

Introductory Review of Innovation Activity in Toshiba

Sub Title : Application of various tools in Toshiba; Sixσ, Taguchi Method, QFD, TRIZ and so on.

Author ; Naoaki Okuzumi , Toshiba Co.

Abstract

Toshiba began to introduce 6σ in 1999 and has carried out it company-wide. This activity, MI-Activity (Management Innovation Activity) we named, is not mere quality improvement activity of product but management-quality improvement activity of whole company.

We introduced and applied BCM(Combination of BSC and CTQ drill-down), DMAIC, DFACE(DFSS modified by Toshiba), Taguchi Method as tools.

We added i-cube program” in 2005 and integrated all these tools and programs into one entity of Toshiba Innovation Activity.

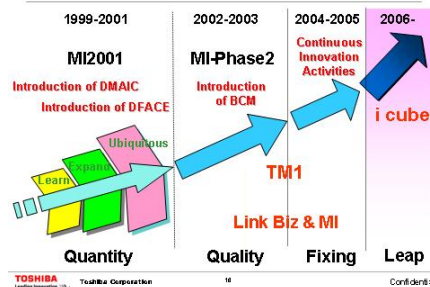
We keep looking for new methods to apply Toshiba, and studying TRIZ and other methods.

In this article, I will introduce brief overview of Toshiba Innovation Activity and how to use those methods including TRIZ.

Extended Abstract

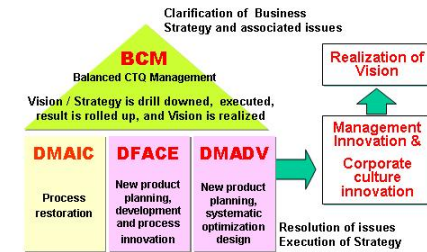
In Toshiba, we began MI activity in 1999, and up to now we have continued this activity by 4stages. (Please see below picture)

Toshiba Management Innovation Activity



The cycle for the vision achievement is constructed by using the method named BCM, DMAIC, DFACE, and DMADV to promote this MI activity concretely. (Please see below picture)

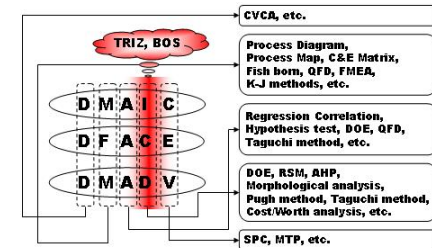
Construction of vision realization cycle



TOSHIBA Confidential

A variety of tool groups (you can see in below picture) corresponding to these methods are prepared and used in actual activities of MI.

Methods and Tools for Innovation Activities



TOSHIBA Confidential

Our company is evaluating and trying TRIZ as a part of further expansion of these tools now. You can see brief summary of the present situation of TRIZ among our company in the picture below.

TRIZ Activities in Toshiba

- Business area of Toshiba in which we have tried TRIZ.
 - Semiconductor Business, Power Systems Business, Medical Equipment Business, Industrial Systems Business, etc.
- Introduction of TRIZ in Toshiba.
 - FY 2003
- Typical examples of TRIZ in Toshiba.
 - To investigate cause of troubles in fab.
 - To plan strategy of technology among R&D section.
 - To develop new products in R&D section.
 - To find breakthrough of dead lock in R&D div.
- Future utilization of TRIZ in Toshiba.
 - We are now studying in-house examples and outside information to make our plan to introduce TRIZ to Toshiba.

TOSHIBA Confidential