

A Study on Total Quality Management Sustainability With Reference to Toyota Kirloskar Motor Pvt Limited- Based On JI KOTEI – KANKETSU Quality Model

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Abstract

Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction and skillful execution; it represents the wise choice of many alternatives. Say's WILLIAM A. FOSTER.

Total quality management is frequently considered to be a means for achieving competitive advantage. However, total quality practices can foster the creation of the indispensable knowledge for continuous improvement and for competing in the current markets .The management of knowledge has also been identified as an important antecedent of performance. JI KOTEI – KANKETSU Quality Model of Toyota, is analyzed in this paper. the linkages between total quality management, organizational learning and performance .The most significant implication of this paper is how JKK is used in developing , maintaining and continuously improving optimal work processes by working in cooperation with pervious and subsequent processes , so as to continuously produce best outputs .

Introduction

Quality is vital for Toyota, and Toyota has retained customer trust because of its quality .In the late 1950's auto industry rapidly expanded with the first export and motorization in Japan. And then, Total Quality control was introduced in 1961 and Quality was made at the process by introducing **Ji Kotei – Kanketsu** (Built in quality with ownership) and these was put into practice by every member having leading role of quality assurance. As a result the corporate constitution was improved and fundamental of Toyota was built.

Ji Kotei – Kanketsu (JKK)

Ji Kotei – Kanketsu means developing, maintaining and continuously improving optimal work processes by working in cooperation with pervious and subsequent processes, so as to continuously produce best outputs.

Ji Kotei – Kanketsu consists of three Japanese words each word has following meaning , Ji : self Kotei : Process and Kanketsu : completion .

Need of Ji Kotei – Kanketsu

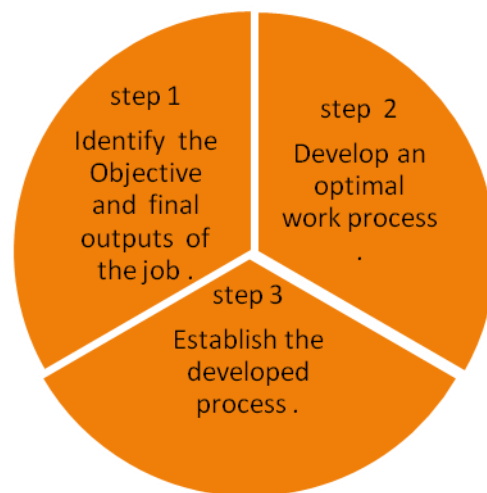
- To produce a product which satisfies customers
- To detect the defects in the parts
- To follow the decided standardized work
- To eliminate deviation in the work
- To build quality in the process
- To follow the rules in the work place

- To have quality assurance in everybody’s work

What benefits are there if you perform tasks according to the 3 key steps of JKK?

- Since the work can correctly understand the contents of the job through a visualized work process, he/ she can identify problems areas and make improvements more easily.
- The best way of working has been made clear, enabling him / her to perform tasks efficiently.
- With the work processes and procedures, a clear division of roles and tasks among members is possible.
- By using the standards smooth hand over of job responsibilities is possible.
- In the course of maintaining and improving the standards, the worker will acquire ideal ways of performing tasks.
- Rework will decrease, leading to reduced work load, increased team member confidence and morale.

3 Key steps on how to implement JKK in actual work



Step 1: Identify the objectives of the job.

Toyota has two objectives of the job.

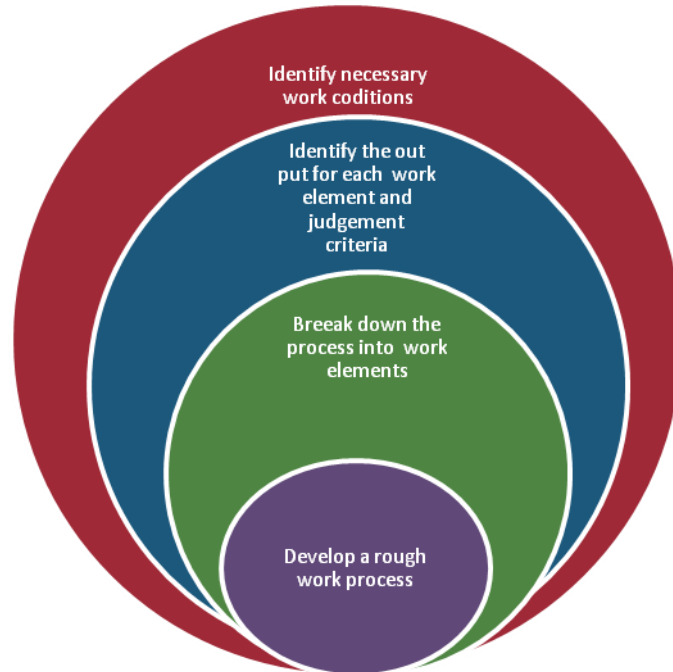
- Identify who your customers are.
- Identify the final outputs of the Job

Identify who your customers are: In Toyota they first identify who will use their final output. Toyota always puts its customer first. According to them customers not only refers to end users who buy their products and services, but also includes subsequent processes (in the same department, relevant departments within the company and affiliated companies) who receive there outputs they produce.

Identify the final outputs of the Job: when they produce a final product they take into consideration quality, quantity, cost, man – hours, timing and any challenges and risks.

Step 2: Develop an optimal work process: This is the most characteristic step of the JKK steps. By developing an optimal work process in this step they will be able to consistently produce high quality outputs.

Procedures to develop an optimal work process



Develop a rough work process : In this process they determine which tasks need to be performed and who has to perform the task and sequentially arrange all the task involved in the job which will give an overall picture of the job about who should do what by when, and in what order .

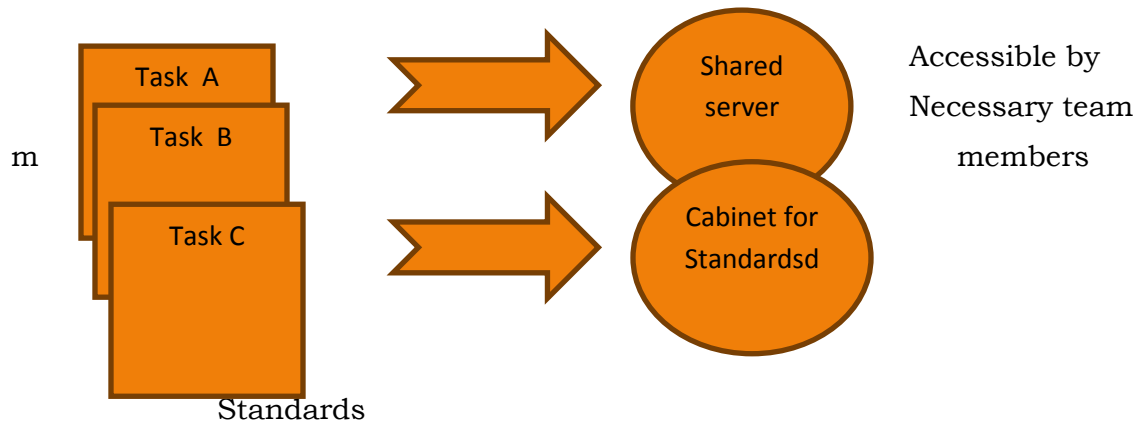
Break down the process into work elements: The work process will be broken into small process, so that each staff member can understand which specific activity he/she should perform.

Identify the output for each work element and the judgment criteria. When identifying work element they think about what output is needed to perform to perform the next work element. They also identify to whom, where the output the output is to be delivered and by when. After identifying the output for each work element, define a set of criteria for judging whether the produced output is good or bad.

Identify the necessary condition for each work element: necessary conditions are roughly classified into two categories. One is the things / information that need to be prepared in advance to produce the required output.

| Category | Examples |
|--|--|
| Things / information received from previous work element | Output from previous work element |
| Tools | Designated equipment , software , formats etc |
| Methods | Measuring methods , manuals (details), how to use software etc |
| Capabilities / Authority | Knowledge , skills and authority required to perform particular tasks (Hazardous materials engineer , access authority to classified information etc) |
| Points to keep in mind & reasons | Reasons why certain conditions (tools, methods, capabilities etc.) are set, failure experiences in the past know – how. |

Step 3: Establish the developed process: The developed standards are not the end of the work, but rather the beginning of Kaizen improvements. Toyota work on continuous improvements of their standards



Environment where standards are accessible to necessary members

In Toyota developed process is done through standardized work process and by establishing rules: The standardized work is a documentary form used in Toyota they are work manual, work instruction sheet or work flowchart. The standards are kept in a fixed place so that they can be referred any time related to something's needs to be clarified. These standards are revised time to time.

Conclusion:

In Toyota every member has a leading role of quality assurance and is making effort to specify what she / he have to do in particular internal rules. Every time problem occurred In Toyota they go back to the basic, “customers will decide whether quality is good or not.”They produce good products without relying on inspection, they always practiced the basic philosophy “Quality is built in the process (Build in quality with ownership) “. By following 3 key steps of JKK Toyota is able to produce defect free products.

Reference

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