While in some ways it’s an insight into the obvious, it is important to establish initially that logistics contributes to an organization’s success by fulfilling customers’ delivery and inventory availability expectations and requirements. What is not so obvious, however, is what exactly is meant by the term customer. The supply chain management concept requires careful consideration of just what is meant by the term customer and realization that there are many different perspectives.

From the perspective of the total supply chain, the ultimate customer is the end user of the product or service. It has historically been useful to distinguish between two types of end users. The first is a consumer, an individual or a household that purchases products and services to satisfy personal needs. When a family purchases an automobile to be used for personal transportation, that family is the consumer of the supply chain. The second type is an organizational end user. Purchases are made by organizations or institutions to allow an end user to perform a task or job in the organization. When a company buys an automobile for a salesperson or buys tools to be used by an assembly worker in a manufacturing plant,
the company is considered to be a customer and the salesperson or assembly worker is the end user of the supply chain’s products. A supply chain management perspective demands that all firms in the supply chain focus on meeting the needs and requirements of end users, whether they are consumers or organizational users.

Another perspective of customer exists for a specific firm within the supply chain. This perspective recognizes that intermediate organizations often exist between the firm and end users. Common terminology generally recognizes these organizations as intermediate customers. Thus, in the Procter & Gamble (P&G) supply chain that provides Tide laundry detergent to ultimate consumers, Kroger and Safeway supermarkets are intermediate customers; they purchase Tide from P&G for the purpose of reselling to consumers.

Finally, for a logistician, a customer is any delivery location. Typical destinations range from consumers’ homes to retail and wholesale businesses to the receiving docks of manufacturing plants and warehouses. In some cases the customer is a different organization or individual who is taking ownership of the product or service being delivered. In many other situations the customer is a different facility of the same firm or a business partner at some other location in the supply chain. For example, it is common for the logistics manager of a retail warehouse to think of the individual stores to be served as warehouse customers, even though the stores are part of the same organization.

Regardless of the motivation and delivery purpose, the customer being served is the focal point and driving force in establishing logistical performance requirements. It is critical to fully understand customer needs that must be met in establishing logistical strategy. This chapter details various approaches to managing customer relationships. The first section presents the fundamental concepts that underlie customer-focused marketing, with consideration of how logistics supports a firm’s overall marketing strategy. The second section describes how supply chain outputs impact end users and how such outputs must be structured to meet their requirements. The sections that follow describe how firms progress through increasing levels of commitment in customer relationships. These levels range from traditional notions of logistics customer service to satisfaction of customers by meeting their expectations to the ultimate goal of helping customers be successful. The chapter concludes with the presentation of a framework for developing customer relationship strategy.

Customer-Focused Marketing

The basic principles of customer-focused marketing have their roots in the marketing concept, a business philosophy that suggests that the focal point of a business’s strategy must be the customers it intends to serve. It holds that for an organization to achieve its goals, it must be more effective than competitors in identifying specific customer needs and focusing resources and activities on these customer requirements. Clearly, many aspects of a firm’s strategy must be integrated, and logistics is only one of these. The marketing concept builds on four fundamental ideas: Customer needs and requirements are more basic than products or services; different customers have different needs and requirements; products and services become meaningful only when available and positioned from the customer’s perspective, which is the focus of logistics strategy; and sales volume is secondary to profit.

The belief that customer needs are more basic than products or services places a priority on fully understanding what drives market opportunities. The key is to understand and develop the combination of products and services that will meet those requirements. For example, if customers require a choice of only three different colored appliances, it makes little sense to offer six colors. It also makes little sense to try to market only white appliances if color selection is important from a customer’s perspective. The idea is to develop...
sufficient insight into basic customer needs so that products and services can be matched to these opportunities. Successful marketing begins with in-depth study of customers to identify product and service requirements.

The second fundamental aspect of the marketing concept is that there is no single market for any given product or service. All markets are composed of different segments, each of which has somewhat different requirements. Effective market segmentation requires that firms clearly identify segments and select specific targets. While a comprehensive discussion of market segmentation is beyond the scope of this text, it is important to note that customers’ logistical requirements frequently offer an effective basis for classification. For example, a contractor building new homes may place an order for appliances several weeks before needed for installation, while a consumer buying a replacement for a broken appliance may require immediate availability and delivery. It is unlikely that a company can operate in every market segment or profitably fulfill every possible combination of customer requirements; thus careful matching of capabilities with specific segments is an essential aspect of the marketing concept.

For marketing to be successful, products and services must be available to customers. In other words, the third fundamental aspect of marketing is that customers must be readily able to obtain the products they desire. Four economic utilities add value to customers: form, possession, time, and place. The product's form is for the most part generated during the manufacturing process. For example, form utility results from the assembly of parts and components for a dishwasher. Marketing creates possession by informing potential customers of product/service availability and enabling ownership exchange. Logistics provides time and place utility. Essentially, this means that logistics must ensure that the product is available when and where desired by customers. The achievement of time and place utility requires significant effort and is expensive. Profitable transactions materialize only when all four utilities are combined in a manner relevant to customers.

The fourth aspect of the marketing concept is the focus on profitability as contrasted to sales volume. An important dimension of success is the degree of profitability resulting from relationships with customers, not the volume sold. Therefore, variations in the basic utilities, form, possession, time, and place, are justified only if a customer or segment of customers values and is willing to pay for the modification. In the appliance example, if a customer requests a unique color option and is willing to pay extra, then the request can and should be accommodated, providing a positive contribution margin can be earned. A final refinement of marketing strategy is based on an acknowledgment that all aspects of a product/service offering are subject to modification when justifiable on the basis of profitability.

**Transactional versus Relationship Marketing**

Traditional marketing strategies focus on obtaining successful exchanges, or transactions, with customers to drive increases in revenue and profit. In this approach, termed **transactional marketing**, companies are generally oriented toward short-term interaction with their customers. The traditional marketing concept emphasizes accommodating customers’ needs and requirements, something few business organizations would argue with. However, as practiced in many firms, the result is a focus on creating successful individual transactions between a supplier and its customers.

Paralleling the development of the supply chain management concept, there has been a shift in philosophy regarding the nature of marketing strategy. This shift has generally been acknowledged as **relationship marketing**. Relationship marketing focuses on the development of long-term relations with key supply chain participants such as consumers, intermediate customers, and suppliers in an effort to develop and retain long-term preference and loyalty. Relationship marketing is based on the realization that in many industries
it is as important to retain current customers and gain a larger share of their purchases as it is to attract new customers.\footnote{Don Peppers and Martha Rogers, "Return on Customer: A New Metric of Value Creation," Journal of Direct, Data, and Digital Marketing Practice (April–June 2006), pp. 318–321.}

The ultimate in market segmentation and relationship marketing is to focus on the individual customer. This approach, referred to as micromarketing or one-to-one marketing, recognizes that each individual customer may indeed have unique requirements. For example, although Walmart and Target are both mass merchandisers, their requirements in terms of how they desire to interact logistically with suppliers differ significantly. A manufacturer who wants to do business with both of these major retailers must adapt its logistical operations to the unique needs of each. The best way to ensure long-term organizational success is to intensely research and then meet the requirements of individual customers. While this approach may not be feasible with every customer, one-to-one relationships can significantly reduce transaction costs, better accommodate customer requirements, and make individual transactions routine.

Supply Chain Service Outputs

Imagine a society in which every individual is totally self-sufficient: Each individual would produce and consume all of the products and services necessary for survival so there would be no need for any economic activity related to the exchange of goods and services between individuals. No such society can be found today. In reality, as individuals begin to specialize in the production of specific goods or services, a mechanism must arise for the exchange of those goods and services to satisfy the consumption needs of individuals. To do so efficiently and effectively, firms must overcome three problems known as: discrepancy in \textit{space}, discrepancy in \textit{time}, and discrepancy in \textit{quantity and assortment}.

Discrepancy in space refers to the fact that the location of production activities and the location of consumption are seldom the same. Consider, for example, the household furniture industry. Most household furniture in the United States is manufactured in a small geographic area in North Carolina and a great deal of office furniture is manufactured in western Michigan. Yet, where is furniture demanded? All over the United States! This difference between the location of production and the location of consumption is a fundamental transportation challenge that must be overcome to accomplish exchange.

Discrepancy in time refers to the difference in timing between production and consumption. Some products, agricultural commodities, for example, are produced during short time periods but are continuously demanded by customers. On the other hand, many products are manufactured in anticipation of future customer demand. Since manufacturing often does not occur at the same time products are demanded, inventory and warehousing are required. It should be noted that much of the discussion in this text is devoted to the challenges firms face in more closely matching the rate of production with market consumption.

Discrepancy in quantity and assortment refers to the fact that manufacturing firms typically specialize in producing large quantities of a limited variety of items. Customers, on the other hand, typically demand small quantities of numerous items. This difference between the production and consumption sectors of the economy must somehow be reconciled to deliver the required product variety and assortment to customers.

To eliminate these discrepancies, Bucklin developed a long-standing theory that specifies four generic service outputs necessary to satisfy customer requirements: (1) spatial convenience, (2) lot size, (3) waiting or delivery time, and (4) product variety and assortment.\footnote{Louis P. Bucklin, A Theory of Distribution Channel Structure (Berkeley, CA: IBER Special Publications, 1966).} As discussed above, different customers may have different requirements regarding
such services. It follows that different supply chain structures may be required to accommodate such differences.

Spatial Convenience

Spatial convenience, the first service output, refers to the amount of shopping time and effort that will be required on the part of the customer. Higher levels of spatial convenience can be achieved in a supply chain by providing customers with access to its products in a larger number of places, thus reducing shopping effort. Consider, for example, the household furniture industry. Some manufacturers utilize a structure that includes department stores, mass merchandisers, and numerous chain and independent furniture specialty stores. Ethan Allen, on the other hand, restricts brand availability to a limited number of authorized Ethan Allen retail stores. This difference in the level of spatial convenience has major implications for the overall supply chain structure and for the logistics cost incurred in the supply chain. It is also clear that some customers are willing to expend greater time and effort than others as they search for a desired product or brand.

Lot Size

The second service output is lot size, which refers to the number of units to be purchased in each transaction. When customers are required to purchase in large quantities, they must incur costs of product storage and maintenance. When the supply chain allows them to purchase in small lot sizes, they can more easily match their consumption requirements with their purchasing. In developed economies, alternative supply chains frequently offer customers a choice of lot-size. For example, consumers who are willing to purchase paper towels in a 12- or 24-roll package may buy at Sam’s Club or Costco. As an alternative, they may buy single rolls at the local grocery or convenience store. Of course, the supply chain that allows customers to purchase in small quantities normally experiences higher cost and therefore demands higher unit prices from customers.

Waiting Time

Waiting time is the third generic service output. Waiting time is defined as the amount of time the customer must wait between ordering and receiving products: the lower the waiting time, the higher the level of supply chain service. Alternative supply chains offer consumers and end users choices in terms of the amount of waiting time required. In the personal computer industry, a consumer may visit an electronics or computer specialty store, make a purchase, and carry home a computer with literally no waiting time. Alternatively, the customer may order from a catalog or via the Internet and wait for delivery to the home or office. In a general sense, the longer the waiting time required, the more inconvenient for the customer. However, such supply chains generally incur lower costs and customers are rewarded in the form of lower prices for their willingness to wait.

Product Variety and Assortment

Product variety and assortment are the fourth service output. Different supply chains offer differing levels of variety and assortment to consumers and end users. Typical supermarkets are involved in supply chains that provide a broad variety of many different types of products and an assortment of brands, sizes, etc., of each type. In fact, supermarkets may have over 35,000 different items on the shelves. Warehouse stores, on the other hand, offer much less product variety or assortment, generally stocking in the range of 8,000 to 10,000
items, and have a limited number of brands and sizes. Convenience stores may stock only a few hundred items, offering little variety or assortment compared to supermarkets.

Supply chains provide additional service outputs to their customers. In addition to the four generic service outputs discussed above, other researchers have identified services related to information, product customization, and after-sales support as critical to selected customers. The point to keep in mind is that there is no such thing as a homogeneous market where all customers desire the same services presented in the same way. They may differ in terms of which services are most important and in terms of the level of each of the services desired to accommodate their needs. For example, some consumers may require immediate availability of a personal computer while others feel that waiting 3 days for a computer configured to their exact requirements is preferable. Additionally, customers differ in terms of how much they are willing to pay for services. Since higher levels of service generally involve higher market distribution costs, organizations must carefully assess customer sensitivity to prices relative to their desire for reduced waiting time, convenience, and other service outputs. Meeting customer requirements for service outputs has important implications for how supply chains are ultimately configured, what types of participating companies may be included to satisfy service requirements, and the costs that are incurred in the process. Attention is now focused on more specific considerations of customer requirements in a logistical context. Three levels of commitment are discussed: customer service, customer satisfaction, and customer success.

Customer Service

The foundation of logistics commitment is to provide customer service in a cost-effective manner. Although most senior managers agree that customer service is important, they sometimes find it extremely difficult to explain what it is and what it does. While common expressions of customer service include “easy to do business with” and “responsive to customers,” to develop a full understanding of customer service, a more thorough framework is required.

Philosophically, customer service represents logistics’ role in fulfilling the marketing concept. A customer service program must identify and prioritize all activities required to meet customers’ logistical requirements as well as, or better than, competitors. In establishing a customer service program, it is imperative to identify clear standards of performance for each of the activities and measurements relative to those standards. In basic customer service programs, the focus is typically on the operational aspects of logistics and ensuring that the organization is capable of providing the seven “rights” to its customer: the right amount of the right product at the right time at the right place in the right condition at the right price with the right information.

It is clear that outstanding customer service adds value throughout a supply chain. The critical concern in developing a service strategy is: Does the cost associated with achieving specified service performance represent a sound investment? Careful analysis of competitive performance and customer sensitivity to service attributes is required to formulate a basic service strategy. In Chapter 2, the fundamental attributes of basic customer service were identified as availability, operational performance, and service reliability. These attributes are now discussed in greater detail.

Availability

Availability is the capacity to have inventory when desired by a customer. As simple as this may seem, it is not at all uncommon for an organization to expend considerable time, money, and effort to generate customer demand and then fail to have product available.
to fill customer orders. The traditional practice in many organizations is to stock inventory in anticipation of customer orders. Typically an inventory stocking plan is based on forecasted demand for products and may include differential stocking policies for specific items as a result of sales popularity, profitability, or importance of an item to the overall product line.

While the detail of establishing inventory stocking policies is covered in Chapter 7, it should be clear that achieving high levels of inventory availability requires a great deal of planning. In fact, the key is achieving these high levels of availability while minimizing overall investment in inventory and facilities. Programs of inventory availability are not conceived or managed based on averages; availability is based on three performance measures: stockout frequency, fill rate, and perfect orders shipped.

Stockout Frequency

A stockout, as the term suggests, occurs when a firm has no product available to fulfill customer demand. Stockout frequency refers to the probability that a firm will not have inventory available to meet a customer order. For example, studies of retail stores across many industries consistently find that stockouts average about 8 percent. For items that are specifically being promoted, stockouts average about 16 percent! It is important to note, however, that a stockout does not have impact until a customer desires a product. The aggregation of all stockouts across all products is an indicator of how well a firm is positioned to provide basic service commitments in product availability. While it does not consider that some products may be more critical in terms of availability than others, it is the starting point in thinking about inventory availability.

Fill Rate

Fill rate measures the magnitude or impact of stockouts over time. Being out of stock does not necessarily affect service performance unless a customer demands a product. Then it is important to determine that the product is not available and how many units the customer wanted. While there are several approaches to measuring fill rates discussed in Chapters 7 and 15, item fill rate is a common approach. For example, if a customer wants 100 units of an item and only 97 are available, the fill rate is 97 percent. To effectively consider fill rate, the typical procedure is to evaluate performance over time to include multiple customer orders. Thus, fill rate performance can be evaluated for a specific customer, product, or any combination of customers, products, or business segments.

Fill rate can be used to differentiate the level of service to be offered on specific products. In the earlier example, if all 100 products ordered were critical to a customer, then a fill rate of 97 percent could result in a stockout at the customer's plant or warehouse and severely disrupt the customer's operations. Imagine an assembly line scheduled to produce 100 automobiles that receives only 97 of its required brake assemblies. In situations where some of the items are not critical to performance, a fill rate of 97 percent may be acceptable. The customer may accept a back order or be willing to reorder the short items at a later time. Fill rate strategies need to consider customer requirements for products.

Orders Shipped Complete

The most exacting measure of performance in product availability and delivery is orders shipped complete. It views having everything that a customer orders as the standard of

---

3 Tom Gruen and Daniel Corsten, “Improve Out-of-Stock Methods at the Shelf,” Chain Store Age (July 2006), p. 35.
acceptable performance. Failure to provide even one item on a customer’s order results in that order being recorded as zero in terms of complete shipment.

These three measures of availability combine to establish the extent to which a firm’s inventory strategy is meeting customer demand. They also form the basis to evaluate the appropriate level of availability to incorporate into a firm’s basic logistical service program. High levels of inventory have typically been viewed as the means to increasing availability; however, new strategies that use information technology to identify customer demand in advance of actual customer orders have allowed some organizations to reach very high levels of availability without corresponding increases in inventory.

**Operational Performance**

Operational performance deals with the time required to deliver a customer’s order. Whether the performance cycle in question is customer service, manufacturing support, or procurement, operational performance is specified in terms of speed of performance, consistency, flexibility, and malfunction recovery.

**Speed**

Performance cycle speed is the elapsed time from when a customer places an order until the product is delivered and is ready for customer use. The elapsed time required for total performance cycle completion depends on logistical system design and operations strategy. Given today’s high level of communication and transportation technology, order cycles can be as short as a few hours or may take several weeks or months.

Naturally, most customers want fast order cycle performance. Speed is an essential ingredient in many just-in-time and quick-response logistical strategies, as fast performance cycles reduce customer inventory requirements. The counterbalance is that speed of service is typically costly: Not all customers need or want maximum speed if it means increased total cost. The justification for speed must be found in the positive trade-offs; the only relevant framework for estimating the value of service speed is the customer’s perceived benefits.

**Consistency**

Order cycle consistency is measured by the number of times that actual cycles meet the time planned for completion. While speed of service is important, most logistical managers place greater value on consistency because it directly impacts a customer’s ability to plan and perform its own activities. For example, if order cycles vary, then a customer must carry safety stock to protect against potential late delivery; the degree of variability translates directly into safety stock requirements. Given the numerous activities involved in order cycle execution, there are many potential sources of inconsistency in performance (review Figure 2.8).4

The issue of consistency is fundamental to effective logistics operations, as it is becoming increasingly common for customers to actually specify a desired date and even specify a delivery appointment when placing orders. Such a precise specification may be made, taking into consideration a supplier’s past performance, but that is not always the case. In fact, customers frequently place orders far in advance of their need for product replenishment. In such situations, it is very difficult for customers to understand why a supplier fails to deliver as specified. Their viewpoint of supplier consistency in operational performance is whether the supplier delivered at the specified date and time. In such situations the

---

4 See Figure 2.8, p. 051
definition of consistency must be modified. It is no longer sufficient to evaluate in terms of planned time, such as 4 days to complete the cycle. It is essential to determine whether the performance cycle was completed according to the customer’s specification. Thus, in today’s logistical environment, consistency is frequently viewed as a firm’s performance in terms of on-time delivery.

Flexibility

Flexibility involves a firm’s ability to respond to special situations and unusual or unexpected customer requests. For example, the standard pattern for servicing a customer may be to ship full-trailer quantities to a customer’s warehouse. However, from time to time, the customer may desire to have shipments of smaller quantities made direct to individual retail locations. A firm’s logistical competency is directly related to how well it is able to accommodate such unexpected circumstances. Typical events requiring flexible operations are: (1) modification to basic service agreements such as a change in ship-to location; (2) support of unique sales promotion programs; (3) new product introduction; (4) product recall; (5) disruption in supply; (6) one-time customization of basic service for specific customers or segments; and (7) product modification or customization performed while in the logistics system, such as price marking, mixing, or packaging. In many ways the essence of logistical excellence rests in the ability to be flexible.

Malfunction Recovery

Regardless of how fine-tuned a firm’s logistical operations, malfunctions will occur. The continuous performance of service commitments on a day-in, day-out basis is a difficult task. Ideally, adjustments can be implemented to prevent or accommodate special situations, thereby preventing malfunctions. For example, if a stockout of an essential item occurs at a warehouse that normally services a customer, the item may be obtained from an alternative facility by utilizing some form of expedited transportation. In such situations the malfunction may actually be transparent to the customer. While such transparent recoveries are not always possible, effective customer service programs anticipate that malfunctions and service breakdowns will occur and have in place contingency plans to accomplish recovery and measure compliance.

Service Reliability

Service reliability involves the combined attributes of logistics and concerns a firm’s ability to perform all order-related activities, as well as provide customers with critical information regarding logistical operations and status. Beyond availability and operational performance, attributes of reliability may mean that shipments arrive damage-free; invoices are correct and error-free; shipments are made to the correct locations; and the exact amount of product ordered is included in the shipment. While these and numerous other aspects of overall reliability are difficult to enumerate, the point is that customers demand that a wide variety of business details be handled routinely by suppliers. Additionally, service reliability involves a capability and a willingness to provide accurate information to customers regarding operations and order status. Research indicates that the ability of a firm to provide accurate information is one of the most significant attributes of a good service program. Increasingly, customers indicate that advanced notification of problems such as

---

Donald J. Bowersox, David J. Closs, and Theodore P. Stank, 21st Century Logistics: Making Supply Chain Integration a Reality (Oak Brook, IL: Council of Logistics Management, 1999).
incomplete orders is more critical than the complete order itself. Customers hate surprises! More often than not, customers can adjust to an incomplete or late delivery if they have advanced notification.

### The Perfect Order

The ultimate in logistics service is to do everything right and to do it right the first time. It is not sufficient to deliver a complete order but to deliver it late. Nor is it sufficient to deliver a complete order on time but to have an incorrect invoice or to incur product damage during handling and transportation. In the past, most logistics managers evaluated customer service performance in terms of several independent measures: fill rates were evaluated against a standard for fill; on-time delivery was evaluated in terms of a percentage of deliveries made on time relative to a standard; damage rates were evaluated relative to a standard for damage; etc. When each of these separate measures was acceptable relative to standard, overall service performance was considered acceptable.

Recently, however, logistics and supply chain executives have begun to focus attention on zero-defect or six-sigma performance. As an extension of Total Quality Management (TQM) efforts within organizations, logistics processes have been subjected to the same scrutiny as manufacturing and other processes in the firm. It was realized that if standards are established independently for customer service components, even if performance met standard on each independent measure, a substantial number of customers may have order-related failures. For example, if orders shipped complete, average on-time delivery, average damage-free delivery, and average correct documentation are each 97 percent, the probability that any order will be delivered with no defects is approximately 88.5 percent. This is so because the potential occurrence of any one failure combined with any other failure is $0.97 \times 0.97 \times 0.97 \times 0.97$. The converse of this, of course, is that some type of problem will exist on as much as 11.5 percent of all orders.

The notion of the perfect order is that an order should be delivered complete, delivered on time, at the right location, in perfect condition, with complete and accurate documentation. Table 3.1 lists some of the most typical failures that arise in the attempt to provide perfect order performance. Each of these individual elements must comply with customer specifications. Thus, complete delivery means all product the customer originally requested, on time means at the customer’s specified date and time, etc. In other words, total order cycle performance must be executed with zero defects, availability and operational performance must be perfectly executed, and all support activities must be completed exactly as promised to the customer. While it may not be possible to offer zero defects as a basic service strategy across the board to all customers, such high-level performance may be an option on a selective basis.

It is clear that the resources required to implement a perfect order platform are substantial. Extremely high fill rates require high inventory levels to meet all potential order

---

**TABLE 3.1**

| Typical Perfect Order Failures |
|-------------------------------|

- Wrong quantities (over or short)
- Wrong items
- Late or early delivery
- Missing or incorrect information (e.g., price or promotion codes)
- Wrong transportation mode
- Wrong destination
- Incorrect documentation (e.g., bill of lading, invoice)
- Damaged items
- Incorrect loading/sequencing of shipment
- Incorrect payment processing
requirements and variations. However, such complete service cannot be achieved totally on the basis of inventory. One way of elevating logistics performance to at least near zero defects is to utilize a combination of customer alliances, information technology, postponement strategies, inventory stocking strategies, premium transportation, and selectivity programs to match logistical resources to core customer requirements. Each of these topics is the subject of detailed discussion in subsequent chapters. At this time firms achieving superior logistical customer service are well aware of the challenge related to achieving zero defects. By having a low tolerance for errors, coupled with a commitment to resolve whatever problems occur, such firms can achieve strategic advantage over their competitors.

Basic Service Platforms

To implement a basic service platform, it is necessary to specify a commitment level to all customers in terms of availability, operational performance, and reliability. The fundamental question, “How much basic service should the system provide?” is not easy to answer. The fact is that many firms establish their basic service platforms on the basis of two factors. The first factor is competitor or industry-acceptable practice. In most industries, levels of minimum and average service performance have emerged. These acceptable levels are generally well known by both the suppliers and the customers throughout the industry. It is not uncommon to hear logistics and supply chain executives speak of customer service commitments in terms of doing as well as or beating major competitors’ performance. The second factor derives from the firm’s overall marketing strategy. If a firm desires to differentiate from competitors on the basis of logistics competency, then high levels of basic service are required. If the firm differentiates on price, then it likely will commit to lower levels of logistical service because of the resources required and costs related to high-level commitment.

The fact is that even firms with a high level of basic customer service commitment generally do not take a total zero-defect approach across the board for all customers. The common service commitment is to establish internal performance standards for each service component. These standards typically reflect prevailing industry practice in combination with careful consideration of cost and resource commitments. Typical service standards such as 97 percent fill rate or delivery within 3 days may be established, and then performance would be monitored relative to these internal standards. While it is generally assumed that this strategic approach results in servicing customers as well as or better than competitors, it does not assure that customers are, in fact, satisfied with either the overall industry performance or even the performance of an organization that performs above industry standard. In fact, there is only one way to be sure customers are satisfied: ask them.

Customer Satisfaction

Customer satisfaction has long been a fundamental concept in marketing and business strategy. In building a customer satisfaction program, however, the first question that must be answered is, “What does it mean to say that a customer is satisfied?” The simplest and most widely accepted method of defining customer satisfaction is based on customer expectations. Simply stated, if a customer’s expectations of a supplier’s performance are met or

6 For an excellent discussion of cost and service, see Mariah M. Jeffery, Renee J. Butler, and Linda C. Malone, "Determining a Cost-Effective Customer Service Level," Supply Chain Management (March 2008), p. 225.
exceeded, the customer will be satisfied. Conversely, if perceived performance is less than what the customer expected, then the customer is dissatisfied. A number of companies have adopted this framework for customer satisfaction and follow a commitment to meet or exceed customers’ expectations. In fact, many organizations have gone further by speaking in terms of delighting their customers through performance that exceeds expectations.

While this framework for customer satisfaction is relatively straightforward, the implications for building a customer service platform in logistics are not. To build this platform it is necessary to explore more fully the nature of customer expectations. What do customers expect? How do customers form these expectations? What is the relationship between customer satisfaction and customer perceptions of overall logistics service quality? Why do many companies fail to satisfy customers, and why are so many companies perceived as providing poor logistics quality? If a company satisfies its customers, is that sufficient? The following sections provide some insights to these critical questions.

Customer Expectations

It is clear that when customers conduct business with a supplier they have numerous expectations, many of which revolve around the supplier’s basic logistical service platform; that is, they have expectations regarding availability, operational performance, and service reliability. Frequently, companies have formal programs to monitor supplier performance with respect to each of these dimensions of logistical performance. In a pioneering study, Parasuraman, Zeithaml, and Berry identified 10 customer expectations that form a useful framework for evaluating logistical impact. Table 3.2 uses their framework to conceptualize specific logistics-based expectations.

In a logistical and supply chain context, the notion of customer expectations is particularly complex because customers are frequently business organizations made up of numerous functions and individuals. Different personnel in a customer organization may prioritize the criteria of performance differently, or they may have different levels of expectation for the criteria. For example, some personnel may be most concerned with responsiveness and rapid handling of an inquiry regarding order status, while others may be more concerned with order completeness or meeting a delivery appointment. Meeting customer expectations requires an understanding of how these expectations are formed and the reasons many companies fail to meet those expectations.

A Model of Customer Satisfaction

Figure 3.1 provides a framework for understanding the process by which customers actually form their expectations of supplier performance. It also suggests that frequently a number of gaps exist that a supplier must overcome in order to develop customer satisfaction.

There are several factors that influence customer expectations, both in terms of a prioritization of the criteria discussed above, as well as the level of expectation relative to each of the criteria. The first of these factors is very simply the customers’ needs or requirements. At the heart of their own business strategies, customers have requirements that depend on the performance of their suppliers. To a major extent, customers expect that these needs can and will be met by suppliers. Interestingly, however, customers’ expectations are frequently not the same as their real requirements or needs. Previous supplier performance is a major factor influencing customer expectations. A supplier who consistently delivers on time will most likely be expected to deliver on time in the future. Similarly, a supplier with

---

7 A. Parasuraman, Valerie Zeithaml, and Leonard L. Berry, “A Conceptual Model of Service Quality and Its Implications for Future Research,” Report No. 84-106 (Cambridge, MA: Marketing Science Institute, 1984).
Reliability: Reliability is one of the aspects of the firm’s basic service platform. In this context, however, reliability refers to performance of all activities as promised by the supplier. If the supplier promises next-day delivery and delivery takes 2 days, it is perceived as unreliable. If the supplier accepts an order for 100 cases of a product, it implicitly promises that 100 cases will be delivered. The customer expects and is only satisfied with the supplier if all 100 are received. Customers judge reliability in terms of all aspects of the basic service platform. Thus, customers have expectations concerning damage, documentation accuracy, etc.

Responsiveness: Responsiveness refers to customers’ expectations of the willingness and ability of the supplier personnel to provide prompt service. This extends beyond mere delivery to include issues related to quick handling of inquiries and resolution of problems. Responsiveness is clearly a time-oriented concept and customers have expectations regarding suppliers’ timely handling of all interactions.

Access: Access involves customer expectations of the ease of contact and approachability of the supplier. For example, is it easy to place orders, to obtain information regarding inventory or order status?

Communication: Communication means proactively keeping customers informed. Rather than waiting for customer inquiries concerning order status, customers have expectations regarding suppliers’ notification of status, particularly if problems with delivery or availability arise. Customers do not like to be surprised, and advance notice is essential.

Credibility: Credibility refers to customer expectations that communications from the supplier are in fact believable and honest. While it is doubtful that many suppliers intentionally mislead customers, credibility also includes the notion of completeness in required communications.

Security: Security deals with customers’ feelings of risk or of doubt in doing business with a supplier. Customers make plans based on their anticipation of supplier performance. For example, they take risks when they schedule production and undertake machine and line setups in anticipation of delivery. If orders are late or incomplete, their plans must be changed. Another aspect of security deals with customer expectations that their dealings with a supplier will be confidential. This is particularly important in supply chain arrangements when a customer has a unique operating agreement with a supplier who also services competitors.

Courtesy: Courtesy involves politeness, friendliness, and respect of contact personnel. This can be a particularly vexing problem considering that customers may have contact with numerous individuals in the organization ranging from sales representatives to customer service personnel to truck drivers. Failure by one individual may destroy the best efforts of all the others.

Competency: Competence is judged by customers in every interaction with a supplier and, like courtesy, can be problematic because it is perceived in every interaction. In other words, customers judge the competence of truck drivers when deliveries are made, warehouse personnel when orders are checked, customer service personnel when phone calls are made, and so forth. Failure by any individual to demonstrate competence affects customer perceptions of the entire organization.

Tangibles: Customers have expectations regarding the physical appearance of facilities, equipment, and personnel. Consider, for example, a delivery truck that is old, damaged, or in poor condition. Such tangible features are additional cues used by customers as indicators of a firm’s overall performance.

Knowing the Customer: While suppliers may think in terms of groups of customers and market segments, customers perceive themselves as unique. They have expectations regarding suppliers’ understanding their uniqueness and supplier willingness to adapt to their specific requirements.

TABLE 3.2 Customer Expectations Related to Logistical Performance

| Requirement          | Description                                                                                     |
|----------------------|-------------------------------------------------------------------------------------------------|
| Security             | Deals with customers’ feelings of risk or doubt in doing business with a supplier.             |
| Responsibility       | Refers to customers’ expectations of the willingness and ability of the supplier personnel to provide prompt service. |
| Access               | Involves customer expectations of the ease of contact and approachability of the supplier.      |
| Communication        | Means proactively keeping customers informed.                                                   |
| Credibility          | Refers to customer expectations that communications from the supplier are in fact believable and honest. |
| Security             | Deals with customers’ feelings of risk or doubt in doing business with a supplier.             |
| Responsibility       | Refers to customers’ expectations of the willingness and ability of the supplier personnel to provide prompt service. |
| Access               | Involves customer expectations of the ease of contact and approachability of the supplier.      |
| Communication        | Means proactively keeping customers informed.                                                   |
| Credibility          | Refers to customer expectations that communications from the supplier are in fact believable and honest. |

a poor record concerning performance will be expected to perform poorly in the future. It is important to note that previous performance experienced with one supplier may also influence the customers’ expectation regarding other suppliers. For example, when FedEx demonstrated the ability to deliver small packages on a next-day basis, many customers began to expect a similar performance capability from other delivery companies.

Related to a customer’s perception of past performance is word-of-mouth. In other words, customers frequently communicate with one another concerning their experiences with specific suppliers. At trade and professional association meetings, the subject of suppliers is a common topic of discussion among executives. Much of the discussion may revolve around supplier performance capabilities. Such discussions help form individual customer expectations. Perhaps the most important factor influencing customer expectations is the communications coming from the supplier itself. Promises and commitments made by sales personnel or customer service representatives, statements contained in marketing and promotional messages, even the printed policies and procedures of an organization represent communications that customers depend upon. These communications become a critical basis on which they form their expectations. The promise of meeting a delivery appointment or having full product availability becomes an expectation in the customer’s mind. Indeed many suppliers may be guilty of setting themselves up for failure by
overcommitting in an attempt to influence customer expectations. Figure 3.1 also provides a framework for understanding what must be done by an organization to deliver customer satisfaction. The failure of many firms to satisfy their customers can be traced to the existence of one or more of the gaps identified in the framework.

**Gap 1: Knowledge**

The first and the most fundamental gap that may exist is between customers’ real expectations and managers’ perceptions of those expectations. This gap reflects management’s lack of knowledge or understanding of customers. While there may be many reasons for this lack of understanding, it is clear that no beneficial customer satisfaction platform can be established without a thorough understanding of customer expectations, how they are prioritized, and how they are formed. Since sales typically has the major responsibility for customer interactions, knowledge regarding logistics expectations is often difficult to obtain.
Gap 2: Standards

Even if full understanding of customer expectations exists, it is still necessary to establish standards of performance for the organization. The standards gap exists when internal performance standards do not adequately or accurately reflect customer expectations. This is precisely the case in many organizations that develop their basic service platform from an examination of internal operating capabilities or a superficial examination of competitive service performance.

Gap 3: Performance

The performance gap is the difference between standard and actual performance. If the standard is a fill rate of 98 percent, based on research with customers regarding their expectations, and the firm actually performs at 97 percent, a performance gap exists. It should be pointed out that many firms focus their efforts to improve satisfaction by eliminating the performance gap. It may be, however, that the dissatisfaction exists as a result of a poor understanding of customer expectations in the first place.

Gap 4: Communications

The role of communications in customer satisfaction cannot be overemphasized. As discussed previously, overcommitment, or promising higher levels of performance than can actually be provided, is a major cause of customer dissatisfaction. There should be no gap between what a firm is capable of doing and what customers are told about those capabilities.

Gap 5: Perception

It is true that customers sometimes perceive performance to be lower or higher than actually achieved. In logistics, many managers frequently lament, “We’re only as good as the last order.” Thus, although performance over a long time period has been very good, a late or incomplete or otherwise subpar delivery may result in a customer’s expression of extreme dissatisfaction.

Gap 6: Satisfaction/Quality

The existence of any one or more of the above gaps leads to customer perception that performance is not as good as expected. In other words, these gaps result in customer dissatisfaction. When building a platform for delivering customer satisfaction, a firm must ensure that these gaps do not exist.

Increasing Customer Expectations

As an important component of TQM the notion of continuous improvement has been accepted by most organizations. As a corollary of continuous improvement, there has been a continued escalation of customers’ expectations concerning supplier capabilities. Performance that meets customer expectations one year may result in extreme dissatisfaction next year, as customers increase their expectations regarding acceptable performance levels.

To some extent, the increase in expectations can be traced to the dynamics of competition. As discussed previously, most industries traditionally have had explicit or implied levels of performance, which were considered to be adequate. If a firm wanted to be a serious competitor, it generally had to achieve these minimum industry service expectations.
However, when one firm in the industry focuses on logistics as a core competency and provides higher performance levels, customers come to expect other suppliers to follow. Consider, for example, that after FedEx introduced real-time tracking of shipment status, UPS and other parcel delivery firms shortly followed suit.

Does achieving perfect order performance ensure that customers are satisfied? On the surface it would seem so. After all, if all orders are delivered with no defects, what basis exists for customers to be dissatisfied? Part of the answer to this question lies in the fact that perfect orders, as important as they are, deal with the execution of individual transactions and deliveries. Customer satisfaction is a much broader concept, dealing with many other aspects of the overall relationship between suppliers and customers. For example, a customer may continuously receive perfect orders but be dissatisfied with such aspects of the relationship as difficulty in obtaining information, long delays in response to inquiries, or even the perception that some supplier personnel do not treat the customer with proper courtesy and respect. Thus, satisfaction transcends operational performance to include aspects of personal and interpersonal relationships.

**Limitations of Customer Satisfaction**

Because of its explicit focus on customers, a commitment to satisfaction represents a step beyond a basic service platform in an organization’s efforts to develop customer relationships. It is realistic to think that a firm satisfying customer expectations better than competitors will gain some competitive advantage in the marketplace. Nevertheless, it is important to realize some of the shortcomings and limitations of the customer satisfaction emphasis.

The first limitation is that many executives make a fundamental, yet understandable, mistake in their interpretation of satisfaction. In many organizations it is assumed that customers who are satisfied are also happy, maybe even delighted, with the supplier’s performance. That may or may not be the actual situation. It must be remembered that satisfaction is the customers’ perception of actual performance in relation to expectation, not their requirements. Examination of Figure 3.2 may help explain this difference between satisfaction and happiness. The fact is that customers may have an expectation that a firm will not perform at a high level. If the customer has an expectation of a low level of performance and indeed perceives that the firm performs at this low level, it is clear that performance and expectation match. By definition, the customer is satisfied. The same is true at midlevel expectations and perceptions as well as high levels of each.

This notion that low levels of performance may be considered satisfactory can best be illustrated by example. Suppose a customer expects a supplier to provide, over time, a fill rate of 95 percent, or late deliveries 10 percent of the time, or damage of 2 percent. If the supplier in fact provides this level of performance, as perceived by the customer, the customer is satisfied. Performance perceived to be poorer than the expectation level results in dissatisfaction. Is the satisfied customer necessarily happy about the supplier’s fill rate or late deliveries? Of course not. While expectations may be met, in fact met as well as or better than competition, there is still no assurance that the customer will be happy. Even performance higher than that expected, while satisfying to customers, may not actually

![Figure 3.2](image-url)
result in happiness. The focus on customer expectations ignores the fact that expectations are not the same as needs or requirements. The second limitation to consider is actually related to the first: Satisfied customers are not necessarily loyal customers. Even though their expectations are being met, satisfied customers may choose to do business with competitors. This can occur because they expect a competitor to perform at a higher level or at least as well as the organization in question. For many years, marketing and supply chain executives have assumed that satisfied customers are also loyal customers. Yet research has frequently shown that many customers who report being satisfied that their expectations have been met are likely to patronize and do business with competitors. Since customer satisfaction exists when customers get what they expect, customers frequently settle for performance that is less than what they really want or need. This result has been identified as customer sacrifice.8

A third limitation to customer satisfaction is that firms frequently forget satisfaction lies in the expectations and perceptions of individual customers. Thus, there is a tendency to aggregate expectations across customers and neglect the basic tenets of marketing strategy related to differences among customer segments as well as individual customers. Simply stated, what satisfies one customer may not satisfy other, much less all, customers. Despite these limitations, customer satisfaction does represent a commitment beyond basic service to accommodate customers. It provides explicit recognition that the only way to ensure that customers are being accommodated is to focus on customers themselves. Firms that focus primarily on industry and competitor standards of basic service performance are much less likely to find that their customers are very satisfied or highly satisfied with their performance.

Customer Success

In recent years, some firms have discovered that there is another commitment that can be made to gain true competitive advantage through logistical performance. This commitment is based on recognition that a firm’s ability to grow and expand market share depends on its ability to attract and hold the industry’s most successful customers. The real key, then, to customer-focused marketing lies in a company using its performance capabilities to enhance the success of those customers. This focus on customer success represents major commitment toward accommodating customers. Table 3.3 summarizes the evolution that customer-focused organizations have experienced. Notice that a customer service focus is oriented toward establishment of internal standards for basic service performance. Firms typically assess their customer service performance relative to how well these internal standards are accomplished. The customer satisfaction platform is built on the recognition that customers have expectations regarding performance and the only way to ensure that customers are satisfied is to assess their perceptions of performance relative to those expectations.

8 Joseph B. Pine II and James N. Gilmore, “Satisfaction, Sacrifice, Surprise,” Strategy and Leadership, 28, no. 1 (2000), pp. 18–23.

| Philosophy          | Focus                     |
|---------------------|---------------------------|
| Customer service    | Meet internal standards   |
| Customer satisfaction| Meet expectations         |
| Customer success    | Meet customer requirements|

8 H. 2000, 11:15
Customer success shifts the focus from expectations to the customer’s real requirements. Recall from the previous discussion that customer requirements, while forming the basis for expectations, are not the same as expectations. Requirements are frequently downgraded into expectations because of perceptions of previous performance, word-of-mouth, or communications from the firm itself. This explains why simply meeting expectations may not result in happy customers. For example, a customer may be satisfied with a 98 percent fill rate, but for the customer to be successful in executing its own strategy, a 100 percent fill rate on certain products or components may be necessary.

Achieving Customer Success

Clearly, a customer success program involves a thorough understanding of individual customer requirements and a commitment to focus on long-term business relationships having high potential for growth and profitability. Such commitment most likely cannot be made to all potential customers. It requires that firms work intensively with customers to understand requirements, internal processes, competitive environment, and whatever else it takes for the customer to be successful in its own competitive arena. Further, it requires that an organization develop an understanding of how it can utilize its own capabilities to enhance customer performance. As an example, Raytheon has adopted and trademarked the slogan “customer success is our mission.”

In many ways a customer success program requires a comprehensive supply chain perspective on the part of logistics executives. This is most easily explained by examining the relations depicted in Figure 3.3. The typical focus in basic service and satisfaction programs is that the firm attempts to meet standards and expectations of next-destination customers, whether they are consumers, industrial end users, or intermediate or even internal customers. How these customers deal with their customer is typically not considered to be a problem. A supply chain perspective and a customer success program explicitly recognize that logistics executives must alter this focus. They must understand the entire supply chain, the different levels of customer within that supply chain, and develop programs to ensure that next-destination customers are successful in meeting the requirements of customers down the supply chain. If all supply chain members adopt this perspective, then all members share in the success.

To ensure that a customer is successful may require a firm to reinvent the way a product is produced, distributed, or offered for sale. In fact, collaboration between suppliers and customers to find potential avenues for success may result in the greatest breakthroughs in

![Figure 3.3](image-url)
terms of redefining supply chain processes. The general topic of collaborative relationships and alliances is further developed in Chapter 14. It is enough to say here that such arrangements are not possible without significant amounts of information exchange between the involved businesses to facilitate an in-depth understanding of requirements and capabilities. However, one important way that many firms have responded to the challenges of customer success is through the development of value-added services.

**Value-Added Services**

The notion of value-added service is a significant development in the evolution to customer success. By definition, value-added services refer to unique or specific activities that firms can jointly develop to enhance their efficiency, effectiveness, and relevancy. Value-added services help foster customer success. Because they tend to be customer specific, it is difficult to generalize all possible value-added services.

When a firm becomes committed to value-added solutions for major customers, it rapidly becomes involved in customized or tailored logistics. It is doing unique things to enable specific customers to achieve their objectives. IBM’s ability to produce and deliver customized personal computers and networks to individual customers is one example of adding value to a rather standard product. In a logistical context, firms can provide unique product packages, create customized unit loads, place prices on products, offer unique information services, provide vendor-managed inventory service, make special shipping arrangements, and so forth, to enhance customer success.

In reality, some of the value-added services that buyers and sellers agree to involve integrated service providers that are positioned to provide such services. Transportation carriers, warehouse firms, and other specialists may become intimately involved in the supply chain to make such value-adding activities a reality. At this point, a few specific examples of how they may work within a specific supply chain to provide value-added services are sufficient. Warehouses, whether private or third-party, can be utilized to perform a number of customization activities. For example, a retail customer may desire a unique palletization alternative to support its cross-dock activities and meet the unique product requirements of its individual store units. Each store requires different quantities of specific product to maintain in-stock performance with minimum inventory commitment. In another situation, first-aid kits consisting of many different items are actually assembled in the warehouse as orders are received to meet the unique configuration of kit desired by specific customers. It is also common for warehouses to provide pick-price-repack services for manufacturers to accommodate the unique product configurations required by different retailers.

Another form of value-added service involves the proper sorting and sequencing of products to meet specific customer requirements. For example, an auto assembly plant may require that components not only be received on time but also be sorted and sequenced in a particular manner to meet the needs of specific automobiles on the assembly line. The objective is to reduce assembly plant handling and inspection of incoming components. Meeting such exacting requirements for delivery is far beyond the basic service capability of many component suppliers. The use of third-party specialists is a necessity, especially when subcomponents from multiple suppliers must be integrated and then properly sequenced.

Value-added services can be performed directly by participants in a business relationship or may involve specialists. It has become more common in recent years to turn to specialists because of their flexibility and ability to concentrate on providing the required services. Nevertheless, regardless of how the specifics are organized and implemented, it is clear that logistics value-added services are a critical aspect of customer success programs.
Developing Customer Relationship Strategy

It follows from the earlier discussion of the marketing concept and relationship marketing that different customers are likely to require different approaches and strategies for customer accommodation. Basic customer service may be appropriate for some customers, customer satisfaction for others, while a success focus may be in order for others. In fact, a basic principle of supply chain logistics is that customers should be segmented based on their service needs, and the supply chain must be adapted to serve those segments. 9

For example, Unilever has a presence in 150 countries around the world with some 179,000 employees, and offers a product portfolio that spans grocery store shelves with well-known trademarked brand names in categories such as spreads (I Can’t Believe It’s Not Butter), sauces (Ragu), dressings (Hellmann’s and Wish-Bone), beverages (Lipton teas), ice cream (Good Humor and Breyers), frozen food (Bertolli dinners), and personal care products (Dove, Suave, and Axe). As one part of the company’s Supply Chain 2010 initiative, Unilever fielded a customer survey to develop a complete understanding of future requirements and anticipated trends. Topics touched upon included ordering and inventory management practices and techniques to reduce retail out-of-stock situations, outsourcing, distribution models and service differentiation, order profiles and frequency trends, collaborative planning through point of sale (POS) data and other means, and product customization needs. Among other findings, these data-gathering efforts made it clear that retailers had increased expectations around the performance of the 2010 inbound supply chain. The vast majority of retailers favored 24- to 48-hour order lead times, with more than half expressing a need for daily order delivery. Nearly two-thirds of respondents expected significant order or product customization. The data was examined by channel and customer to avoid potential fallacies of relying on aggregated data. A major conclusion was that Unilever U.S. should strongly focus on customer-specific strategic supply chain initiatives. 10 To accomplish this, companies such as Unilever need both a framework for choosing the appropriate customer-specific strategies as well as programs for customer relationship management. Each of these is discussed below.

Framework for Strategic Choice

It is clear that customer success approaches are extremely time consuming and resource intensive. No company is likely to be able to implement such approaches with every potential customer. In fact, it is likely that many customers themselves may not desire such relationships with all (or any) suppliers. From a strategic point of view, then, a company must determine which type of relationship approach is appropriate for which customers.

There is no easy answer to that question, but one approach relies on the well established Pareto principle (also known as the 80/20 principle). This states simply that a large percentage (perhaps 80 percent) of a company’s revenue and profit typically is derived from a small percentage of its customers (as few as 20 percent). There is no absolute concerning these percentages, but the concept is very clear. This principle can also be applied to the products a company sells; a few products account for a large percentage of sales revenue and profits. The combination of these facts leads to the diagram presented in Table 3.4. 11

---

9 David L. Anderson, Frank F. Britt, and Donovan J. Favre, “The Best of Supply Chain Management Review: The Seven Principles of Supply Chain Success,” Supply Chain Management Review (April 2007), p. 57.

10 Adapted from Sean Monahan and Robert Nardone, “How Unilever Aligned Its Supply Chain and Business Strategies,” Supply Chain Management Review (November 2007), p. 44.

11 This discussion is adapted from and based on Robert Sabbath and Judith M. Whipple, “Integrating Marketing and Supply Chain Management to Improve Profitability,” CSCMP Explores 4 (Summer 2007), pp. 1–15.
In the diagram customers are classified as A, B, C, or D on the basis of profitability and products as 1, 2, 3, or 4 on the same basis. For example, A customers are those who are extremely profitable; B customers, very profitable; C customers, somewhat profitable; and D customers, unprofitable. Similarly, products 1 through 4 exhibit similar profitability characteristics. Methodologies for determining specific customer and product profitability are discussed in Chapter 15.

It is likely that only a small number of customer/product combinations are extremely profitable. Those situations are naturally the most likely candidates for a customer success relationship, as depicted in the upper left-hand corner of Table 3.4. It is also likely that even A customers may not desire or require the same intensity of development for all products. Thus, satisfaction or even basic service may be acceptable in those situations.

Those customer/product combinations that fall in the lower right-hand corner should be carefully reviewed as to whether or not it is reasonable to maintain them. In many instances there may be good reason to continue. For example, they may be new customers or may be small but rapidly growing companies. Likewise there may be characteristics of the products that must be reviewed. However, in some instances it may simply be a wiser decision to stop doing business with a particular customer and/or eliminate a specific product from the overall assortment.

The above discussion is meant to be suggestive of strategic choice and not necessarily the only approach. For example, it may be necessary to maintain customer success through the entire product range for an A customer. Or it may be desirable to establish a customer success focus with a customer who is currently of limited profitability in order to convert that customer to extremely high profitability. The most important point to remember is that customer success typically must be reserved for a limited number of situations due to the resource constraints. Other situations may require a satisfaction approach. It is clear, however, that if a company chooses to do business with a customer, adequate basic service is a minimum requirement.

### TABLE 3.4

| Customer Category | Product Category |
|------------------|-----------------|
| A                | Success         |
| B                | Success/satisfaction |
| C                | Basic service   |
| D                | Basic service/cull |

Source: Adapted from Robert Sabbath and Judith M. Whipple, “Integrating Marketing and Supply Chain Management to Improve Profitability,” CSCMP Explores 4 (Summer 2007), p. 8.

Customer Relationship Management Technology

The term customer relationship management (CRM) has been used by many firms to describe their efforts to accommodate better the needs and requirements of individual customers. However, the term CRM is also used to describe technology and software that is used to manage and analyze data from numerous sources within an organization to gain greater insight into customer buying behavior (sales calls, call centers, actual purchases, etc.). In fact, numerous software vendors offer packages they describe as CRM software to accomplish this purpose. CRM technology is designed to extend the functionality of the ERP sales and delivery applications. CRM provides sales representatives and customers with current information regarding sales history, shipment history, order status,
promotional summaries, and shipment information. The history and current status information, combined with product development, pricing, and promotion information, allow firms to better create and manage customer orders. Such timely and accurate information exchange between a firm and its customers increases the likelihood that the product sales and promotion plans will be supported with the required product. Figure 3.4 illustrates the flow and elements of a typical CRM system.

While traditional ERP applications focus on efficiently taking customer orders, firms are finding it necessary to transition from treating customers as income sources to be exploited to treating customers as assets to be nurtured. While the traditional sales and delivery technology is configured to accept customer orders in a wide range of formats and allow those orders to be managed throughout the fulfillment process, a broader range of capabilities is necessary to manage the overall customer relationship. An integrated CRM system includes a combination of a server-based common database, remote PCs carried by sales representatives, and a global synchronization process to ensure that both corporate and sales representative data are timely and consistent. Beyond this base functionality, CRM today requires sales tracking, sales history analysis, pricing management, promotion management, product mix management, and category management. In some cases, customers expect their supplier’s sales force to manage the entire category of products at the customer’s facility.
For example, it is becoming more common for grocers to expect their suppliers to manage both the product mix and shelf quantities for major product categories such as beverages and specialty products. This practice, termed **category management**, requires substantial information support from the manufacturer but also facilitates information sharing.

Amazon has been one of the leaders in CRM technology in an Internet retail environment. Due to its online interface and massive data storage and computational capabilities, Amazon is able to develop customer profiles that give a clear picture of each individual customer’s interests and purchasing habits. For example, Amazon customers frequently receive e-mail messages from Amazon informing them of new books written by authors of books that they previously purchased. In addition, every time repeat customers log onto Amazon.com, they get tips on other books they might like, based on their previous purchases. Also, when a customer selects a particular title from Amazon’s website, the customer is informed of book titles that other customers have ordered in conjunction with the title that has been selected. All of these actions certainly benefit Amazon by increasing revenue. However, most customers also appreciate this ability on the part of Amazon as it adds significantly to their reading enjoyment.

The objective of customer relationship management is to develop a customer-centered organization. While CRM certainly involves the science of gathering and analyzing data about individual customer needs and purchasing habits, it extends to the process of developing capabilities that enable the organization to meet those individual needs more completely. CRM has grown rapidly over recent years as a process for improving the overall performance of a business by better understanding and anticipating the wants and needs of customers.

Companies that have embraced CRM are committed to the notion that customers are the sole driver for the entire business. In addition to technology, other efforts are made to build deeper understanding of customer requirements and develop lasting relationships with critical customers. For example, it is becoming increasingly common for suppliers to have their own personnel maintain an office very near, or even inside, the facilities of key customers. In this way, the supplier gains critical knowledge of the customer’s needs and plans and can anticipate the customer’s actions with a high degree of certainty. As one example, Procter & Gamble has a number of employees who live and work in Bentonville, Arkansas, the headquarters of its largest customer, Walmart.

CRM’s relevance to logistics lies in its need for cross-functional transparency. Logistics has primary responsibility for many of the processes that drive value and customer success. A CRM program provides a business with the platform necessary for the development and management of the appropriate relationships with customers. A much deeper discussion of the actual process for developing and maintaining relationships in logistics is deferred to Chapter 14.

**Summary**

A fundamental requirement for logistics is the need to develop customer relationships whether those customers are end users, intermediate, or even internal. The marketing concept provides the foundation for customer commitments with its fundamental focus on customer needs rather than on products or services, the requirement to view and position products and services in a customer context, identification of market segments that differ in needs, and commitment that volume is secondary to profit.

Contemporary implementation of the marketing concept suggests that it is more important to focus on the development of relationships with customers than to perfect individual
transactions. This interpretation focuses on the needs and requirements of individual customers as the core ingredient of relationship marketing. In a supply chain context, customer requirements related to spatial convenience, lot size, waiting time, and variety and assortment must be supported by logistical performance.

Organizations build their platform for customer relationships on three levels of increasing commitment. The first of these is basic logistics customer service. To be competitive, a firm needs a basic service capability that balances availability, operational performance, and reliability for all customers. The level of commitment to each dimension of service requires careful consideration of competitive performance and cost/benefit analysis. The highest level of commitment is perfect order performance, which requires zero defects logistics operations. Such high-level commitment is generally reserved for a firm’s key customers.

Going beyond basic service to create customer satisfaction represents the second level of commitment. Where basic service focuses on the organization’s internal operational performance, customer satisfaction focuses on customers, their expectations, and their perceptions of supplier performance. Customer expectations extend beyond typical logistical considerations and include factors related to communication, credibility, access, responsiveness, and customer-specific knowledge as well as reliability and responsiveness of operations. A firm can provide logistics service that is equal to or even better than competitors’ but still have dissatisfied customers. Failure to satisfy customers can arise from lack of knowledge about customer expectations, improper standards of performance, performance failure, poor communication, or incorrect customer or firm perception of performance. As customer expectations escalate, logistics executives must continuously monitor customer satisfaction and logistics performance.

The highest level of commitment is known as customer success. Where satisfaction programs seek to meet or exceed expectations, a success platform focuses on customer needs and requirements. Customer expectations are frequently different from needs and requirements. Achieving success requires intimate knowledge of customers’ needs and their operational requirements and a commitment by the service provider to enhance a customer’s ability to compete more successfully in the marketplace. Value-added services represent one way logistics can contribute to customer success.

A customer relationship strategy requires in-depth knowledge of the logistical requirements of different customers. CRM technology is increasingly being used to aid in this process and to provide both the company and its customers with the information necessary for effective long-term relationships.

Study Questions

1. Explain the differences between transactional and relationship marketing. How do these differences lead to increasing emphasis on logistical performance in supply chain management?

2. Why are the four primary service outputs of spatial convenience, lot size, waiting time, and product variety important to logistics management? Provide examples of competing firms that differ in the level of each service output provided to customers.

3. Using the 10 categories of customer expectations in Table 3.2, develop your own examples of how customers might evaluate performance of a supplier.

4. Compare and contrast the customer service, customer satisfaction, and customer success philosophies of supply chain management.
5. What is meant by value-added services? Why are these services considered essential in a customer success program?

6. Explain the customer satisfaction “gaps” shown in Figure 3.1.

Challenge Questions

1. How could Unilever use the framework for strategic choice (Table 3.4) in implementing its Supply Chain 2010 Initiative?

2. What, in your opinion, would be the major logistics challenges faced by Unilever in this initiative?

3. The framework for strategic choice suggests that consumer profitability and product profitability are the two most important criteria. If you were in the position of revamping a firm’s customer relationship strategy, such as Unilever’s Supply Chain 2010 Initiative, what other criteria might you consider?

4. Read the entire article describing Unilever’s strategy (see footnote 10). Then access information about Unilever’s recent financial performance (you can access annual reports online). How, in your opinion, does the recent financial performance relate to this strategy? What other factors may be impacting performance?