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Four steps to improving customer service

By Barbara A. Cleary, PhD

With a variety of approaches to process improvement, including programs and regimens that have come and gone without a trace, a new generation of business owners, educators, and healthcare providers is ready to get to the heart of improvement and to understand the basics about quality of products and services. Unlike earlier generations, they do not have time to take extensive courses or attend multiple conferences in their quest for this understanding. So let's boil down the essentials of quality improvement, beginning with the customer's experience.

We've all been victims of poor customer service. Recorded telephone responses, including the interminable "Press 1 for sales..." to "Press 2 for service" announcements, or the softly uttered assurance that "Your call is important to us..." that precedes a 15-minute wait on hold, or the unanswered letter to customer service—all have become routine in our business lives. Everyone has a horror story when it comes to customer service, it seems, although the old "Complaint" window has long ago vanished from our experience, aside from its appearance in cartoons.

The quality of a customer's experience with an organization begins to be evaluated at the first interface between customer and provider, but the provider often does not even realize that an interface has taken place. It is common knowledge that 95% of customers who have had a negative experience will never complain about it. Further, it is easy to view the disgruntled customer as just that...someone who will complain about anything. As the American Society for Quality points out, "unless your company offers a unique product or service, your major competitive advantage is high quality service. Quality service results in repeat and additional purchases from existing customers." And further, "The *Harvard Business Review* reports that customers who experience poor service quality often stop doing business with the offending companies without warning or complaint. On average, 40 percent of customers with poor experiences do not return."

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Of course, the reality is that the quality of an organization and the success of its endeavor are dependent on the responses of its customers. It is common understanding that when a customer has a positive experience, he or she may tell one person about that experience; if the interaction has been negative, it will be related to at least seven people. All the advertising in the world cannot compensate for an unpleasant or negative experience of a customer. Failing to respond to a suggestion or complaint from a customer will be fodder for countless conversations about your company. And remember—it's less expensive to hold on to an existing customer than to develop new customers.

Preventing customer dissatisfaction goes well beyond assuring a pleasant voice on the voicemail recorder. It involves a genuine commitment to improvement and a conscious look at a number of factors in an organization that ultimately lead to the interface with the customer. These factors include:

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a. an understanding of who the customer is;

b. knowledge of the system that serves the customer;

c. responsive leadership that understands variation in the system;

d. use of data in making decisions.

This list embodies what is often referred to as "quality," because it reflects an interest in improvement at every level of an organization—and a concerted organization-wide commitment to monitoring processes to assure that improvement.

You may remember when you were learning to drive. You had to think in small steps: press in the clutch, insert the key and start the engine, look in the rear-view mirror, put the car in gear, slowly (or jerkily) move forward. It all seemed somewhat artificial and halting, and you may have thought you'd never get the hang of it. But look at the process now; you undertake the same steps, but you no longer need a list or flow chart or a memory jogger to follow them. Driving has become second nature to you, and you are barely conscious of the improvement you've made since those days when you initiated a new process into your regimen.

Process improvement—bringing continuous improvement to any process and enhancing its quality—is the same way. You may find yourself studying manuals or using reminders about the steps to improvement as you begin a quality journey, but it will all become second nature to you eventually. You will sense opportunities for improvement; you will become facile with data; and you will see your processes improve over time.

1. To improve customer service, you will need to understand who the customer is and what his or her needs are.

With sophisticated methods, often electronic, it's easy to map the demographics of those who are likely to purchase certain products or use specific services. But serving a customer involves paying attention to a much larger group of people, since "customer" really includes a reference to all those who benefit from what an organization does—not just the end user of the organization's services.

Who, for example, benefits from the services that a hospital provides? The list is far longer than the immediately obvious one, the patient. It may include those who:

- pay for the patient's care
- make medications available
- are on the hospital payroll
- drive ambulances
- provide professional medical care
- run a hospital gift store
- collect taxes from the hospital
- build facilities for the hospital
- deliver supplies
- visit patients in the hospital
- provide chaplain services to patients
- deliver newspapers to hospital rooms

Identifying customer needs is critical to success of products and services. All customers have needs, but these may easily be confused with wants. For example, I know that I need a safe environment in which to work. When a company understands this need, it can develop any number of approaches to meet the need—some of which the customer has never thought of. When customers articulate their needs, they often mention wants, or specific responses to their needs. I may *need* a safe environment; I may *want* a body guard to escort me to my desk. An organization can meet needs in a variety of ways, not in one narrow approach. Creating policies that assure nonsmoking areas, installing sprinkler systems in case of fire, using an alarmed entry system, inspecting a building for hazards, providing lighting for hallways and parking areas: all of these represent responses to the need for a safe environment—even though the customer was applying a much narrower understanding of "safe."

2. To serve customers well, the organization must understand the systems that serve these customers.

Customer needs can be satisfied when there are deliberate, purposeful systems in place to address these needs.

Systems include activities that contribute to the achievement of a defined purpose. They are made up of processes that reflect what W. Edwards Deming called "constancy of purpose"—that is, processes that directly support the purpose of the system.

Anton Chekhov, the Russian playwright, was known for insisting that everything in a drama must contribute to the outcome: "If in the first act you have hung a pistol on the wall, then in the following one it should be fired. Otherwise don't put it there" (from Gurlyand's *Reminiscences of A. P. Chekhov*, in *Teatr i iskusstvo* 1904, No. 28, 11 July, p. 521). In the same way, every system in an organization must support the mission.

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Of course, this definition of "system" implies that the purpose of the system has been identified. It may be expressed in a mission statement, or it may be articulated as goals of the organization. In a school, for example, the mission might be to promote learning. Systems that support this mission would include the obvious ones of classroom instruction, the testing program, the counseling services, the curriculum; but the food service and maintenance systems also contribute to the mission. A system, defined by Deming, includes suppliers, inputs, processes, outputs, and customers. [*Out of the Crisis*, p. 4] All of these must in some way contribute to promoting learning. It would make no sense to create a class schedule that revolves around the needs of the school's business office rather than student needs, for example, or designing a curriculum that builds skills in only one area in order to conform to testing standards.

Improving only one area of a system may militate against overall improvement and fulfillment of an organization's mission. A bank could have the best security system in the world, but if it means that customers cannot enter its buildings, the security process has undermined the larger purpose of serving customers.

3. An organization's leadership must understand variation in systems, and be able to distinguish special causes from common causes in variation.

What is known as "point mentality" represents a knee-jerk response to what appears to be a problem. We often treat medical symptoms, for example, as single events, when in fact they may be related to a larger condition. If the stock market goes down slightly on a single day, selling everything in a panic would represent point mentality. The market will undoubtedly go up again, in the nature of markets, so watching trends rather than points makes sense for investments. Collecting data and charting it provides a visual image of trends, both in the stock market and with every process that is measurable.

Sometimes conditions demand that one can't wait to evaluate patterns in data, but must instead respond immediately to a situation. Emergencies require response. But most of the time, we will save time, energy, and other resources by examining data over a period of time and making decisions based on trends or other patterns in the operation of the system itself. The fact that a child fails one third-grade spelling test does not mean that he or she will be a failure in life—or even in spelling.

Every system has variation. Some of this is due to the system itself, known as common-cause variation; some of it is due to singular incidents or special situations, known as special-cause variation. W. Edwards Deming estimated that 94% of problems (or possibilities for improvement) lie with the system as common-cause variation; 6% are special causes. [*Out of the Crisis,* p. 315]

Describing variability and central tendency over a period of time helps one to understand how the system is working, and to predict how it will continue to work in the future. The alternative is a constant tampering with the system, responding to every whim it may have.

Students in a morning class at a school find the room chilly when they come in, and the teacher adjusts the thermostat to a higher temperature. But when afternoon classes meet, students complain that the room is too warm, so the teacher turns the thermostat down. This up-and-down approach to the problem is inefficient; furthermore, it does not solve the problem of temperature control for either group, since by the time the room is warm in the morning, students have moved on to their next class. The same pattern is true for the afternoon class.

By collecting data related to room temperature, then analyzing causes for the variation that ensues, students can see that the variation in room temperature is due to a special cause—tampering with the thermostat. Since the thermostat is turned down at the end of the day and remains low until morning, the temperature in the room is lower in the morning and higher in later hours.

An alternative analysis would involve recording room temperature throughout the day for several days or weeks, without adjusting the thermostat. This data would show that even without changing the thermostat setting, the room warms up naturally when the sun comes into the windows in the afternoon. The next step would be to investigate causes for the variation in temperature during the day, and eventually to come up with a theory for improving the situation. Mounting the thermostat near the window, rather than on the opposite side of the room, might reduce the variation, since it would record cooler temperatures from outside in the morning, and adjust the interior temperature accordingly, and warmer temperatures in the afternoon, so the thermostat would not trigger as much heat from a furnace.

Before studying the problem, the inclination of students was to assign blame: "Why can't the first-period class leave the thermostat alone?" and "Tell the afternoon class to turn the temperature up!" By understanding that much of the variation was due to natural causes, students were able to focus on keeping the temperature steady instead of moving the thermostat abruptly from highs to lows. They recommended to the maintenance staff that the thermostat be moved, and continued to record data to assure themselves of improvement in the system.

If one explains to a room full of people that on the count of 3, everyone should clap simultaneously, do you suppose that there will be only one giant, simultaneous clap? Of course not; there is variation in the system. Instead of a single sound, there will be a rippling sound of applause, no matter how carefully orchestrated the practice seems to be. Can you count on finding exactly 49 pieces of candy in a package of chocolate-covered peanuts? If you examine enough packages, you will find that there may actually be between 47 and 50 pieces in the packages. Are you being cheated? This is common-cause variation. When you leave your house every morning at exactly 7:12, can you expect to arrive at work at exactly the same time each day? No—in the case of traffic, there will be common-cause variation (timing of traffic lights, pace of traffic, number of cars on the road at the same time) as well as special-cause variation (an accident on the highway, delays in your carpool, flat tires, etc.). Fleeting events cause special variation. Imperfections in the system itself generate common-cause variation.

The key to improvement lies in understanding this variation, so that decisions can be based on trends in data, rather than only on intuitive reactions. This involves recognizing special-causes and distinguishing them from common-causes. Without this distinction, managers are likely to make two kinds of mistakes. The first is ascribing a variation or problem to a special-cause (e.g., "The operator was late to work") when it is really due to a common-cause (there aren't enough operators for a particular process). The second involves assuming that variation is due to a common-cause, rather than a special one. (Deming, p. 319)

How does one tell the difference between special- and common-cause variation and avoid the mistakes that can ensue from misunderstanding these concepts? The answer lies in the use of control charts, where data is collected and analyzed with respect to trends and patterns that can be acted upon. In the 1920s,

Walter Shewhart developed the idea of 3-sigma-limit control charts. Control limits, displayed on the control chart, are generated by the data itself (collected over time) and help to clarify the distinction between common- and special-cause variation. Charting data offers the advantage of visual representation, so trends and instability in processes can be detected and acted upon.

Every system has some degree of variation, as anyone who has thrown darts at a dartboard is clearly aware. The key to improvement lies in understanding the cause of variation, and understanding whether this cause lies in the system itself (the dartboard is not mounted firmly, for example, or the bull's eye is not clearly discernible in dim lighting), or in a special cause (blindfolding the thrower, perhaps, or moving the target as the dart is in the air).

Once the concept of variation is grasped, one can begin to work on the system, to reduce the amount of variation. This work involves collecting data, studying causes, testing improvement theories, and constantly evaluating the impact of improvement strategies.

An understanding of variation supports the larger understanding of the system, and this understanding supports the ways in which the customers' needs are served. Failing to understand the inter-connectedness of these concepts may result in addressing the wrong issues to improve the system. This might be like placing a bucket under roof leaks rather than assessing the pattern of leaking and subsequently repairing the roof.

Studying data will help to avoid addressing irrelevant issues by focusing on larger issues.

4. Employees must use data in decision making.

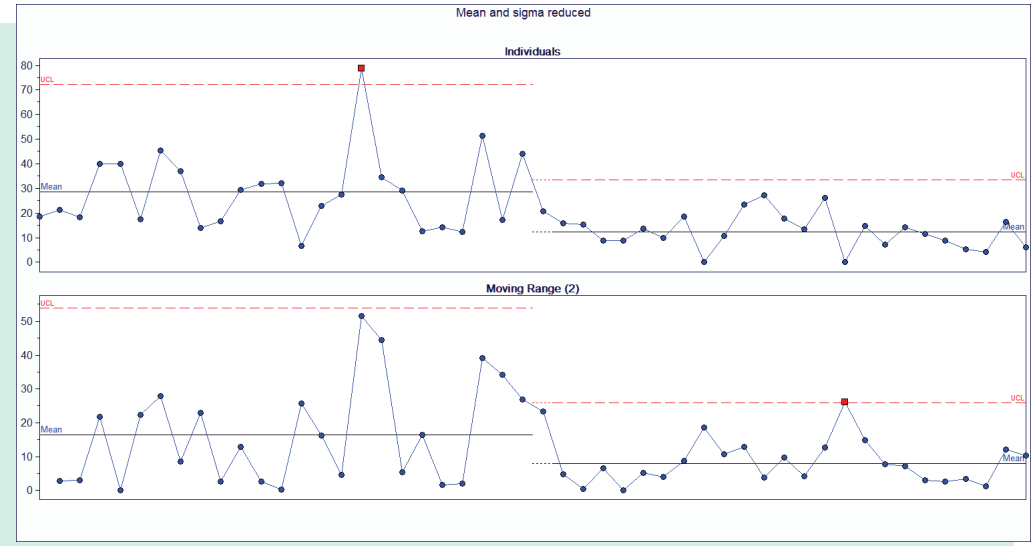
Decisions about improvement efforts demand insight that is based on data collection and analysis.

If you were to ask employees to list the greatest problems that they see in the organization, you are likely to see a great variety of problems listed—some trivial, some vitally important. Separating the trivial from the critical amounts to far more than collecting opinions about these problems. But knowing which issues are the biggest problems is important in terms of allocating resources and addressing needs. Decisions about improvement efforts demand insight that is based on data collection and analysis. Customer surveys, statistical monitoring of processes, check sheets, and other tools offer ways to collect data about a variety of processes. A Pareto chart can support analysis of the output of these approaches visually.

The alternative to robust observation using data gathering and analysis is responding to every issue or problem as it comes up. If a receptionist complains that he needs to walk too far to retrieve work from the printer, responses might include everything from making remarks about his need for exercise to purchasing another printer and placing it closer to his desk—not cheerfully. But by analyzing the needs of all those who use the printer and understanding the amount of time it takes for each to walk to the printer, a more sound decision might be reached with respect to the placement of the printer or even to the number of print jobs demanded of a single printer.

In a hospital setting, a visitor may walk down a patient hallway where many beds are empty, and come to the conclusion that hospital population is down. In fact, it may be down, for that floor or at that moment; but collecting data on hospital dismissals and admissions will lead to more profound analysis of the current situation so that steps can be taken to address problems where they exist. This process will assure long-term customer satisfaction by demonstrating clear understanding of real challenges and responding to them with both short-term and longer-term solutions.

To make the most of data collection, technology renders analysis easy. SPC software will use data related to a specific process to show trends, indicate stability of a system, and indicate where improvement is needed. The chart below indicates, for example, that the process being analyzed has two indicators of special causes. One appears on the individuals chart (central tendency), and one in the moving range chart (variability).



Customer service, as we have seen, involves a thorough approach to analysis at every step, and improvements that genuinely reflect the need for change. Leaving peppermints for customers may please them for the moment, but it is far-ranging attention to quality in every process that will win their loyalty. And most organizations want their customers to be not only satisfied for the moment, but loyal enough in the long term that they will tell their friends and colleagues about their positive impression of your organization.

How PQ Systems can help

Software is an outstanding tool for creating control charts, but software by itself cannot help you improve products and processes. Improvement will come from the data-based decisions you make after interpreting the charts. That's why your software tool should have the features and flexibility to make the charts easy to interpret. PQ Systems software can help you garner information from your data to provide proof of your quality improvement.

How do we know? Since 1984, PQ Systems has been providing charting software and services to help organizations drive strategic quality outcomes. Our control charting software SQCpack is being used in high-performance organizations such as Akzo Nobel, Baptist Health, Cleveland Clinic Health System, Honda of America, and Innophos. To learn more about SQCpack and download a free trial, visit www.pqsystems.com or call 800-777-3020.

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