



In Search of Quality

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Quality is one of those words that surrounds us, smothers us and, at times, threatens to overwhelm us. The word is used in so many ways that it risks signifying nothing at all. Yet, even if only in self defense, we must come to grips with its meaning. After all, how are we to improve it if we do not know what it is?

For at least a quarter-century now, many companies have embarked upon voyages of discovery with respect to Quality. In today's incarnation of the quality movement, they typically sail off aboard the S.S. Six Sigma. They are in search of the meaning of Quality not just for their products and services, but also for their processes, their systems, their operations, their company, and their people. If they are wise, they adopt the view that Quality must be an integral part of everything they do. The history of some companies gives ample testimony to their commitment to Quality. Their continued success justifies their commitment. Most important, the future they face demands it of them. But, just what is this thing called Quality?

My research into matters typically begins with the words used to name, define, or describe that which is to be understood. Defining one's terms has always seemed such sound advice. Consequently, I have in my keeping several old dictionaries that I find useful in studying words and how their meanings change over time – or remain constant, as the case may be.

The oldest of my dictionaries is *Webster's High School Dictionary*, published in 1868, only 40 years after Noah Webster's very first dictionary

of the American language appeared. It contains these definitions of the word quality: "Nature; character; distinguishing property; attribute; high rank."

I also have a copy of a dictionary published 100 years later, in 1968: *Webster's New World Dictionary of The American Language* (Second College Edition). It offers these definitions of quality:

1. any of the features that make something what it is; characteristic element; attribute
2. basic nature; character; kind
3. the degree of excellence which a thing possesses
4. excellence; superiority
5. position, capacity, or role [Rare]
6. high social position or people of high social position [Archaic]

Three other definitions are given but they are technical, relating to acoustics, logic, and phonetics. I will not burden you with these technical definitions.

Incidentally, in this 1968 dictionary, just below "quality" is "quality control," defined as follows:

"a system for maintaining desired standards in production or in a product, esp. by inspecting samples of the product"

Sometime during the century spanning 1868 and 1968, things changed. Quality had come to imply excellence and the notion of quality control had appeared. Then, again, perhaps things hadn't changed. In 1868, the dictionary was itself still a relatively new product, and a high school dictionary of that time, although a useful indicator as to meanings then in use, is hardly the last word on the matter. So, I turned to the earliest of the *big* dictionaries I own: *Webster's Universal Dictionary of The English Language* (1908-9). It is most illuminating (and well illustrated, too). Here are its offerings on the subject of quality:

1. That which belongs to a body or to an entity and renders or helps to render it such as it is; characteristic attribute; nature; a belonging; as, purity of tone is an important *quality* of music; a man is admired and respected for his good *qualities*.
2. Any character or characteristic which may render an object good or bad, commendable or reprehensible; as, a fabric of poor *quality*; a mind of superior *quality*.
3. Superiority of character; excellence of nature; as, a person of *quality*.
4. Power to accomplish; capability of doing a specific thing; as, certain substances having healing *qualities*.

Note: The fifth, sixth, and seventh definitions are technical, dealing with logic, music, and acoustics, respectively.

8. Superior rank or station; as, he belongs to the *quality*.

Clearly, as the second definition establishes, the notion of goodness in products existed shortly after the turn of the century. But, why shouldn't it? The exodus off the farms and into the factories, begun in earnest in 1875, was well underway if not largely completed by then. King Cotton had been deposed by the Barons of Business.

One of the more recent dictionaries in my library is a paperback edition of *Webster's New World Dictionary* (1982). It carries only four listings for quality, none of which are technical:

1. that which makes something what it is; characteristic element
2. basic nature; kind
3. the degree of excellence of a thing
4. excellence

(Hmm. Do you suppose the "search for excellence" that occupied all our time in the 1980s was really a quest for Quality?)

Here, too, are signs of the times circa 1982. Directly beneath "quality" is this listing for "quality circle":

"any of the small groups of workers that meet regularly to suggest improvements in production"

Sound familiar?

Certainly the biggest, and arguably the best, of my dictionaries is a Christmas present from my wife, *The Compact Oxford English Dictionary* (1991). It consists of all 25 definitive volumes of the English language packed into one, in print so fine a special magnifying glass is required to access its contents.

In it, I encountered for the first time a distinction between the concept of quality as it applies to people and as it applies to things. For obvious reasons, we will deal here with the concept of Quality as it applies to things. Setting aside all the technical, archaic, and obsolete definitions leaves us with just two of interest:

7. An attribute, property, special feature or characteristic.
8. The nature, kind, or character (of something). Now restricted to cases in which there is comparison (expressed or implied) with other things of the same kind; hence, the degree or grade of excellence, etc. possessed by a thing.

Tucked away under this heading, in the explanatory notes, I also found these two related constructs:

- **quality circle**, a group of employees (orig. in Japanese industry) who meet to consider ways of resolving problems and improving production in their organization;
- **quality control**, the maintenance of the desired quality in a manufactured product, esp. by means of critical examination of a proportion of the output and its comparison with the specification.

Being of a persistent as well as curious nature, I next resorted to an older (1879) version of *Roget's Thesaurus* but, except for linking quality with quantity, it was of no help whatsoever. A later edition (1962) makes the link between quality and goodness. It also maintains the link to quantity made in the 1879 version.

Then, by way of seeing what the ancients and other thinkers of note have had to say about Quality, I referred to *Bartlett's Famous Quotations*: the eighth edition, 1882; and the most recent edition, the 15th, 1962. I found nothing worth mentioning in the 1882 edition but the newer one contains this comment by Lucius Annaeus Seneca ("Seneca the younger"), Roman philosopher, dramatist, and statesman (c. 4 B.C.-A.D. 65): "It is quality rather than quantity that matters."

Seneca's words have a nice ring to them but we probably ought to keep in mind that he was a cynic and a hypocrite, a murderer, and tutor to the young Nero. Ultimately, owing to Poppaea's ascent to power as well as to his own conspiratorial bent, Seneca was forced to commit suicide (leading me to conclude that one should move cautiously with respect to this Quality thing).

What have I learned? What have I concluded about Quality after all this rummaging around in those conceptual chests of drawers called dictionaries?

Well, the term that won't leave the forefront of my thinking is actually from my youth: *Quality Merchandise*. It still appears where I first saw it, on signs in store windows. It means, of course, goods that are well made, free from defects. It might or might not mean that these goods possess the attributes and characteristics sought after by their would-be purchasers. These qualities vary from product to product and customer to customer. In shoes, one buyer might look for sturdiness, another for style; some demand both. Tensile strength might be important in certain tools or other items fabricated from metal or plastic, whereas lack of this same characteristic marks fine china and crystal. "Delicate," a term

which applies to some lingerie, also applies to certain pastries, but it is a totally inappropriate quality in a cutting board or a chain saw. On and on the possibilities go. How are we to resolve the confusion?

The solution lies in recognizing that Quality is a relative construct. Its definition hinges on whom you ask and with respect to what. David Hume (1711-1776) captured this thought 250 years ago when he wrote, "Beauty in things exists in the mind which contemplates them." More than 100 years later, Margaret Wolfe Hungerford (1855-1897) wrote the more familiar, "Beauty is in the eye of the beholder."

Thus, the first order of business in improving Quality (or anything else for that matter) is always to define it, to say what you mean by it. Once defined, ways can be found of measuring it. And, once it is measurable, it can be improved. (The same holds true for "service," by the way.)

In the end, partly because I fancy myself "a systems thinker," but mostly because I've been influenced by the writings of Joseph M. Juran, I am inclined to take an internal or production view of Quality, *and* an external or marketing view as well.

Internal quality refers to the extent to which a company's products and services meet specifications, that is, the extent to which they are free from defects.

Managing internal quality is an *engineering problem*, a matter of building systems that perform to specification, a matter of doing things right.

External quality refers to the extent to which the company's products and services are of value to its customers. This is traceable to the extent to which the company's product and service specifications reflect its customers' wants, needs, requirements, and constraints. These usually can be expressed in terms such as cost, suitability, reliability, accuracy, timeliness, speed, and so on.

Managing external quality is a *communications problem*, a matter of engaging your customers in dialogue and getting to know them. Eventually, it is a matter of doing the right things. If the requirements for external quality are not met, then to paraphrase Peter Drucker, the result is apt to be "beautifully engineered products that should not have been built at all."

Quality, or what some seem to mean by "total quality," including "total quality management," is not the simple arithmetic sum of internal and external quality but, rather, a more complicated function of the two (see the equation below).

$$Q = f(Q_i \& Q_e)$$

In the final analysis, even if you're wearing a totally modern Six Sigma black belt, Quality means what it has meant all along: value in goods and services. On the one hand, this means goods that are well made and services that are properly delivered. On the other, it includes the notion of value. Value, to play off the earlier Hume and Hungerford quotations about beauty, is in the eye and mind of your customers. Which, by the way, is why they know it when they see it.

Ultimately, to go in search of Quality is to go in search of your customer, for there is where value is determined and there is where the definition of Quality begins.

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