relationships and products.

Effective SRM performance measurement systems

- Track the performance of all suppliers to some extent, with a focus on critical component suppliers or suppliers with prior quality issues
- Collaborate with suppliers on performance measurements, reporting, and improvements
- Automate key supplier performance measurement activities
- Standardize supplier performance measurement procedures across the organization.

Supplier performance measurement

Ongoing supplier performance measurement is a central feature of supplier evaluation programs. It is generally performed for a small number of critical data elements such as delivery, reliability, quality, technology, and cost reductions. These same measures are also often used to select and rate suppliers.

When evaluating performance, businesses must check the supplier's

- Promptness and flexibility of response to inquiries
- Ability to perform on a consistent schedule
- Commitment to quality assurance and the processes they have in place for enforcing this standard
- Financial stability
- Investment in technology, which may impact their ability to produce goods or services and also their ability to integrate with an organization's information systems.

The reliability and quality of the supplier's supply chain partners must also be checked.

Some organizations set goals for their suppliers, for example, requiring cost reductions over a period of time, expecting collaboration with their suppliers to achieve the reduction and then sharing in the savings.

The sophistication of a performance measurement process should correspond to the organization's dependence on the supplier and the complexity of its interactions. All important desired results and key competitive factors should be regularly monitored.

SCOR metrics

SCOR metrics can be used to judge individual supplier performance. See Module 3, Section C, for more details.

Measuring customer satisfaction

Since the organization is the customer, measuring customer satisfaction with specific suppliers can be accomplished by discussing the supplier's products or services with internal persons who design, engineer, receive, handle, install, process, assemble, and ship the supplier's product or service. Communicating the level of satisfaction with each supplier in addition to providing the results of quantitative analysis can help with continual improvement efforts. Tracking how issues were resolved or left unresolved can help when deciding whether to continue the relationship.

Supplier rating systems

Supplier rating systems start by setting supplier performance measures (as described above) and standards. Standards are target values against which to measure the supplier. Standards can help as a control for when they are not being met. They can also help with continual improvement: The standard can be increased as suppliers improve to keep the standard achievable but challenging.

When the supplier rating system is implemented with other operating functions, it can monitor quality costs, track the timeliness of incoming materials and outgoing shipments, identify areas for improvement, and ultimately contribute to the financial well-being of the organization.

In addition to the measures already mentioned, supplier performance rating systems can incorporate data for continuous rating of suppliers from various sources:

- **Conformation rates.** Data from each inspection or test should be documented in the system. The data should include part number, lot size, number of parts accepted or rejected, reason for any rejections, and the quality disposition.
- **Number of floor failure events.** If a supplier-caused discrepancy is found after a part is shipped to stores or has been installed in an assembly, the organization needs to adjust the performance index accordingly. The performance index is the relationship of nonconforming costs to purchased costs.
- **Levels or amounts of conditionally accepted materials.** These are materials that do not conform to specifications but are accepted through the material review process.
- **Time line performance.** The system tracks the difference between purchase order schedule and actual receipt dates and identifies undelivered and past-due items and unauthorized early deliveries.

Methods of sharing ratings with suppliers

It is critical to share supplier performance ratings, along with the measurements and standards used for the ratings, with the suppliers. Suppliers should understand when missed standards or overall ratings will initiate corrective action. Corrective action can improve future performance and thereby save costs and increase customer satisfaction.

Measures and standards can also be automatically collected and disseminated to both the organization and to suppliers. The organization gets a picture of ongoing performance levels; suppliers can use the real-time information provided to immediately self-correct and avoid the need for formal corrective action. In other words, rating systems are not just a historical tool but a set of active controls.

Supplier performance can be shared with suppliers in different ways:

- **Scorecards.** Scorecards capture quantitative and qualitative data and provide historical, plan (current), and predictive views of supplier performance. Suppliers have access to their own scorecard and can address specific areas of concern immediately. Scorecards should be sent to strategic suppliers on a regular basis, at least quarterly. Deficiencies should be addressed by the supplier through a written corrective action plan.

- **Performance alerts.** Automated alerts on areas of concern related to supplier operational performance are delivered to supply chain managers on a real-time basis.
- **Surveys.** Standardized surveys are sent to supply chain managers in order to gather qualitative information on the performance of suppliers. The questions may address overall performance, reliability, cost, order accuracy, delivery/timeliness, quality, business relationships, personnel, customer support, responsiveness, etc.

Other tools include supplier performance reports and supplier quality certification processes. Exhibit 2-118 is an example of a supplier performance report.

Exhibit 2-118: Performance Report

Date: January 20XX				
Supplier No. 100 Acme Mfg. Co.		Purchase Order No. 100		
	Product			
	Wheels	**Rims**	**Spokes**	
Qty Ordered	250	250	5,000	Reliability
Qty Rec'd	250	248	5,012	
Qty Rejected	0	2	0	Quality
UM	ea	ea	ea	
Standard Cost	60.00	30.00	5.00	Cost
Purchase Price	62.00	29.00	5.00	
Purchase Price Variance	2.00	<1.00>	0	
Date Due	1/5	1/5	1/5	Lead time
Date Rec'd	1/7	1/5	1/5	
Variance	+2	0	0	
Quality rating = A–				

Controlling errors

Controlling errors in the supply chain is critical in the overall process of preventing future problems. To do this, some organizations are implementing online compliance scanning and labeling control systems with suppliers. These controls prevent suppliers from printing out package labels and shipping goods unless they comply with the purchase order (PO) or release order rules.

Although each customer/supplier may specify the rules according to their supply contract, examples of these rules include

- "Do not ship unless it is included in the most recent version of PO release."
- "Do not ship +/– days outside of delivery request date."
- "Do not ship +/– amount outside of PO."

- “Do not ship +/– amount outside of PO total.”

These control points help to minimize the number of shipments that are turned away at the receiving dock or arrive incomplete. Putting these rules in place will help document problems and resolve disputes and inventory discrepancies.

However, when supply chain problems such as unplanned rush orders, canceled orders, delays in supply delivery, or slowdowns in customs or port clearances do occur, organizations are implementing processes and technology that guide decisions on recovery strategies.

Chapter 6: Supplier Relationship Management Technologies

This chapter is designed to

- Illustrate functions performed by SRM technology, especially web-enabled SRM
- Discuss the functions of portals and trading exchanges
- Describe the roles of planners, buyers, and purchasing agents in the SRM model
- Discuss the effects of SRM on the company and its suppliers from the perspective of how purchasing roles have changed.

SRM software can streamline connections between purchasers and suppliers and between members of cross-functional teams. It increases the efficiency of processes associated with acquiring goods and services, managing inventory, and processing materials. SRM technology can lead to lower production costs and a higher-quality and more profitable end product.

Topic 1: Benefits of SRM Software

There are many reasons why companies that have seen the power of SRM technology are eager to spend the money necessary to get started. One is that transaction costs have decreased. In addition, SRM software tends to work well with most existing ERP systems and actually helps those systems to achieve their full, promised potential. SRM may even be a fully integrated ERP module.

Companies using SRM software have also discovered benefits related to the sourcing process itself. The software helps reduce the cycle time on sourcing projects. Instead of going through reams of RFPs and comparing a wide array of quotes, the software brings all of these data together for simplified presentation, analysis, and selection. Another way that SRM software reduces sourcing periods is that projects can be saved and then reposted later. If the organization has frequently recurring needs, this can save a great deal of time.

SRM software makes it easier for companies to select suppliers. Prices and total cost of ownership (or individual line items) can be compared quickly so that TCO can be managed systematically, including tracking the past performance of vendors. For example, it may be tempting to choose a vendor on the basis of its lower price for raw materials, but if a shipment it sent previously was of low quality and most of the materials had to be scrapped, the buyer may want to keep searching.

SRM software can help standardize purchasing decisions. Most organizations have no clear idea of why they choose their suppliers, but the software makes selection criteria more readily apparent. It can also enforce centrally made strategic sourcing decisions among decentralized buyers for consolidated purchasing and shipping and quantity discounts.

Others who are actively involved in purchasing for major corporations have commented on the structure SRM software brings to the entire sourcing process. After all, instead of their having to deal with hundreds of separate suppliers alone, the software does most of the work for them.

SRM technology also makes communication between the buyer and the seller faster. Since the transfer of information can be done in real time, the supplier can check the buyer's inventory to determine whether new shipments are needed and the buyer can instantly submit orders over the internet without reducing overall productivity. Similarly, questions related to orders can be answered, perhaps by checking an extranet web page, so no human interaction or human-related delays have to interfere with the work.

Topic 2: Components of an SRM System

SRM system components may include both transactional and analytic systems:

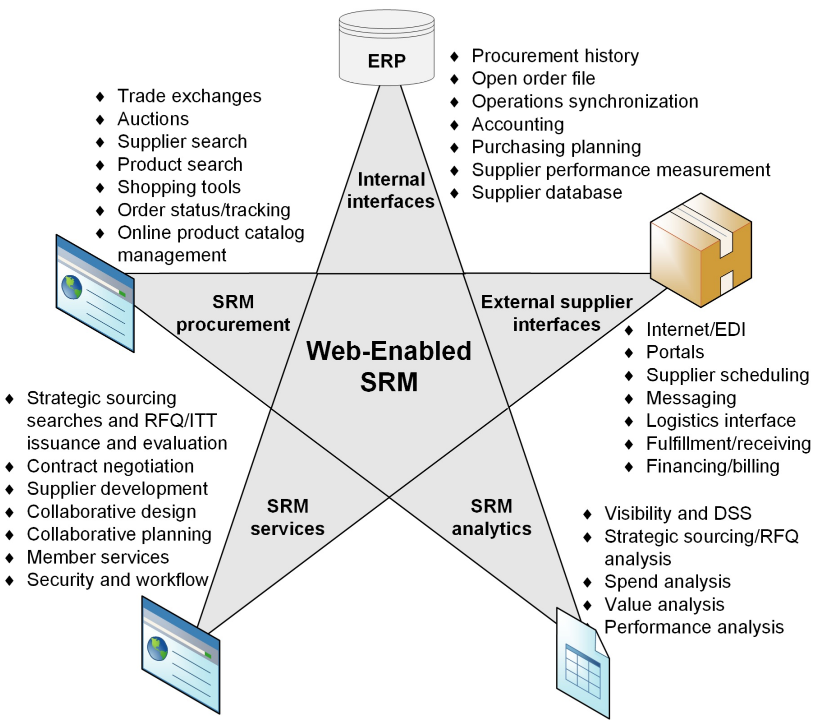
- Strategic sourcing and RFQ/ITT submission and analysis
- Procurement of goods and services through internet trade exchanges or auctions
- Collaborative product design and planning
- Purchasing and supplier scheduling using direct system links over the internet or electronic data interchange (EDI) or using portals
- Catalog management
- Supplier databases and rating systems

The internet is now integral to SRM, so the following content looks at web-enabled SRM (which could include cloud-based SRM systems).

Web-enabled SRM

Exhibit 2-119 highlights web-enabled SRM, which includes internal interfaces, external supplier interfaces, and SRM analytics, services, and procurement.

Exhibit 2-119: Web-Enabled SRM



Internal interfaces

Internal interfaces could refer to an ERP system and its data warehouse. They collect and provide a repository for internal information in order to guide the purchasing processes. ERP or other internal interfaces provide SRM systems with a wealth of information, including the following examples:

- **Procurement history.** This area stores historical information, such as past transactions or preferred supplier lists, and dynamic information, such as open PO status and active supplier files. The accuracy and completeness of this information serves as the foundation for all internal and networked procurement functions.
- **Open order file.** The internal system tracks and controls all open orders with suppliers.
- **Operations synchronization.** Purchasing receives consolidated demand information from manufacturing planning systems and/or advanced planning systems to synchronize the replenishment requirements of individual plants, subsidiaries, and supply chain partners. Availability of parts, etc., is provided to such systems. Purchasing is similarly synchronized with other departments such as quality management, marketing and sales, inventory planning, and transportation.
- **Accounting.** Accounting feeds directly into the organization's financial system for order and price matching, invoice entry and payables, credit management, early payment discounts, cost variance, and financial reconciliation.
- **Purchasing planning.** Future purchasing is scheduled against anticipated demand and is available to partners on a planning calendar.
- **Supplier performance measurement.** Once the data history is compiled, organizations can generate specific reports and performance measurements using this function. This will enable them to determine the value of their supplier relationships and the degree of success of their continuous improvement initiatives.
- **Supplier database.** The internal system contains a data warehouse of all suppliers used in the past or who submitted RFPs/ITTs, with subsets for approved or preferred suppliers. Supplier contracts are also stored for reference.

External supplier interfaces

External supplier interfaces automate transactional interactions with existing suppliers using internet or EDI links. These interfaces may be direct links between each party's ERP systems, in which case the status of individual orders or logistics information is kept up to date in each system. The secure links allow for a full range of transactions between buyer and supplier, including requisitioning, purchase order generation and tracking, logistics, receiving goods, and paying suppliers. Suppliers can also post transactions, such as approving the buyer for trade credit financing or issuing invoices or credits for defective products. External supplier interfaces include secure portals for use with SRM services such as messaging boards or collaborative product design. Portals can also be used to link with suppliers who do not have direct transaction system links (e.g., checking order status). (Note that portals are covered later.)

SRM analytics

Analytical technology allows the purchasing and supply chain management group to solve issues related to the management of materials, information, and finances in the supply chain through the following functions:

- **Visibility and decision support systems (DSS).** An analytical SRM solution helps facilitate the gathering, cleansing, and presentation of procurement information to allow organizations the visibility they need to support their business decisions. DSS analytical systems assist with optimizing suppliers, material quality, etc.

- **Strategic sourcing/RFQ analysis.** Purchasing and supply management have the information they need to negotiate the best contracts and support corporate goals.
- **Spend analysis.** This strategic application allows the organization to identify who they are buying from, what they are purchasing from each supplier, and when and how it was purchased. These comparative data can assist in sourcing and developing strategic relationships and consolidating purchasing.
- **Value analysis.** This analysis finds the purchasing, financing, and delivery processes or activities that are value-added and seeks to eliminate what is non-value-added. For example, the analysis could recommend substitution strategies rather than paying expediting charges for a particular material, or it could recommend substituting a less expensive good or service when the price for quality received is too high.
- **Performance analysis.** Using the analytical approach enables the organization to measure its procurement performance in terms of cost savings, quality, delivery, price, and overall effectiveness. The analysis can monitor entire procurement programs, individual suppliers, and contract effectiveness.

Let’s take a look at an example using the analytical SRM approach.

Case study: electrical systems/components manufacturer

A large global manufacturer of electrical distribution systems and components with more than 70,000 employees in 130 countries lacks a global view of purchasing and the analytical capability to amend purchases and verify that supplier policies are being followed. To solve this problem and reduce costs, they implement an analytical SRM system. The technology provides them with a more comprehensive, global view of purchasing, which allows SRM managers to focus on their strategic procurement practices.

SRM services

SRM services allow organizations to initiate strategic sourcing searches or other supplier searches that go beyond arm’s length transactions. Some SRM systems may search the same sites for strategic sourcing and for SRM procurement, while others provide additional services for strategic sourcing. Value-added services may include more detailed search and analysis, comparison of RFQs or ITTs, contract negotiation tools and forms, online financial and billing services, comparison shopping functions, and transportation and logistics support to facilitate product fulfillment.

SRM services may also include supplier development, collaborative design, and collaborative planning. Supplier development provides tools to help set up collaborative efforts, begin sharing data, and settle on pricing strategies. Collaborative design tools allow organizations to collaborate in real time on design drawings and specifications; collaborative planning tools help orchestrate logistics.

SRM services may provide member services, security, and workflow tools. Member services create personalized websites or portals for partners in the same way that CRM systems can create personalized pages for customers. Security is of great concern for organizations implementing and using online market transactions. The main goal of security is to protect individual files so that confidential information cannot be accessed without prior validation. Workflow tools process information in the background to ensure that all dependencies between procurement process steps occur correctly.

SRM procurement

The goal of SRM procurement applications is to streamline procurement of the goods and services necessary to produce products and run the organization. SRM procurement provides interfaces to online trade exchanges or auctions as well as additional features for transactional purchasing—such as shopping tools, special pricing, payment processing, order status and tracking, and after-sale support. Online technologies have made it possible to use B2B (business-to-business) service functions such as product search, supplier search, and custom searches by content (e.g., product description or type) or parameter (e.g., how the content is organized). Product catalog management involves managing suppliers' product catalogs online to ensure that they have current prices, inventory levels, and product specifications.

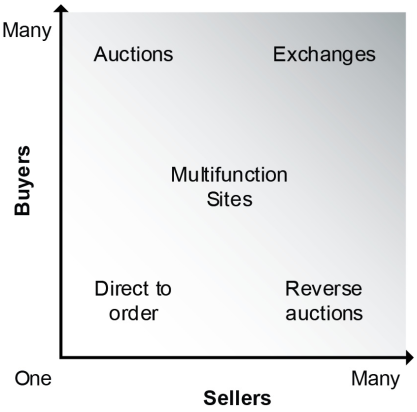
Portals, trading exchanges, and auctions are common SRM procurement applications, so let's look at each of these tools in more detail.

Topic 3: Portals, Trading Exchanges, Auctions

Portals and trading exchanges are not exclusive to procurement; for example, they could be used with customers when the organization is on the selling end of the transaction or with logistics such as for finding transportation carriers.

Exhibit 2-120 shows the types of online exchanges and other transaction models by the number of buyers and the number of sellers involved in each transaction.

Exhibit 2-120: Business-to-Business Digital Transaction Models



Portals

According to the *APICS Dictionary,* 16th edition, a **portal** is

> a multiservice website that provides access to data that may be secured by each user's role. Users can aggregate data and perform basic analysis.

Portals work over web browsers to enable people to more easily interact with systems or other persons. They provide faster access to information than a person could achieve in collecting, sorting, and aggregating the information on his or her own. Individuals can make custom views and perform self-service functions. Portals can be independently or privately owned, or they can be jointly owned and used by a consortium of organizations. Portals increase information reach and reduce distribution cost.

Consumer versus business portals

Consumer portals are multiservice websites for consumer interactions, including personalized home pages, email, online shopping and search, and news and entertainment services. Examples include Amazon.com or Yahoo.com.

Business portals allow users to aggregate and perform basic analysis on information relative to their job. Organizational intranets and extranets are examples. Portals give employees and trading partners access to data according to each company's and each user's role. To ensure identity authentication and security, some portals are the only allowed method for communications across enterprises. Portals can gather and continually update both external and internal sources of real-time information to determine customer priorities and make employees more productive. External information can be consolidated from external trading partners, the internet, and industry information services; internal information includes all attached transactional and analytical databases. Often portals are connected with or are a direct output of CRM or SRM systems.

SRM portals

SRM portals allow individuals to view and react to the effects of production changes on supplier product or service availability and to see exception-based information and forecasts based on point-of-sale data. Buyers can see suppliers' available-to-promise inventory. The data are presented on a dashboard that allows users to configure what items are tracked. Often a user has no ability to modify the data, which is ideal for partners who need the information but should not be able to change it. For example, a company's suppliers might be given access to a portal to see up-to-the-minute requirements. Suppliers could use the portal to send and receive communications such as to confirm capacity and order status or receive a demand-pull signal for orders.

Trading exchanges

A physical exchange—such as a stock exchange—creates a space for buyers and sellers to transact business efficiently. Similarly, a trading exchange, also called a B2B marketplace, creates an electronic "space" in which buyers and sellers can optimize, automate, and coordinate transactions. Automating the procurement process using trading exchanges lowers the cost per transaction and increases market reach for both buyers and suppliers.

Exchanges occupy the many-to-many quadrant of the chart in Exhibit 2-120. Exchanges can be called horizontal marketplaces when used across industries and vertical marketplaces when used by only one industry. The *APICS Dictionary,* 16th edition, defines these terms as follows:

> **Horizontal marketplace:** An online marketplace used by buyers and sellers from multiple industries. This marketplace lowers prices by lowering transaction costs.
>
> **Vertical marketplace:** An online marketplace connecting buyers and sellers within the same industry. It enables lower prices by lowering transaction costs.

A successful exchange will result in faster decision making, lower inventory, and better collaboration, planning, and production. Trade exchanges include the following:

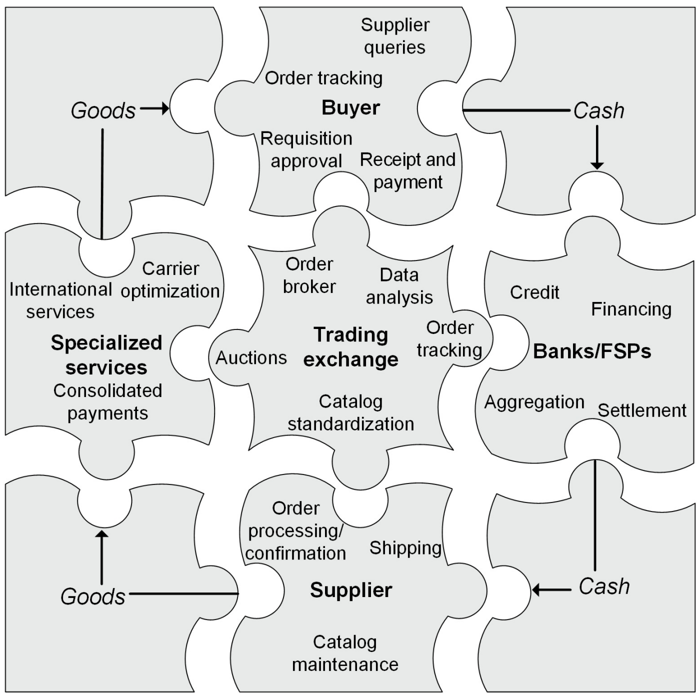
- Supplier and buyer broker services
- Supplier and product search functions
- Bidding events, including setup and prequalifying bidders
- Cost-savings identification
- Access to a larger market
- Supplier identification and support
- Online catalogs listing products, sales promotions, and quantity pricing
- Online SRM services, including strategic sourcing for direct materials

- Open, standards-based systems for automated connections
- Billing and payment processing for faster transfer of funds to suppliers

Some exchanges include a full range of SRM services and analytics, as discussed previously, and they may also provide supplier certification to give buyers some assurance that suppliers meet certain predefined capabilities.

Exhibit 2-121 shows the complex interactions among partners in a trading exchange. The exchange is at the center because it serves as a hub for numerous transactions among the community. Exchanges facilitate collaboration because members can avoid forming multiple individual interfaces.

Exhibit 2-121: Trading Exchange Community Interactions



A good starting point in this cycle is at the bottom of the diagram where a supplier uploads catalog information to the exchange. The exchange ensures that the catalog is in a format to allow automated searches.

Buyers perform product searches, and matches from suppliers are aggregated. A highly detailed search can use an automated RFQ/ITT. Exchanges may help buyers and/or sellers prepare bids or assist buyers in writing more complete queries. Bidding events may require hours of preparation. This may come down to traditional procurement activities or be performed by a third party for many consumers, creating economies of scale. Annualized contract negotiation or a one-time purchase order can be initiated. Supplier availability is communicated to the buyer, and the exchange confirms the order. The transaction is communicated to the bank or financial service provider (FSP), logistics services, and carriers.

Exchange ownership models

B2B marketplace ownership models include the following:

- **Independent public trade exchange (ITX) or public marketplace.** These are public sites often used for indirect materials and commodity purchases where price is the primary factor and where any buyers and sellers for a particular market meet to gain access to a wider market and find the best deals.

- **Private trade exchange (PTX) or private marketplace.** According to the *APICS Dictionary,* 16th edition, these are

  > trade exchange[s] hosted by a single company to facilitate collaborative e-commerce with its trading partners. As opposed to public e-marketplaces, a private exchange provides the host company with control over many factors, including who may participate (and in what manner, how participants may be connected, and what contents should be presented, and to whom). The ultimate goal might be to improve supply chain efficiencies and responsiveness through improved visibility and collaboration, advanced integration platforms, and customization capabilities.

  Trading may occur between members or only with the owner. PTXs are formed by market-dominant companies. Most private exchanges are members-only sites, but they do not usually charge fees and do not force suppliers to compete on price alone. PTXs have been developed by Volkswagen AG and BMW AG in the automotive industry and by utilities such as the Tennessee Valley Authority and the Kansas City Power & Light Company.

- **Consortia trade exchange (CTX) or consortia-based marketplace.** The *APICS Dictionary,* 16th edition, defines a consortia trade exchange as

  > an online marketplace, usually owned by a third party, that allows members to trade with each other. This site lowers members' search costs and enables lower prices for the buyer.

  CTXs are open or member-based sites formed by a consortium of companies, generally within the same industry. These some-to-many sites are semipublic, in that all members are allowed to trade with one another and price is often a major factor in purchases. There is a strong focus on finding new suppliers on these sites. Excess inventory and capacity is frequently traded in a clearinghouse. Ford Motor Company, General Motors Corporation, and DaimlerChrysler AG formed a consortium-based exchange, Covisint, in 2000, which was later joined by Renault Nissan and Peugeot Citroen. (Volkswagen and BMW rejected membership and opted to form private exchanges instead.)

- **Virtual trading exchange.** A virtual trading exchange is "an online trading exchange that enables both information integration and collaboration between multiple trading partners" (*APICS Dictionary,* 16th edition).

Private exchanges are very costly; companies with high transaction volume or a large number of suppliers should consider a private exchange because the larger number of transactions reduces cost per transaction. Companies with few suppliers or low transaction volume should consider an independent public marketplace to keep costs down or a consortia-based marketplace to consolidate their supplier base with others.

Private exchanges are desirable when partners want high security in data exchange. However, they should determine supplier interest in joining a private exchange. The best candidates are those that have strong market position or exclusive products or services. If the company has market dominance, it cannot gain much from aggregating demand with smaller businesses. The private exchange can help retain the unique brand value. When the company has unique business capabilities such as a unique processing model, then a private exchange can help leverage it.

Auctions

Auctions determine the value of a good or service on the open market. Winning a bid constitutes a contract. Most auctions require indifference as to who the buyer or seller is, so they are best for commodities (e.g., copper, wheat). Auctions should be avoided when delivery time, reliability, or quality are important. Auction items are solely differentiated by price, and any special features should be put in the description to show the item's value. Auctions benefit both buyers and sellers, with a balance of increased revenue, efficiency, and speed and reduced cost.

Types of auctions include the following:

- **Classic or forward auctions.** Classic auctions have one seller and multiple buyers who bid up the price for a product until the highest bidder gets the item.
- **Reverse auctions.** Reverse auctions are "internet auction[s] in which suppliers attempt to underbid their competitors; company identities are known only by the buyer" (*APICS Dictionary,* 16th edition).
- **Dutch auctions.** Dutch auctions have one seller and multiple buyers for multiple but finite quantities of the same item for sale. The price starts high and is lowered periodically. A bid immediately constitutes a contract for sale at the current price. U.S. Treasury securities are offered by Dutch auction.
- **Demand management auctions.** Demand management auctions are clearinghouses to liquidate excess supply (e.g., hotel rooms); buyers and sellers must be indifferent to the other party.
- **Stock-market-style auctions.** Stock-market-style auctions have dynamic pricing based on buy and sell offers and multiple buyers and sellers for commodities.

Trading exchange benefits and risks

Benefits for buyers include

- Better control over negotiated purchasing agreements
- Standard product specifications that reduce duplicate entries for parts and duplicate suppliers for the same part
- Reduced administrative costs
- Lower unit costs
- Faster response to needs and faster time-to-market
- Improved catalog accuracy, reducing billing and pricing errors
- Reduced logistics and transportation costs due to better volume leverage.

Risks to buyers include

- Lower-quality goods
- Nonconformance to specifications

- More product rework and returns
- Long-term loss of suppliers and fewer skilled suppliers.

Forcing supplier concessions could lead, in the long term, to worse supply chain coordination, poor planning, and adversarial relationships. Key suppliers should not be moved to cost-based exchanges.

Benefits for suppliers are less clear than those for buyers. They include

- Automatic connections and lower transaction costs
- Access to a wider market
- Faster payment receipt (order to cash)
- Ability to offer all available inventory
- Future bidding improved by knowledge of winning bid; shows need for cost reduction
- Better and more accurate catalogs for increased order accuracy
- Volume leverage, reducing logistics and transportation costs
- Reduction of replenishment lead time
- Supply and demand planning and collaboration, if offered.

However, these benefits must be weighed against significant reductions in revenue. Low bid winners may have unprofitable margins.

Risks to suppliers include

- Possibility that option contract may lock up the supplier’s capacity even when the business is not guaranteed
- Fewer investments in improving processes due to tighter margins
- Possibility of being driven out of business
- Possibility that buyer will use the seller’s data to get a lower bid elsewhere
- Exchange integration costs for software and connectivity.

Suppliers whose value is not purely dependent upon low price (e.g., those with brand recognition for quality or dependability) are less likely to participate. If 100 suppliers participate in an online auction but only one supplier wins the bid, the bid was a waste of time for the other 99 suppliers. Suppliers that do not see results may drop the service, especially with public horizontal exchanges. Suppliers are better off building long-term relationships, reserving exchanges to liquidate excess inventory. Whenever they win bids, their goal should be to start a personal relationship with these companies.

Topic 4: Processes Enabled by SRM

SRM enables any process that requires close, ongoing relationships between buyers and suppliers to succeed. These processes include a long list of supply chain management innovations discussed elsewhere in these materials:

- Collaborative design
- Collaborative planning, forecasting, and replenishment (CPFR)
- Lean and Just-in-Time
- 3PL/4PL partnerships
- Supplier- and vendor-managed inventory
- Quick response programs
- Distributor integration
- Collaborative transportation management

One process enabled by SRM not discussed elsewhere is supplier co-location.

Supplier co-location

Supplier co-location is a term often used to describe the practice of locating a supplier or multiple suppliers within a single location. Consider the following examples.

> **Example:** An auto manufacturer invites multiple suppliers into a production plant. The suppliers put inventory and staff on site so that each one can perform an operation on vehicles as they move along the production line. In return, the manufacturer provides the suppliers with free space, shelving, office equipment, and telecommunications.

> **Example:** In the airline industry, all alliance partners operate in the terminal of the dominant carrier at an international airport to facilitate partner connections and product offerings. They offer combined check-in, member lounges, and ground services.

When multiple entities are located in one facility or campus, a primary benefit to the organization is highly integrated operations. The benefit to the supplier is that they are on site and become an integral part of the business. In manufacturing applications, there is also the potential for the organization to reduce capital plant requirements, inventories, and lead times.

The relationship between the organization and the supplier shapes the extent of the co-location. Highly integrated supplier co-location is characterized by internally co-located personnel with high levels of team partnering. But there can be less integrated supplier co-location initiatives with physically separated teams. Broadband communications and SRM technologies make long-distance co-location between lead companies and suppliers a viable alternative to on-site co-location. However, suppliers with facilities located near their customers often have greater success.

Supplier co-location also refers to bringing together people or groups in related roles for product and process innovation. Suppliers have been co-located in this manner to generate ideas and design new products. For example, organizations may use SRM to co-locate core team members on a design project to facilitate communication, develop trust, and promote and sustain team ownership for the project. This allows problems to be addressed quickly as they arise in the design, prototyping, and product qualification processes and typically reduces concept-to-customer time.

Co-location initiatives may necessitate licensing agreements, ranging from traditional patent and software licenses to revenue-sharing agreements.

Topic 5: Effects of Supplier Relationship Management on Organizations and their Suppliers

SRM has had a strong effect on organizations and their suppliers, primarily in terms of collaboration and the need to have two-way discussions with suppliers rather than just handing down specifications. Technology has also streamlined processes.

Another effect of SRM on organizations is that strategic sourcing has increased the complexity of purchasing. From the purchasing organization's perspective, SRM has made it so that what were once routinely one-time transactions are now recurring relationships that must be planned, monitored, and measured for their impact on business goals. The best supplier may not be the one that offers the lowest price but rather the one that can collaborate with the purchaser to achieve multiple, interrelated business goals.

Exhibit 2-122 shows the various purchasing functions in SRM. Often a senior, experienced individual is responsible for the strategic tasks and others will oversee the tactical tasks. As purchasing has become more strategic and global, purchasing roles have been stratified according to strategic and tactical expertise.

Exhibit 2-122: Functions of Purchasing

1. Supplier selection
2. Negotiation
3. Order placement
4. Supplier follow-up
5. Supplier performance measurement and control
6. Value analysis
7. Evaluation of new materials and processes

The individual with the strategic role may be charged with tasks such as

- Adding value to products by managing supplier relationships
- Identifying and researching strategic partners
- Developing certification standards and supplier improvement programs
- Negotiating long-term contracts
- Serving on cross-functional teams to integrate workflows and share data
- Enforcing compliance with sourcing contracts
- Assembling and managing the sourcing risk portfolio
- Managing relationships with strategic sourcing partners
- Analyzing purchasing data to report impact on corporate goals and to identify areas for improvement.

The more tactical tasks, managed by one or more persons, may include

- Managing supply (planning and procuring supplies based on the master production schedule, auditing present needs on the manufacturing floor, releasing work orders, creating purchasing planning schedules)
- Issuing purchase orders
- Tracking orders
- Resolving discrepancies in orders or accounts
- Monitoring the performance of suppliers and issuing reports on timeliness, completion, and quality of work.

SRM technology puts in-depth information about the supply channel in the hands of purchasing managers, planners, and purchasing agents/buyers in real time. The requirements for purchasing jobs have changed accordingly. A survey of job postings shows that managers must have a greater understanding of the corporation's business goals (rather than merely the departmental goals) and how purchasing can affect the achievement of those goals. They must have substantial analytical abilities and people skills, including awareness of cultures with which they may come into contact. Global expertise (market research, knowledge of taxes and local laws) is necessary. And they must be customer-centric.

Planners, purchasing agents, and buyers must be familiar with a host of SRM technologies, but they must also be creative in translating corporate purchasing strategies into specific tactics and in finding opportunities to improve tactical processes. They must be detail-oriented and able to track global logistics and contract performance.

As the world's economy becomes increasingly integrated, it is imperative for purchasing management to master the best practices for operating successfully in a global market. Organizations need skilled operations management and supply chain management professionals to keep their business favorably positioned throughout their markets. The ideal manager for international suppliers will need a special set of soft skills. The individual should be someone who can moderate a discussion of expectations and who is sensitive to the values and needs of the other party's culture.

Chapter 7: Linkages between CRM and SRM

This chapter is designed to

- Explain how CRM and SRM interrelate
- Describe basic types of contracts
- Discuss terms and conditions of contracts that promote relationship building and maintenance on the part of both parties
- Describe how to use effective negotiation skills to get the most out of relationship management
- Explain how to apply contracts to ensure that all parties are living up to mutual agreements
- Enumerate the building blocks of collaborative relationship
- Describe how to use collaboration skills to get the most out of relationship management
- Identify the features and benefits of collaboration
- Describe how to overcome obstacles to collaboration.

This chapter first looks at several case studies that illustrate the use of CRM and SRM in organizations. Contracts are an important factor in the success of customer and supplier relationships, so we'll also examine contract types, terms and conditions, negotiation skills, and deployment and management. The final topic will discuss how to establish collaborative relationships with supply chain partners.

Topic 1: How Organizations Can Leverage CRM and SRM

CRM and SRM are basically two sides of the same coin—managing relationships with the buy side and the sell side. Therefore, organizations often consider them together to determine the extent to which each is necessary. The key is to integrate CRM seamlessly with SRM and other processes such as logistics so that, for example, warehouses know and value their distribution customers and transportation suppliers, and so on. The goal is to have all parties consider not only their own intermediate customers' needs but also the needs of their suppliers, their suppliers' suppliers, their partners' customers, and the ultimate customer.

CRM and SRM are both important supply chain collaboration tools. Collaboration in CRM and SRM can involve

- Organizing one or more sets of suppliers in separate supply chains to suit the needs of specific customer segments
- Enabling some customers to collaborate with suppliers (or vice versa) to add value to the experience for all parties.

CRM and SRM collaboration can also include enabling customers or suppliers to participate in product development. When working with customers, this can involve focus groups for large customer segments and partnerships with larger clients or customers. For suppliers, this may consist of including supplier representatives in product design.

You can appreciate the benefits of implementing CRM and SRM in your own business through the following case studies of fictitious businesses.

- A collaboration between a furnace manufacturer and a company that makes furnace controls to illustrate the importance of CRM and SRM to the relationship.

- Continuations of the three case studies “Customer Relationship Management (CRM),” that represent different types of business structures—a modern clothing retailer, a recreational boat manufacturer, and a financial services company. We’ll focus on how the case-study companies can use CRM and SRM strategies to fulfill a variety of business goals.
- A large multinational company that uses organizational learning to meet the challenges of integrating SRM and CRM. This case study summarizes research by Uusitalo and Uuskoski.

Case study: collaboration between furnace manufacturer and maker of furnace control systems

A company that makes control systems for residential furnaces is given a design by a furnace manufacturer. The control system firm must assemble parts from six component manufacturers and customize controls for different furnace models. While the furnace manufacturer is its customer, the control system firm’s primary concern is managing its relationship with its suppliers, ensuring that the parts are well integrated into the design, that the failure rate is low, and that there will be no delays and little need for extensive safety stock. So, SRM is a major issue for the control system firm.

The furnaces are sold through distributors to furnace installers. For these installers, CRM is the major issue. They must understand how to present their products to homeowners, arrange installation and pickup of old furnaces, track when the customer will need regular maintenance, and ensure customer satisfaction with their purchases. They may rely heavily on the distributor and the manufacturer for support, but if they can’t manage the customer relationship, their reputation will suffer and the sales will fall.

The furnace manufacturer is concerned with both CRM and SRM. It needs to stay current with what homeowners are looking for in new furnaces, so it conducts focus groups with consumers and works with engineers to ensure that current models reflect attention to current demands such as for sustainability. It also needs to supply technical and support information to customers after the sale and support regular maintenance or warranty work. For each furnace, the manufacturer works with 30 suppliers, who provide everything from paint and plastic to control systems. The furnace manufacturer must manage relationships with its suppliers just as the control system firm does with its own suppliers.

Case study: modern clothing retailer

With each fashion cycle, the clothing retailer learns more and more about the preferences of its customers. It can tell its designers and manufacturers precisely what styles sell best in what areas, what colors are losing favor, and what sizes are selling best. In this way, it limits its losses because of unsold inventory.

The clothing company is also working to develop relationships with its end customers. To do this, it has set up kiosks in its retail stores for entry of e-mail addresses, social media contact names, and other useful information. It offers an in-store discount for anyone volunteering this information. It uses email and social media to send willing customers information on promotions and suggestions for items the user might be interested in based on past purchases. It uses the social media connections to manage customer complaints and also gives the customers an opportunity to provide ideas for new products, such as fashions they may have seen in a music video.

As its online business has grown, the company has been able to consolidate its unsold inventory into a "bargain center"–branded website and alert its customers to newly received discounted merchandise. This has saved the retailer considerable costs in transporting unsold goods between its retail outlets.

Case study: leisure boat manufacturer

In the product development phase, our boat manufacturer uses VOC to learn more about what excites customers and what they aren't satisfied with in the current marketplace. The manufacturer discovers that customers are particularly concerned about delays in delivery and in purchasing a watercraft that is distinctive, that doesn't look like every other boat on the water, and that has their personal mark in some way. The customers feel they are paying a premium price and want to be treated appropriately.

The manufacturer begins by developing a system in which customers can "visit" their boats online as they are being assembled. This requires working with the engine suppliers closely to get them to set up cameras in the assembly area and perform some data entry regarding production stages. Not only can customers see precisely where their boats are in the production schedule from day to day, but they can see the boats themselves as they are being assembled. The boats are designed to allow a considerable degree of customization, but the key ingredient here is that the manufacturer keeps track of what customizations are being ordered in each geographical area. Customers can be advised to choose configurations and custom elements that are truly distinctive in their area.

Data on customer orders are continually being fed from the front end at the marina into the back end of component and raw materials ordering and production scheduling. The production managers can more accurately order raw materials and parts and avoid the expenses of carrying an inventory of high-priced components. Suppliers are provided these data so they can minimize lead times and their own inventory.

As boats enter service, calls to the customer care teams are carefully logged and tagged by specific concerns. When a pattern of concerns indicates a problem with a particular component, the manufacturer can quickly work with the supplier to correct the problem. When the problem is due to a design feature, the design team can begin immediately to build that customer response into the design process for the next model.

Case study: financial services company

When a broker in the financial services company enrolls a new customer, he or she completes a profile that indicates customer goals and key service interests. As the company develops new products and services, it integrates customized direct mailings with this information in the customer database. The customer believes the contact is from the broker, which solves a problem related to broker dissatisfaction with the parent organization when it used to omit the broker from the loop. As the customer responds to offers, the customer's actions are stored and used to analyze how well customer needs are being met by current products and how well promotional programs are performing.

The company is able to create customer segments based on probable customer needs. This allows for promotional messages to be tailored to the segments' values.

Case study: multinational corporation's use of organizational learning

A large multinational corporation (MNC) is a manufacturer, installer, and maintainer of escalators and elevators. It uses harmonized, segmented SRM and CRM at both the global and local levels, with global spend category management and global customer focus. The company employs organizational learning to integrate these initiatives.

Organizational learning can be defined as the ability of an organization to create, gather, and transfer knowledge and to modify behavior to assimilate the new knowledge into the organization's practices. The organization

- **Challenges people's paradigms.** A paradigm is how people see their environment and what they do not see. Examining paradigms helps people make sense of what SRM/CRM should look like and helps them envision the learning possibilities.
- **Creates formal knowledge creation steps.** Knowledge creation involves devising new options for learning and growth.
- **Empowers people to make decisions.** Decision making in this context is the application of created knowledge to find SRM and CRM improvements. Organizational learning needs practical application for the benefits to be seen and knowledge to become part of regular operations.

The MNC's approach is broad, but this case study focuses on just a few exemplary elements.

For paradigm setting, globally one idea is to benchmark how to support suppliers/customers so they can reach new markets. At the account level, they work to understand the pricing logic of suppliers/customers; at the local level, they look beyond price at what other factors motivate suppliers/customers. The company organizes presentations, workshops, and coffee-break discussions to get people to consider these new ways of thinking about customer or supplier motivations.

For knowledge creation, the company decides to interrupt workers' hectic routines. Globally, it has SRM and CRM decision makers challenge each other in relation to how they cope with similar situations between both disciplines; at the local level, it uses examples of real cases. It provides periods of reflection between meetings for idea generation. The focus of discussion is on transferring SRM success stories to CRM or vice versa and on finding the common ground between the two. Both focus on understanding the other party so that a deal can be created that appeals to those interests while also satisfying one's own interests. For example, one customer's chief goal may be to minimize the delays that employees experience during peak elevator riding times. An offer on an innovative new system may be well received.

For decision making, the company requires decision-maker involvement to facilitate later incorporation of the best ideas. It creates some cross-functional roles and responsibilities between SRM and CRM, including an SRM/CRM management board. These roles have some decision-making authority for improving SRM/CRM. Change management is used to spread awareness, provide incentives, and show executive support. A debate between SRM and CRM decision makers focuses on similarities to help with global and decision-maker acceptance; specific case review helps with local acceptance. The results include a better understanding of when price increases are justified. Other insights include learning about specific negotiation situations based on the behavior of the other party. The company also devises joint training programs and job rotation between purchasing and sales and organizes a contact network between these two functions to improve ongoing organizational learning. Learning about the perspective of the other person in the transaction (i.e., the seller's perspective for the purchaser and the buyer's perspective for the salesperson) helps each become better at their jobs because they seek first to understand before attempting to be understood.

Topic 2: Contracts

Sales agreements or contracts are an important part of any business relationship. The *APICS Dictionary,* 16th edition, defines a **contract** as

> an agreement between two or more competent persons or companies to perform or not to perform specific acts or services or to deliver merchandise. A contract may be oral or written. A purchase order, when accepted by a supplier, operates as the highest level of a contract except where a longer-term contract exists. Acceptance may be in writing or by performance, unless the purchase order requires acceptance in writing.

Other contract-related terms defined in the *APICS Dictionary,* 16th edition, include the following:

> **Annualized contract:** A negotiated agreement with a supplier for one year that sets pricing, helps ensure a continuous supply of material, and provides the supplier with estimated future requirements.
>
> **Bilateral contract:** An agreement wherein each party makes a promise to the other party.
>
> **Contracts for the international sale of goods (CISG):** Governs the sale of goods in the international environment. They enable exporters to avoid choice-of-law issues.
>
> **Trading partner agreement:** A contract between trading partners that describes all facets of their business together. This is a legal and binding agreement suitable for legal purposes as well as standard working agreements.

The level of relationship will dictate the type of contract that is needed. When buying on the market, a purchase order constitutes the highest level of contract that will likely exist, except when a CISG is needed. Ongoing relationships can use an annualized contract, while partnerships or collaborations/strategic alliances will form a long-term trading partner agreement, which is a type of bilateral contract.

Contract types

Contracts take a few basic forms that need to be differentiated because they strongly affect which party accepts more of the risks if there are cost or schedule overruns.

The *APICS Dictionary,* 16th edition, defines various contract types as follows:

> **Cost-based contract:** A type of purchasing contract where the price of goods or services is tied to the cost of key inputs or other economic factors, such as interest rates.
>
> **Cost-plus contract:** A pricing method where the buyer agrees to pay the seller all the acceptable costs of the product or service up to a maximum cost plus a fixed fee.
>
> **Cost-plus-fixed-fee contract:** A contract in which the seller is paid for costs specified as allowable in the contract plus a stipulated fixed fee.
>
> **Cost-plus-incentive-fee contract:** A contract in which the seller is paid for costs specified as allowable in the contract plus a profit provided certain provisions are met.
>
> **Firm fixed-price contract:** A contract in which the seller is paid a set price without regard to costs.

A pure cost-based contract minimizes the risk for the supplier because cost overruns are charged to the customer. These types of contracts might be appropriate when it is impossible for either party to accurately assess costs in advance and there is a level of trust between partners. Such contracts need to be audited regularly to ensure that all costs charged are reasonable and appropriate.

Firm fixed-price contracts minimize the risk for the customer because the supplier must absorb all cost overruns. These contracts are appropriate for products and services that have a market value that is easy to determine or costs are otherwise reliably estimated.

Incentive arrangements and contracts, which provide incentives for desired behavior, can help specifically with CRM and SRM initiatives or other similar collaborative arrangements between organizations. The *APICS Dictionary,* 16th edition, defines incentive contracts as follows:

> **Incentive contract:** A contract where the buyer and seller agree to a target cost and maximum price. Cost savings below the target are shared between buyer and seller. If actual cost exceeds the target cost, the cost overrun is shared between buyer and seller up to the maximum price.
>
> **Incentive arrangements:** The incentive contract allows for the sharing of the cost responsibility between the buyer and seller. Incentives are incorporated into the contracts to motivate the supplier to improve its performance in areas such as quality, on-time delivery, and customer satisfaction. There are three elements of an incentive agreement: target cost, target profit, and the sharing agreement.
>
> **Fixed-price-incentive-fee contract:** A contract in which the seller is paid a set price and can earn an additional profit if certain stipulations are met.

Incentive arrangements and contracts can be part of an overall trading partner agreement or can be negotiated separately. The benefit of such arrangements is that they align collaborative goals with individual motivations. The motivations are the cause that generates the effect of collaboration. Traditional self-centered motivations cannot be expected to generate anything other than self-centered effects.

As stated in the definition of incentive arrangements, the organizations must settle on a desired cost and a profit margin for goods or services. These targets should be challenging but realistic. Both parties will be motivated to find ways to cut costs due to the mutual increase in profitability. The targets can be increased over time as goals are met. The organizations must also determine how the profits or excess costs will be split among the partners and to what maximum price any cost overruns will be shared among the partners.

Contract terms and conditions

If a relationship is to be successful, both parties must know and understand their responsibilities. Normal responsibilities must be defined in the form of terms and conditions. The *APICS Dictionary,* 16th edition, defines **terms and conditions** as "all the provisions and agreements of a contract."

These contract clauses should specify what actions can be taken by each party if unexpected events arise or failures occur. They are both the rules of fair play between the parties and the method of encouraging fulfillment of strategic goals.

It is important not to accept another party's assurances that an undesirable contract clause is simply standard "boilerplate" legalese that won't be an issue. If negotiations cannot arrive at a fair set of contract details, it is better to walk away. (Note: Negotiation is discussed later in this section.)

Also, no contract should ever be signed without first being reviewed by your legal representatives, specifically those who have experience with contract law.

The following are some of the common contract terms and conditions that should be clearly spelled out in writing. Hypothetical examples are provided to illustrate the contract concepts. (Note: These examples are not intended to provide actual contract language, which should always be created with the assistance of legal counsel.)

- **Pricing.** Accepted price quotes may include more than just price per unit. For example, packaging estimates may be included. Some contracts set fixed prices with certain price increases allowed based on certain contingencies, such as increases in raw materials (called escalation), while other pricing contracts may specify that orders use current market prices.

  Example: The unit pricing for the product is set forth in Schedule B. Prices for spare parts, accessories, and packaging are set forth in Schedule C. The supplier may increase pricing in Schedules B and C once every 12 months during the term of the agreement, not to exceed 4 percent and provided that the supplier provides 3 months' written notice prior to any such increase.

- **Delivery requirements.** This should specify dates, locations, and conditions such as how orders will be placed, how a product is to be protected during shipment, what modes of shipping are to be used, minimum or maximum orders, and the like.

  Example: The supplier will deliver the products in accordance with the delivery schedules. If the supplier fails to deliver the products in accordance with the schedule, the supplier will provide written notice to the purchaser stating the reason(s) and planned resolution.

- **Transfer of ownership (Incoterms® trade terms).** Incoterms® trade terms stated in the contract will affect when each party is responsible for the freight. This is required only for international transactions, although companies may elect to use the terms for domestic freight as well.

- **Payment terms.** These terms should address not only timing and form of payment but special issues such as currency exchange. To manage risk, it may be possible to stipulate the exchange rate to be used in the contract with the supplier or a period of time during which a sampling of exchange rates will be used as a basis for currency exchange.

  Example: The purchaser agrees to pay the supplier's invoices within 30 days of receipt. Invoices shall be paid in Hong Kong dollars (HKD).

- **Performance criteria.** How will performance requirements be met? For example, specifications of product or service attributes should be noted along with which attributes are more important and why.

  Example: The supplier agrees to manufacture the product under ISO regulation certification requirements. The supplier will maintain the documentation necessary to meet ISO regulations.

- **Quality assurance.** The management process and performance standards the organization has in place in order to assure quality, including any specific standards with which the supplier must be compliant or registered, should be specified.

> **Example:** The supplier agrees to the purchaser's quality audits of the manufacturing facility at the purchaser's request and subject to scheduling approval.

- **Order requirements.** This includes measurements of standard deliveries, quantities that a company wants, and the date on which the order is due. The contract may state the company order period (i.e., 60 days), which is the time between when a purchase order is placed and goods are available per the Incoterms® trade terms. Purchase orders are also considered contracts with stated quantities and pricing confirmed by each party.

> **Example:** Deliverables and dates are as specified. Three days early or late is considered acceptable on-time delivery and used for supplier evaluation purposes.

- **Associated incentives and penalties.** The contract should detail how an organization will provide business assistance and/or incentives to a supplier or help them to improve. Incentives may include contractual sharing of cost savings. Any penalties to be assessed when problems occur need to be communicated as well.

> **Example:** Failure to deliver the product in accordance with delivery schedules and failure to resolve the issue within 30 days will give the purchaser the option to terminate the agreement, with written notice to the supplier.

- **Status reporting.** A successful partnership depends on good communication. Both parties must establish trust and confidence with each other so that an open exchange of information occurs. The contract should cover provisions for routine communication in terms of frequency and types (e.g., face-to-face meetings, online conferencing, electronic reports, hubs or dedicated workstations, intranet sites, blogs).

> **Example:** The purchaser will establish an internet-enabled portal where employees and partners can post daily communication entries and notes to support collaborative planning, forecasting, and replenishment. Regular meetings will be held to review open orders, engineering changes, design issues, production issues, etc.

- **Channels for resolving problems.** In the event of quality or delivery problems, what are the expectations and protocol for corrective actions to enable a swift resolution and prevent a recurrence? If task conflicts arise from disagreements in viewpoints or ideas, what conflict resolution technique will be used that is culturally and contextually appropriate?

> **Example:** Following fact finding and the opportunity for both parties to discuss a point of contention, alternate dispute resolution, including a third-party arbiter, shall be used to resolve conflicts. This third party shall be mutually agreed upon before contract signing.

- **Security requirements.** What are the safeguards that must be in place to prevent unauthorized access to proprietary data? Are there data that need to be classified? Are there specific requirements for sharing data? Are there security issues for the goods in transit that need to be addressed to meet the customs compliance requirements of specific countries? This contract element involves measures to mitigate security risks for both parties.

> **Example:** Neither party shall disclose confidential information that has been disclosed to it by the other party to any other third party, without the prior written consent of the disclosing party. Freight

forwarders and transportation providers must be C-TPAT-certified.

- **Language of the contract.** Will a contract written in English be acceptable to all parties? Are there are language differences that necessitate translation? Correct translation is critical. It is also beneficial to define all vague wording (multiple meanings) and acronyms. Depending on how many of these terms exist, a separate section may be warranted.

  Example: The initial contract will be written in English. The document will be translated by the organization's translator and submitted to the supplier for review. The translator will address any translation questions from the supplier. It should be noted that the term "business day" means a day other than a Saturday or Sunday on which banks are open for business in New York and Luxembourg City.

- **Contract termination.** The process and terms for contract termination (e.g., when and how, advance notice requirements) should be defined.

  Example: This agreement may be terminated by the purchaser for any reason with 6 months' prior notice to the supplier.

- **Legal authority.** In global sourcing, an organization's relationship with a supplier may be influenced by many layers of laws, regulations, directives, and international treaties. Requirements of particular countries should be specified.

  Example: The validity of this agreement and any amendments shall be governed by the law of the Czech Republic with the intention that the rules of the United Nations Convention on International Sale of Goods shall not apply with the application of any conflict of principles.

Negotiation

Negotiation is an important part of contract development. The *APICS Dictionary,* 16th edition, defines **negotiation** as "the process by which a buyer and a supplier agree upon the conditions surrounding the purchase of an item or a service." Negotiations for commodities will differ greatly from negotiations for outsourced functions that have great impact on the supply chain.

While the level of importance of the relationship will dictate the amount of time and energy spent on negotiations, all negotiations can benefit from sound negotiating principles. This is especially the case when working to transform an organization from traditional adversarial relationships with suppliers to more constructive partnerships.

Traditional negotiating tactics include the following forms, which are called position-based tactics:

- Hard negotiators view other parties as adversaries to be beaten, so they take a position, demand concessions, and give none in return. They threaten, mislead, or pressure the other party. This can endanger long-term success.
- Soft negotiators value agreement to the point that they disclose their bottom line, alter their position, or accept one-sided agreements that involve only concessions. Contracts may be won, but this party is left feeling exploited and may be financially at risk.

These positions can be described as win/lose or lose/win.

Fisher and Ury of the Harvard Negotiation Project developed a third option: a win/win negotiation technique called principled negotiations. Rather than negotiations in which each party sequentially takes and gives up actual or deceitful positions, principled negotiations start by insisting on several criteria for long-term gain (none of which are typically present in win/lose or lose/win tactics):

- Negotiations should efficiently solve the underlying issues.
- Negotiations should preserve or increase positive relationships.
- Agreements, if reached, should endure, meet both parties' actual needs to the extent possible, resolve conflicts of interest fairly, and be in the community's interests.

Principled negotiation is a four-step interest-based bargaining style:

1. **Separate the people from the problem.** Rather than trying to be adversaries or friends, principled negotiators insist on the criteria listed above for long-term gain. They attack the problem rather than the other party.
2. **Focus on interests, not positions.** Position taking leads to defensiveness. Principled negotiation avoids taking positions or a bottom line at all. Instead, negotiators relate what they are interested in achieving and seek to understand what the other party is interested in achieving.
3. **Invent options for mutual gain.** Principled negotiators first seek a time frame in which to study the problem rather than bowing to time-based pressure. During this time they devise alternatives that could satisfy the interests of both parties.
4. **Insist on the use of objective criteria.** Rather than engaging in haggling, principled negotiators guide any disagreement toward deciding upon a fair standard that both parties can agree will be the basis for the decision (e.g., market value, expert opinion, analysis results, the law, ethical standards).

Principled negotiations or similar negotiation tactics can result in relationships that are perceived as profitable and indispensable by both parties, which, in turn, means that the buyer is not constantly looking for a new supplier or vice versa.

Both parties in a negotiation are advised to predetermine their best alternative to a negotiated agreement. This is what the organization would do if the negotiation fails. It might be to manufacture the product in house, partner with an existing supplier to expand their operations, and so on. When the costs and benefits of this alternative are known in advance, the negotiator will know when it is better to walk away (or to take an offer that still beats this best alternative).

Contract deployment and management

Once a contract has been signed, the contract deployment process is used to get the agreement to function as intended. Organizations regularly monitor relationships for responsiveness, on-time delivery, order accuracy, product or service quality, and invoicing and payment accuracy. They also informally maintain relationships to anticipate and avoid problems and to develop cooperation and trust.

Deployment

The main purpose of contract deployment is to ensure a smooth transition to new partners and successful adoption across the organization. Without diligence in rolling out contracts and continuous monitoring of both internal adoption and performance, contract deployment ultimately will fail to deliver the anticipated economic and other benefits. Because an organization may continually be adding, removing, and replacing partners over time, contract deployment is an ongoing function.

Contract deployment activities include

- Navigating the legal maze involved in creating a new agreement
- Communicating with the winning supplier
- Promoting the benefits of new agreements to internal buyers
- Loading new contracts into a centralized contract management database
- Implementing order-to-payment procedures
- Training users and suppliers on new procedures
- Validating performance against measures and key performance indicators
- Integrating and deploying transaction management systems
- Auditing initial invoices for accuracy and compliance.

Compliance management

Compliance management, which is emerging as a discipline equal in importance to strategic sourcing, consists of

- Defining and implementing strategies to concentrate purchases with preferred suppliers
- Monitoring and measuring compliance and identifying off-contract purchases to uncover lost savings opportunities
- Channeling findings to management for remediation
- Monitoring and reporting on key performance metrics
- Auditing pricing to ensure accurate billing
- Monitoring contract expirations, executing renewals, ensuring proper rebates and early payment discounts
- Driving continuous process and incremental cost improvements
- Establishing baselines for new sourcing initiatives.

Technology makes it possible to merge data from various sources and make them quickly visible to senior management for analysis and action.

Measuring success and avoiding pitfalls

Unsatisfactory performance is a great risk. It can cause an otherwise sound business strategy to fail. To avoid this pitfall, organizations should follow some basic guidelines.

- **Establish clear performance expectations.** Clear performance expectations must be addressed up front. For example, a performance indicator may be the volume of customer complaints. Rather than using anecdotal information about complaints, best practices involve a complaint tracking system with monthly reports and specific performance improvement targets. Another best practice is a formal **service level agreement (SLA),** which is "a document that represents the terms of performance for organic support" (*APICS Dictionary,* 16th edition) that is updated each year.

- **Measure against those performance expectations at regular intervals.** It is imperative for organizations to monitor performance proactively. Continuous monitoring programs measure performance against predetermined metrics and adjust them as changes with customers' needs occur. Ensuring that suppliers have adequate internal controls is essential; these controls are needed to capture accurate billing data as well as provide critical information on how suppliers manage their business and process risks. Consider, for example, an organization that outsources telemarketing services to a supplier. One month, the supplier's invoice indicates an overbilling of several hundred thousand dollars; however, they cannot provide evidence for the overbilling due to poor internal controls and record keeping. Organizations should consider instituting a policy of reviewing potential suppliers' internal controls *before* entering into a contract.

- **Maintain ultimate responsibility.** Many organizations have the false idea that once they contract for an activity, they no longer need to be involved. Although the supplier may be fully capable of handling an activity, the organization should not relinquish the complete management of the relationship. For example, if day-to-day customer care activities are outsourced, the organization should still maintain a close watch over customers' needs and expectations and monitor the supplier's overall effectiveness. This fact highlights the increased demand for risk sharing. Partnerships that provide for equal sharing of risk have become a key method for managing new product development and controlling rising operations costs.

- **Coordinate the activities of multiple suppliers and share experience and knowledge.** It is essential for organizations working with multiple suppliers to establish formal sharing of best practices.

- **Maintain an exit strategy.** When the need for a new outsourced supplier arises, organizations need to be prepared with a formal backup plan for each key supplier. Although the need for consolidation is important, a best practice is to spread vital activities among multiple suppliers if feasible. This reduces the operational disruptions that come with switching suppliers.

Topic 3: Collaboration with Supply Chain Partners

Information technology has enabled collaborations among participants in supply chains, undreamed of a decade or two in the past, that have become essential strategies for the present and future success of the organizations involved. These partnerships are being forged both across thousands of miles and with local suppliers, creating virtual organizations that extend beyond the physical boundaries of a company.

The *APICS Dictionary,* 16th edition, defines **virtual organizations** as

> short-term alliances between independent organizations in a potentially long-term relationship to design, produce, and distribute a product. Organizations cooperate based on mutual values and act as a single entity to third parties.

Virtual organizations use point-of-sale data to replace make-to-stock (i.e., make-to-forecast, or push) with make-to-order (pull) or go even further and provide these data to suppliers, who consult with the organization on product design and perform significant manufacturing tasks.

Virtual organizations build trust between partners by sharing information. The more information each partner offers, the more robust the relationship becomes. And the faster the flow of information, the more efficient and agile the virtual organization becomes. For some chains, speed and accuracy become the differentiators that allow the virtual organization to win customers.

When sellers have access to greater detail about purchasing history and buyer preferences, they are able to provide enhanced service. For example, a pharmaceutical wholesaler has designed a virtual organization by providing multiple independent pharmacies with an internet-based system for ordering, accounting, and inventory control. The wholesaler gets a large set of captive accounts, information on actual customers, and a portion of the improved returns in exchange for its information technology investment. The independent pharmacies improve customer satisfaction, and all partners reduce inventories.

The speed at which virtual organizations can adapt to new business situations is the key to their success. Many virtual organizations have this speed because they are a constantly adapting network of informal relationships enabled by communications that are flexible and easy to set up. Some members of the network remain at a commodity level, while those who share better information or provide greater value for the whole gradually become partners.

Virtual organizations may need to weaken their formal hierarchical organizational structures and instead empower individuals and even teams who represent a particular core competency to informally work with others outside the organization as if they were employees, make decisions, and refine strategies. By empowering individuals to act outside formal organizational structures, virtual organizations work to achieve the benefits of both centralization and decentralization.

A virtual organization has its risks. If the organization fails to design in informal controls, incentives, and training, individual decisions could cause the organization to revert to locally optimal but overall suboptimal decisions. Another risk is a backlash from organizational hierarchies, potentially leading to a return to functional silos. However, technology that did not exist when traditional organizational hierarchies were formed can help these new disaggregated, informal control structures to survive and even thrive.

What do these strategic partnerships look like in action? Suppliers, manufacturers, and customers all come together on design teams to create products that will not only satisfy customer demand but will be efficient to produce, assemble, transport, and store. Planners gather from all functional areas and from multiple supply chain partners to discuss anticipated demand, demand planning, and appropriate forecasting methods. The operations people plan and manage manufacturing priorities, capacity, and inventory; the logistics people determine the most effective warehousing and the appropriate means of transportation to optimize customer satisfaction and profits.

Requirements for success

But how does a business select its strategic partners? Jordan Lewis, author of *Partnerships for Profit,* has developed a comprehensive framework of criteria for evaluating potential partners for strategic alliances. Seven factors need to be carefully researched and considered when forming a supply chain strategy.

- **Adding value.** Can a company add value to your company's existing products? Does the potential partner create products that are complementary to those of your organization? For example, Liberty Mutual sells auto insurance but a third-party auto glass company processes all glass-only claims. Liberty Mutual reduces its administrative costs, and the auto glass company gets significant new business (even after stating that the customer is free to choose a different auto glass company). Other examples of value-added benefits include shortening time to market, speeding up distribution times, or enhancing the product repair process; these all contribute to a higher perceived value of the company.

- **Improving market access.** Will a partnership with this company lead to increased access to new markets? Does the partner company have better, more effective advertising? Again here a company that has products that complement your organization's offerings might make a good partner. You might decide to offer a package deal, combining products from both companies, as a promotion.

- **Strengthening operations.** Will an alliance with this company improve your operations by lowering costs and cycle times? If yes, then resources and facilities can be used more efficiently and effectively. Companies with complementary seasonal products, for instance, can effectively share warehouses and trucks throughout the entire year.

- **Adding technological strength.** Does the company use the same technology or is it willing to share new technology with your company? Does the potential partner have internal expertise to facilitate the transition between new and old technologies? And is your organization prepared to handle those challenges?

- **Enhancing strategic growth.** Are there significant barriers to working with this company? Will its strategy align with your organization's? Is the company heading in the same general direction? Pooling expertise and resources from both companies can provide new opportunities for growth.

- **Sharing insights and learning.** Is the company willing to share its insights and key learning with your company? Alliances where that occurs yield a wealth of information that can be used by both organizations. It also encourages partners to learn more about themselves and increase their desire to be more flexible in the partnership.

- **Increasing financial strength.** Is the potential partner willing to share administrative costs for shared activities? Is the company willing to share in the risk? Sometimes administrative costs can be reduced due to the expertise of one or both partners, and strategic alliances can limit investment exposure if the other company will agree to share in the risk.

Every potential partner organization has its strengths or core competencies. These should not be diminished by the alliance with your organization; this can happen if the company's resources are diverted from its strengths. It can also occur if the company's strategic or technological strengths are compromised in the process of making the partnership successful. Remember that it's only a successful strategic alliance if the partnership results in a "win-win" for both parties. In addition, trust and communication are also important components to a successful relationship.

Creating relationships that produce meaningful results requires commitment by both parties and hard work. Effective partnerships are a combination of shared risks, resources, rewards, vision, and values. Without these elements, strategic alliances often are unbalanced and unaligned. The more unbalanced a partnership is, the more likely that key objectives will not be met.

Building collaborative relationships

So once you have analyzed potential partners according to these criteria and have chosen those that objectively match your needs, how do you go about building a collaborative relationship? How will you generate a supply chain strategy that can develop and grow trust, manage risks, overcome barriers, communicate, and collaborate effectively?

Building these partnerships depends upon the following:

- Auditable information exchange and technology for connectivity
- Deterrence-based arrangements such as formal contracts that make adherence to proper behavior a matter of self-interest
- Incentive-based arrangements such as aligning sales and management goals to collaborative objectives
- Process-based arrangements such as long-term trust building based on constant communications and feedback that spiral out into greater trust over time
- Assignment of leaders with the appropriate level of authority to enforce the relationship
- Focus on the entire supply chain
- Networkwide visibility and measurement of the bullwhip effect to assess the impact of collective management of inventory
- Sharing of knowledge, not just data
- Clearly visible sharing of both the benefits and the burdens of the relationship
- Varied types of commitment, depending upon factors such as length of relationship, feedback, and amount of added value by each potential partner

In order to build the foundation of the collaborative partnership, the partners must

- Initiate management tasks.
- Overcome barriers to collaboration.
- Build levels of communication.

- Determine levels of collaborative intensity.
- Examine strategic importance versus difficulty to determine product categories.

Initiate management tasks.

Once the collaboration is official, it's critical that top management demonstrate their enthusiastic commitment to the partnership. Since actions speak louder than words, management should publicly model relationship-building efforts. The managers of both organizations need to work together from the start: sharing information with external parties and with internal staff, modifying incentives to match collaborative goals, enforcing agreements by departments and staff, stabilizing pricing and ordering, and improving operations. They must develop good working relationships and strive for personal communication to develop mutual trust. They need to develop supportive relationships that foster team spirit between the partner companies.

Division managers throughout the network must place the interests of the whole above their local interests. These managers may be asked to make major changes in how they operate to facilitate collaboration. Top management may need to change the individual incentives for their managers and consistently encourage them to make the needed changes. This may require internal team discussions during which senior management enumerates the benefits of the collaboration and discusses the negative impact of the division managers not being on board with the required changes.

Management can start building the collaboration by jointly discussing and designating relationship goals and planning the steps necessary to reach them. This process begins with determining the specific contribution of each party and the criteria for measuring that contribution. Obviously, total profits should be one of the criteria, but there should be other specific measures, including nonfinancial contributions. The criteria should be flexible enough to allow each party to use innovation to meet its goals. In the early stages, relationships should emphasize equity in profits among all parties. Equity will help motivate all parties to work toward the good of the whole.

The next task is to define roles for each party, taking care to avoid redundant efforts. Conflicts can occur if these roles make one party more dependent upon another than they wish to be. To alleviate this common problem, networks should avoid sequential interdependence, in which the second party cannot begin work until the first party is done. Instead, they should establish reciprocal or mutual interdependence, in which the exchange of tasks and services occurs in both directions. Examples of this include CPFR (collaborative planning, forecasting, and replenishment), which are covered in more detail elsewhere. Although mutual interdependence is more complex to manage, it can also yield much greater rewards.

Since no contract can cover all contingencies, the next task is to create a policy for resolving conflicts. If a conflict is serious enough to require amending the contract, negotiations to do so should include all affected parties. Many organizations prefer to resolve differences through informal negotiation rather than by revisiting the contract. All parties to the contract should agree upon a plan to govern such negotiations to ensure that they aren't too informal. The plan should call for regular meetings among key managers and cross-enterprise teams, and it should include guidelines for referring problems to the highest level necessary to resolve the conflict. Either the contract should specify how finance and information technology establish rules for transactions, or a policy and procedures guide should do so. Contracts, policies, procedures, and informal conflict resolution must be sensitive to cultural differences. In the United States, courts can resolve conflicts without detriment to long-term relationships among parties to a contract. The opposite is true in most Asian countries.

Finally, managers must stay involved. Without management commitment, each party tends to revert to its own self-interests. Weaker parties in the relationship may bear the brunt of problems; without an effort to maintain equity, the relationships may fall apart. The partnership's benefits and areas needing improvement will be easier to identify and improvements can be made in a timely manner if the relationship is monitored and cared for. Top management must follow through on its responsibility for adhering to the collaborative arrangements.

Overcome barriers to collaboration

Building successful collaborations requires overcoming predictable obstacles, including the following challenges.

- **Suboptimization.** Suboptimization refers to a solution to a problem that is best from a narrow point of view but not from a higher or overall company point of view. When supply chains are not truly connected at the planning level, each partner in the supply chain will work to maximize its own profits or to increase other measures at the expense of the other supply chain partners. When this occurs despite the recommendations of a holistic optimization tool, it is a double loss because the investment in global planning is being wasted. For example, when a product is available in limited amounts, retail orders must be monitored across the supply chain. If each store is allowed to determine its own order quantity, the result might be overstocking of locations that order early and stockouts elsewhere. Transportation cost is another area commonly suboptimized.
- **Individual incentives that conflict with organizational goals.** Incentives such as sales force bonuses that are structured without thought for the supply chain strategy can often be counterproductive. For example, sales quotas for distributors or manufacturers are often based on monthly or quarterly targets for sales to retailers instead of on those retailers' actual sales. While the distributor doesn't actually control retail sales, this practice can lead to channel stuffing (intentionally selling too much inventory) and is aggravated by promotions intended to increase sales at the end of a period. These practices create a great deal of excess inventory as well as variability in demand that the manufacturer must deal with. Instead, sales goals must be aligned with actual demand. Many companies have stopped giving sales incentives and instead have turned to other metrics that more effectively align sales with company objectives.
- **Working with competitors.** Supply chain management books tout the success of collaborations among competitors, but many of these ventures fail. This is partly due to lack of trust and cultural rigidity, but it also reflects the reality that one company is trying to win market share at the expense of the other. Such relationships should be kept at arm's length to ensure fairness, and extra caution must be devoted to sharing information. Companies may pretend to embrace collaboration when they really only want access to information for their own benefit.
- **Bottlenecks caused by weak or slow partners.** The slowest or least integrated partner in a network will often limit the technological collaboration level of a company as well as the level of trust that can be built. If the company is not willing to invest in a technical and social change process, the only

alternative may be to find a more willing or able partner who can keep up with the network's collaboration curve.

- **Technology barriers.** When potential partners have incompatible systems, it increases the difficulty of sharing data, especially when one or more companies use very old legacy or ERP systems that do not adapt well to the newer integration solutions such as process-oriented middleware (like business process management [BPM], or web services). Incompatible and/or antiquated hardware infrastructures can also prove a barrier to collaboration.
- **Power-based relationships.** Rather than building relationships based upon trust and mutual benefit, the nucleus company may use its leverage to dictate the terms of relationships to the other members. While the profits of the nucleus company increase, other members of the network may suffer losses. When this occurs, the disadvantaged partners may rebel. Resistance may result in redundancy, loss of overall profitability for the supply chain, or an actual reversal of the power relationship. Once in power, the mistreated party may retaliate instead of using the opportunity to develop equitable relationships along the supply chain.
- **Underestimated benefits.** When collaboration is viewed as another type of process reengineering, the partners generally measure the results in reduced cost and cycle time rather than return on investment, which is a better long-term indicator. Simply measuring efficiency increases will fail to account for some of the true long-term benefits of collaboration. This may lead managers to reject a collaborative venture based on a failure to see gains like removal of reduplicated efforts, enhanced innovation, and better use of total system assets and processes.
- **Culture conflicts.** Cultures tend to be egocentric and thus tend to resist external collaboration. They feel that their ways are the best ways of doing things and will often reject a different way without even considering it. Culture conflicts are increased when each company relies on its own sources of information and is unable to see the impact of its choices on other areas of the network. When companies don't see the negative results of their actions, they can't learn from their mistakes.

  Another potential culture conflict can arise when managers delay or prevent collaboration. Such managers generally have safeguarded their positions by not sharing information so that they must be sought for their expertise. Others feel that collaboration is a fad or a bad idea altogether. Still others talk about collaboration but are only interested in receiving the benefits from a partner without reciprocating.

Build levels of communication.

Communication between partners can take place on different levels; not all collaborations depend upon the same degree or intensity of communication. We'll consider four levels of communication.

- **Transactional with information sharing.** At this level of communication, each partner has access to a single source of data about matters such as workflow, forecasts, and transactions. Contracts are generally medium term.
- **Shared processes and partnership.** At this level, partners collaborate in specific processes such as design. They share knowledge across the network. Contracts are longer term.

- **Linked competitive vision and strategic alliance.** At this level, supply chain partners function as a virtual entity, working out even the highest level of strategy together. The partners develop considerable trust and achieve social and cultural understanding as well as information sharing. Strategic alliances may last for decades.

- **Mergers and acquisitions (backward and forward integration).** Outsourcing current functions isn't the only way to forge links in a supply chain. Mergers or acquisitions may involve two companies in the same tier rather than horizontal supplier-customer partners. The merger of Gillette with Procter & Gamble is one such merger, as is the purchase of Chrysler by Fiat. There has been a great deal of amalgamation among service companies, including mergers of banks with other financial providers to create "one-stop shopping" for consumers of financial products, and mergers in heavy industry. Although mergers would seem to provide the deepest level of trust and communication, the sudden clash of business, regional, and national cultures involved often requires years of work to align attitudes, technology, and business practices.

Determine levels of collaborative intensity.

Determining the level of collaborative intensity that each relationship requires depends on cost, quality, delivery reliability, precision, and flexibility. Cost speaks for itself, but cost and quality often are inversely proportional. Quality and delivery reliability are usually measured by number of defects allowed or late orders and are often collectively rated by members of an exchange using supplier history. Precision is measured as degree of variance from specifications. (Small variances in components from different vendors may actually prevent assembly.) Flexibility is the ability of the supplier or manufacturer to deliver in varying quantities when given a specific number of days' notice. These criteria are strongly influenced by four factors related to the product or service: strategic importance, complexity, number of suppliers, and uncertainty.

- **Strategic importance.** The primary sourcing consideration is the strategic importance of the product or service. If the company cannot afford to make mistakes, it should produce the item in-house, even if this is more expensive. If the company lacks internal capability, it should form an alliance with one or more companies that can make the item or perform the service. Multiple sources provide a backup. Commodity products, by contrast, are widely available, have little strategic importance, and can be purchased at the lowest available price. This includes modular products and overhead items such as electricity.

- **Complexity.** The next factor is the complexity of the item and of the process steps required to produce it. Strategic alliances may be needed for very complex items simply because of the level of collaborative planning needed to get the item right in the necessary time frame. Examples include military technologies such as missiles. Many contractors may need to form strategic alliances to get all of the components to work together and to provide the appropriate level of security. Airplanes also require alliances for many major systems, although minor systems can be sourced through lower-level relationships.

- **Number of suppliers.** The number of suppliers available for a product or service will also determine how much the company should escalate the relationship. When one or very few suppliers are available to produce a required component, the company may need to form a strategic relationship in order to guarantee continued availability of the item. For example, Canon is one of the only producers of high-quality engines suitable for use in laser printers, so Hewlett Packard has a strategic alliance with them for this part even though the two compete on printer sales directly. Focusing only on price or time to market with such a supplier would be a mistake.

- **Uncertainty.** Finally, uncertainty is a primary concern in building relationships. Supply uncertainty is the risk that the good or service may not be available or may have strong fluctuations in price or quality. Even if there are hundreds of suppliers of finished lumber on the market, there may be great variability in quality and in precision of milling. If a manufacturer that uses this lumber advertises its superior quality of lumber as a selling point, then it is well advised to not simply buy from the lowest-price supplier but to develop a partnership with one or more suppliers who can meet these stringent levels of quality.

Examine strategic importance versus difficulty to determine product categories.

If a partnership requires more than one of the intense collaboration levels noted above—for example, when there is a limited number of suppliers and uncertainty about an item's availability—then the need for higher collaborative intensity can be termed as "high strategic importance." Strategic importance can be considered one half of the overall equation. Difficulty, which includes the supply chain challenges of complexity, number of suppliers, and uncertainty, is the other portion of the equation.

Exhibit 2-123 shows how this creates four basic categories of goods.

Exhibit 2-123: Strategic Importance versus Supply Chain Difficulty

Difficulty (Supply Risk)

Difficulty	Low Strategic Importance	High Strategic Importance
High	**Bottleneck Materials** ♦ Suppliers have strong bargaining power.	**Direct/Core Competency Materials** ♦ There are one or a few suppliers. ♦ There is a high impact on value to the customer. ♦ Price is a large percentage of the total system/product cost.
Low	**Commodity Materials** ♦ Suppliers' relative bargaining power is not strong.	**Leveragable Materials** ♦ There are many suppliers. ♦ Supplier competition is ample. ♦ A small percentage of cost savings over a broad base of items can have a large impact on profitability.

Low **Strategic Importance (Profit Impact)** High

Source: Adapted from Designing and Managing the Supply Chain, third edition, Simchi-Levi et al.

This model can be used to determine which suppliers are most appropriate for each of the four types of goods:

- **Commodity materials are of low strategic importance and low supply chain difficulty.** They require suppliers whose priority is cost reduction. These items are best purchased at arm's length. Which of your suppliers can provide the best cost reduction on the commodity items you need?

- **Bottleneck materials are also of low strategic importance but are of high supply chain difficulty.** Efforts must be made to ensure that the need for these items is fulfilled. Therefore some level of ongoing relationship with a particular supplier may be called for.
- **Leveragable materials have high strategic importance but low difficulty.** They call for collaboration to maximize both cost savings and reliability through means such as bulk purchasing by multiple members of the supply chain.
- **Direct/core competency materials are of high strategic importance and high difficulty.** They require strategic partnerships for longer periods of time to ensure availability and quality.

Sometimes companies do not heed these factors and end up buying at arm's length to get the lowest price for items that are critical in one or more of these ways. Sometimes the cost of the process of checking goods for defects or repairing them or for resolving problems with customers after resale is quite a bit higher than the cost savings found by switching from supplier to supplier. Some damage to reputation may be irrevocable but hard to measure. Companies must add these costs to the cost of the product when determining how much they are actually spending.

While much of the advice in this topic so far can apply to upstream and/or downstream collaboration, some additional considerations apply primarily to downstream collaboration, as is discussed next.

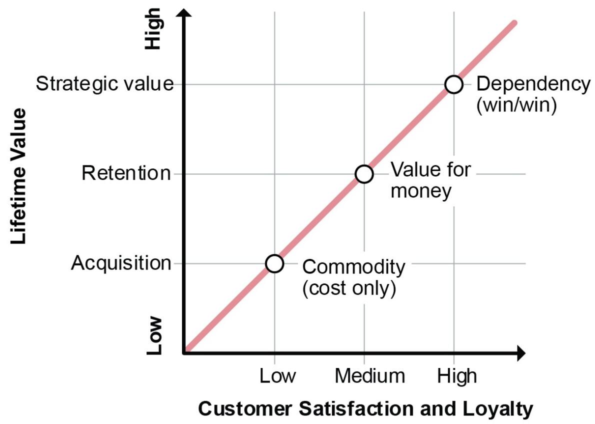
Collaboration with customers

Collaboration may take the form of a closer business relationship or an alliance between a supplier and one of its intermediate customers. For example, intermediate customer representatives could be informally or formally included in the product design process. In terms of end-customer collaboration, customers could provide their time and opinions to improve the organization's offerings, such as in the voice of the customer technique.

Collaboration with intermediate or end customers can take place when both parties find strategic value in the relationship and when there is enough trust and loyalty to encourage this higher level of commitment. Therefore, collaboration is a natural continuation of relationship building for some types of loyal customers.

As Exhibit 2-124 suggests, if customer satisfaction and loyalty can be increased, the nature of that relationship will evolve past mere attention to price, to a growing recognition of the product's or service's value, and then to a dependency on the product or service that signals the creation of a win/win relationship between customer and business.

Exhibit 2-124: Evolving Relationship with Lifetime Customers



It is the potential value of lifetime customers that has driven the shift toward customer-centric organizations.

Increased customer retention is the primary benefit of customer collaboration efforts, which, in turn, should lead to increased profits for the organization and the supply chain. When these relationships work, they can improve relationships from the perspectives of both the customer and the company. Customers gain an improved experience—one tailored to their needs. Businesses gain increased customer visibility (awareness of actions involving the customer), with resulting increases in the ability to satisfy the customer, focus marketing to win new customers, create lifetime customers, and realize the profit potential of each customer.

Organizations also gain greater control over customer relationships and are better able to measure profitability and their own performance. Some customer-supplier relationships will become more transparent so that each party knows the motivations and requirements of the other, which can draw the partners into closer collaboration. Organizations can also turn dispute resolution into an opportunity to improve customer loyalty through innovative problem solving.

The importance of developing relationships with customers has also led to two basic shifts in today's business culture:

- **Greater focus on the customer.** This focus is on both internal customers (the recipients of another person's or department's output) and external customers (recipients of goods, services, or information who are not part of the organization supplying it). A shift to a customer-centric corporate culture is an opportunity for growth, but it requires extensive organizational change management.
- **Greater integration.** This integration occurs both internally (as might be seen in process reengineering within an organization aimed at increasing communication and collaboration among all departments) and externally (greater sharing of information and processes between parallel departments of supply chain partners). The movement is away from boxes on a hierarchical organizational chart to graphics that indicate the involvement of multiple teams and their mutual involvement in the process.

How are these customer-centric businesses created? Exhibit 2-125 illustrates a five-step process that begins with redefining and redirecting the organization and ends with measuring the success of this corporate initiative. Note that part of this process involves implementing a customer relationship management (CRM) strategy. Here CRM is discussed at the level of setting strategy.

Exhibit 2-125: Creating and Maintaining a Customer-Centric Business

- **Align mission statement, goals, organizational structure, and jobs to support a customer focus.** Moving the organization from a product-focused to customer-centric orientation requires changes in the way companies manage everything from product design to customer service. This means that every customer contact point (e.g., where the customer learns about the product, where they purchase it, whom they contact with questions or when there are problems) must be analyzed to identify key players within the organization who can affect customer satisfaction and to determine what they can do to maximize the customer's experience. This requires a high level of collaboration across sections of the organization and a clear articulation throughout the organization, to every member, of this new priority.

  To achieve greater customer focus, some organizations have instituted the position of chief customer officer. This person is responsible for identifying customer touchpoints, defining and enforcing service standards, researching methods to enrich the customer experience, and helping customers navigate within the organization. From a high-level perspective, this position is responsible for integrating and leveraging customer information across the organization.

- **Identify the customer's perspective and needs.** One of the goals and benefits of developing a distinct CRM strategy is increased customer visibility. Information about the customer's desires, buying habits, and experiences are captured at every point of contact and may be analyzed to support decisions. Products, services, and communication infrastructure will ultimately create customer loyalty by meeting and exceeding customer needs and wants. To begin this step, an organization might compare the perspective of its customers with high lifetime value against those with low value. The gap in fulfilled expectations can suggest changes in products, services, or communication. For example, a credit card company may discover that high-value cardholders use their cards heavily because of their frequent flier partnerships but that many low-value cardholders are located in cities not served by those air carriers. Consequently, these cardholders see little value in using this card rather than another. The credit card company may consider creating other air carrier partnerships or other types of partnerships that would reward the low-value group and move them toward higher value. By determining what constitutes true customer satisfaction, the organization can identify its competitive advantage factors and leverage this to enhance customer value at every customer interaction throughout the internal supply chain organization.

- **Create a map of customer segments.** Customer-centric businesses recognize that they have more than one type of customer and use their qualitative research to segment their customers so that they can satisfy each segment's distinctive needs more fully through individualized CRM programs or supply chains. Businesses may prioritize their CRM efforts according to the value of these different segments. Different characteristics of the segments may also shape CRM programs. For example, a technologically proficient customer group may prefer that all contact points be electronic. A highly affluent, demanding segment may require human contact that is always available.

- **Implement the most appropriate CRM strategy.** Factors that influence the shape of a CRM program include position in the product life cycle, value of the customer's potential business, targeted customer needs, or preferred channels of communication or product/service acquisition. As Exhibit 2-126 illustrates, a CRM strategy is cyclical. The process begins with targeting the desired customer and acquiring that customer's business. For the relationship to continue, first, the promised terms of the purchase of the product/service package must be fulfilled. Continued customer care helps ensure satisfaction. The company can then capitalize on its customer's satisfaction by setting new goals for this customer. This may mean increasing the volume of the customer's purchases, increasing the value of the purchases (up-selling), or cross-selling additional products or services.

Exhibit 2-126: The CRM Cycle of Business

- **Monitor, measure, and report.** This step in the process is iterative and is based on the measures arising from ongoing customer contact and exchange. In the CRM model, the business is constantly learning more about its customers and the way they prefer to do business, and this information constantly reshapes CRM. It is also important for organizations to research continuously and document what is working and what is not working. The research provides data about buying patterns, customer attitudes, and levels of customer satisfaction, and the information should be shared across all points of contact within the organization.

Features and benefits of collaboration

Exhibit 2-127 summarizes the benefits to the supply chain of collaborative relationships.

Exhibit 2-127: Features and Benefits of Collaboration

Collaborative Relationship Features

- Joint development of shared processes
- Open sharing of information and knowledge
- Jointly developed performance metrics
- Open two-way communications
- Networkwide visibility
- Clear roles and responsibilities
- Joint problem solving
- Commitment to the relationship

Benefits

- Lower costs
- Improved quality
- Better customer service
- Reduced inventories
- Rapid project results
- Reduced cycle times and lead times
- More effective working relationships
- Enhanced commitment to one another

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