

What is Critical to Quality?

Critical to Quality is the conversion of Critical to Customers factors into certain measurable and controllable manufacturing and/or delivery processes.

These processes are internal to the management and due to their quantitative nature, the management can easily control them, measure deviations, if any and rectify these deviations to improve the customer experience.

Originally developed by Motorola in the 1980s, Six Sigma is a renowned set of management techniques that is very well received and implemented worldwide. It is a management approach that is based on data and statistics to ensure continuous improvement in manufacturing and business processes, products and services through eliminating errors. Critical to Quality is one such important parameter under Six Sigma.

Example of Critical to Quality in a restaurant

Now, in the same example that we have cited above, how would the restaurant owner convert the critical-to customer's factors into measurable critical-to-quality processes? It would be done in the following manner:

CRITICAL-TO-CUSTOMERS

CRITICAL-TO-QUALITY

Prompt Delivery

A set time, say 12 minutes, for noting down the customer's order, the kitchen and serving the customer.

Palatable and Uniform Taste Using standard recipe with measured ingredients and predecided

Taste

time to maintain consistent, customer-approved taste.

Piping Hot Food

Maintaining the temperature between 30 degrees to 50 degrees depending upon the type of dish.

CRITICAL-TO-CUSTOMERS

CRITICAL-TO-QUALITY

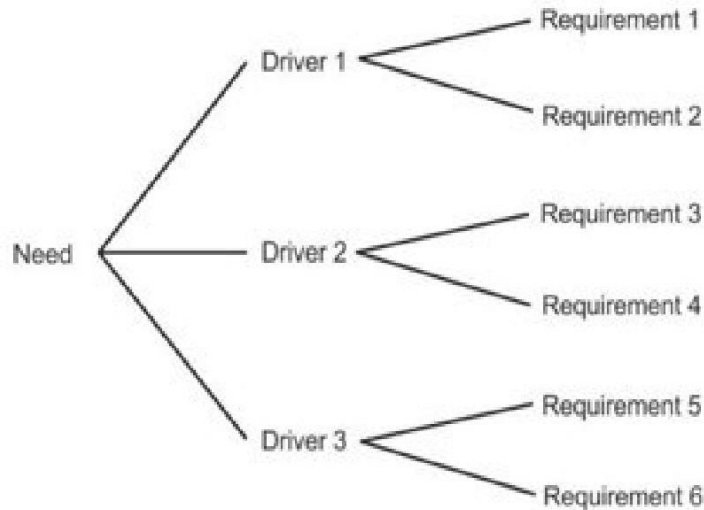
Cleanliness in the restaurant

Setting up a floor and tables cleaning routine at every 10 minutes
Washing the dishes in hot water.

Reasonable prices

Regular prices within an acceptable range.

b. Benefits to customers in the form of promotions, offers, loyalty discounts etc.



1) Identify the critical needs of the customers

Here, the business organization identifies the factors that are critical for the customers to feel good about using the product or services. The business can do incorporate these broader customer requirements into their CTQ tree by taking inputs from the salespeople.

This is because the sales force gets to communicate directly with the end-users of the products and hence, is better positioned to understand their pain points and requirements.

2) Convert these needs into a specific process parameter:

After understanding the customer requirements, the business has to convert these into specific parameters of the business processes that are used to manufacture the product or deliver a service.

E.g. If a customer wants 'good customer service', from the business process perspective, this translates into the parameters such as greeting the customer immediately when she enters the premises, responding to all the queries, etc.

3) Attach performance metrics to that factor, so that the deviations can be measured and controlled by the organization

After the business determines the business process parameters of a CTQ Tree, it has to attach specific, measurable performance metrics to each of these parameters so as to communicate the expectations clearly to the human resource of the organization and control deviation, if any.

Characteristics of CTQ

1. CTQ is a very specific and measurable form of a business process.
2. CTQ is collected from VoC (Voice of Customer). Its genesis lies in the expectations of customers as conveyed by the customer points of contact.
3. CTQ is used internally, within the business organization to help the management direct business processes.
4. CTQ as a standard is actionable and controllable
5. CTQ connects the customers' expectations and the business's response to the same seamlessly

Benefits of CTQ

1) Meets customer expectations

The business can successfully fulfill its customers' expectations with the help of CTQ.

2) Possibility to surpass expectations

With CTQ, not only the present expectations can be met but it is possible to raise the bar higher by offering newer elements of product or services. This

is made possible by meticulously scrutinizing the performance standards and deviations under CTQ.