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A Framework for Improving Customer Service through Information Technology: The Customer-service Life Cycle

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The Customer-service Life Cycle

A Framework for Improving Customer Service through Information Technology

By thinking of customers' use of a product or service as a cycle, hospitality organizations can use the internet and IT to offer better service and create a stronger relationship each step of the way.

BY GABRIELE PICCOLI, BONNIE R. SPALDING, AND BLAKE IVES

The internet provides hospitality operators with an unprecedented ability to communicate directly with customers. With the relatively widespread adoption of the internet, businesses of all sizes have the opportunity to build competitive advantage. But regardless of any technological opportunities, competitive advantage still rests on a business's ability to provide outstanding customer service. The real opportunities for sustainable advantage lie with those who recognize the importance of using information technology (IT) to improve service in all phases of the customer's involvement with the firm's product or service.

Vandermerwe noted the importance of considering the customer's relationship with a business in its entirety, when she wrote:

> Those companies that are and will be most successful have started to look at the customer's entire experience, from the pre- to the post-purchase stage, and have been working to satisfy and retain existing customers through providing them with the products and services they desire.[1]

In this article we present a framework to help you think creatively about the use of IT—particularly the internet and the worldwide web—as tools for the creation of competitive advantage. By structuring your thinking about your firm's relationship with its customers, we seek to help you identify your strengths and highlight areas in need of improvement.

Customer-service Life-cycle Model

It has become almost a commonplace that the internet will revolutionize businesses' relationships with their customers. We believe that the extent to which this actually happens will depend on a firm's ability to deliver value through online customer relationships.

The framework we outline in this article, the Customer-service Life Cycle (CSLC), is intended to focus your thinking about your internet strategy and to help you differentiate your offer at any of the stages that your customer experiences in researching, acquiring, owning, and disposing of your product or service.

The CSLC breaks down the firm–customer relationship into 12 stages. For each one the CSLC shows how IT is used or could be used to support customers' needs and create value.

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[1] S. Vandermerwe, "Jumping into the Customer's Activity Cycle: A New Role for Customer Services in the 1990s," *Journal of World Business,* Vol. 28, No. 2 (1993), p. 48.

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For each stage we present relevant examples and leading applications that clarify the CSLC stages and show how established brick-and-mortar firms, as well as start-ups, have taken advantage of the pervasive IT infrastructure to support their customers.

Exhibit 1 depicts the four main phases of a customer's purchase cycle. During the first phase, which we call the requirements phase, the customer realizes the need for a specific product or service and begins to focus on its attributes. Next, during the acquisition phase the customer orders, pays for, and acquires the product or service. The customer then owns the product or uses the service. In this ownership phase, the customer deals with issues involving the product's or service's efficient and effective use. The final phase is retirement, in which the customer disposes of the product or has finished with the service. In this phase, the customer may begin to think of buying again, of trading in or returning the old product, or of evaluating the total cost of ownership.

We break those four major phases into 12 sub-phases, or stages. Those 12 stages, outlined in Exhibit 2 (on the next page), represent typical processes customers experience in the course of obtaining, using, and retiring a product or service. Any one of the 12 steps may be a candidate for enhanced service using IT. The primary objective of the CSLC framework is to help managers spot stages where their organization's customers are frustrated and where the interaction can be improved through the use of the internet or advanced IT applications.

The life-cycle model is not focused specifically on the hospitality industry, but many of its stages are fully applicable. As a planning framework, the CSLC is designed to help managers view their business with a fresh perspective. Thus, while some stages in the CSLC may not appear immediately applicable to a particular hospitality enterprise, we encourage readers to envision how the internet could be used to enhance the customer experience at each stage. We believe that fertile ground for innovation may be discovered. In this article we give a diverse set of examples of how the CSLC might apply to the hospitality industry, including both business-to-consumer and business-to-business applications.

Along those lines, the CSLC's stages need to be tailored to the specific circumstances of your business or firm. Usually you will find that certain stages present particular challenges for your

Phases of the Customer-service Life Cycle (CSLC)
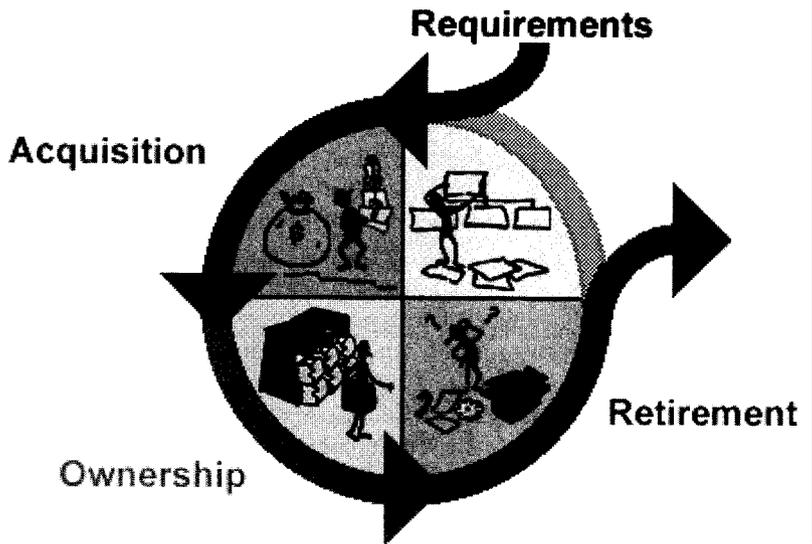
customers. For instance, you may have recently developed an innovative new product for which you are fortunate to have no competitors. That being the case, you may seek innovative ways to work with customers in the requirement stage. Simply put, before you can sell your new product you will have to educate potential customers about its capabilities. For example, Priceline.com had to educate both consumers and hotel operators regarding its procedures and benefits (although it used conventional advertising to do so). On the other hand, for a mature product competing in a fiercely competitive industry the real potential may lie in your ability to differentiate your offer by dealing with unresolved customer problems—such as the need to effectively account for the total cost of ownership or use of your product or service.

Customer-service Life-cycle Stages

In this section we present each of the 12 stages in the CSLC. Wherever possible, we give examples of companies that have used the internet or IT applications to augment customer relationships in that stage of the CSLC. Because time has passed in the preparation of this article, some of our examples are now dated. However, the

Stages of the Customer-service Life Cycle

Phase 1: *Requirements*	
(1) Requirements Stage	Establish (or recognize) a need for the product or service
(2) Specification Stage	Determine the product or service attributes
Phase 2: *Acquisition*	
(3) Source-selection Stage	Determine where to obtain the product or service
(4) Ordering Stage	Order the product or service from a supplier
(5) Authorization and Payment Stage	Transfer funds or arrange credit
(6) Acquisition Stage	Take possession of the product or receive service
(7) Testing and Acceptance Stage	Ensure that the product or service meets specifications
Phase 3: *Ownership*	
(8) Integration Stage	Add to an existing inventory or integrate with existing internal business processes
(9) Usage-monitoring Stage	Control access and use of the product or service
(10) Upgrading Stage	Upgrade the product or service if conditions change
Phase 4: *Retirement*	
(11) Transfer or Disposal Stage	Move, return, or dispose of product or service; cease to need the service
(12) Auditing and Accounting Stage	Monitor expenses related to the product or service

principles behind the CSLC remain solid, even though some firms' early attempts to use the internet have not been successful.

Some of the scenarios and examples are phrased from the customer's standpoint, while others put the hospitality provider in the position of customer. In either case, we encourage you to "walk through" the stages of the CSLC in your customers' shoes and evaluate their interaction with your firm. By so doing you should be able to spot areas where advanced IT can improve your firm's relationship with your customers.

Stage 1: *Requirements*

In the first stage of the CSLC, the customer establishes a need for the product. Activities in this stage may include educating customers about the purpose of the product or service or helping them see how your offering differs from that of your competitors.

Site59.com. Site59 bills itself as "your source for spontaneous escape and entertainment." It does so by cleverly positioning its offering in the requirement stage. Customers indicate to Site59 what mood they are in, and Site59 returns appropriate suggestions for half-day activities as simple as visiting a local museum or as elaborate as a night out for dinner and the theatre (with reservations and tickets arranged on the web site).

Denny's and Fairfield. Denny's Restaurants and Fairfield Inns have each arranged with Mapquest to provide locations of their establishments in conjunction with map requests. A user who visits Mapquest to obtain driving directions, turn-by-turn maps, and directions from one destination to another is prompted to select the Denny's or the Fairfield checkbox. If the user does so, all Denny's or Fairfield locations along the planned route are highlighted.

This arrangement not only promotes Denny's and Fairfield, but it uses the internet to alert the user to the availability of their products. While the user is probably not looking for a restaurant at the time of planning and may not be thinking about a hotel, the need to eat and eventually sleep during the trip is made salient. At the same time, the user receives an easy-to-use map to Denny's and Fairfield locations. In the best-case scenario, a prospective customer would plan rest and dining stops around the Denny's locations along the route and arrange for a room at the Fairfield at a likely stopping place.

Stage 2: *Specification*

Once your customers have established the need for a new product or service, they need to specify the characteristics of that product or service to know which particular one to acquire. In the specification stage customers select the product features that best suit their needs.

If there are many choices or high volatility (in interest-rate fluctuations or seat or room availability, for instance), IT applications can help the customer time a purchase. As the following examples illustrate, innovative uses of technology can provide effective customer-service tools during the specification process.

Travelocity *Dream Map*. This feature from the popular travel-reservation site turns the process of specifying the need for leisure airline tickets on its head. Using technology, Travelocity enables the customer to specify her needs in an innovative manner. Traditionally, once the customer has decided that she is interested in a vacation, she normally has to select a destination and price the ticket. Why not change the specification stage, by letting the customer specify a budget, and immediately showing a map of available destinations? This is exactly what Travelocity's Dream Map does. It enables customers to specify the product features, starting with the ticket price. It then enables customers to choose the other dimension, destination, based on which of the available locations is most appealing.

Travelocity *Team-up to Travel.* Travelocity's Team-up to Travel service allows multiple users to browse the web site simultaneously and make travel plans together in real time. One user is the leader who queries the ticket engine; all others see the results on their own browsers. The group can chat using instant-messaging applications that run seamlessly in the browser.

This service helps distant friends, families, and small-business partners solve a problem that plagues the specification stage—namely, how to coordinate the selection of travel plans to satisfy all travelers (e.g., price, destination, schedules). By using the internet to enable the group to plan a trip together, Travelocity attempts to eliminate misunderstandings, along with the need to make multiple phone calls to set up joint travel plans. By allowing users to easily coordinate the specification and configuration of the product features, Team-up to Travel improves customer service and boosts the likelihood that users will book through Travelocity.

> Managers should "walk through" the stages of the CSLC as if in a customer's shoes, to evaluate the customers' interactions with the firm's services and employees. By so doing the managers should be able to spot areas where information technology can improve the firm's relationship with its customers.

Stage 3: *Source Selection*

Finding a convenient supplier can be a challenge. For example, you could obtain your F&B supplies from a host of traditional distributors. Alternately you could rely on new intermediaries like RestaurantPro.com or RestaurantTrade.com. In either case, the internet provides a new source for finding desired products—one that can significantly reduce the vendor's distribution and inventory costs. New intermediaries have rapidly crowded this space, but there are rich opportunities for established suppliers to "connect" to their customers at this stage.

Hotwire. In a recent example of "copetition," which is a neologism for the growing phenomenon where competitors join forces in some areas while still vying for customers in the marketplace, seven air carriers (American, America West, USAirways, Continental, Northwest Airlines, United Airlines, and Hawaiian Airlines) are partnering in Hotwire. Through its web-based search and booking engine, Hotwire allows price-sensitive, but brand-insensitive consumers to purchase a discounted air ticket, without determining in advance which carrier will offer them a seat. (Hotwire also offers hotel reservations and car rentals.) This service, modeled after Priceline.com, turns source selection on its head, letting users who are relatively insensitive to the service source (e.g., the airline carrier) satisfy more important requirements (e.g., price) first.

Zoho. Zoho, the hospitality marketplace, introduced two services complementary to its procurement engine: Zoho Auction and Zoho Plan.[2] These solutions were designed to allow proper-

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[2] While Zoho has recently encountered difficulties and has been unable to continue as an independent entity, a number of initiatives it had are worth noting and are retained here as examples.

Any technology that reduces customers' waiting in long queues is a way to provide better service. For example, many airlines do so with self-serve kiosks, while some hotels use wireless technology to expedite front-desk services.

ties such as hotels, casinos, and resorts to efficiently move used or surplus hospitality goods and to plan for renovations and new properties. Using the Zoho web interface, properties that participate in the Zoho network could evaluate used goods from properties undergoing renovations. If satisfied with those goods, purchasers could arrange for delivery to their property. Zoho thus sought to increase the array of source options available to its customers.

Stage 4: *Ordering*

After selecting a source for their product or service, customers actually place an order. As with all other stages of the CSLC, the primary IT objective is to make it as easy as possible for your customers to do business with you. IT applications usually make this particularly easy for returning customers, as certain elements of subsequent orders (e.g., shipping information) typically are repeated from the first. Customer-relationship management (CRM) initiatives, underpinned by an extensive integrated-software infrastructure, take this a step further by building a large detailed customer history. In addition, a well-constructed CRM increases switching costs, ranging from such simple purchasing biases as a guest-rewards program to high tangible costs such as having to reconfigure integrated sourcing and purchasing procedures, or losing extensive transaction data history.

Zoho. Zoho, as well as other eProcurement intermediaries, attempted to provide a simple, centralized location for hospitality companies to order their supplies online. The core of their business was in simplifying the ordering stage. Beyond the convenience of providing an online ordering intermediary, Zoho's software saved information from previous orders so that subsequent orders could be completed with little additional time investment.

Wyndham ByRequest. Wyndham Hotels and Resorts uses data-warehousing applications and the internet to allow customers enrolled in its frequent-guest program, Wyndham ByRequest, to specify which type of room they like. They can select, for instance, whether they want upper or lower floors, whether they want to be near or far from the elevator, and even what kind of pillows they would like or what drinks or snacks they prefer to receive as welcome tokens. This customer-service design has a number of potential far-reaching advantages and risks, yet it also helps ensure that Wyndham differentiates itself at the ordering stage of the CSLC. If Wyndham can deliver the room as specified by the customer, the customer is likely to be satisfied, and thus Wyndham becomes the preferred hotel for the customer that has invested the time to create a profile. Customers also have a strong incentive to return to Wyndham's booking engine after creating their elaborate profile since they can thereafter quickly procure rooms personalized to their taste. On the other hand, making customers such an offer can backfire if the firm creates high expectations but then cannot deliver the "personalized" room.

Stage 5: *Authorization and Payment*

Once the product or service has been ordered it must be paid for. That payment may also need to be authorized through the customer's approval process. Convenience in payment is essential, but so too is security. Furthermore, there may be legal requirements to follow (e.g., charging—or waiving—sales or bed taxes).

Swissôtel express booking. Swissôtel express booking takes advantage of customer-registration information to provide a fast and simple way for guests to save their credit-card, Club Swiss Gold Point, corporate ID, and IATA numbers online. By choosing a city and dates from pull-down menus and displaying availability, a guest can instantly book a reservation without reentering those account numbers. The technology behind this system simplifies and expedites the hotel-booking process. The database also allows Swissôtel to improve its customer-relationship management by leveraging the information that it keeps about its guests.

Stage 6: *Acquisition*

In the acquisition stage, the customer takes possession of the product or begins to use the service.

USAirways e-ticket kiosks. USAirways has installed e-ticket check-in kiosks at a number of airports and is quickly expanding the service. The kiosks are capable of selling tickets for flights that depart within four hours, but their main purpose is to streamline the check-in process by allowing the customer to check in at the kiosk. The kiosks assist the customer in obtaining boarding passes, selecting seats, and checking luggage. By reducing long queues at the desk, the kiosks enable airlines to better serve all travelers. As the kiosks are networked to a central server, travelers' preferences and profiles can be easily retrieved, thus making the experience more personal, efficient, and rewarding. Continental, United, and Northwest Airlines are also using e-ticketing kiosks. Northwest has taken this technology a step further by allowing boarding passes to be printed by home-based PCs.

Wireless hotel check-in. PMS vendors are embracing wireless extensions to their systems. Most are making curb-side check-in available. Hotels that use such systems provide some front-desk employees with wireless devices that enable them to check guests in at curbside, on the way to their room, or even on the hotel's shuttle bus. By checking in guests during the ride to the hotel, the acquisition process is streamlined and its most frustrating step, the check-in queue, is eliminated altogether.

British Airways mobile check-in. British Airways has announced a check-in system similar to the USAir kiosks described above, but the application is delivered on mobile phones and other wireless devices. When travelers check in via their web-enabled mobile phones they are able to view an actual seating chart for the plane. Travelers will be able to preview and select their own seating arrangements. By enabling the travelers to check in using their own mobile devices, British Airways should be able to streamline the acquisition process and increase the quality of its customer service. The service increases convenience and reduces anxiety for travelers on the move, while reducing labor needs for British Airways.

Stage 7: *Testing and Acceptance*

After customers have acquired their new product or service they may test it out to verify that it works as expected. When an innovative product or service is introduced, customers may need to be educated about its features and how to maximize the benefits of its use. This is particularly important for products and services that require the customer to undergo a certain degree of process change in using the product or service—think for example of eProcurement engines and the degree of process reconfiguration that they require. (Indeed, this has been a point of resistance for implementation of eProcurement systems.) Allowing the customer to evaluate and accept the product or service, sometimes even prior to purchase, is an effective way to resolve the education and adoption problems that can stifle an innovation's market penetration.

Although the evaluate-and-accept process historically has taken place after purchase, we increasingly see firms in service and information-based industries letting customers try out products prior to purchase—in particular with virtual tours, sample consulting reports, or demo software. Of course, giving samples away for free (or showing sample rooms to would-be guests) is not a new concept, but the low cost of distribution over the internet makes give-away opportunities even more economical and desirable.

Hotwire. Hotwire offers an online demonstration of its service, which a consumer can use to see every step of the purchase process without actually completing it. This enables customers to know exactly how the service will work before they commit to using it. This is especially important for targeting customers who are already taking a risk in not knowing their air carrier or flight times. Educating customers and showing them exactly what to expect online improves their comfort with the product and should increase purchases.

Four Seasons Hotels. Four Seasons's web site provides interactive previews of many aspects of their hotel properties. Prospective guests can see views of the lobby, recreation facilities, meeting and banquet facilities, restaurants, and several types of guestrooms. They can also click and zoom in on those images to get a closer look.

Stage 8: *Integration*

Once the product or service is acquired and accepted for use, the customer must add it to an existing inventory of resources. Often customers must also adjust their internal business processes to take full advantage of the new product or service. This is particularly the case with a complex product or service.

Because this stage is often a source of customer frustration, it may have untapped potential for differentiating service. For example, Federal Express offers interNetShip, a web-based tool to

create and edit FedEx labels. Using interNetShip, customers can develop an address book of frequent recipients that seamlessly creates package labels, automatically prices the shipment, and prints the labels. InterNetShip is an IT-based solution to the challenge customers face when integrating their shipping procedures to best take advantage of the FedEx service.

WorldRes. WorldRes, one of the internet-based booking engines that enable hotels to sell rooms online, offers an example. Through a web-based interface the operator can update information on room rates and availability across the entire WorldRes network. Hotel operators who are the WorldRes clients must effectively and efficiently integrate the new service with their operations. To support this stage and ease integration, WorldRes has developed online learning modules that educate the customer to properly use their service.

Stage 9: *Usage Monitoring*

Customers must ensure that resources remain acceptable while they are in use or during the time customers receive service. Using the internet, suppliers can provide customers with the facilities to simplify this monitoring stage.

Otis. A large supplier to hotels, Otis Elevators mastered this stage long ago. During the 1980s Otis introduced self-monitoring equipment that reduced unavailability, service calls, and maintenance costs. The new version of this service, called e*service, is now web-based and allows customers to monitor their elevator system through a web browser and to place service calls as needed 24 hours a day.

American Express AXI Travel. AXI Travel is an online travel-procurement product designed and developed by American Express and Microsoft. AXI Travel enables employees of large companies to fulfill their travel and entertainment needs online without engaging a travel agent or company travel manager. The real value of AXI Travel, however, is for the travel managers themselves. At any time travel managers can log on to a secured area and monitor the travelers' spending, compliance with internal travel policies, and other dimensions of the procurement activities.

Priceline.com. In addition to being a market-clearing distribution channel for hotels and airlines, Priceline.com provides its suppliers, such as hotels, visibility of demand. Demand visibility enables the supplier to view regular re-

ports detailing key demand dimensions, such as price points, popular air routes, and high-demand dates. Those reports not only enable the supplier to monitor Priceline's service, but also provide data on customers' preferences and demand.

Stage 10: *Upgrading*

Hospitality-industry upgrades traditionally take place in the context of differing levels of service or facilities. Upgrades can also be offered to improve the guest's overall experience. Being able to upgrade service in response to important events, such as the customer's reaching certain milestones or having a dissatisfying experience, may be a source of increased loyalty and customer retention.

American Airlines. American Airlines, long known for using technology as a strategic weapon, uses the internet to simplify its customers' management of upgrade credits. American has substituted the mailing of upgrade stickers with a database of upgrade credits. Travelers can earn upgrade credits through repeat business, by trading in earned miles, or by purchasing them. Customers can manage earned credits, as well as purchase additional ones, directly through the American Airlines web site. Customers can request an upgrade on the web site or via an automated telephone interface. The upgrade is granted on a space-available basis, beginning 24 hours before the flight's scheduled departure. If the upgrade is available, the customer is automatically upgraded and notified by electronic mail or synthesized voice-mail messages.

We found few other examples in the hospitality industry for implementing technology to aid with the upgrading of products or services, despite the many opportunities to exploit the low marginal costs often associated with the industry's products. There is definitely opportunity for companies to focus on this stage and create more innovative technology solutions.

Stage 11: *Transfer or Disposal*

Customers will eventually transfer, resell, return, or dispose of resources. As this sometimes happens long after acquisition, the original supplier may not be involved. Hospitality companies deal with customers leaving their properties, yet this does not necessarily signal the end of a customer relationship. Guests of a hotel or restaurant do not necessarily "transfer" or "dispose of" their experiences, but they do leave the service experience. In a hospitality context it is useful to think

of this stage as a guest departure, and consider ways to extend the customer relationship using IT. For example, some hotels automatically prompt the guest for feedback when they use the in-room TV to check out.

JTECH Communications. JTECH Communications' Performance Alert Electronic Comment Card involves a screen and touch-pad integrated into the restaurant guest's check-presentation folder. When the check is delivered, guests are asked to fill out the electronic comment card, which can be programmed to ask customized questions. When the comment card is integrated with JTECH's SmartAlert Wireless Messaging System, a low rating from a guest will automatically page a manager with that guest's table number, and the manager can then speak with the guests and try to improve their unsatisfactory experience.

Stage 12: *Auditing and Accounting*

The final stage of the life cycle focuses on evaluation of and accounting for the experience. This stage is particularly important for large corporations that are constantly attempting to measure, manage, and control their T&E budgets. Given the complexity and magnitude of this process, an organization may willingly limit its portfolio of T&E suppliers in exchange for the ability to precisely monitor and control total spending while enforcing company policies. That need is the genesis of American Express's AXI Travel (described earlier).

GetThere.com DirectObserver. Companies that use GetThere.com have the option to sign up to use GetThere.com DirectObserver. This add-on product allows an organization's travel department to evaluate its travel-related expenditures over time. Gathering data in electronic format manifests the process of travel-services procurement, and the historical data collected can be used to support future decisions, forecasting, and auditing. Moreover, because the data are available on the internet, they are available in real time and can therefore be used to support decisions immediately.

Creative Thinking

As we stated at the outset, the Customer-service Life Cycle is intended to help you to think creatively about how technology can be integrated into your products and into your customer's experience. The most innovative ideas are often not the most costly or resource-intensive, but simply those based on an understanding of how customer needs can effectively be satisfied. To be sustainable, they must also fit your firm's resources and operations. For instance, the views of public spaces and guest rooms provided by Four Seasons promote the firm's investment in its physical plant. A hotel with rooms looking out on the Opera House in Sydney Harbor or the Statue of Liberty in New York might want to provide those views on its web site, possibly even offering those rooms at premium prices.

Organizations achieve competitive advantage through their ability to envision and implement business strategies that make the most of those attributes and resources that set them apart from their competitors. These distinctive competencies are the key to making it difficult or impossible for competitors to replicate the company's winning strategy. Advanced information technology that fosters outstanding customer service is one resource that has the potential to generate a sustainable competitive advantage.

The competitive advantage provided by IT can be valuable, particularly if innovations are based on the firm's distinctive competencies. But the pace of technical innovation requires that strategies must be frequently reevaluated and improved—given that competitors also use IT and customers are increasingly sophisticated. The Customer-service Life Cycle is a framework intended to aid managers in evaluating their relationship with customers, benchmark their competitors, and uncover opportunities to use the internet and advanced IT to provide outstanding customer service. ■

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When purchasing services the customer is usually interested in the outcome or experience being provided. This means that the quality of the service is based on an subjective evaluation from the point of view of the customer. These challenges however can be overcome through a structured approach to measuring, analyzing and improving service quality. The first step of improving service quality is to start measuring service quality; it is hard to improve that which is not measured. This was the most complete attempt at building a framework for thinking about and measuring service quality. It originally used ten aspects of service quality: competence, courtesy, credibility, security, access, communication, knowing the customer, tangibles, reliability, and responsiveness. Customer service is the provision of service to customers before, during, and after a purchase. The perception of success of such interactions is dependent on employees "who can adjust themselves to the personality of the guest". Customer service concerns the priority an organization assigns to customer service relative to components such as product innovation and pricing. In this sense, an organization that values good customer service may spend more money in training employees than the average A Customer Relationship Management Approach for Optical Retail Business. Helsinki Metropolia University of Applied Sciences Master's Degree (Master of Health Care) Degree Programme in Health Business Management 04.11.2013. Abstract. CRM is a strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments. CRM unites the potential of relationship marketing strategies and IT to create profitable, long-term relationships with customers and other key stakeholders. It is grounded on high quality customer-related data and enabled by information technology. (Buttle, 2009, p. 15).