CTQ (Critical To Quality)

Tagucci said "If you cannot measure a customer requirement, you will not know if you`ve improve it".

Starting from this affirmation we have to think how to transform the customer's voice into a measurable indicator. **CTQ**s are the key measurable characteristics of a product or process whose performance standards or specification limits must be met in order to satisfy the customer.

Typically, a **CTQ** must be interpreted from a qualitative customer statement to an actionable, quantitative business specification.

Those who gather Voice of Customer (VOC) data must help the customer tranlate vague and sometimes emotional statement into specific and measurable customer requirements. This is made through KCI (Key Customer Issue).

To understand better we can follow the transformations:

VOC	KCI	CTQ
Time to reply to our claims is too big	Want to decrease time to reply to the customers with 20%	For all climes received we have to reply in max 48 hours
I hate to deal with this company	Products are not delivery on time	10 days lead time (+/- 1day)

A tool used is **CTQ** Tree.

These tools, as shown in figure, are diagram-based tools that help you develop and deliver high quality products and services.
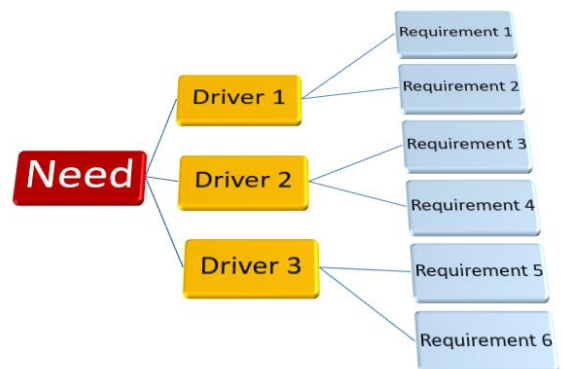
When **Critical to Quality** is useful:
- ✓ Critical to quality is implemented when the quality of output is affected;
- ✓ It is applicable where an input determines what happens next in the process;
- ✓ It is usually applied for measuring whether inputs or outputs are meeting needs.

Example / From **VOC** to **CTQ**

VOC	Demand of thin products on the market More demand in A product

KCI	Wants to increase production of thin strips Wants to increase production of A products

CTQ	Increase share for thin products : 2% up to 22% Increase share for A products : 0.7% up to 3.8%