# Customer Identification

Orientation is a way of gaining a sense of direction by reference to a landmark. The word seems to have originally meant to face the rising sun and thus identify the east. Using the sun as a landmark provided a sense of direction. Customer orientation means gaining a sense of direction for an organization by frequent and repeated reference to customers as landmarks. Because customers are multiple and various, using them as landmarks is complex. The first step in acquiring a customer orientation is identifying customers.

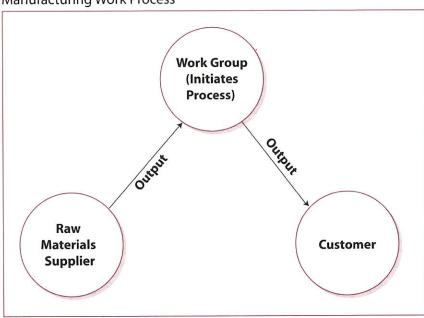
# Manufacturing Work Process

Continuous improvement is basically about work. But as was suggested in Assignment 1, its adherents look at work as a *process*, a sequence of specific steps. Looking at work as a process shows that the current continuous improvement movement, or Quality Revolution, has a long history. It began with the industrial quality control efforts of manufacturing firms.

Industrial quality control included determining clear specifications for products before producing them and then inspecting some or all of the products to confirm that they conformed to the specifications before shipping them to customers. In general terms, the manufacturing work process can be depicted as in Exhibit 2-1.

This manufacturing work process can be said to have a "product orientation" because it is based on four assumptions:

- 1. The manufacturer knows what the product should be.
- 2. The manufacturer can measure the product.
- 3. The manufacturer can determine whether the product meets the specifications within acceptable limits.
- 4. Customers will be satisfied with products that meet specifications.



**Exhibit 2-1**Manufacturing Work Process

In short, quality was defined by manufacturers as conformance to specifications.

A product orientation results in an internal orientation for the firm. If products fail to conform to specifications, the management of the firm will look to its combination of raw materials, employees, and equipment to solve the problem. Product orientation also implies an attitude toward sales. Ralph Waldo Emerson famously summed up that attitude in the nineteenth century with the phrase, "If you build a better mousetrap, the world will beat a path to your door." Emerson naturally assumed that the makers of mousetraps knew or could determine the specifications of a *better* mousetrap. There was no need to define "better." What better means would be obvious to a mousetrap manufacturer.

An **output** is any product or service that results from a work process.

A **work process** is a sequence of steps designed to produce a specific product or provide a specific service.

# Types of Outputs

A mousetrap represents the output of a work process. An *output* is any product or service that results from a work process. A *work process* is a sequence of steps designed to produce a specific product or provide a specific service. A mousetrap is an output that is a product. Advocates of continuous improvement distinguish outputs that are products by three characteristics: (1) customers are not involved in the production of the product; (2) the product is tangible—it can be inspected, measured, tested, perhaps tasted, and so on; and (3) repetitive processes are used to produce the product.

Issuing an insurance policy is an example of a work process that results in an output that is a product. An insurance policy is a tangible product. (The policy itself is a tangible product. The promise to

perform contained in the policy, as explained in Assignment 1, is intangible.) Customers are not involved in the production of the insurance policy. The process of issuing insurance policies is a repetitive one. Specifications for an insurance policy can be determined in advance. For instance, the information contained in the policy must be complete and accurate. Determining whether these specifications have been met can be confirmed by inspection of the policy before mailing it to the customer. If these specifications are not met, the management of the firm or the supervisor of the policy issuance group will look internally to solve the problem.

Outputs that are services are very different from outputs that are products. Customers are involved in the production of services. (This involvement of customers is sometimes called coproduction.) The output is intangible. The work process that results in the output is nonrepetitive; it takes place once and cannot be repeated. It is at least arguable that the work process that results in a service is unique. These three distinguishing characteristics of service outputs—coproduction, intangibility, and nonrepetitiveness—should be compared with the characteristics of services described by Albrecht and Zemke in Assignment 1.

Settling an insurance claim is an example of a work process that results in an output that is a service. Customers are involved in settling the claim; that is, coproduction is necessary to the transaction. The output is intangible—it cannot be inspected, tested, tasted, sniffed, and so on. The work process that results in the output certainly has some repetitive aspects, but most claim representatives would agree that every claim is different. Quality is not determined by conforming to specifications but by the reaction of the claimant, the customer. This customer reaction is called the outcome, a stage beyond the output. Outcomes will be explained in more detail later.

#### Service Work Process

Engaging in work processes that result in services, rather than products, necessitates a *customer orientation*. Customers know what the service experience should be. Customers help service providers translate their expectations into measurable specifications. Customers determine whether the service meets specifications, that is, satisfies their expectations. In short, quality means meeting or exceeding customer expectations.

A customer orientation implies an external focus for an organization. If a service fails to meet customer expectations, the management of the organization will look to customers—rather than to the combination of raw materials, employees, and equipment—for a solution to the problem. Customer orientation also implies an attitude toward sales. That attitude has been described by Philip Kotler, in his book *Marketing Management*, as the marketing approach, that is, the assumption that an organization's objectives can best be achieved through the complete satisfaction of the end user—the customer.<sup>1</sup>

**Coproduction** means that customers are involved in the production of outputs.

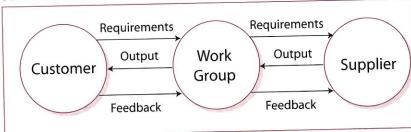
A **nonrepetitive work process** varies each time it is performed.

**Customer orientation** occurs when an organization looks toward its customers and responds to them.

A **marketing approach** assumes that an organization's objectives can best be met by completely satisfying the end user.

A diagram of a service work process appears in Exhibit 2-2. First, the customer's requirements or expectations, rather than the manufacturer's specifications, initiate the process. Second, although the service provider, or work group, might rely on a supplier, the supplier is sought out and selected based on the work group's requirements, which are a reflection of the customer's requirements. Indeed, the work group is the supplier's customer. Third, this process does not end with the delivery of the service to the customer. On the contrary, the work group solicits feedback from the customer and provides feedback to the supplier.

**Exhibit 2-2**Service Work Process



The service work process is *continuous*. Allowing the customer to determine requirements for satisfaction before delivery and seeking feedback from the customer after service has been delivered means that the service work process is designed to ensure *improvement*. The service work process is fundamental to the idea of continuous improvement. Because of the influence of advocates of continuous improvement, both manufacturing and service organizations now take this approach, determining requirements by establishing customer expectations.

"There's no such thing as instant pudding."
—W. Edwards Deming

# A Page From the History of Quality

Although W. Edwards Deming is best known as the person responsible for the "industrial miracle" in postwar Japan, his career is a typically American one. He was born at the beginning of the twentieth century and spent his early life in the American West, where he took an interest in the organization of industry and its effects on the lives of individuals. A precocious student with a clear gift for mathematics, he earned a bachelor's degree from the University of Wyoming in 1921 and a master's degree from the University of Colorado in 1924. He earned a Ph.D. in mathematical physics from Yale University in 1927 and began his career as a teacher in that same year.

While working at the U.S. Department of Agriculture, Deming became responsible for courses in mathematics and statistics. He invited Walter Shewhart, who pioneered the use of statistical methods in quality control,

to lecture at the U.S.D.A. Later, Deming applied statistical methods to the analysis of clerical work at the Bureau of the Census, one of the earliest applications of his methods to a nonmanufacturing activity.

Deming traveled to Japan in 1946 and 1948 to study agricultural production and other problems in the war-devastated country. Through these trips, he met Japanese statisticians and business leaders. Deming became convinced that his statistical methods could help establish Japan as a producer of quality products. He returned to Japan in 1950 to teach his methods to members of the Union of Japanese Scientists and Engineers (JUSE). He is said to have given the Japanese not only statistical methods but confidence. He announced, "Japanese quality could be the best in the world instead of the worst" and that Japanese products could capture world markets in five years. He later said, "They beat my prediction. I had said it would need five years. They did it in four." The Deming Prize was established by JUSE in 1951 and it remains a coveted quality award in Japan.

Deming had less success in finding business leaders who would adopt his methods in America. Nonetheless, for forty years he taught and consulted with many individuals who are now the leaders of American businesses. His clients included Ford Motor Company and Xerox.

Deming is often thought of as gruff and outspoken. He had little patience with industry leaders who were content to indulge in business as usual. He is primarily thought of as a statistician who taught that "statistical techniques, in their ability to aid in the discovery of causes, are creating a science of management and a science of administration." His main interest was in humans reaching their full potential.

His avocation as an organist and composer has been used to describe his outlook: "His version of the national anthem, which addresses people's inability to hit all the notes, serves as a metaphor for one of his points for management: don't blame the singers (workers) if the song is written poorly (the system is the problem); instead, rewrite the music (fix the system). In life and art, Deming simply wanted to make it easier for people to sing."

W. Edwards Deming's ideas are discussed at length in his books, including *Out of the Crisis* (1986) and *The New Economics* (1994). His life and work have been profiled in books, articles, films, and videotapes. He first became known to a wide audience in the United States in 1980 when NBC produced a TV documentary, "If Japan Can, Why Can't We?"

The service work process helps to provide answers to a key question: Who are customers? The answers to that question depend on where the person providing the answers appears in the work process. The shortest answer to the question is "whoever receives your output." The following example might help clarify that answer.

Roger Pennypacker, an insurance agent, has obtained permission to quote on property insurance on an apartment house. Elfrieda Albright owns the apartment house and is a prospective new client for Pennypacker. Pennypacker inspects the premises and interviews Elfrieda in an attempt to understand her insurance needs. Once he has

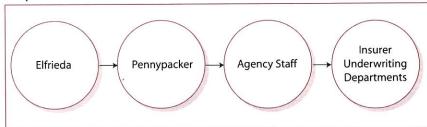
gathered this information, he turns the material over to the staff of the Pennypacker Agency to complete applications for insurance and to solicit quotations from four or five of the insurance companies the agency represents.

Who is the customer in this scenario? The obvious answer is Elfrieda Albright. But is she the only one?

This scenario describes the first phase of the service work process—learning requirements and submitting information to a supplier. A diagram of the first phase appears in Exhibit 2-3.

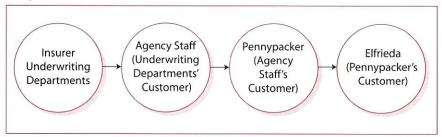
By looking at Exhibit 2-3, it is possible to say that Elfrieda Albright is the customer and Pennypacker is the work group (a group of one, in this case). Elfrieda tells Pennypacker of her insurance needs in her own way. He inspects the premises and listens to Elfrieda but explains what her needs are, based on his knowledge of insurance, current market conditions, the desires, preferences, and requirements of the underwriting departments of the companies he represents, and so on. The agency staff is a work group, and Pennypacker is its supplier. Since work groups are the customers of suppliers, the agency staff is now Pennypacker's customer. The process does not end there. If a customer is defined as anyone who receives an output, the underwriters are the customers of the agency staff. The underwriters are customers when they receive the output from the agency—the completed applications for insurance and other information. The underwriters perform a work process, become a work group when they underwrite the applications, deciding whether to accept them and, if so, at what prices and under what conditions.

**Exhibit 2-3**Requirements in the Service Work Process



The diagram in Exhibit 2-4 looks at outputs rather than requirements. It indicates that the staff of the Pennypacker Agency is a customer of the underwriting departments of the insurers represented by the agency. The agency staff receives the output of the underwriters, the quotations or declinations. At that point, the agency staff are the customers of the underwriters. Once the agency's staff obtains the quotations and prepares a proposal for writing the business, Pennypacker schedules a meeting with Elfrieda Albright to give her the proposal, explain it, and attempt to close the deal. Pennypacker is then the staff's customer and Elfrieda is Pennypacker's customer.

**Exhibit 2-4**Outputs in the Service Work Process



This means that it is not always clear who our customers are. Even a routine transaction when diagrammed and analyzed can become relatively complex, and the roles of the people involved in the process change at various stages of the process. This is, in part, because there is more than one type of customer.

# Types of Customers

Defining a customer as *the person* who receives an output is advantageous for three reasons. First, it is specific. General statements about customers—"XYZ Communications is one of our biggest customers" or "Fly-By-Night Airlines is one of our worst customers"—are vague. Second, it is personal. Thinking of organizations rather than of individuals as customers decreases the usefulness of customer identification. In fact, it is likely that the risk manager of XYZ Communications is one of the organization's biggest customers, and the treasurer of Fly-By-Night Airlines is one of the organization's worst customers. The answer to the question of who is the customer should be the name of an individual. Finally, defining a customer as the person who receives your output de-emphasizes the organization for which that individual works. This definition of a customer allows for both *internal* and *external customers*.

**Customers** are people who receive outputs.

#### Internal Customers

Briefly consider again what Roger Pennypacker needs to do to obtain quotes on property insurance for Elfrieda Albright's apartment building. After he interviewed Elfrieda and inspected the premises, he submitted material to the staff of his agency. His notes, photographs, recommendations, and suggestions all constitute an output received by the staff. At that point, *Pennypacker's staff is his customer*. For that reason, he should be specific (he will provide the material to the office manager), he should be personal (he will provide the material to Oloona MacNamara), and he should ignore the fact that he and Oloona work for the same organization. It is indeed likely that Oloona works for Roger. That does not matter. What matters is that Oloona receives Pennypacker's output and therefore she is his customer. He should be aware of her requirements and set out to meet or exceed her expectations. Oloona MacNamara should be treated as a customer by Pennypacker even though she is an internal customer.

**Internal customers** are people who receive outputs from a work group within the same organization.

Why? Is this a call for revolution in the workplace and a reversal of roles? Should bosses go around trying to meet or exceed the needs of their employees because doing so would make America's offices kinder, gentler places?

No—or, at least, not exactly. The reason is that it is impossible to meet the needs of end users without meeting the needs of every customer, internal or external, who is part of a work process.

#### **External Customers**

Similarly, Oloona MacNamara should be specific about her customers—the underwriting departments who will receive the applications for insurance and additional information from Oloona (the underwriting departments of Insure-All, Risk Free Insurance, Professional Fire and Casualty, and Realtors Mutual). She should be personal about the underwriters, underwriting managers, or branch managers who will receive her output (Megan Kemp at Insure-All, Will Gleason at Risk Free, Joan Deming at PF&C, and Rodney Evans at Realtors). Finally, she should ignore the fact that these individuals are not employed by the Pennypacker Agency and seek to understand their requirements, needs, and expectations because they are her external customers. Only through these underwriters can Oloona meet the needs of her primary customer, Roger Pennypacker, when he receives her output of the proposal, and, through him, Elfrieda Albright, the end user of the proposal.

#### **End Users**

As mentioned earlier, customer orientation implies the attitude toward sales that Philip Kotler describes as "the marketing approach," that is, the assumption that an organization can best achieve its objectives through the complete satisfaction of the end user—the ultimate customer. This identification of the customer with the end user recognizes how difficult it can be to identify customers and acknowledges the need to be specific when referring to customers.

Many, in fact most, people do not directly encounter end users. The only way for such people to be customer oriented is to identify and focus attention on those internal and external customers whom they do encounter, those internal and external customers who receive the outputs they produce.

Service work processes combine and overlap to make what are sometimes long and complex delivery chains. This fact adds to the difficulty of satisfying customers in service businesses such as insurance. Customer orientation requires that these long and complex chains be broken down, diagrammed, and analyzed so that all internal and external customers are specifically, personally, and clearly identified. The way to identify them is to track outputs and determine who receives them. This approach clears away a lot of gunk—office politics, positions of power and authority, practices that continue out of inertia, habit,

**External customers** are people from outside of the organization who receive outputs.

**End users** are ultimate customers, the users of the final product or service.

or tradition, and so on—that clogs up a system to reveal how it really works. Identifying customers in this way is an important first step toward the customer orientation that continuous improvement demands.

# Summary

A work process is a sequence of specific steps that produces an output. Work processes have evolved from those established by manufacturers into those that represent the approach taken by service businesses. This evolution represents a shift from a product orientation and an internal focus to a customer orientation and an external focus. This shift reflects the changing nature of outputs. Outputs that are services typically involve coproduction (customer involvement), are intangible, and result from processes that are nonrepetitive. This evolution also represents a shift from sales to what Philip Kotler calls the marketing approach, that is, the assumption that an organization can best achieve its objectives through the complete satisfaction of the ultimate customer, the end user.

Customers are identified by tracking the outputs of work processes. A customer is defined as the individual who receives an output. This definition allows for (1) internal customers, individuals who receive an output from people employed by the same organization, (2) external customers, individuals who receive an output from people employed by other organizations, and (3) the ultimate customer, the end user of an output produced by a system of work processes.

Customers should be identified specifically, personally, and clearly. Identifying customers by tracking outputs and determining who receives them does much to clarify how a system actually works. Identifying customers is an important first step toward the customer orientation that continuous improvement demands.

# **Assignment Note**

1. See Philip Kotler, *Marketing Management* (Englewood Cliffs, NJ: Prentice-Hall, 1984), pp. 17-29.