

Ye Olde Brewery: Quality Measures

Description

What goes around comes around, even when it comes to beer. The microbreweries that seem to be all the rage in beer-connoisseur circles are actually indirect descendants of the beer-making industry from 100 years ago and more. The beer market of the pre-Czechoslovakian region in the late 1800s offers a microcosm for study.

Of course, in Eastern Europe and out, there are myriad differences between the beer industry then and now. The rest of the world was a lot less accessible a century ago. Local breweries ruled the market, and the market rarely fluctuated in size. There were no 18-wheelers rumbling down highways with promises of less-filling mountain gusto for good friends, and good friends were more likely to stay in the immediate area from cradle to grave than they are today. It was simply a reflection of the transportation and career opportunities available at the time.

Similarly, the great technological advances in measuring devices had yet to be made (or at least introduced to the Czech lands) by the late 1800s. As far as beer making went, sensors were essentially whatever the human form could provide. The color, foaminess, and transparency of a beer were judged by eye. The nose was the final arbiter of a brew's aroma, and the palate decided whether a beer's taste was up to snuff (of course, some things never change).

However, even then a good beer was not likely to go unnoticed. Competition among beer makers was on the rise, and the market range for certain breweries was increasing. As a brewery's area of influence expanded, the durability of its product became much more important.

Unfortunately, the demand for a beer that could travel great distances far outweighed the supply of proven durability sensors. Experienced brewmasters noticed a relationship between durability and the amount of alcohol in the beer, but they had no precise method for measuring alcohol content. They could only *estimate* alcohol content according to the beer's density and viscosity.

The sensors for judging density and viscosity were nowhere near as precise as today's technology allows, but the method used by certain Bavarian brewers was a real seat-grabber. An inspector clad in buck-leather trousers sat on a wooden bench covered with beer. If, at the end of an hour, the inspector could not separate his rear end from the bench, the beer's durability was proven.

Fortunately for beer lovers, measurements in the beer-making industry have become more precise and more comfortable to employ. In fact, they have now advanced to the point where even small-market breweries can capture a share of the market. Which proves another point: The more things change, the more things stay the same.

Learning Points

Quality experts have known for years that "we cannot improve what we cannot measure." Too often, however, there are those who claim that the nature of *their* work is such that it is impossible to measure it. This is especially true of those in positions where their work affects customer goodwill, is creative in nature, has an element of "art" to it, and so forth.

The use of the seat of an inspector's pants to measure a beer's durability in the late 1800s, while unscientific, reminds us that the need to establish some form of measurement is crucial to developing a quality product. The fact that scientific measures were ultimately developed to test durability should be a

source of encouragement to anyone trying to develop measures to identify problem areas and improve performance in any aspect of work.

When we utilize quality measures, it turns the subjective into the objective. Objective data (versus anecdotal evidence) and the graphic presentation of that data assure that the message can be heard by all and that action will be taken to eliminate the problems the data represent.

Discussion Questions

Question: What are some of the quality measures that you use to evaluate your own organization's performance?

Answer: Responses will vary but may include the following:

- percentage of deliveries that are late
- time it takes to approve a loan
- time it takes to develop a new product
- percentage of integrated circuit chips that are defective

Question: Are there any areas in your organization where quality measures are not used because the nature of the work does not appear to lend itself to measurement?

Answer: Responses will vary but may include the following:

- research and development
- customer service
- training and development
- graphic art

Question: What are the steps to establishing measurement in an organization?

Answer: First, identify the features to be measured. Choose features that are important to the customers of the services or directly affect outcomes that are important to customers. Second, identify the unit of measure. By asking customers how they evaluate the results of the service, you will discover implicit ways in which customers measure the service. Finally, decide the means by which you will measure. You may use technological sensors (e.g., clocks, thermometers, etc.), or you may use data bases and reports or human evaluation (e.g., does a hotel room have the proper number of towels, do blemishes exist on the finish of a home appliance).

Question: What are the criteria for developing a unit of measure?

Answer: The ideal unit of measure meets six criteria.

- It reflects a customer need, whether the customer is internal or external.
- It provides an agreed basis for decision making.
- It is understandable, i.e., it does not require additional definitions.
- It can be broadly applied.
- It can be uniformly interpreted.
- It is compatible with existing sensors, i.e., those human or technological measures used to monitor performance.