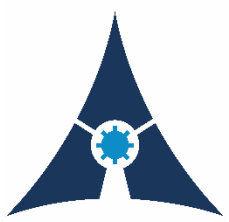
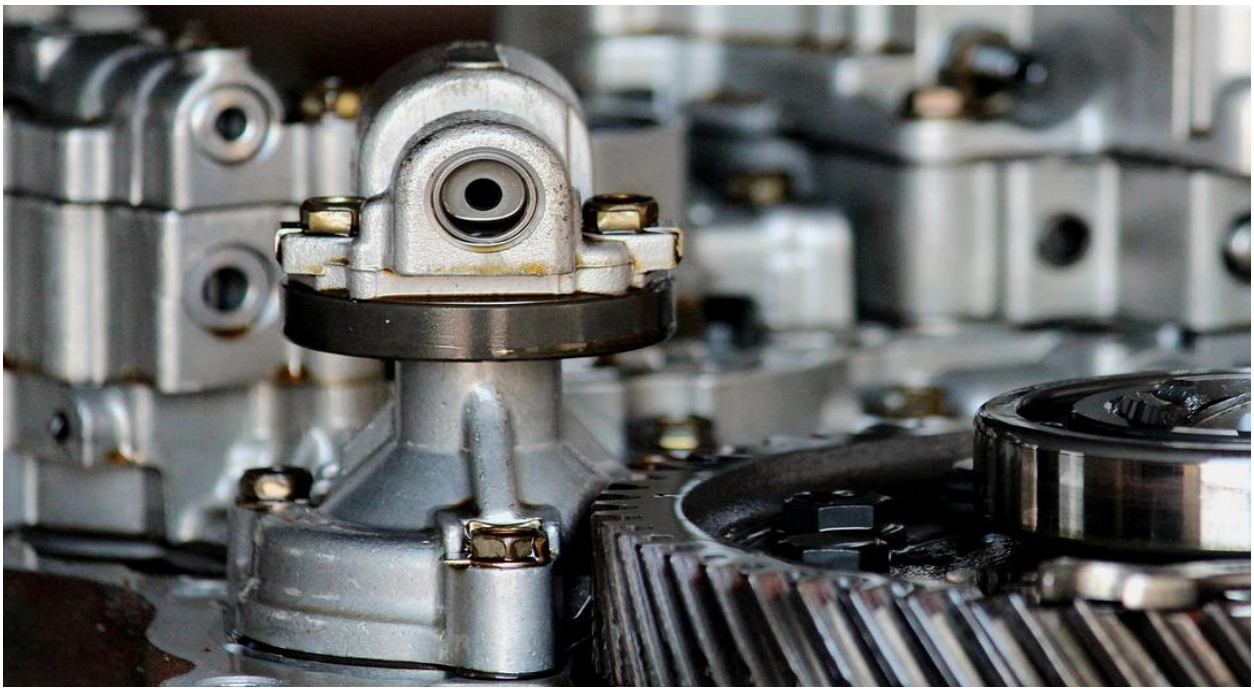


ARRELIC INSIGHTS

OVERVIEW & LIMITATIONS OF TOTAL QUALITY MANAGEMENT

OVERVIEW & LIMITATIONS OF TOTAL QUALITY MANAGEMENT

In today's global markets competition continues to get harder and it is becoming essential for companies to provide more consistent or better quality products and services to their customers. In order to provide such quality products and services that meets or exceeds customers' expectations a key management approach such as Total Quality Management (TQM) should be implemented by organizations.



So what exactly is Total Quality Management (TQM)?

Total means the involvement and input of everyone in the organization from top management to its employees. **Quality** means fully meeting customer needs and requirements all the time and **Management** is the way we act and operate our policies and procedures including our training and instructions to all our employees. Thereby TQM can be defined as a management philosophy that seeks to integrate all organizational functions such as marketing, finance, engineering, customer services and so forth to focus on meeting customer needs and organizational objectives. What TQM is considered today is because of the quality gurus in history, who each played a part in developing the quality management approach. They are W. Edwards Deming, Joseph M. Juran. Armand V Fiegenbaum and Philip B Crosby.

Following are the eight principles of Total Quality Management.

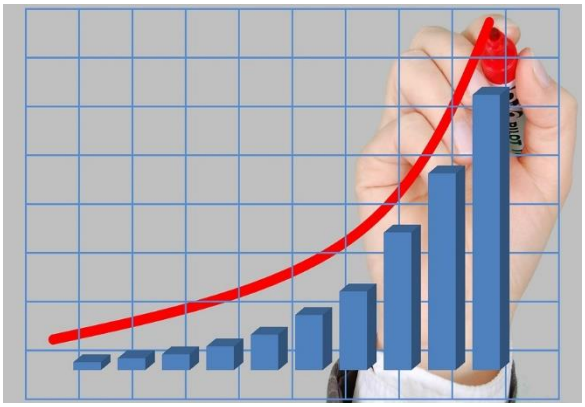
The first principle is **Customer Focus** whereby the company must place the customer at the center of attention in order to understand their need, so that their can meet or exceed their expectations.

The second principle is **Leadership** by establishing a unity of purpose and organizational direction where all members of an organization can share a common goal or aim.

The third is the **Involvement** and **Utilization** of the entire workforce by creating an environment without fear that encourages every employee involvement and achievement of the organization's objectives.

The forth principle is **Process Approach** recognizing that things accomplished as a result of processes.

The fifth principle is the **Strategic and Systematic Approach to Management**. A company's strategic plan must incorporate quality as its core component. The strategy is doing the right things, right, the first time and every time.



The sixth principle is **Continual Improvement** by creating a culture of continuous improvement for zero defects, zero errors and zero accidents.

The seventh is **Factual Approach** to decision making meaning decisions must only be based on accurate relevant and reliable data and information.

The eighth principle is **Mutually Beneficial Supplier Relationships** where both the company and the supplier can benefit from one another's resources and know-how resulting in value for all.

These eight fundamental principles of TQM helps the manufacturing industries to streamline their operations and reduce defects to increase the overall productivity.

As with any organizational system Total Quality Management has its limitations. Though it may differ from one company to another. As such there are two common limitations that occur with this management approach. The first is **Cost and Time** in implementing TQM systems. During these long years substantial cost can accrue. Due to the lengthy process of training employees which also takes a significant investment by the company in terms of money and the utilization of resources. So adopting the TQM process can be quite expensive and exhausting.

Second limitation is the **fear of change.** Because of increasing global competition, many organizations are replacing the traditional approach with a TQM approach. However there are those employees that resists change due to in certainty doubt and fear from these rapid global changes and this is what sometimes but so hold in organizations with successfully implementing the TQM system.

Despite these limitations, there are companies that have successfully implemented the TQM approach and have gone on to achieve long-term success growth and survival. An example of such a company would be the Toyota Motor Company. In relation to TQM they put the customer first, second they continually improve their products (also refer to as Kaiser which means continuous improvement) and third they foster total participation by encouraging all employees to be involved in making effective contributions towards the development of the company and the achievements of its objectives.

About Arrelic

Arrelic is a fast-growing deep-tech firm aiming to bring the next level of IoT based sensor technology to transform the mode of manufacturing operation and maintenance practice of various industries with extensive expertise in Reliability Engineering, Predictive Maintenance, Industrial Internet of Things (IIoT) Sensors, Machine Learning and Artificial Intelligence. We provide a single ecosystem for catering all industry needs from Consulting to IoT and Analytics as well as providing Training and Development courses for different stakeholders. We aim to help manufacturing industries to improve their overall plant productivity, reliability and minimize total production cost by 25-30% by eliminating machine downtime, lightening management decisions by analysing the machine data with right mind and expertise; for a worry free operation.

Disclaimer

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation. In this regard, Arrelic has no responsibility for the consequences hereof and no liability.

©2018 Arrelic Reliability Private Limited ・ All rights reserved.