2022

2022 LEARNING SYSTEM
VERSION 5.0

MODULE 6

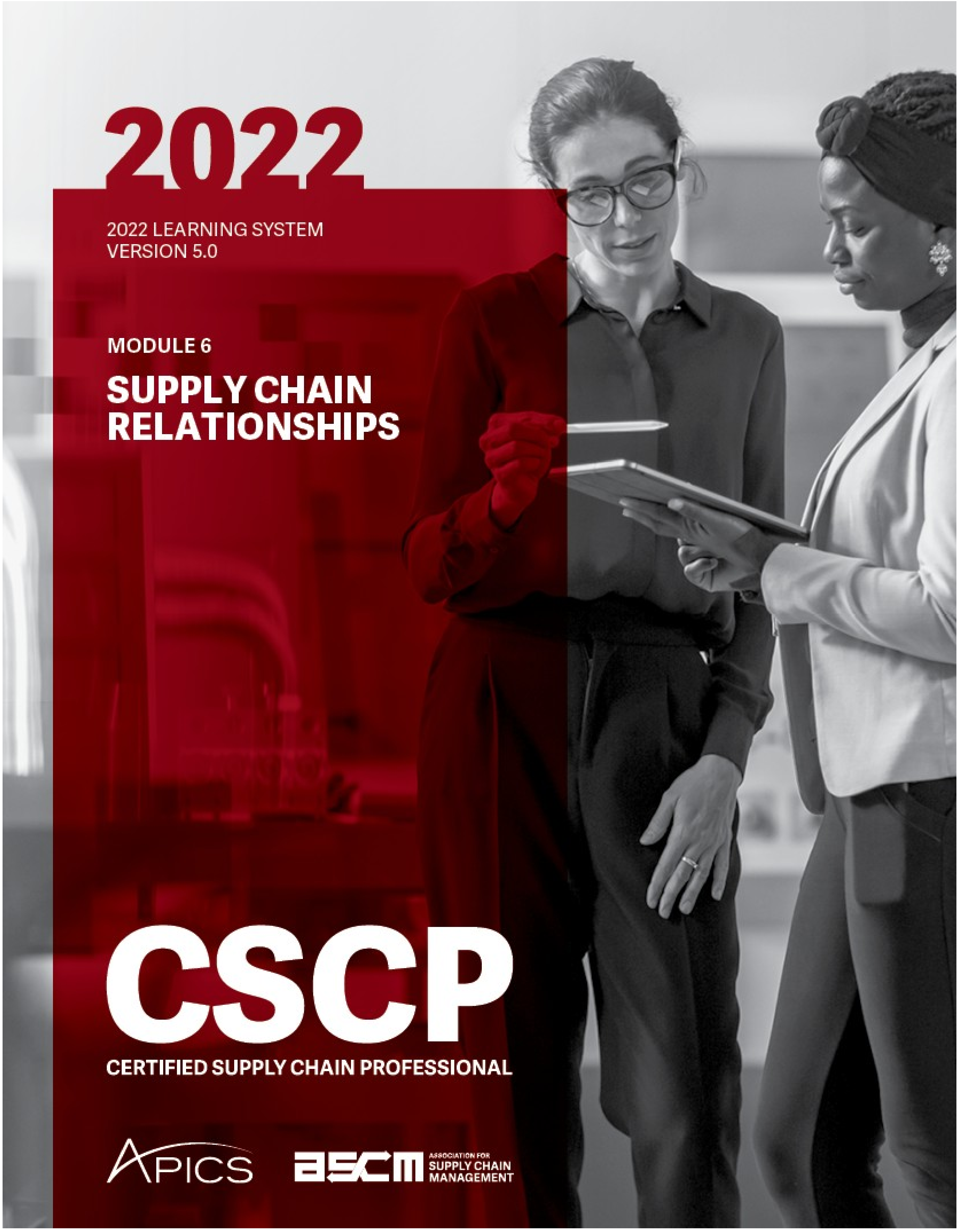
SUPPLY CHAIN RELATIONSHIPS

CSCP

CERTIFIED SUPPLY CHAIN PROFESSIONAL

APICS

ASCM ASSOCIATION FOR SUPPLY CHAIN MANAGEMENT



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APICS Certified Supply Chain Professional (CSCP) Learning System

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Module 6: Supply Chain Relationships

This module focuses on customer relationship management (CRM), supplier relationship management (SRM), and overall supply chain relationship management advice.

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.

Looking at CRM and SRM as two sides of the same process can help organizations better implement these types of relationship management, because they can take lessons learned from one area and apply them to the other area.

Section A: Customer Relationships

This section 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, psychological profiles, customer value, customer needs, or contact channel
- Describe the Pareto effect in relation to customer value
- Explain how customer data can be used to understand segment wants and needs
- 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 use demographics, customer value, needs, etc.
- Explain how to use customer type (prospects, vulnerable, win-back, loyal) in CRM strategy
- Explain the relationship between CRM, technology and creating lifetime customers
- Describe the sources of customer information, including the voice of the customer
- Review how technology can be used to enhance the CRM process
- Describe how customer-focused metrics can improve overall satisfaction
- Understand how to measure key customer service metrics, including fill rates, lead time, order status, inventory turnover, and on-time delivery.

In this section we explore the need for segmenting customers in various ways, such as by lifetime value. The section then explores CRM, its scope and benefits, and how companies develop and implement CRM strategies. The section also provides examples of how organizations use customer information and metrics to refine both relationships and the CRM process.

Topic 1: Customer Relationships and Segmentation

Customer relationship management (CRM) is a philosophy that recognizes that all companies are at least in part service companies and that the quality of that service matters. Segmenting customers helps provide tailored services to different groups. Various methods of segmenting customers and complementary CRM strategies are described here.

Customer Relationships and Segmentation Road Map

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 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.

Because different types of customers have different needs, the CRM philosophy requires that organizations segment their customers and engage in customer-focused marketing.

Segmentation and Customer-Focused Marketing

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.

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.

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 (the ultimate payor) and end users (the ultimate user).

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

The primary reason to identify and understand market segments is to increase the organization's profits (or its equivalent) over the long term; therefore, customers are the primary group that requires segmentation. However, organizations can segment suppliers and other stakeholders using very similar methods.

Customer-Focused Marketing

Most organizations now recognize that a successful business strategy is customer-focused. According to the *Dictionary*, **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 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 identified. For example, a furnace repair/replacement service 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 provides 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 and/or product types.
- **Profitability is more important than sales volume.** All strategic decisions on product form, marketing expense, and logistics (methodology, timing, and placement) have an associated cost. Each additional cost must be justified by incremental (marginal) 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. The situation to avoid is a feature or investment that increases revenue but also increases expenses by a similar amount.

What Is Driving the Change to Being Customer-Focused?

Today's customer is harder and more expensive to win and to keep, so businesses need to understand customer segments, improve two-way communications with them, and work to fulfill customer segment needs when it can be done profitably. 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 very difficult 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. 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. Creating 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 expect to find a running shoe that exactly matches their own level of exercise, running style, terrain, and anatomy. The marketplace is more segmented every day, which could be seen as a drawback due to its complexity. However, CRM philosophies and technology systems 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 broadly targeted media sources have decreased or eliminated this form of advertising in favor of more narrowly targeted channels that are less expensive, 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.

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 internet 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, or 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.

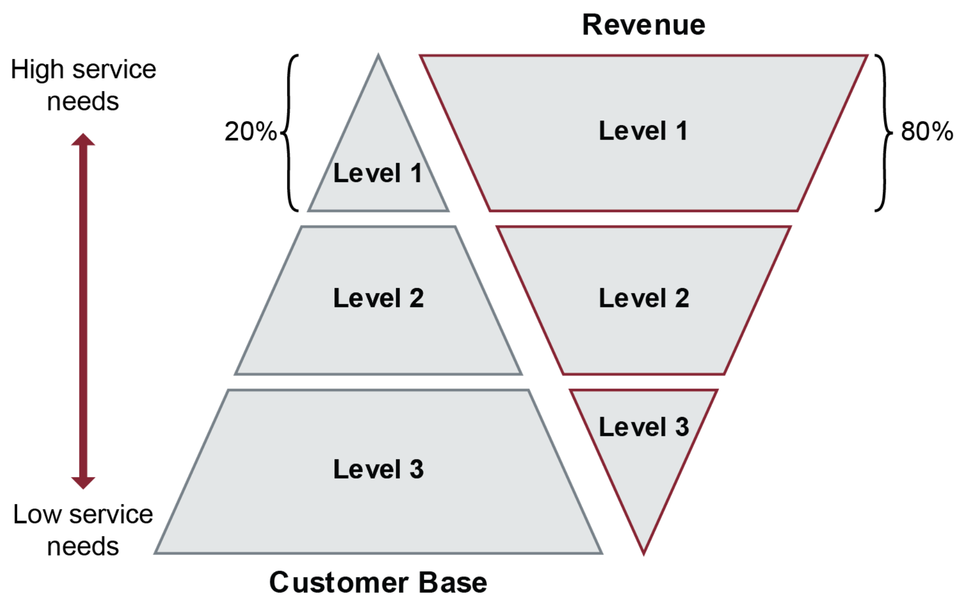
Segmentation by Customer Value

Customer value can be defined as the actual or potential profit the organization can make by acquiring and retaining a given customer or customer type over the lifetime of the relationship. 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 working to increase value generation from high-yield customers. They aim to acquire and retain profitable customers and get them to spend more. Exhibit 6-1 applies the Pareto principle to customer segments, showing how a small number of customers (about 20 percent) can generate a disproportionately large amount of total revenue (about 80 percent). Top tiers get more/better services.

Exhibit 6-1: Pareto Effect in Customer Segments



Segmentation by Customer Needs

Segmentation by customer needs revolves around the services or product features that profitable customers desire. These needs may refer to specific product or service features, contact channels, or logistics channels (time and placement).

Defining what customers value can use customer-focused segmentation to analyze actual buying behaviors as well as information on the things customers are searching for, such as an entry into a search engine. 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 they will seek the lowest price. Other items or services may be perceived as more critical. For these buying decisions, other factors, such as reliability, longevity, 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 value something more than economy when they choose to shop in a retail environment for items they could obtain over the internet at a lower price. 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 they have received or they may be 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, track order progress, and view account histories. Customers may use websites to obtain installation instructions or 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 less expensive technology channels, such as a discount for setting up automated bill payment and paperless billing. Another option is to educate customers on the benefits of a particular channel. For example, automated call-answering systems usually refer callers to chat services or 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 information from multiple sources, including market research and the voice of the customer.

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.

Market Research and the Voice of the Customer

In addition to external forms of market research, we shouldn't overlook customers themselves as a source of information. Determining the wants and needs of prospective and existing customer segments may require phone surveys, questionnaires, focus groups, or a combination of these market research approaches. Successful organizations recognize market research as a way not only to understand existing customer segments better but also 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.

CRM Strategies by Customer Segment and Type

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 is often an order qualifier. 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 a key element in a CRM strategy that must not be forgotten: the customer. A CRM strategy must factor in the customer segments being targeted, possibly leading to a different strategy for each of the organization's targeted customer segments. CRM strategy also needs to consider customer type, which refers to the customer's current relationship with the organization (e.g., prospects, win-back customers).

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.

Demographic, Attitude, or Psychological Profile–Based Strategies

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 are too repetitive or boring are a reason to stop following a brand on that messaging and networking site.

Value, Service, Retail, or B2B Strategies

- **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 values 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 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 supplier should have full online service and specification information for the manufacturer's related products.

- **Continuous improvement.** Business customers 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.

Technology Channel Strategies

When developing a customer-centric strategy for reaching customers via technological channels, businesses must carefully test how receptive their customers are to the given 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 channel? How willing are they to learn? Some B2B systems may require extensive training. Will the decision to use a more technologically advanced channel drive some customers away? Will multiple channels be needed?

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 or re-initiate the relationship. 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 types of customer relationships.

The four relationship types are prospective, vulnerable, win-back, and loyal customers.

Prospective Customers

Potential customers are included in the prospective type. 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, a financial services 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

Some customers may be vulnerable; for some reason, the likelihood of retaining their business is less than for other groups. 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

Customers may become ex-customers and good ones need to be won back. 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. Contracts may be used to keep customers long enough so they become profitable, but this means that the opportunity to win back customers is often only before a customer signs 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

Other customers 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. 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 want to reward people who fly frequently and/or those who often upgrade services?
- **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 products 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 (e.g., prompting 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 more expensive service program. For example, during an annual re-enrollment period, a credit card company offers a more expensive account program that has better insurance against credit fraud.

Effectiveness of Customer-Type-Related CRM Campaigns

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.

Topic 2: Customer Relationship Management

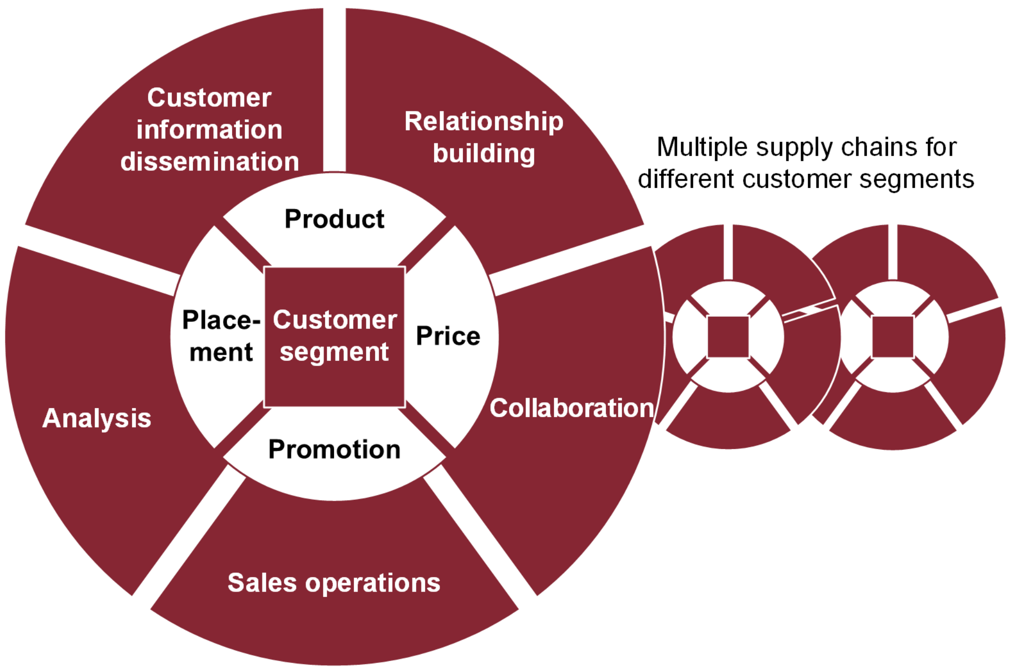
Customer relationship management (CRM) strategies will vary depending on what elements of CRM are selected, how the components will interact, and what technologies will be used. The organization also needs to determine how product life cycles and types of customer segments will influence the chosen strategy. CRM technologies are discussed in more detail after that, including core technologies and marketing/sales technologies. Implementation tips are also provided.

Scope of CRM

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. Carefully determining the scope of CRM is the first step in developing a CRM strategy.

Exhibit 6-2 shows that the scope of CRM can involve 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 6-2: Scope of CRM in 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 on a fee basis or for free only to more profitable customer segments.

Every person who has contact with the customer should have ready access to the data collected on the customer: all prior transactions/purchases, web visits, problems and complaints, and the status of problem resolution.

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. To keep everyone aligned and up to date, 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 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.

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 product or service recommendations.

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

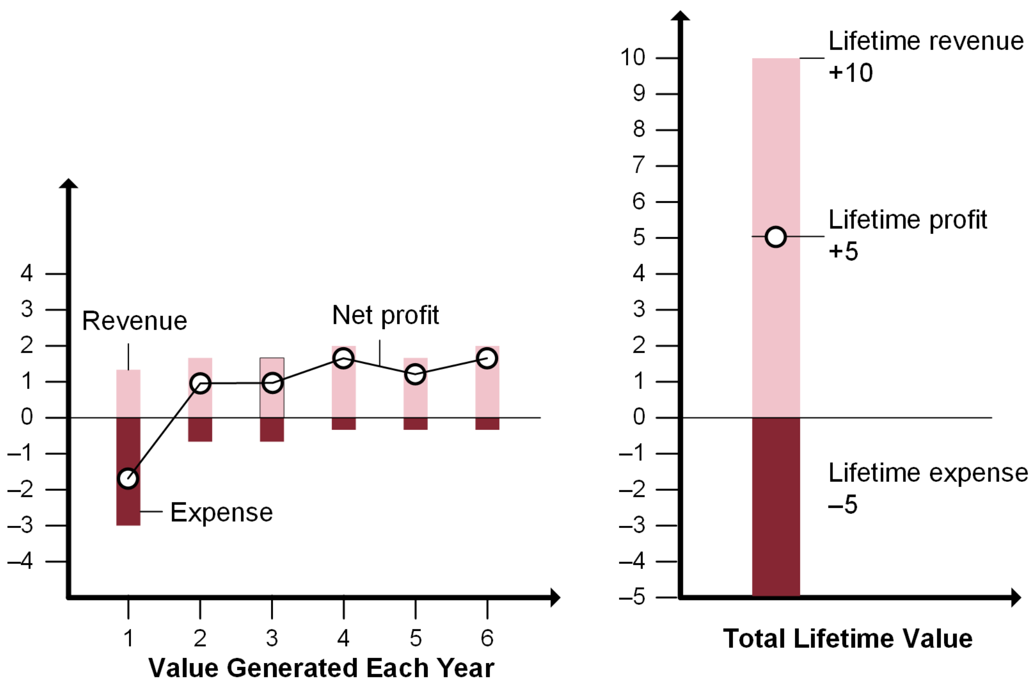
Relationship building is the development of lifetime customers by training staff to optimize each customer's experience at each interaction. It also involves the use of customer data to design and focus initiatives to acquire and retain customers. Relationship building requires providing staff with information 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 , 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 6-3: 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. This may be the result of increased customer satisfaction and confidence and larger orders or the result of efforts to cross-sell or up-sell. As revenue grows and the cost of customer acquisition decreases, profit increases. As shown in , from a negative profit point in Year 1, the relationship yields sustained net profit over the lifetime of six years (the circles on each bar). Although specific profit margins will vary, the right-hand graphic suggests the ultimate profitability of lifetime customers.

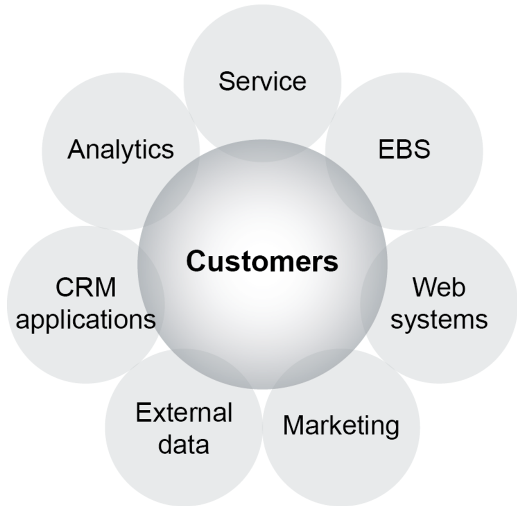
Companies may also be better able to maintain profit margins with lifetime customers who value convenience and stability over price. Customers for whom time or quality is a major concern may also be more inclined to rely on established relationships with suppliers or companies. They can save time or 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 or quality is poor?") This thinking underlies the creation of preferred supplier lists or deeper relationship types.

Components of CRM Strategy

Components of CRM strategy include those listed in Exhibit 6-4: enterprise business systems (EBS), web systems, marketing, external data, CRM applications, analytics, and service.

Exhibit 6-4: Components of CRM Strategy



The first component, EBS, is the technological backbone. EBS is the collective name for some critical applications:

- 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 peruse product photos and information, order products, 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 the 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.

Adopting 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, decisions linked to metrics, metrics linked to results, and results fed back into plans.

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 are needed 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 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. 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

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, enabling spending more time on value-added work. Alerts and notifications can be made instantly so that corrective actions can be taken immediately.

CRM technology 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.

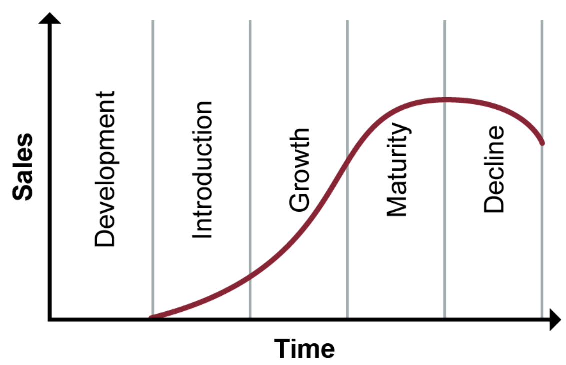
Data collection practices also need review in a CRM strategy. It is important to verify that transactions are being recorded and that there are steps to ensure data validity. For example, an organization can avoid common data collection issues by not allowing outbound call records to be deleted until 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.

Product's or Service's Stage in Life Cycle

The product life cycle is shown in Exhibit 6-5. 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 6-5: 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. CRM can be employed here 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 “word of mouth”—person-to-person advertising.

Case study: development in 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. Store designs 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. 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 sold to a reseller or discarded.

- 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 reducing prices 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 organization needs to predict or even create trends. However, the clothing company's existing data are not very helpful; the information can identify strong and weak sellers in the past, but there's little predictive value.

To solve these issues, the clothing company decides to get better customer data in part by establishing 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 clothing 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 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. Engines are built by 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 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 they 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 distribute the 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 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. This is often due to 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 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 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 an innovative new model. 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 assigned to their existing customers to ensure continuity of service.

CRM Core Technologies

The CRM processes depend on data, and CRM's core technologies of customer data warehouses, business systems, and segmentation technologies can assist in the collection and analysis of customer data. 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:

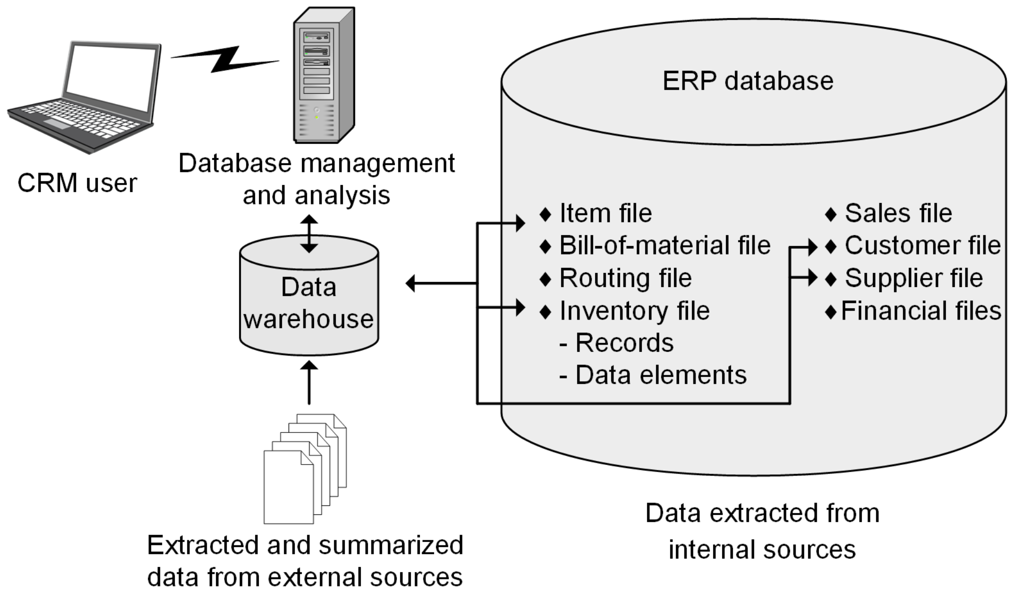
- Customer interaction centers (CICs) are a means of grouping service functions so that the overall customer experience can be better managed. CICs often use multimedia and other technology tools so that the customer service representative and the customer can engage in a highly personalized verbal, texting, or chat interaction. The representative can pull up order, account status, product warranty, and maintenance information. The system will also suggest 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 with great supply chains are using CEM to generate enhanced customer loyalty and a competitive advantage by listening to the 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.

Let's take a closer look at the CRM's core technologies.

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). A customer data warehouse (CDW) contains information about an organization's customers, products, and marketplace. 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 6-6 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 6-6: Example of CDW Interfacing with ERP



One alternative to using a CDW in conjunction with a transactional database is to use a cloud-based database (virtual database accessed via the web) for either transactional or analysis activities, or for both, as part of a software as a service (SaaS) or organization-hosted cloud.

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 rank the importance of the channel to various 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 has several 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 otherwise or only at a high level) 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 or chat/text services 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.

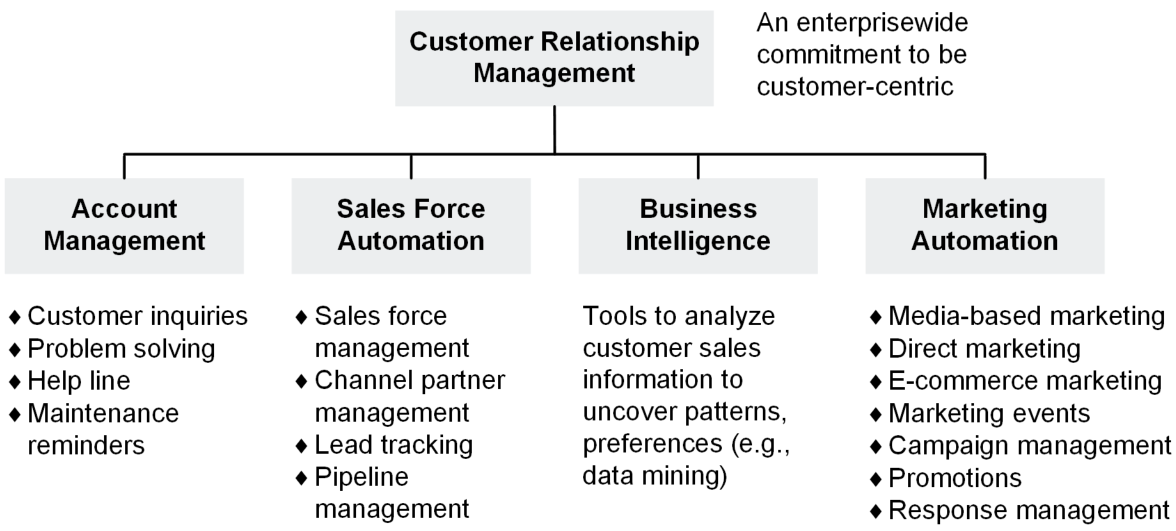
CRM technology provides sales personnel with access to order status, customer history, and product and customer information. Applications to assist the sales function include account/territory management, contact management, campaign management, and field sales communication and management.

CRM technologies are 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.

Some systems integrate sales and marketing uses. In one SaaS 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 6-7 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 6-7: 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.

Keys to Successful CRM Implementation

Why does CRM sometimes fail to provide the results a company needs? 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 success are poorly chosen. Failures such as these may stem from poor, or nonexistent, testing of CRM software or applications. It could also be a culture or leadership failure. Company leaders and managers need to be on board and demonstrate their "customer-first" commitment to their employees to help the culture embrace CRM.

CRM software may have robust features, but if such systems cannot be easily implemented within the limitations of the organization's resources and culture, then the technology investment will add little value. Businesses implementing CRM technology should remember the following.

Architecture Needs to Be Determined Early.

It is important to establish a thorough, well-thought-out 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 (software as a service) 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 (enterprise resources planning). This may require an application programming interface from a supplier.

There are several maturity 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.

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.

System Should Enhance Efficiency.

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

For example, a large commercial airline company makes the decision to use CRM technology as a way to create stronger customer relationships while making the system intuitive for the customer-facing staff. 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.

Implementation Should Be Coordinated Throughout Organization.

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

Everyone Must Be Trained, and Some Will Need More In-Depth Training.

Job processes must be redrawn to reflect the new CRM system. Training must be delivered to everyone according to his or her level of involvement. But remember also that CRM is not just a software system. Technology alone cannot solve the challenges that businesses and supply chains face. Training staff in the CRM methodologies can help them buy into the concept and anticipate challenges that may arise.

Implementation Is Measured Against Customer Needs/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.

Topic 3: Customer Service Metrics and Performance

Customer service is the supply chain role that works to ensure that marketing promises can be met. Customer service metrics are discussed next from a strategic and operational perspective. Customer relationship management (CRM) performance relates to assessing how CRM is impacting customer service and customer satisfaction.

Customer Service Metrics

Customer service is the supply chain role that has the goal of fulfilling marketing objectives. In other words, what matters to customers should be the organization's top priority. What do they care about, and what happens when their expectations are not met? The basic customer satisfaction premise is that if customer expectations are met or exceeded, the customer will be satisfied. Customers have expectations about product availability, performance, quality, and service reliability.

Customer metrics need to measure what is important to the customer. Pinpointing exactly what they value and expect may require customer interviews, questionnaires, online feedback surveys, post-purchase follow-up calls, and so on.

Customer service metrics can be presented at a strategic or operational level. Strategic-level metrics are long-term, aggregated, or summary assessments. Operational metrics are the daily details that need managing. In addition to customer satisfaction as is discussed as part of strategic metrics, fundamental measures of basic customer service include the customer service ratio (fill rate), lead time monitoring, and order status monitoring.

Strategic Metrics and Their Presentation

Some strategic-level metrics that assess overall customer performance are discussed next, along with potential ways to present this information to executives.

Perfect Orders

Perfect order fulfillment is a total logistics service metric. It is a SCOR metric that basically measures every step of a customer's experience, from order entry, credit checks, inventory availability and picking, to on-time delivery, invoicing, and payment. Only an order that gets everything right counts as a perfect order. Perfect orders matter to profitability. According to AMR research, a three percent increase in perfect orders equates to a one percent increase in profits. However, since so many things can go wrong, it isn't surprising that even the best logistics organizations have considerable room for improvement in this area.

Another challenge with calculating this metric is that it could be difficult to collect necessary data, depending on the organization's level of internal systems or partner integration.

Customer Satisfaction

Customers have underlying expectations about the quality and predictability of an experience, and these expectations can change over time. For example, if most of your competitors are improving their supply chain customer experience, even if your metrics are all the same as last year, customer satisfaction is likely to go down because the customers now have higher expectations.

At a strategic level, organizations can use summarized and aggregated customer feedback. To determine relative levels of success, they can compare these results to benchmark organizations. They can also benchmark internal capabilities and the features, price, and quality of their offerings against competitors' capabilities and offerings or against the best-in-class capabilities in any industry. The gaps that exist based on aggregated customer feedback and competitive benchmarking show areas for improvement.

Using Real Numbers and Real-Time Data

Some executives choose to view data on customer metrics in real numbers of persons affected rather than as an aggregate metric. In other words, while 99 percent may seem like you are doing well, if this is reported to the same executives as 9,000 customers getting late orders on a particular day, it can help motivate continued efforts toward improvement.

Similar to the use of real numbers to put a face on customer-related data, many executives want to see data in real time or as near to real time as they can get. This also helps to reduce complacency.

Operational Customer Service Metrics

Exhibit 6-8 provides a look at metrics that are important to keeping customer satisfied.

Exhibit 6-8: Customer-Focused Metrics

Attribute	Metric	Definition
Availability	Stockout frequency	Probability of inventory not being available to meet customer demand
	Fill rate	Measures impact of stockouts over time (For example, if a customer requests 100 items but there are only 92, the fill rate is 92 percent.)
	Orders shipped complete	All items ordered are present in shipment

Attribute	Metric	Definition
	Backorders	Unfilled order or customer commitment
Time needed to deliver customer order	Speed of performance	Elapsed time from when customer places order until product is delivered to customer and is ready for use (e.g., installation)
	Supply chain cycle time	Time it would take to fill customer order if inventory levels were zero. Sum of longest lead times for each stage in supply chain.
	Delivery consistency	Number of times cycles meet amount of time planned for completion
	Flexibility	Ability to accommodate unexpected or unusual customer requests
	Malfunction recovery	Having contingency plan in place for equipment malfunctions or service breakdowns; ability to source out-of-stock customer item from alternate facility
Product support	Response time to inquiries	Number of days it takes for customers to receive response regarding inquiry they have made
	Response accuracy	Measure of whether response is on target and correct so that customer does not require additional follow-up
	Customer complaints	Number of complaints or amount of negative feedback received from customers (usually within given time frame)
Overall satisfaction	Repeat purchases	Measure of customer completing another purchase from same seller
	Referrals to other potential customers	Number of names provided by previous purchaser as being potential customers

Customer Service Ratio (Fill Rate)

The customer service ratio, also known as the fill rate, and a related measure, stockout frequency, can be used to measure availability of inventory when it is wanted by a customer. Orders shipped complete and backorders are other availability metrics.

Traditionally, many organizations have stocked product in anticipation of customer orders based on demand forecasts. The goal is to achieve high levels of availability while keeping the investment in inventory and facilities to a minimum.

Customer service ratio (fill rate) and stockout frequency can be defined as follows.

- **Customer service ratio.** The *APICS Dictionary,* 16th edition, defines **customer service ratio** as follows:

    1) A measure of delivery performance of finished goods or other cargo, usually expressed as a percentage. In a make-to-stock company, this percentage usually represents the number of items or dollars (on one or more customer orders) that were shipped on schedule for a specific time period, compared with the total that were

supposed to be shipped in that time period. 2) In a make-to-order company, it is usually some comparison of the number of jobs or dollars shipped in a given time period (e.g., a week) compared with the number of jobs or dollars that were supposed to be shipped in that time period.

The customer service ratio measures customer service levels based on the percentage of product delivered compared to the amount ordered by the customer. The most basic calculation is full orders delivered complete and on time, which is called on-time delivery. The *Dictionary* defines **on-time delivery** as "a metric measuring the percent of receipts that were received on time by customers."

On-time in full (OTIF) is a metric for on-time delivery, and it is defined by the *Dictionary* as follows:

> A delivery scoring system in which a target delivery goal—usually expressed as a percentage—is set, and the deliverer tries to meet that delivery goal fully and by the delivery date.

Other variations include the following.

- **Unit fill rate.** Percentage of items delivered versus items ordered
- **Line item fill rate.** Percentage of line items delivered versus line items ordered
- **Monetary value fill rate.** Percentage of monetary value delivered versus monetary value ordered.

- **Stockout frequency.** Another method of measuring customer service evaluates the supplier's management of stockouts. Some examples include
  - Percentage of items that are in stockout
  - Monetary value of items ordered that are in stockout
  - Average age of stockout
  - Average time to recover item from stockout.

Lead Time Monitoring

Lead time monitoring involves measuring the time needed to deliver a customer order.

Lead time monitoring can be broken down into speed of performance, consistency, flexibility, and malfunction recovery.

- **Speed of performance.** Speed in terms of operational performance is the elapsed time from when a customer places an order until the product is delivered to the customer and is ready for use. Logistical system design determines elapsed time required for the performance cycle completion. Idle time may constitute a large percentage of production time, while work or run time makes up a small percentage. The entire time it takes to make a product is called cycle time, and cycle times that are too long are a key area for supply chain improvements.

  In the *APICS Dictionary,* 16th edition, **cycle time** is defined as follows:

> 1) In industrial engineering, the time between completion of two discrete units of production. 2) In materials management, it refers to the length of time from when material enters a production facility until it exits.

Speeding up cycle time in production reduces work-in-process (WIP) inventory and meets supply chain management goals of reduced cost and improved customer service. The tradeoffs may be in the cost of equipment, facilities, training, or hiring that makes reduction of idle time possible. Faster speeds, which may result in higher costs to the consumer, may be justified if the value of speed has perceived benefits to the consumer. Speed of performance can be measured using metrics such as

- Order delivery cycle time
- Time to process a customer-requested change
- Time to respond to a customer query
- Average wait time to be connected to an agent in a call or chat function
- Percentage of calls that encounter a busy signal
- Percentage of calls to customer service that are abandoned.

- **Consistency.** Consistency considers the number of times that cycles meet the planned amount of time for completion. Greater value is typically placed on consistency than on speed of service, because consistency has a direct impact on the customers' ability to conduct their activities. For example, if cycles vary, then a customer must carry safety stock to ensure against possible late delivery, with the overall degree of variability directly impacting safety stock requirements. Early deliveries could also cause problems, such as an intermediate customer having too many trucks arriving at the same time or an end customer not being home for delivery. Consistency metrics could include
  - Variance in lead times
  - Percentage delivered in quoted lead time.

- **Flexibility.** Flexibility describes an organization's ability to accommodate unexpected or unusual customer requests. Examples requiring flexibility include support of customized sales or marketing initiatives, new product introductions or product recalls, or supply disruption. An organization's logistical strength is closely tied to the ability to be flexible.

- **Malfunction recovery.** An effective customer service program knows that malfunctions and service breakdowns inevitably occur, and so the program will have a contingency plan in place. For example, if a stockout of a customer item occurs, an alternate facility may provide a replacement. The average number of days (or hours) from malfunction to recovery can be measured.

Order-Status Reporting

Order-status reporting involves providing methods for customers to check on the status of their orders. For example, the status might be listed as received, executed, picked, packed, or out for delivery.

Status could indicate whether the order is on schedule, or, if not, it could estimate a new arrival date. Intermediate customers and ultimate customers may need separate reporting systems so that each type of customer sees just what is relevant to their needs. For intermediate customers, this data could be automatically sent via EDI (electronic data interchange) to their information systems. Measurements of success in this area could include the following:

- Functionality supplied versus requested (for service development purposes)
- Order status accuracy
- Percentage downtime of website or reporting system

CRM 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. Here 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 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 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.

Customer Satisfaction

The best source of customer metrics is the customers themselves. The SCOR customer-facing metrics and other metrics 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. Measuring how well the organization is doing in terms of order fulfillment is important, but customer perceptions are what matters.

Customer satisfaction therefore hinges on how well customer expectations are established and then fulfilled. If customer expectations are met or exceeded, the customer will be satisfied. Organizations can go a long way toward customer satisfaction by setting realistic expectations with their customers. One phrase that sums this up is to under-promise and over-deliver. The airlines now do this by quoting very generous flight times and then typically arriving "early."

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 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. PRM software 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 the productivity and competitiveness of partners. The synergy created helps each trading partner to contribute to customer satisfaction.

The quality of service in each delivery channel needs to be evaluated. One way 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 delivery 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?

Customer Satisfaction Measurement Methods

The general customer satisfaction measurement process is to poll customers on how you are doing relative to each customer-focused metric you are tracking. You can also ask them how your competitors are doing in regard to the same metrics. Tracking these results over time will show trends. Below are some possible methods that can be used to measure an organization's customer satisfaction level:

- **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. Organizations may use VOC with their most valuable customer segments to discover how their expectations and requirements have been changing and find gaps to focus on first.

- **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. Reviews solicited from external perspectives like these resemble 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. A 2021 article by Flori Needle that compiles social media statistics cites a Convince & Convert study that indicates that customer advocacy increases by

25 percent when a customer’s social media complaint is answered, but it also cites research by Sprout Social that indicates that while 79 percent of consumers expect brands to respond to social media posts within a day, average cross-industry brand response rates are less than 25 percent for any response at all.

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.

Section B: Supplier and Supply Chain Relationships

This section is designed to

- Explain the factors used to select strategic partners
- List the benefits and requirements of strategic alliances
- Describe the steps required to implement a strategic alliance
- Indicate ways that supplier relationship management (SRM) can be measured, including use of supplier rating systems
- Illustrate functions performed by SRM technology
- Describe the roles of planners, buyers, and purchasing agents and how the interactions between these roles have changed in the SRM model
- Outline criteria and methods for measuring supplier performance
- Understand the process for certifying suppliers
- Explain how customer relationship management (CRM) and SRM interrelate
- Enumerate the building blocks of collaborative relationships
- 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
- Describe how communications must be tailored to fit the purpose, target audience, and communication channel
- Apply the basic communications model and express the importance of feedback
- Understand how different national cultures can impact relationships and communications.

After introducing SRM and its process and technology components, this section compares and contrasts strategic sourcing and transactional buying, including how in an SRM relationship there are many more contact points between various functional areas of an organization. This is followed by a discussion of how to measure SRM and certify suppliers.

This section concludes by showing how CRM and SRM are two sides of the same coin. It includes several case studies that illustrate the use of CRM and SRM in organizations. We also discuss how to establish collaborative relationships with supply chain partners.

Topic 1: Supplier Relationships and Segmentation

Supplier relationship management (SRM) and supplier segmentation are introduced here, followed by SRM process and technology discussions.

Supplier Relationships and Segmentation Road Map

Supplier relationship management and supplier segmentation are introduced next.

Supplier Relationship Management

The *APICS Dictionary,* 16th edition, defines **supplier relationship management (SRM)** 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.

Supplier relationship management helps develop and maintain relationships with suppliers to meet the general goals of ensuring mutual profitability while also meeting marketplace needs.

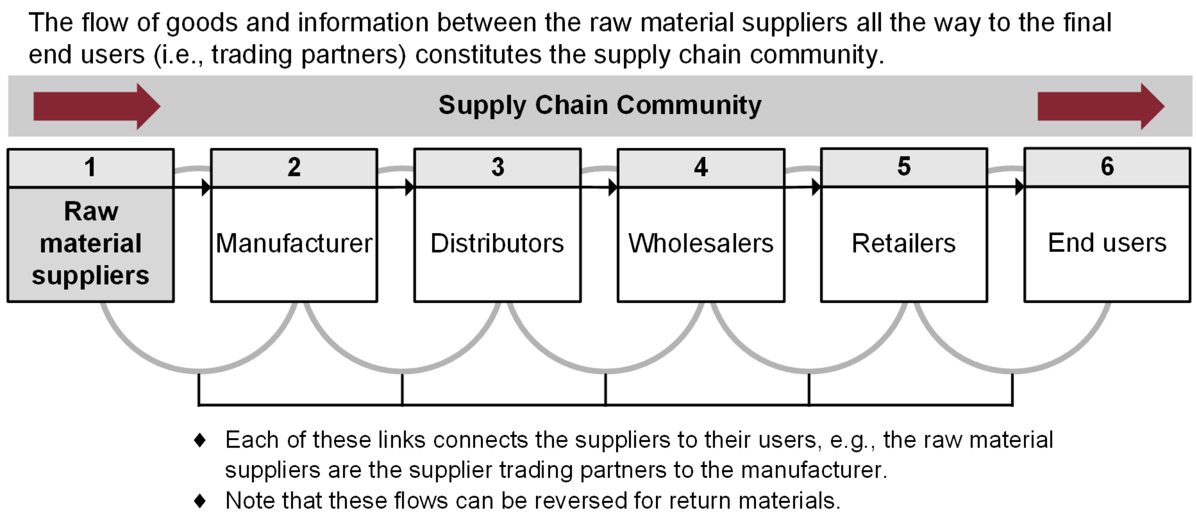
SRM is a methodology to structure and support relationships with suppliers to

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

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 6-9), supplier relationship management relates to all those upstream activities prior to one's own contact with the product or service. Note that Exhibit 6-9 assumes that the organization using SRM is a manufacturer; a distributor would use SRM to manage manufacturers, who are its suppliers.

Exhibit 6-9: Supply Chain Community



Supplier Segmentation

Supplier segmentation is a part of a category strategy for suppliers. Segmentation is the process used to create these supplier categories. 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.

The rationale for segmenting suppliers is based on the importance of the supplier category to the organization. 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. The vital few suppliers who deliver significant value need more relationship management than the trivial many.

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:

- **Product or service type.** Segmenting suppliers by the general category of goods or services they supply can help when analyzing all suppliers in that category.
- **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 mistakenly considered to be strategic 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 (i.e., niche audience) or differentiation (from competitor offerings) basis for their products/services, 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 could be placed 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 used.

- **Level of innovation.** Some suppliers are better partners than others when working to innovate a product's design. Suppliers who contribute 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.

Processes Enabled by SRM

Supplier relationship management (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:

- 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
- Supplier co-location

Most of these are addressed elsewhere. Only supplier co-location is discussed more here.

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. Such collaboration usually reduces concept-to-customer time.

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

SRM Technologies

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.

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 enterprise resources planning (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 can improve the sourcing process. 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. If the organization has frequently recurring needs, this can save a great deal of time.

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. Prices and total cost of ownership (TCO) or individual line item costs can be compared quickly so that TCO can be managed systematically, including tracking the past performance of suppliers so that poor performers (e.g., too much scrap) aren't reselected. It can also enforce centrally made strategic sourcing decisions among decentralized buyers for consolidated purchasing, shipping, and quantity discounts.

Persons actively involved in purchasing for major organizations have commented on the structure SRM software also brings to the ongoing supplier management process. After all, instead of their having to deal with hundreds of separate suppliers alone, the software does most of the organizing 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.

SRM system components may include both transactional and analytic systems:

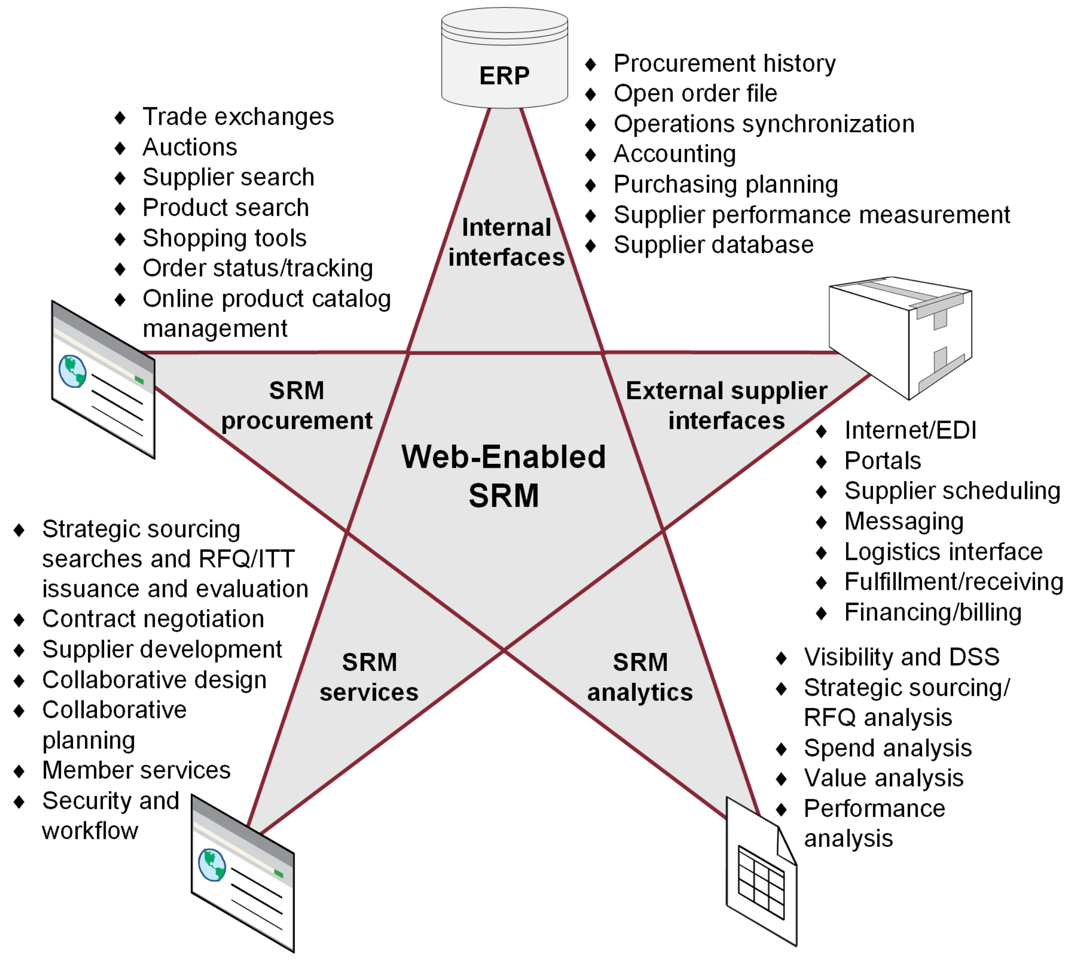
- Strategic sourcing and RFQ/ITT submission and analysis
- Procurement of goods and services through internet trade exchanges or auctions
- Collaborative product design and planning
- Purchasing and supplier scheduling using direct system links over the internet or electronic data interchange (EDI) or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

- Supplier databases and rating systems

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

Exhibit 6-10 highlights web-enabled SRM, which includes internal interfaces, external supplier interfaces, and SRM analytics, services, and procurement.

Exhibit 6-10: 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 purchase order 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 system contains a data warehouse of all past and present suppliers as well as those who submitted RFPs/ITTs. There are usually subsets for approved or preferred suppliers. Supplier contracts are retained 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, issuing invoices, or issuing 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).

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 manufacturer of electrical distribution systems and components with more than 70,000 employees in 130 countries lacks a global view of purchasing. It also lacks the analytical capability to amend purchases and verify that supplier policies are being followed. To solve these problems and reduce costs, they implement an analytical SRM system. The technology provides them with a comprehensive, global view of purchasing, which allows SRM managers to focus on strategic procurement practice. They can also drill down into specific exceptions to rules so that they can amend proposed purchases prior to their final approval.

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 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.

Topic 2: Strategic Sourcing and Alliances

Strategic sourcing can be enabled by supplier relationship management. We differentiate between strategic sourcing and tactical or traditional buying and address generic sourcing methods such as sole sourcing. After that, we turn to the types of strategic alliances that strategic sourcing can help build.

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 across the 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 gain volume discounts or could perform multisourcing to optimize supplier capacities and lead times while providing resilience against disruptions. However, there are sometimes situations when the organization has no choice but to use a sole-source supplier. The *Dictionary* 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.

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.

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.

Strategic Alliances

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

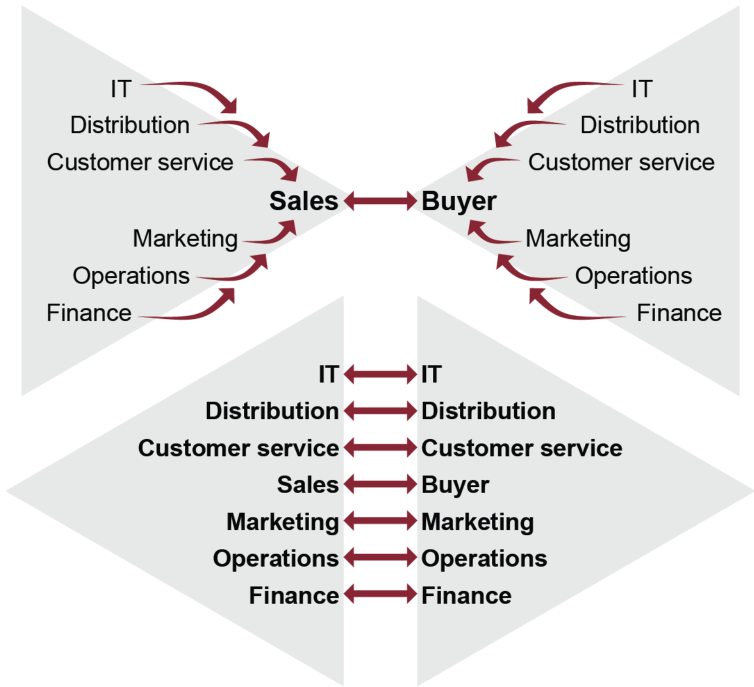
> a relationship formed by two or more organizations that share information (proprietary), participate in joint investments, and develop linked and common processes to increase the performance of both companies.

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” (*Dictionary*).

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 6-11 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 6-11: 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" (*Dictionary*). 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.

Characteristics of Successful Alliances

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 good 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 an 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 innovative products 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. For example, 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.
- **To better manage risk.** Alliances can enable sharing of risks among those partners best equipped to mitigate or avoid the risk.

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 Strategic Alliances

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 organizations will continue to keep some suppliers at arm's length.

Organizations seeking alliances with suppliers must consider the following.

- **Strategic importance.** While the organization should develop the in-house manufacturing capabilities for a component critical to competitive differentiation that may require proprietary knowledge or processes, manufacturing the component may call for expertise that lies outside its core competencies. In such cases, it should form a close alliance with a supplier who does have this core competency. 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. A strategic alliance may provide opportunities to co-develop new 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 by purchasing in excess 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 Successful Alliances

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. The dynamics of today's marketplace have made clear that no single restructuring of methodologies or processes will withstand the ongoing changes of the marketplace; rather it is a process requiring continuous improvement.

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 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 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, who must be consulted versus just informed, and how the decisions 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

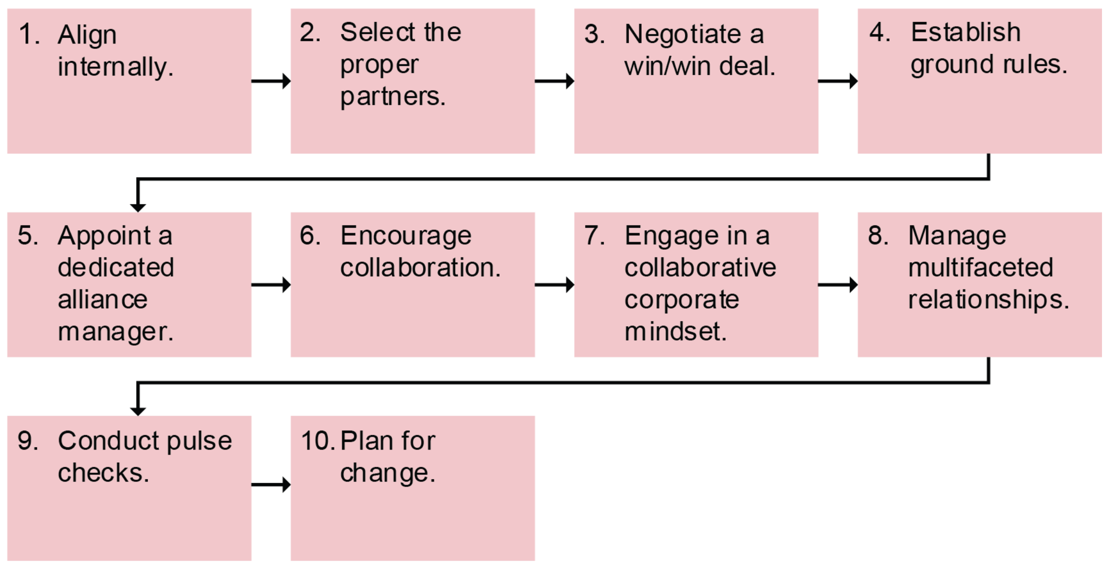
Open and continuous communication regarding joint objectives is vital to a successful supply chain relationship. Merely sharing data is not enough. What is necessary is a dynamic environment in which information flows in both directions on a real-time basis. Effective collaboration entails interaction 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 are paid accordingly.

Steps in Creating and Maintaining Alliances

Commitment alone is not enough for an alliance to be successful. Successful alliances are able to channel that commitment into concrete steps that make ongoing success possible. The process may differ by organization, but some essential steps (illustrated in Exhibit 6-12) can be isolated.

Exhibit 6-12: 10 Steps to Successful Alliances



Applying a systematic process like this to 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 global participants and processes with broader supply chain interests.

Let's take a closer look at each of these steps. Note that this area uses some case study organizations: 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, a 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 or acquire 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 Proper Partners.

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

Assume a recreational boat manufacturer is entering into a 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 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, the 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, a 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 Dedicated Alliance Manager.

If possible, top management should choose a dedicated relationship manager to oversee the alliance and implement a specific methodology for managing alliance relationships. The role of alliance manager may differ among organizations, but the objectives are to promote partner relationships, build joint initiatives, bring products/services to market quickly, and gain market share.

This step is 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.

The 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 customer relationship management system and the wealth of information for predicting and crafting new trends that such information contains.

Step 7: Engage in 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 tactics that will help meet 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, the engine designer for the 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 includes finding ways to shift supply channels quickly when one supplier goes under. It also continually looks for ways to help each supplier succeed. Finally, it has been careful to strengthen relationships with the suppliers' employees—not just with the organization itself.

Topic 3: Supplier Performance

Supplier performance can be assessed using performance measurement. Suppliers can also be subjected to a certification or rating process. When errors in performance are discovered, it is important to have an error correction process in place.

Supplier Performance Measurement

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.

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 includes ability to produce goods or services and also 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.

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 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 organizational commitments backed by a clearly defined process.

One way to promote good relationships is to work with suppliers who are willing to be certified. The *APICS Dictionary,* 16th edition, defines **supplier certification** 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 6-13.

Exhibit 6-13: Customer and Supplier Benefits of Supplier Certification

Benefits for Customers	Benefits for Suppliers

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 stands for the International Organization for Standardization. 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.

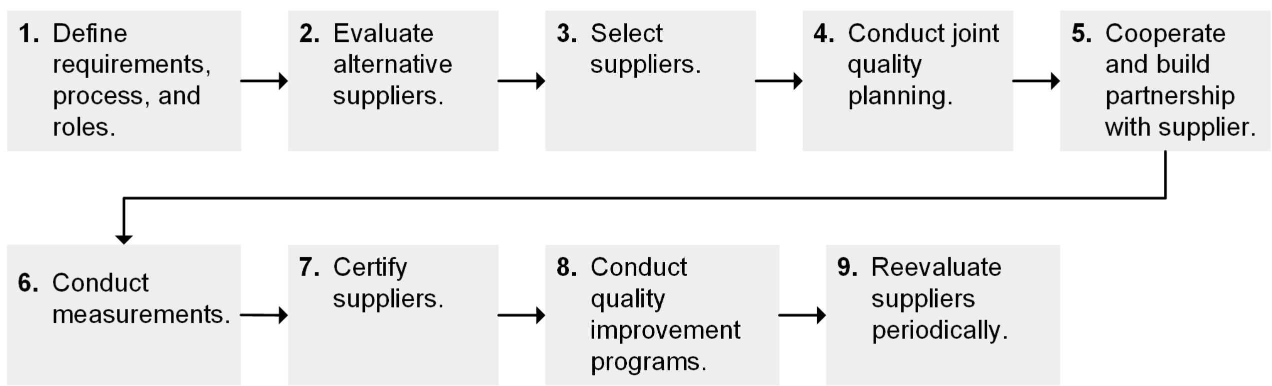
Large organizations may also devise their own unique certification system if they have a sufficient suppler base and enough clout with those suppliers to get them to adopt the standards. Organizations need to justify the expense of creating such a system.

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 should 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 6-14.

Exhibit 6-14: 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, warehouse, or transportation terminal?

After the players and their roles have been identified, the next step in the documentation process is to establish a system of metrics, for example, an ISO standard or a custom scheme. Custom schemes 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.

Existing and/or potential suppliers are screened through conversations with the suppliers, 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.

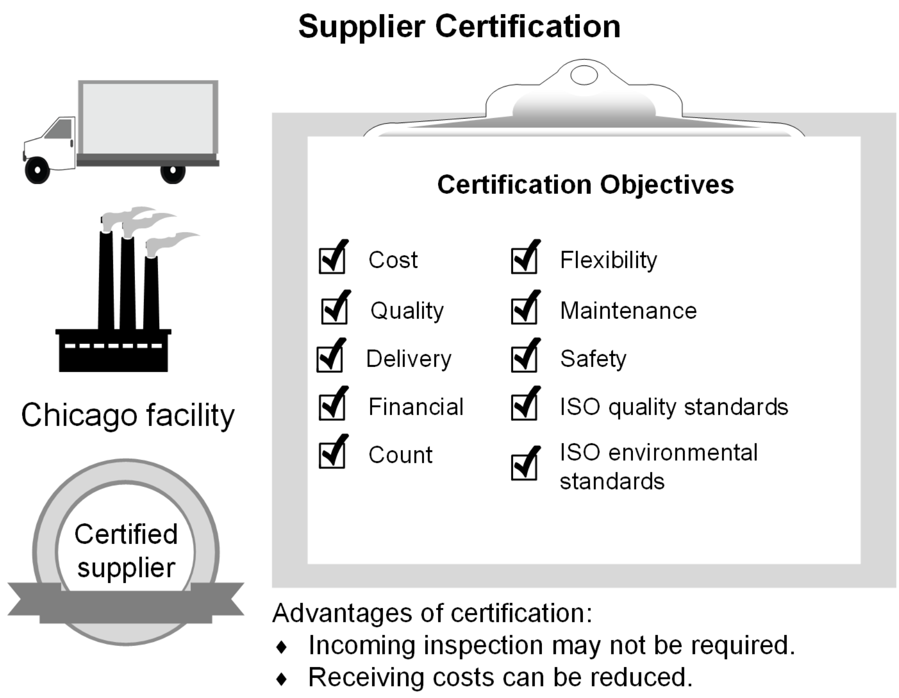
Suppliers are measured against the chosen performance standards, which may include cost, quality, delivery, and other attributes such as technical support and attitude. The organization will obtain qualified individuals to measure the system against the standards.

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 five to ten percent in performance and stand out in all areas of the relationship.

illustrates a certification award, one possible outcome of the certification process.

Exhibit 6-15: Certification Award



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.

Supplier Rating Systems

Supplier rating systems start by setting supplier performance measures 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.

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 6-16 is an example of a supplier performance report.

Exhibit 6-16: 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 Received	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 Received	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.

Freight Claims

A freight claim is a form submitted to the carrier requesting financial reimbursement for loss or damage. The contract specifies the time in which the claim must be filed in writing. The filing terms are governed by law and the original bill of lading. Domestic trade terms or Incoterms® trade terms will specify whether the buyer or seller should file freight claims.

Freight claims can be submitted for visible damage, shortages, concealed damages that are discovered when the package is opened, and losses due to delays. When a claim is submitted, it can be supported by photographs of damage, notes on a delivery receipt, and the invoice supporting the monetary value of the goods. Freight claims cannot be submitted for uncontrollable factors such as natural disasters, acts of war, government seizure, failure to appropriately package, and perishability.

As filing freight claims is a routine matter in the transportation industry, many carriers post filing information and sample claims forms on their websites.

Topic 4: Supply Chain Relationship Management

Customer and supplier relationship management are two sides of the same relationship, and so some common processes are discussed here. Several case studies are explored to illustrate these similarities. Tips for increasing collaboration and building collaborative relationships are also provided.

Customer and Supplier Relationship Management

Customer relationship management (CRM) and supplier relationship management (SRM) are basically two sides of the 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 getting 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 can involve including supplier representatives in product design.

Processes for Managing Relationships with Supply Chain Partners

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.

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.

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 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 SRM software to automate 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

Customer-Supplier Collaboration Case Studies

You can appreciate the benefits of implementing customer relationship management (CRM) and supplier relationship management (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 illustrates the importance of CRM and SRM to the relationship.
- Three case studies represent different types of business structures—a modern clothing retailer, a recreational boat manufacturer, and a financial services company. We'll focus on how these case-study companies can use CRM and SRM strategies to fulfill a variety of business goals.
- A large multinational company uses organizational learning to meet the challenges of integrating SRM and CRM. This case study summarizes research by Uusitalo and Uuskoski.

Furnace Manufacturer and Furnace Control System Manufacturer

A company that makes control systems for residential furnaces is given a design by a furnace manufacturer. The control system supplier must assemble parts from 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 and 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.

Modern Clothing Retailer

With each fashion cycle, a 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 from unsold inventory.

The clothing company is also working to develop relationships with its end customers using CRM. To do this, it has set up kiosks in its retail stores for entry of email 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, provides products for free to social media influencers, and also gives the customers an opportunity to provide ideas for new products.

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. It uses SRM to let its suppliers know which styles have required liquidation so they can refine their demand data.

Leisure Boat Manufacturer

In the product development phase, a boat manufacturer uses CRM and the voice of the customer (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 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 and provides this to suppliers using its SRM system. It also uses these data in its CRM system to advise customers on 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 through SRM 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. The CRM system helps capture and consolidate this data.

Financial Services Company

When a broker in a 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 CRM 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.

Multinational Corporation Using 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 the needs of suppliers/customers. 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 each one's own interests. For example, one customer's chief goal may be to minimize the delays that riders experience during peak elevator riding times. An offer on an innovative new system may be well received.

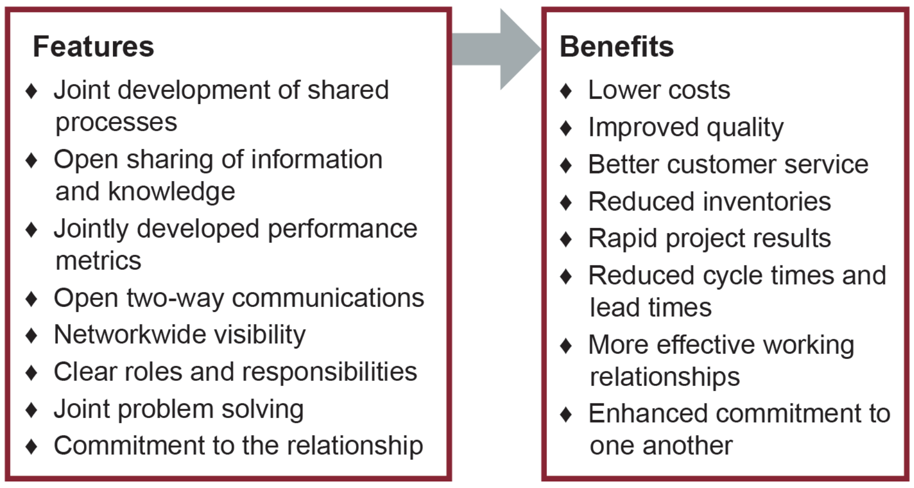
For decision making, the company requires decision-maker involvement to facilitate later incorporation of the best ideas. It creates some cross-functional roles and responsibilities between SRM and CRM, including an SRM/CRM management board. These roles have some decision-making authority for improving 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.

Developing Collaboration with Supply Chain Partners

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

Exhibit 6-17 summarizes the benefits to the supply chain of collaborative relationships.

Exhibit 6-17: Features and Benefits of Collaboration



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 assemble- or 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 competitive 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 enhance service levels. For example, a pharmaceutical wholesaler has designed a virtual organization by providing multiple independent pharmacies with an online 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. These individuals and teams informally work with others outside the organization as if they were employees. This enables them to make decisions and help develop strategies. By empowering individuals to act outside formal organizational structures, virtual organizations get 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, forecasting methods, forecasts, and inventory goals. The operations teams collectively plan and manage manufacturing priorities, capacity, and inventory. The logistics teams determine the most effective and appropriate warehousing and 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. Several 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.** Does the partner company have better, more effective advertising or provide access to new markets? Again here a company that has products that complement your organization's offerings might make a good partner. A package deal with products from both companies could be a promotion.
- **Strengthening operations.** Will an alliance with this company improve your operations by lowering costs and cycle times? 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 ease the transition between technologies? 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 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 yield a wealth of information that can be used by both organizations. This 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. Trust and communication are also important components to a successful win/win relationship.

Creating relationships that produce meaningful results requires commitment by both parties. 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

Once the organization has analyzed potential partners according to its selection criteria and has chosen those that objectively match its needs, how does it go about building a collaborative relationship? How will it 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 regular 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
- Clear 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.

Note that in addition to these steps, it is important to realize that different partnerships require different levels of collaborative intensity. While this is addressed elsewhere, it is based on the strategic importance versus the supply chain difficulty to obtain the supplied product or service (how much you need them) plus an assessment of how much the partner needs you (strategic fit). This results in a procurement product category strategy that guides the appropriate level of collaboration.

Initiate Management Tasks.

Once the collaboration is official, it's critical that top management demonstrate their 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.

Management can start by jointly discussing and designating relationship goals and planning next steps. 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 nonfinancial measures too. 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.

To facilitate collaboration, division managers are often asked to make major changes in how they operate. These division managers throughout the network must be given incentives to place the interests of the whole above their local interests. In addition to altering individual incentives, top management at each organization needs to go over the benefits of collaboration, consistently encourage division managers to make the required changes, and spell out the negative impact of any division managers not being on board with the required changes.

Another 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 on another than they wish to be. To alleviate this common problem, networks should avoid sequential interdependence. This is when 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. An example of this is CPFR (collaborative planning, forecasting, and replenishment). Although mutual interdependence is more complex to manage, it can also yield much greater rewards.

Since no contract can cover all contingencies, yet another task is to create a policy for resolving conflicts. If a conflict is serious enough to require amending the contract, negotiations 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 consideration for 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 just 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. Incompatible and/or antiquated hardware infrastructures can also prove a barrier to collaboration.
- **Regulations and legal issues.** There may be regulatory restrictions on sharing information, trade secrets, or products with partners in some countries. In another example, an organization may have legal rights to use certain assets or services that cannot be easily allocated to others. There may also be requirements to use arbitration in a conflict, and informal methods may be hard to enact.
- **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 with potential for vindictive behavior.
- **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 duplicated 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. Although mergers would seem to provide the deepest level of trust and communication, the sudden clash of the business, regional, and national cultures involved often requires years of work to align attitudes, technology, and business practices.

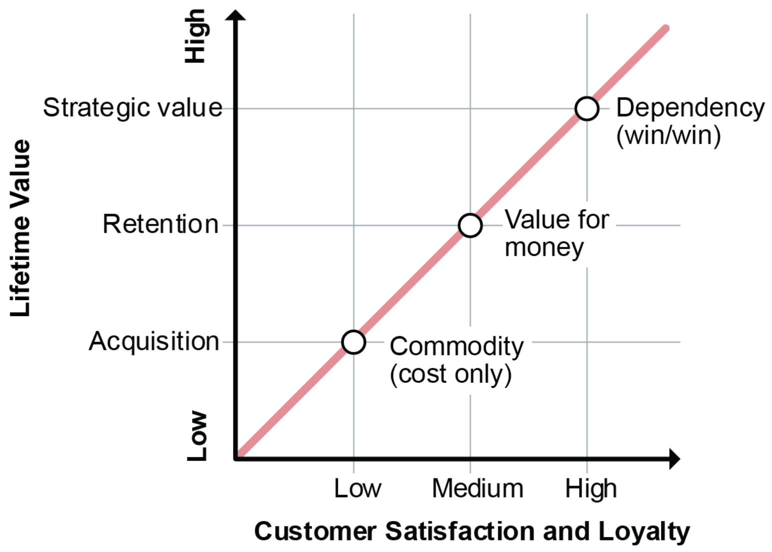
Collaboration with Customers

Collaboration may take the form of a closer business relationship or an alliance between a supplier and one of its intermediate customers such as informal or formal inclusion 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 6-18 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 6-18: 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. The relationships can be improved from the perspectives of both the customer and the company. Customers get an improved experience—one tailored to their needs. Businesses get increased customer visibility (awareness of actions involving the customer). This increases the supplier’s 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. 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 (e.g., process reengineering to increase 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 hierarchical organizational thinking to the involvement of multiple teams and their mutual involvement in the process.

How are these customer-centric businesses created? Exhibit 6-19 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.

Exhibit 6-19: 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 enhance 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 can be analyzed to support decisions. To begin, 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 that can ultimately create customer loyalty by meeting and exceeding customer needs and wants. 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. The credit card company may consider creating other air carrier partnerships or other types of partnerships that would move the low-value group toward higher value. In this way, the organization can identify and leverage these competitive advantage factors.

- **Create a map of customer segments.** Customer-centric businesses recognize that they have more than one type of customer. They use quantitative and qualitative research to segment their customers and develop solutions to each segment's distinctive needs. 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 strategic shape of a CRM program include product position(s) 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 6-20 illustrates, a CRM strategy is cyclical. The process begins with targeting the desired customer and winning that customer's business. For the relationship to continue, the promised product/service package terms must be fulfilled. Continued customer care promotes 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 6-20: CRM Cycle of Business

- **Monitor, measure, and report.** This step in the process is iterative and is based on the organization's selected customer key performance indicators. 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. 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. It is also important for organizations to research continuously and document which CRM processes are working and which are not.

Communication Considerations

Generally defined, communication is the two-way process of creating and sending messages and receiving feedback with the goal of influencing the opinions, actions, and decisions of the intended audience.

Management of communications is a cornerstone of effective leadership and management. Managing communications involves collecting data and information from the various parts of the supply chain or supply chain project team members, creating discussion guidelines and formal reports, selecting communications media, and distributing the information to the right people at the right times.

Stakeholders have different needs, preferences, styles, levels of expertise, and cultural backgrounds, so supply chain managers should adapt their communication styles appropriately. Customizing your communications shows respect and sensitivity, makes the message more effective, and encourages greater stakeholder engagement and positivity. Well-planned and well-delivered communications therefore require gathering and using stakeholders' communication requirements.

The ability to communicate quickly, succinctly, and accurately can be helped or hindered by the abundance and diversity of available data or information. It is easy to overload your audience with too much information. The capability to develop is to know what information needs to be communicated for the given purpose and audience. Ask yourself:

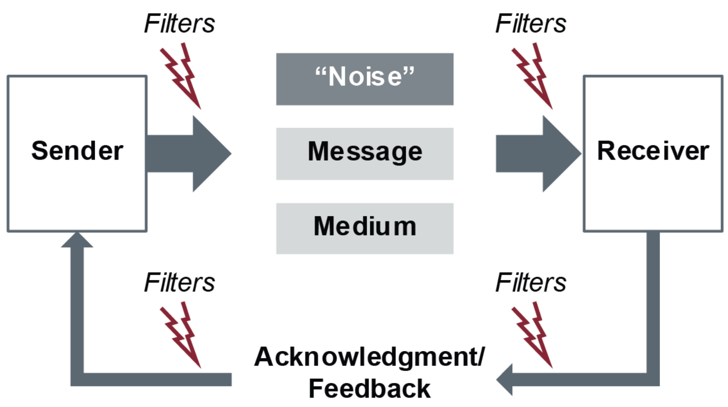
- What does your audience need?
- How does the subject of your communication fulfill the audience's need?
- How can you make the benefits of the presentation clear to the audience?

We will examine how communication occurs as well as the importance of context in influencing the success of a communications management plan.

Communication Process and Dimensions

A basic communication process occurs for all types of communications. This could be one-on-one talks, a presentation to multiple people, or technology-enabled communications. The intent is always the accurate transfer of information between individuals or groups. Exhibit 6-21 shows the elements in the communication process.

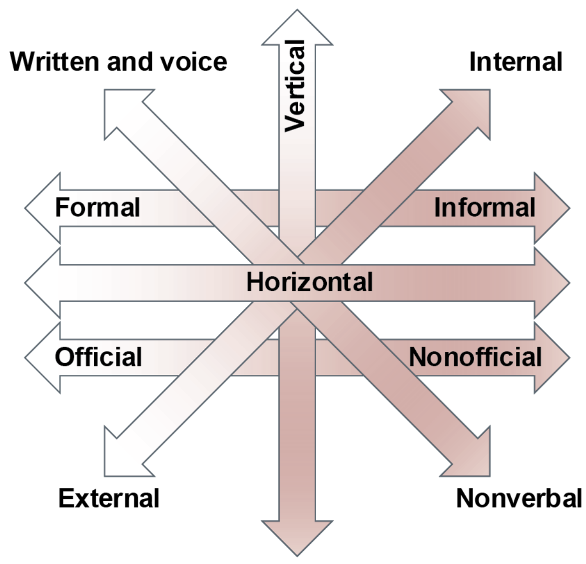
Exhibit 6-21: Basic Communication Process



The following are the key elements in the communication process.

- **Sender—**The sender is the one with ideas, requests, or information to convey.
- **Message—**This is the subject matter that goes through an "encoding process" to translate the sender's information into written, verbal, and/or nonverbal gestures.
- **Medium—**The medium is the pathway for the message. It could be oral (conversation, presentation), written (memo, newsletter), nonverbal (a stern look, sign language), and/or electronic (email, video chat, social media). Some media are better for formal (i.e., expected level of decorum) and/or official (i.e., on the record) communications, and some are better for informal/nonofficial communications (e.g., text messages). Similarly, working horizontally with peers may require different media than when working vertically up or down in the organization. External parties like suppliers, customers, or regulators also fit into a formal or de facto horizontal/vertical communication hierarchy that will influence choice of media. In-person media tend to have both verbal and nonverbal information and so can convey a richer message than media that omit nonverbal information. Videoconferencing can somewhat compensate for this deficiency. Exhibit 6-22 illustrates these various dimensions of communication.

Exhibit 6-22: Communication Dimensions



Source: Holmes Corporation. Used with permission.

- **Receiver—**The receiver is the intended audience, who "decodes" or interprets the message in light of previous experiences or frames of reference.
- **Filters—**A filter is any factor influencing how the communication is received or interpreted. Filters include emotional states (mood), individual perceptions, experience, and culture. Because of filters, a message may not be received at all.
- **"Noise"—**Noise is anything that distorts a message. Noise includes background sounds, another person trying to interrupt, or distractions that prevent the receiver from paying attention or understanding the communication. It can also be electronic distortions that corrupt a phone line, file, or program.
- **Acknowledgment—**The receiver acknowledges receipt of the message in a medium, but this does not necessarily imply comprehension or agreement.
- **Feedback—**Feedback is the verbal or nonverbal reply or reaction to the message. It expresses the receiver's understanding of the message. Feedback lets the sender assess whether or not the message has been received as intended.

Feedback is the key to this model. While filters and noise can get in the way of communication being successful, insisting on getting acknowledgment and especially feedback as appropriate is the communicator's method of making messages fail-safe. Attention to the recipient's feedback will signal if there is comprehension. If needed, the sender can revise the message and repeat the communication process.

Communication Management Plans

The *APICS Dictionary,* 16th edition, defines a **communication management plan** as "a document that describes the communications needs and expectations within a project, including format, dates, locations, and responsibilities." These plans are especially important in supply chain projects since stakeholders may come from diverse areas or organizations and using a plan can help encourage them to engage. In smaller projects, this plan could be brief, especially if few stakeholders are involved.

The following describes the steps in creating a communication management plan.

Identify Target Audience(s).

Planning communications starts with determining the target audience. Due diligence regarding the who, what, when, why, where, and how of communications can help avoid delayed communications, misinterpreted messages, or incorrect audiences. Efficient and effective communication will provide no more and no less information than the receiver needs to avoid the key points being buried in irrelevant data.

Managing stakeholder relationships is crucial to a communications plan. The *Dictionary* defines **stakeholder relationship management** as

> addressing and managing the competing priorities, needs and concerns of internal and external stakeholders in a proactive and sustained manner resulting in decreased cost and enhanced stakeholder acceptance or buy-in.

A kickoff meeting is a good time to gather communication preferences from stakeholders, including

- Preferred communication types, media, formality, and formats
- Information needs.

Analyzing RACI (responsible, accountable, consult, and inform) and organizational charts can also provide information on how to structure your communications. RACI charts spell out who needs to do each task (responsible), which one person will answer to its success or failure (accountable), who needs to be given a chance to review the information (consult), and who simply needs to be told about what's going on (inform).

Organization culture and policy can also influence communication strategies. There may be guidance on how to communicate with internal staff and for contractor, public, and media interactions.

Good questions to ask regarding the level of information to present include

- Is the subject matter relevant for the person in this role?
- Is the level of technical detail appropriate?
- Is the level of complexity sufficient to succeed in the assigned activities?
- Is any confidential information being disclosed, and, if so, is it necessary and are appropriate precautions/approvals being taken?

It is important not to underestimate informal communications, as these often motivate people and keep them informed.

Identify Communication Channel(s).

Communications channels refer to the number of potential two-way interactions that can occur between stakeholders. These are important because they indicate the relative complexity of communications. The greater the number of stakeholders, the higher the number of possible lines of communication, and the more careful the manager and team must be to ensure thorough communication of issues. As complexity increases, so do the risks of communication failures. However, when the number of authorized representatives is reduced, complexity can also be reduced. (Each representative communicates with a subteam.)

Create Message(s).

A clear purpose is important. It addresses why you are communicating and what you want to accomplish. Are you hoping to influence attitudes or achieve consensus? Do you want the audience to make a decision or take action?

Crafting an understandable message involves tailoring the message to the audience. With a clear picture of the intended audience, ask yourself questions such as

- Does the audience need background information and, if so, how much?
- What aspects of the topic matter to them?
- What information would be distracting, confusing (e.g., jargon), or irrelevant?
- Are there specific benefits for audience members?
- Why should the topic be of interest to the audience?
- If the intention is to persuade, how difficult will that be for the given audience?
- How much does the audience already know about the topic?

Different audiences may require different information, so vary your messages accordingly. For example, for a new supply chain process, financial information is useful to the board and senior management. Staff members need to know their own role and the roles of persons with whom they will need to interact.

When selecting an appropriate delivery method, consider factors such as

- Physical constraints—size of the audience, how dispersed audience members are, time zones, and the technology and resources available
- Urgency—whether the message is routine, important, critical, or time-sensitive
- Cost—cost constraints, image and brand considerations
- Message distribution—the number and makeup of the receivers
- Security/privacy/sensitivity considerations—any legal, risk, professional, or proprietary aspects
- Preference—for example, a telephone call in lieu of an email or vice versa
- Need for retention/retrieval—whether the information should be retained and for how long, plus the methods for storing, maintaining, and disposing of the data.

An inappropriate medium choice or incorrect recipients can dilute the message's intent, lead to indifference and confusion, or create many other problems. Good medium choices, on the other hand, can grab people's attention and encourage conversation.

Ensure Understanding/Gather Feedback.

Feedback is essential in communication so you know whether the recipient has understood the message in the way you intended and whether he or she agrees with the message. Getting feedback from customers and suppliers regarding communications is essential to ensuring smooth supply chain operations.

In face-to-face communication, observe nonverbal cues and respond to feedback. If not a face-to-face communication, follow up on queries and feedback received to help determine communication utility. Ask and answer questions to assess if the intended meaning equals the perceived meaning. Make clarifying points as needed; then repeat the feedback process to ensure understanding of the clarifications.

Do not neglect lessons learned through feedback. Consider what you will do differently next time, act on good feedback as feasible, and maintain an attitude of openness to feedback. Failure to do so may harm your credibility and give people a disincentive to provide constructive feedback in the future.

Close the Loop.
The final step in any communication plan is to ensure that communications are continually monitored for completeness, accuracy, and tone. It is also important to monitor the release and timing of messages. This may even include involving the legal department for any messages intended for consumption by the general public.

Cultural Issues

To be effective in international business, organizations must understand the complexity of culture and the potential effect of cultural forces on the implementation of global strategies and local tactical supply chain practices. This applies as much to internal staff in multinational organizations as it does to customers and suppliers.

> **Example:** An American organization partners with organizations in Australia, China, Singapore, the Czech Republic, Germany, and Russia to develop and distribute engineering components. The employees of all the organizations must be prepared for diverse communication, social, and work styles.
>
> **Example:** A Brazilian agricultural importer/exporter plans to open offices in Colombia and Costa Rica and establish new relationships with food packaging firms in both countries. The Brazilian businesspeople cannot assume that just because of their geographical proximity to these countries the Colombians and Costa Ricans will share the same attitudes toward business. They will have to learn each other’s expectations.

What Is Culture?

In international business, it is not uncommon to hear cultural concepts such as “saving face” from Asian and Latin cultures, “ringi” from Japan, “guanxi” from China, and “speak your mind” in America.

- “Saving face” is finding a way to retain one’s good image or pride despite being wrong or losing in a conflict.
- “Ringi” refers to the Japanese decision-making process of building consensus from the ground up.
- “Guanxi” describes the Chinese tendency to build networks of close and informal relationships.
- “Speak your mind” equates to an expression of blunt honesty in American culture.

So how does culture influence these behaviors? A simple definition of culture is a shared system of values, beliefs, and attitudes. These shared patterns identify the members of a given culture and distinguish them from other culture groups. Culture affects our own actions and the way we perceive others. It shapes many aspects of human contact, including the give and take of negotiation, protocols, and other social and work conventions. Culture is learned through a process of socialization. It is not a product of an individual's personality. Making assumptions about culture can result in inadvertently causing insult or embarrassment, such as speaking one's mind when another culture requires much more ceremony before eventually getting to this level. (Or it may never be appropriate.)

Dimensions of Culture

Studying cultural differences can help in understanding how employees in different cultures expect to be treated, which can help build teams and reduce the chances of conflict. Anthropologists, sociologists, and other learned professionals have developed various models and theories about characteristics that differ across cultures and their implications. Exhibit 6-23 is an overview of one: Geert Hofstede's dimensions of culture.

Exhibit 6-23: Hofstede's Cultural Dimensions

Issue	Examples of SCM Implications	Country Examples
Power distance Extent to which less-powerful members of organizations and institutions accept unequal distribution of power. • High power distance: more separation of the average person from power and equality. • Low power distance: more equality.	High: Managers tell employees what should be done. Low: Managers consult with employees about what should be done.	High: Malaysia, Philippines, China, India, Panama, Mexico Low: Austria, Israel, Scandinavian countries, U.K., U.S.
Individualism/collectivism Degree to which individuals are integrated into groups. • Individualism: Ties are loose; self-reliance valued. • Collectivism: Strong, cohesive groups in which protection is exchanged for loyalty to group.	Individualist: Individuals tend to define themselves by their job. Collectivist: Relationships are more important than one's job; need for consensus-based decision making and involving the group in business activities to build a strong relationship.	Individualist: U.S., France, Australia, U.K., Italy, Netherlands, Belgium Collectivist: Latin America, Japan, China, Pakistan, South Korea, Singapore

Issue	Examples of SCM Implications	Country Examples
Uncertainty avoidance Level of tolerance of uncertainty and ambiguity; extent to which individuals feel comfortable in unstructured, new, or unexpected situations.	High: Overall workplace culture cannot tolerate deviant people or diverse ideas; rules are set; may need to gather more data and apply a more structured decision-making process to gain idea acceptance. Low: Workplace culture has tolerance and self-control; fewer rules, written or unwritten.	High: Greece, Portugal, Latin America, Belgium, Japan, France Low: Singapore, Denmark, Sweden, Hong Kong, U.K.
Masculine/feminine Masculine traits: Ambitious, tendency to polarize, preference for speed and size, oriented toward work and achievement. Feminine traits: Nurturing, empathetic, oriented toward quality of life, striving for consensus, favoring small size and slow pace.	Masculine: Overall emphasis is on work more than family, particularly in terms of time. Feminine: Balance between work and family life, especially in time. Note: In masculine societies, gender roles are distinct; in feminine societies, roles may overlap.	Masculine: Japan, Hungary, Austria, Venezuela, Italy Feminine: Scandinavian countries, Netherlands, Chile, Thailand
Long-term/short-term Long-term orientation: Values thrift and perseverance; orders relationships by status and values. Short-term orientation: Values social traditions and fulfilling social obligations, being respected; expects reciprocation of greetings, favors, gifts.	Long-term: Traditions may change and adjust to the times. Short-term: Traditions must be honored and not changed.	Long-term: China, Japan, South Korea, Brazil, India Short-term: West Africa, Philippines, Norway, U.K., U.S.

Issue	Examples of SCM Implications	Country Examples
Language/ communication skills Language training or interpreters may be required.	Miscommunication can impede working relationships and cause outsourcing problems. May necessitate more reliance on e-mail and documentation so that partners can have written records to re-read and ensure understanding.	The Chinese rely a great deal on nonverbal behavior and the context of the situation to decode the meaning of what is being communicated (as compared to Western cultures, which are much more direct and outspoken in their communication style). The English spoken in the United Kingdom may be different than English dialects spoken in other parts of the world.

Issue	Examples of SCM Implications	Country Examples
Attitudes	Requires an understanding or awareness that there are differing perspectives toward negotiation, conflict, disagreements, and other business and social exchanges.	In India, progression in negotiations and agreements may take place only after people get to know each other at a personal level. Legalistic methods may be misconstrued. Respect, patience, and formality are among the main virtues for successful negotiations in China. Americans express opinions freely, and they expect others to do the same; conflict situations may arise.
Customs and business etiquette	Requires an understanding of appropriate behavior and what one can or cannot do or say in business as well as social settings.	In Thailand, it is impolite to show the soles of your shoes; care should be taken when crossing your legs in a business meeting. In India, the person of power sits in the back seat of an automobile; in the U.S., that person would most likely ride in the front passenger seat. In Germany, Spain, and China, first names are generally reserved for family and close friends. In Japan, when someone gives you their business card during a meeting, it's considered an extension of themselves as a person. It would be an insult to put it in a briefcase or folder without looking at it. The proper way to accept the business card is to hold it in both hands, read it, and then place it right side up on the table in front of you until the meeting is over.
Work values	Different approaches to completing tasks or problem solving can impede operations and the development of strong working relationships.	In the U.S., the "get-down-to-business" mentality before forming relationships prevails, and finding the most practical solution drives most situations. In India, workers may have a group identity and expect that the head of the group will speak for them. Managers may be more likely to speak and act authoritatively than to use a more collegial Western approach.

This model was derived from Hofstede's research during the 1970s into cultural differences at IBM subsidiaries in 64 countries. Hofstede's dimensions have been subsequently researched in additional countries and in other occupations and industries.

The Hofstede model can help to analyze a country's culture in terms of its general population. However, it's important to realize that not all individuals or even regions with subcultures fit any model's characteristics all of the time. There will be exceptions to the Hofstede dimensions and other cultural models. Not all dimensions may be of the same importance in all cultures. Organizations' mission and vision statements may also promote an internal culture that could differ in some ways from that of the local culture.

For more in-depth information about Geert Hofstede's model, consult his book *Cultures and Organizations, Software of the Mind.* The Clearly Cultural website reports on cross-cultural news and research. It also features world maps showing the global distribution of Hofstede's dimensions. Links to this information have been included in the online Resource Center.

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