

1 Quality Throughout History

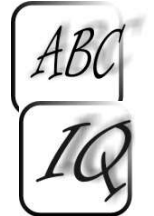
Learning objectives (for example following)

- Understand the various definitions and the importance of quality
- Explore Quality Facets
- Discuss Quality in Business



Keywords

Quality, ASQ, Quality facets, standards



Required skills

A general knowledge of management on the bachelor's degree level.

Time requirements for the study

You will need approximately 90 minutes of your time to study this chapter.



1.1 Introduction

Quality is far larger than business. We talk about quality in all parts of our lives in judging art, in evaluating the things that we make, in describing our experience. We even talk about quality time and quality relationships. In the broadest sense, quality is that which adds value, that which makes our lives better. Before we try to manage quality, we should try to understand our experience of quality. This chapter is dedicated to understanding the human experience of quality and to show how people have always strived to deliver quality, even long before quality management was defined.

Quality has been part of human life, culture, and history from its earliest beginnings, and it has always had two aspects. One aspect, represented by the 11,000-year-old Sphinx at Giza, is beauty. Indefinable and alluring, beauty draws us, adding richness to our lives. Another aspect is represented at Giza as well, the 5000-year-old Great Pyramid-still standing - represents the functional quality of great engineering. Both of these are shown in Figure 1-1. The Sphinx is still standing because definable and measurable functional quality brings stability to the more ephemeral quality of beauty. In recent centuries, we have been able to define more and more of what quality is, and, in defining it, make it more susceptible to engineering, make it reproducible, and bring it under management. But there will always be an indefinable side to quality-what we call beauty.



Fig. 1-1. The Sphinx and Great Pyramid at Giza, Egypt

1.2 Definition

There are many definitions of quality, such as the following:

- Quality is a subjective term for which each person has his or her own definition. In technical usage, quality can have two meanings: (1) the characteristics of a product or service that bear on its ability to satisfy stated or implied needs, and (2) a product or service free of deficiencies.
- Quality is the degree to which a set of inherent characteristics fulfills requirements.
- Quality is conformance to requirements.
- Quality is fitness for use.
- Quality is meeting customer expectations.
- Quality is exceeding customer expectations.
- Quality is superiority to competitors.
- Quality - I'll know it when I see it.

In addition to these various meanings, quality may also be viewed from several dimensions:

- Characteristics such as reliability, maintainability, and availability
- Drivers of quality, such as standards
- Quality of design versus quality of conformance
- Quality planning, control, and improvement
- Little q and big Q (product or functional quality versus improvement of all organizational processes)
- Quality as an organizational strategy

1.3 The Facets of Quality

If we look more closely at the experience of quality, we see that there are four levels on which we determine that something has - or is lacking-quality:

- Universal. We are all awed by a night sky or a beautiful sunrise. All of us are relaxed by a swim in the sea and nourished by fresh water.
- Cultural. Some cultural value systems create agreements about what is beautiful that last for centuries. For example, to those who grow up learning to appreciate classical music-whether it is of China, India, or Europe - that sound is wonderful. Yet the rules for each are different. Chinese music uses a five-tone scale, while Western music uses eight tones per octave. Chinese music and Western music always have rhythm, but Indian classical music includes a form that has no rhythm-no set beat or timing. To anyone trained in one tradition, the music is beautiful and deep. But the traditions alien to us, although alluring, are strange enough to be uncomfortable.
- Social. Many styles and forms are agreed on by groups of people-economic or social classes, ethnic groups, families, or groups of friends-that are smaller than a whole culture but larger than the individual. Styles may last a season, years, or even decades, but not centuries.
- Personal. Finally, there are some purely personal preferences regarding what matters, what has value, what is quality. As the French say, *chacun a son gout*, each to his own taste. Or, as the Romans put it, *de gustibus non disputandum est*, there is no disputing matters of taste. Or, in English, *to each his own*. So it is universally recognized that there is a valid personal element to taste, that there is no logical argument one can put forth to say what someone else should or should not like.

When we as people decide what we like, we make a decision internally, mixing together all four of the elements I just described. Usually, we are not aware of doing this. This mixing of levels is one of several things that make the customer definition of quality very difficult for people in business-people who want to deliver quality and value to other people. Here is a more complete list of issues that make it difficult to understand what people-our customers-want:

- One problem ruins the whole experience. If you go to a wonderful restaurant with excellent food, beautiful décor, and very slow service, what do you remember? The slow service. If a single part of the experience is not good, the whole experience falters, at least for most people most of the time.
- Quality works at all four levels at once. To experience quality, we must be satisfied at the universal, cultural, social, and individual levels. If the experience really fails for us on even just one level, it isn't an experience of quality.
- Each individual is different, but companies succeed by selling to many individuals. If we make all of our products the same, then we will completely satisfy a few people, but partially satisfy many others. That is the low-cost option. The higher-cost option is to provide custom products or services, where customers pay more to get exactly what they want, either custom made or altered to customer specifications. Rather than two options, this is actually a range. In between standard identical products and full customization, we can offer products with options, or products with limited customization. The same applies to services.

As we work to define quality in the specific, we are asking, "What do customers like about our present or future products or services?" When we ask this question, we should remember the four facets of the experience of quality and keep in mind the complicated challenge of figuring out what other people especially many other people who we don't know - want.

1.4 Quality Before Business

If people were creating quality across the world for thousands of years before the invention of quality management, how did they do it? What can we learn from them? The two oldest ideas that became part of quality management are the idea of a standard and standardization and writings and schools. Let's take a look at standards and schools, and how they developed. Then we will look at another tool used to sustain and transmit quality-secret teachings.

1.5 External Standards

External standards are those rules that keep the business environment-things external to business-stable. Most external standards are either customs or laws. A stable society can rely on relatively unchanging customs-rules of negotiating and keeping agreements, general codes of business conduct, and so forth. But when times become difficult-with famine, war, or different cultures mix then cultural standards become unreliable. In these times, if the rule of law can be maintained, then businesses can survive and perhaps thrive. If the rule of law is lost, then business becomes very difficult, and often shady or criminal. So law and stability are valuable for business.

Many times throughout history, some people have been above the law. These people-usually royalty or the most wealthy classes - could do as they pleased, whether there were any laws or not. The first time in history that changed was with the Code of Hammurabi, in 1780 B.C.E. This was a written legal code that even the King had to obey, and it was a huge step forward in civilization and stability. When people know the rules, and the rules are written down and change only slowly, we can learn how to do business and count on being able to do business in the same way year after year. We can get better at what we do. The stability of the rule of law, and the elimination of arbitrary authority or advantage for those who are above the law, makes room for improving quality, effectiveness, and efficiency, rather than always trying to cope with changing circumstances or trying to gain favor with those in power.

Every culture in the world, on every inhabited continent-from the indigenous cultures that live closest to the earth to the highly evolved technical civilizations of the last 5000 years-has created great quality. The oldest works of living art come from the Australian aboriginal cultures. These nomadic tribes add to paintings each year, telling the story of the tribe. There is one painting that is over 20,000 years old, and still a work in progress. A little more of the tribe's story is added each year. Much of the world's beauty is ephemeral-arts that leave no trace such as music and dance, and those that fade quickly in time, such as basketry-so we do not have a trace of all the fine art, crafts, and engineering that have come and gone over the millennia. The work of indigenous cultures is often sophisticated and subtle, as complex and beautiful as anything created by more technically advanced civilizations.

1.6 Internal Standards

Although external standards-in the form of laws-have been around for thousands of years, internal standards mostly came later. They mostly took the form of trade secrets-formulas, recipes, and methods kept in secret, perhaps written down, or perhaps simply taught from parent to child or master to apprentice from one generation to the next.

The benefit of internal standards is consistency. And, if you know how to deliver high quality, then, through a standard, you can deliver consistent high quality. When we repeat the same process using the same ingredients, we tend to get the same results. If one person does that well, we call it craftsmanship. When one person passes it on to others who seek to maintain it, it becomes a standard.

Standards are an important part of quality today. Departments and companies have internal standards, industries have standards, and independent or government-supported agencies offer standards, as well. The difference between a standard and a regulation is that there is no law that says that you have to follow a standard. It's just usually good business sense to do it. For example, if you want to make a device that runs on 150 volts instead of the standard 120 volts of household current in North America-or 220 volts for Europe-you can. But nobody could use your product, because, if they plug it in, it won't work.

Summary

Quality has been with us for as long as there has been life on Earth, and people have been striving to create quality for as long as we have been around. Until a couple of hundred years ago, the creation of quality relied on individual expertise, transmission through a few standardized texts and schools in some specialties, and transmission through folklore and secret teachings. As a result, quality was very much a hit-or-miss affair. We will look at the history of how we have moved, in 200 years, from this situation to a situation where we can investigate and define quality, measure quality, repeat processes to deliver consistent quality, and improve quality in business.

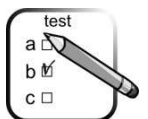


Review questions

Ham and Cheese Around the World

Think about these questions to see how culture affects quality, and how business managers have to think to provide quality to customers.

1. How many different combinations of ham and cheese can you think of? What country or culture does each one come from?
2. Pick another food that you know - sushi, or peanuts, or anything else - and describe the different dishes and tastes, and how different cultures have changed them;
3. You have been asked to manage catering for a multicultural, inter-religious event. Your caterer recommends ham and cheese. You check with your customers, including traditional Muslims and Orthodox Jews. You learn that the



first don't eat ham. The second eat neither ham nor mix milk and meat - and they won't even eat food prepared in a kitchen where ham has been prepared. You also learn that several of the guests have already pre-ordered their meals, including ham-and-cheese sandwiches. Come up with three to five solutions, and choose the best one if price is not an issue, and the best one if you have to keep costs down.

References

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