

Study on Impacts of Total Quality Management: Situational Analysis

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Abstract: Total Quality Management is a management philosophy that seeks to integrate all organizational functions such as marketing, finance, engineering, customer service, etc. focused on meeting customer needs and organizational objectives. TOTAL refers to involvement and input of everyone in the organization. QUALITY refers to fully meeting customer's needs and requirements all the time. MANAGEMENT is mainly about the way we act or operate our policies and procedures including training and instruction to all employees. This article tried to figure out the impacts on total quality management in different situations.

1. Introduction

Modern companies implement quality improvement programs to enhance their products or services. The quality imperative movement of the last two decades has redefined quality as a never-ending effort to continually improve a company's products. This movement combines strategic and operational control to achieve long-term success and survival of an organization. TQM stands for total quality management, a term derived from the quality imperative movement. It involves all staff to identify every process within the business that will influence quality. TQM is a continuous effort to enhance the quality, efficiency, and responsiveness of a product or service. Any action taken to implement TQM is an action to fulfill the quality imperative. The quality gurus of TQM are Edward Deming, Joseph Juran, Philip Crosby, Genichi Taguchi, Kaoru Ishikawa, Shigeo Shingo, Armand Feigenbaum. TQM can be implied in many aspects in the society. Take Jiangxi province as an example to see the province daily products (Fig.1).

Item	1978	2000	2010	2019	2020
Province Daily Production					
Gross Domestic Product (10 000 yuan)	2384	54879	257073	675816	701954
Primary Industry	991	13292	32555	56372	61246
Secondary Industry	907	19199	139262	299721	302864
Industry	635	14901	118556	245639	244609
Construction	272	4298	20706	54274	58446
Tertiary Industry	486	22388	85255	322195	337844
Transport,Postal and Telecommunication Services	70	5342	12251	29691	30188
Wholesale and Retail Trades,Hotel and Catering Services	135	4985	23222	69882	71185
Financial Intermediation	32	2547	6616	42671	49416
Government Revenue (10 000 yuan)	335	4704	33596	109632	110611
Government Expenditures (10 000 yuan)	446	6123	52692	174981	182352
Cloth (10 000 meters)	55	59	221	282	211
Machine-made Paper and Paperboard (ton)	254	658	5112	7568	7953
Coal (ton)	39329	49692	77540	13798	7684
Processed Crude Oil (ton)			12834	21551	19177
Electricity (10 000 kWh)	1241	5508	16905	37696	36081
Crude Steel (ton)	702	8763	50247	69164	73281
Rolled Steel (ton)	671	7751	53467	76595	84533
Cement (ton)	4262	37863	170426	263700	266933
Vehicles (unit)	3	366	1021	1345	1233
Cameras (set)	27	489	16	2038	838
Province Daily Consumption					
Energy Consumption(10 000 tons of SCE)		6.86	17.41	26.48	26.80
Total Retail Sales of Consumer Goods (10 000 yuan)	930	19312	80992	275837	283382
Province Other Daily Economic Activities					
Freight Traffic (10 000 tons)	12.89	64.66	274.90	413.32	429.42
Passenger Traffic (10 000 persons)	17.69	98.14	209.95	163.57	117.99
Newspapers Published (10 000 copies)	39.60	109.39	193.01	217.70	206.46
Number of Magazines Published (10 000 copies)	1.03	28.70	19.34	20.79	21.75
Books Published (10 000 copies)	23.27	55.62	43.94	68.37	73.91
Business Volume of Postal and Telecommunication Services (10 000 yuan)	21	2228	19125	83994	105222
Letters Delivered (10 000 pieces)	20.20	38.38	49.24	4.61	3.23
Packages Delivered (piece)		6767	3321	1178	1011
Number of Marriages (couple)	437	810	989	809	746
Number of Divorces (couple)	28	66	134	316	300

Figure 1. The province daily products

2. Elements or Principles of TQM

1. Specified quality

Specified quality is the first essential element. Companies should specify what quality means and give employees a clear picture to lead them in their work. From the customers' point of view, quality means that the product functions well, the price is competitive or fair, and the service is quick and satisfactory. Most Japanese companies such as Matsushita, Sony, and Toyota have a very good reputation for quality.

2. Customer orientation

The second element is customer orientation. Business must provide what the customer wants. An example is Dell computer's growth fueled by its customer service that offers tailor-made solutions to their clients' PC needs. It is necessary to recognize internal as well as external customers. Service with quality and efficiency for the internal customers adds value to their efforts, and is eventually passed on to the final.

3. Detailed business process concentration

The third element is detailed business process concentration. Breaking the business process into small parts gives managers the chance to inspect and improve the ways each step is done. Accounting and management consulting firms such as Andersen Consulting make good use of this approach.

Checking the quality, efficiency, and responsiveness of each phase or unit gives managers accurate information to make necessary changes. Increased efficiency of each step greatly contributes to the overall improvement.

4. Cooperation with clients and suppliers

The fourth element is cooperation with clients and suppliers. Businesses should avoid viewing clients and customers as adversaries and instead should cooperate with them as partners to deliver high quality products. This helps managers prevent or solve problems. Most automakers need to have strong cooperation with their suppliers. The Japanese Just in Time (JIT) system is a perfect example of a well-executed supplier partnership program.

5. Problem prevention

The fifth element is problem prevention. TQM focuses on the detection of potential problems before they occur. Failure to prevent defects has dangerous consequences: it will cost extra time and resources to inspect and fix. Undetected problems can even threaten an entire business. Companies use an outside firm to verify that their operations are sound. Companies must design in quality before they provide a product or service. During the design phase of a product or service, it is vital for managers to have input from customers, marketing, assemblers, and final producers.

6. Adoption of an error-free attitude

The sixth element is the adoption of an error-free attitude. This attitude prevents mistakes. Managers should encourage every employee not to simply finish a job but to finish it correctly as well. Zero defect programs adopted by most Japanese semiconductor and electronic companies are good examples of this element.

7. Accurate measurement

Companies should ensure that performance is measured accurately, that is, based on factual data rather than assumptions. Managers can use such data to assess critical variables in the operational process. The statistical quality method taught by Dr. Demming and widely adopted by Japanese and American companies is the basic cornerstone of TQM.

8. Employee participation

For continuous improvement in work, management must empower employees to be innovative and act in an atmosphere of trust and respect. At Ford Motor, their company slogan is "Quality is Job 1". This is used to involve employees in the quality assurance process.

9. Total involvement atmosphere

All units of an organization should simultaneously apply quality concepts. Every manager and employee should be encouraged to add value for continuous improvement. TQM requires commitment from every staff member of the company. Quality awards for management and staff are often used as incentives.

10. Continuous improvement

The last element of TQM is continuous improvement. Quality is a moving target and creates new standards for businesses. Products that consumers believed were of a high quality in the past are now of average quality. The organization itself must be dynamic to meet customers' ever-changing needs. Nokia, for example, instituted an up-to-date quality assurance program at its plants, and solidified its position as the one of the best cellular phone companies in the world. Another good example of continuous improvement is "Kaizen". The Japanese "Kaizen" program is commonly adopted by Japanese and US manufacturers.

3. The Situational Analysis

1. The Education Program Coordinator notices that over the past few years, the decline in enrollment in the Teacher Education program has decreased. Because of this, she recommended for the closure of the program.

The case is about Fact-Based Decision Making in TQM. The coordinator learned about the fact or the situation clearly about the decline in enrollment. She compared the investment of the Teacher Education program (such as staff, money, and other resources) and the influence of it. Hence, the

coordinator made a decision to stop the program. The author agrees with the coordinator for the closure of the program. Because the phenomenon speaks for the essence of society rule or field trend, education management should catch the sign and make adjustment.

2. The school dean decides to put together a team to try to come up with ways to do curriculum revision to suit to the demands of shifting to Outcomes-based Education.

The second case discussed is involved in Strategic, Systematic Approach. The school shifted to the OBE, which appeared to be something different from traditional education. So the dean and his team analyzed the SWOT and make strategies to meet the new demands or requirements of OBE. The author agrees with the dean to put together a team to research the OBE. This will help the whole school understand and meet the demands of OBE quickly and deeply.

3. John is an applicant for a teaching job in a university. During the interview, the dean asked him if he is willing to be trained on the use of online platforms. What principle of TQM is the dean is trying to adhere to?

The dean is trying to adhere to Total Employee Involvement of TQM. Online teaching has been not only a new trend, but also an extremely important way nowadays. Therefore the usage of online platforms should be mastered by university teachers. By asking his willingness of training, the dean is trying to adhere to Total Employee Involvement, to which the author raises his thumb.

4. The principal notices that two teachers are constantly at odds with each other, so he sits them down to find out what is wrong and to try to find a way to move past the issue.

This case is absolutely applied with communication of TQM. There seems to be a wide gap between that two teachers, which resulted from something unknown, such as misunderstanding, mistake or offence. The principal made a chance for them to talk with each other which is a way for them to eliminate the contradiction.

5. Lily works for a firm that sells pharmaceuticals. Her company just found out that a new drug is coming on the market, so her boss has a meeting to discuss the best ways to get the information to doctors so that they can prescribe the medication.

The case is talking about Customer-Focused. The boss is trying the best ways to get information of the new drug to doctors who can prescribe the medicine to patients properly and safely. The firm, the boss and the doctor, they care much about the patient (the customer). So this is the customer-focused, they cherish the life and the health of the patient (the customer).

4. Conclusion

An excellent kind of management is to simplify difficult issues into smaller ones and to proof-mistake simple details into none.

All things done in Education management is responsible for students, more specifically, for all things about students in their life span.

References

- [1] Gong Yiming. Modern Quality Management [M]. Beijing: Tsinghua University Press, 2003.
- [2] Zhou Nanhai. Quality Management Innovation [M]. Beijing: Economic Management Press, 2000.
- [3] Lin Zhengzhan. Research on the Application of TQM in the Internal Quality Assurance System of Self-study Exams [J]. China Exam, 2010(3).
- [4] <https://baike.baidu.com/item/%E5%85%A8%E9%9D%A2%E8%B4%A8%E9%87%8F%E7%AE%A1%E7%90%86/82450?fromtitle=TQM&fromid=1446922&fr=aladdin>