

Voice of the Customer (VOC) and Critical-to-Quality (CTQ)

Voice of Customer (VOC)

An important element of Six Sigma is understanding your customer. This is called VOC or Voice of Customer. By doing this, it allows you to find all of the necessary information that is relevant between your product/process and the customer, better known as CTQ's (Critical to Quality). The CTQ's are the customer requirements for satisfaction with your product or service.

There are a number of reasons for starting with the customer when working on process improvement:

- It ensures that the problem and goal are defined in terms that truly relate to customer requirements.
- It avoids cost and time cutting solutions that actually hurt service or relations with customers.
- It provides insight into possible output measures of the process.
- It helps to create a climate of positive change; sometimes just listening to customer feedback is a huge leap in customer satisfaction – aka Hawthorne Effect.
- It enables you to translate the often vague customer comments into measurable statements called Critical to Quality (CTQ) metrics.

How to Collect VOC

1. Brainstorm a list of stakeholders; they could be customers, suppliers, process owners, regulators, sponsors, groups that are somehow affected, groups that somehow affect the process.
2. Prioritize the results into three categories; “A” category for those groups that benefit most or are affected the most negatively from the process, “B” category, and “C” category for those groups that are affected the least.
3. As a team, first hypothesize what you think the VOC is for each customer group and person involved in the process.
4. From your hypothesis, build interview questions. See separate templates and online resources for possible non-leading questions.
5. Go out and ask individual customers and customer groups, as well as track what they show they want when they vote with their wallets or feet.
6. Interview key internal process owners to understand each of their perspectives.
7. After data has been collected, sort through responses and de-duplicate.
8. Optionally, categorize responses by performing some sort of affinity diagramming or clustering activity.
9. Identify solutions that customers have stated and place this information in a separate “Possible Solutions” document that the team will explore later in the Improve phase.

10. Include in your plans some traceability of VOC responses. Being able to go back to the customer group that made an interesting comment so you can probe further is very advantageous.
11. Your final list will then be used to convert the vague VOC into measurable CTQ's.

Critical to Quality (CTQ) Analysis

VOC's can be vague and difficult to define, that's where CTQ's come in. The customer may identify a requirement that is difficult to measure directly so it will be necessary to break down what is meant by the customer into identifiable and measurable terms.

Converting VOC to Critical-To-Quality (CTQs)

1. Identify customer and stakeholder groups, and prioritize them.
2. Collect their qualitative VOC needs in their language, not assuming you already know it.
3. Analyze data and blend it to generate VOC lists, prioritized by segment.
4. Ask customers and stakeholders to translate their customer language into measurable CTQs.
5. Set your specifications for CTQs that match customer needs.

TEMPLATE: Converting VOC to Critical-to-Quality (CTQs)

Priority	Customer Or Stakeholder	VOC Ranked	CTQs (<u>Measurable</u> versions of VOC) Ranked
1		1 2 3	1 2 3
2		1 2 3	1 2 3
3		1 2 3	1 2 3
4		1 2 3	1 2 3
5		1 2 3	1 2 3