

# **TOTAL QUALITY MANAGEMENT AS A TOOL FOR ORGANIZATIONAL EFFECTIVENESS**

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## **ABSTRACT:**

The purpose of this study is to ascertain the influence of TQM on organizational effectiveness. Background : Numerous studies are revealing the impact of TQM on different aspects of an organisation. However, there remains a limited understanding of the impact of TQM on the effectiveness of the organisation. Therefore, there remains a significant research gap in how TQM influences an organization's effectiveness. In this regard, there is a significant research gap in the literature. Therefore, fulfilling this research gap is an area that calls for attention. Research will use a multi-case study based approach and use secondary and primary data. The research concludes, using a multi-case study methodology, that TQM has a generally favorable influence on organizational effectiveness. The study demonstrates that TQM has a beneficial effect on financial and market share of product. Further, TQM has a favorable effect on earnings, sales, and revenues and a positive effect on investor returns. Consequently, the study establishes that TQM facilitates organizational performance. In terms of Innovation, the case study research provides limited insights into the

effect of TQM on Innovation. The study shows that a thorough understanding of quality indicators, the selection of adequate performance indicators, the determination of weak points, leadership support, the development of a quality culture, and staff and management involvement are key success variables for implementing TQM. TQM has a positive impact on performance on companies, but impact on innovation is not évident. Therefore, there is a need to undertake study on how TQM influences innovation.

**Keyword:** Organizational effectiveness, Innovation, Organizational Performance.

## **I. INTRODUCTION:**

Researchers have undertaken different studies to examine the impact of TQM in companies. For instance, Lamine and Lakhal (2018) reviewed the effects of TQM on the company's performance. On the other hand, Ahmad et al. (2018) examined the impact of TQM on SMEs. Further. Kristianto and Taigan (2019) investigated the effect of TQM on employee satisfaction and Supply Chain integration. Moreover, Jaiswal and Garg (2018) investigated the impact of TQM on employee and customer satisfaction. Likewise, various

other studies have been undertaken by researchers to examine the effects of TQM in a different context (Mai et al., 2018; Abu-rumman, 2018). However, there are rarely any studies that have focused on examining the impact of TQM on the organisation's effectiveness. In this regard, there is a significant research gap in the literature. Therefore, fulfilling this research gap is an area that calls for attention. Therefore, the research intends to undertake an examination of the effect of TQM on the Organizational Effectiveness.

## II. MATERIAL AND METHODS:

The research uses pragmatism research philosophy and employs deductive reasoning. Further, the study has used a multi-case study-based approach. The case study organisation used in the study are: AtlantiCare, Santa Cruz Guitar Co., Ramaiah Institute of Management Studies, TV Motor Company, and NATVAR Iron & Steel Works. Secondary data was used for Atlantic are, Santa Cruz Guitar Co., Ramaiah Institute of Management Studies, TV Motor Company. On the other hand, primary data was used for NATVAR Iron & Steel Works. The companies are from different industries such as automobile production, Music guitar production, education industry, utensil production and healthcare industry so that impact could be examined in diverse industries.

## III. RESULT:

Table 1: Table Research Findings

Companies	Impact of TQM	Success Factors
AtlantiCare	Improvement in profits of \$650 million, increase in market share, improvement in revenues, and 3x increase in customer base.	Plan do check act, employee empowerment, improvement in internal communication, incorporating quality culture.
Santa Cruz Guitar Co.	Improvement in profits, increase in customer satisfaction, improvement in quality,	Breakdown of the tasks and high involvement of the leadership
RIMS	9% improvement in test results (quality), 22% increment in placements (Sales), increase in placement salaries of students (increased demand by consumers), and improvement in level of knowledge of students.	Evaluation of the quality process at each step, Leadership intervention, and identification of critical metrics.
TVS Motor Company	Increase in the sales and revenue, increase in market share, productivity and profitability of the company.	Cross-functional teams, embedding quality culture, PDCA cycle, use of Core team,
NISWPL	Improvement in quality, decline in rework, reduction in defects, improvement in market share, decline in operating expenses.	Identification of the problems, identification of key metrics, and embedding quality culture.

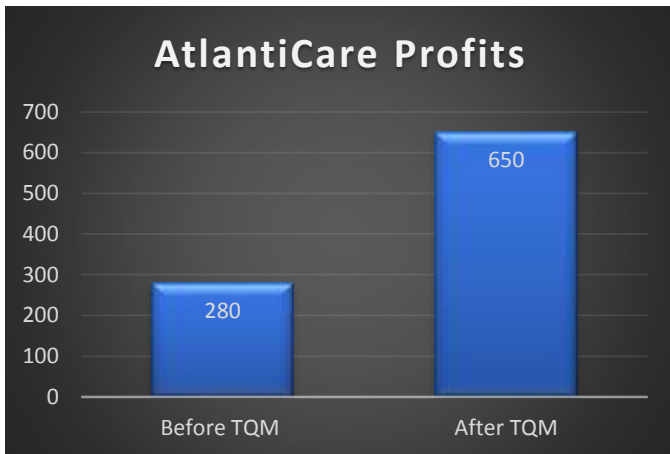


Figure 1: Profit of Atlanti care before and after implementation of TQM (Data provided by company in case study)

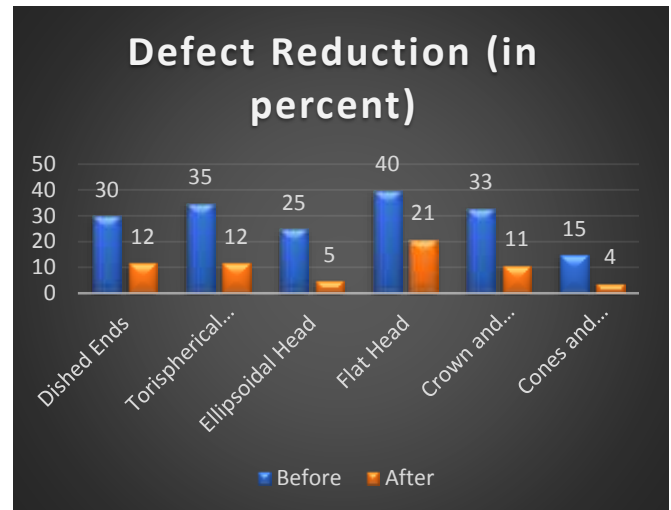


Figure 4: Defects before and after TQM implementation (Data provided by company)

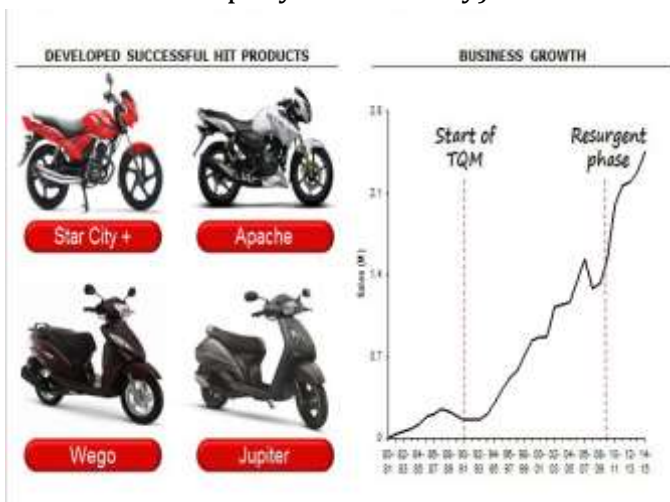


Figure 2: TQM impact on TVS renewal

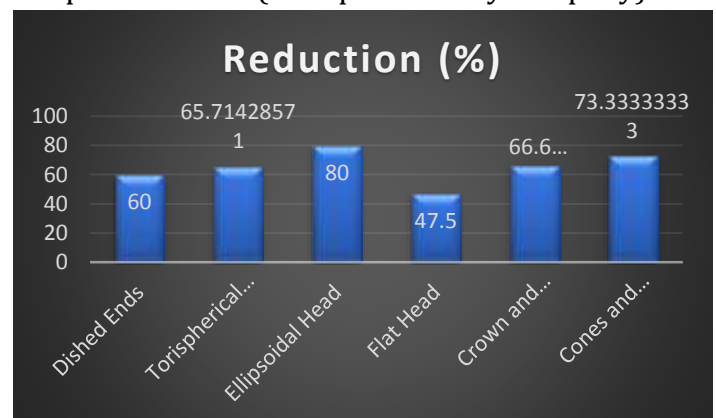


Figure 5: Percentage reduction in Defects after TQM implementation (Data provided by company)

Defect	Before	After	Reduction (%)
Dished Ends	30	12	60
Torispherical head	35	12	65.71429
Ellipsoidal Head	25	5	80
Flat Head	40	21	47.5
Crown and Petal heads	33	11	66.66667
Cones and Toircones	15	4	73.33333

Figure 3: Reduction in defects at NISWPL after implementation of TQM (Data provided by company in case study)

#### IV. DISCUSSION:

While reviewing the adoption of TQM, considering the example of AtlantiCare, the study discovers that the firm's revenue increased after implementing TQM. The firm's earnings rose by \$370. Consequently, the AtlantiCare case study demonstrates that the firm's profit boosted significantly after adopting TQM (AtlantiCare, 2021). Apart from the boost in earnings, the case study observes a surge in return consumers and a six-year high in market dominance. Growing market share implies that the market share of products has improved (Disterheft et al., 2015).

It is stated that the firm utilized the PDCA cycle to determine existing problems, allowing

it to develop workable solutions. A critical element of the case study is that the firm created a quality culture and assured that its workers understood it, demonstrating that effective adoption of TQM in organisations requires developing a quality culture. As a result, they create a culture in which workers recognise quality is critical for effective TQM adoption in this study. Additionally, the AtlantiCare case study emphasises the necessity of providing TQM training to workers and the relevance of performance indicators.

In case of Santa Cruz Guitar Co, the firm practices TQM through enforcing strict quality controls. As seen by the firm, the primary advantage of TQM adoption is an improvement in consumer satisfaction (Akao et al., 2020). This demonstrates that the market share of the product did get better because of TQM adoption. Additionally, the firm's profitability has increased significantly because of TQM adoption. While the magnitude of the boost in earnings is not disclosed in the case study, it does reveal that the adoption of TQM has undoubtedly increased the firm's profitability. A crucial argument raised in the case study is that effective deployment of TQM in the company was accomplished via partitioning the various support and workstations from the leadership.

Using Ramaiah Institute of Management Studies as a case study, it is discovered that employers were giving college students a higher wage following the adoption of TQM. In the case of the Ramaiah Institute, it is emphasized that the university's consumers are its students. As students began to get more extensive payment packages from employers, it is claimed that this indicates an increase in consumer satisfaction.

The example demonstrates that implementing TQM led to increased test scores, income, and job opportunities (Osei-Kyei and Chan, 2016). Additionally, TQM adoption increased the level of education provided to students, showing that it allowed the firm to

optimise the quality of its products, which increased the market share of development. A critical point to notice in the case of Ramaiah Institute is that the firm's primary metrics are employment quality, efficiency and research, and security of learning. This demonstrates that the Ramaiah Institute determined critical metrics and trained the staff to concentrate on them, resulting in the effective adoption of TQM. Additionally, the company conducted a root cause analysis to determine the underlying causes of the various problems inside the firm. The Fish Bone diagram tool of TQM was used to identify the issues.

Concerning TVs, it is worth noting that the firm's adoption of TQM resulted in an extraordinary upsurge in car sales. The study shows that the firm's profitability has increased significantly after the adoption of TQM, suggesting that TQM has a favorable financial impact. Apart from the economic benefits, TQM has led to a considerable increase in vehicle quality and reduced manufacturing costs.

The firm created its concept of TQM by selecting important indicators and then implementing TQM based on such data. Finally, while considering the example of NISWPL, it is observed that the significant benefit achieved by the firm after the adoption of TQM is an increase in earnings as a result of the reduction in defective products (NISWPL, 2021). Additionally, there is a noticeable boost in the market share of the product, as shown by the rise in product sales. Finally, it was observed that the capability to generate innovative ideas from challenges improved, suggesting that the capacity for Innovation did improve.

The assessment of all case studies demonstrates that implementing TQM has unquestionably benefited firms. One of the significant evidences is that TQM has a favorable correlation with an organization's financial success (Netland, 2016). TQM has a beneficial effect on a firm's productivity,

earnings, sales, and various financial metrics. Consequently, it is claimed that TQM has a beneficial impact on the economic efficiency of firms regardless of their sector.

Additionally, the research indicates a strong correlation between TQM and the commercial success of a product. The study concludes that the adoption of TQM strategies across several businesses led to increased consumer satisfaction, repeat consumers, and total consumer base, along with many other benefits. This demonstrates that implementing TQM improves product competitiveness, implying a positive link between the two. Owing to the unavailability of information regarding investor returns in the case study, it is impossible to draw a link between the two (Valmohammadi and Roshanzamir, 2015). Nevertheless, the study concludes that since the firms are not publicly listed, it is impossible to make conclusions regarding investor returns. Nevertheless, when the firm's efficiency, earnings, and sales improve, there is a high probability that investment returns will also increase.

With regards to Innovation, there is a shortage of data available on the influence of TQM on Innovation. According to the case studies, it is claimed that before implementing TQM, firms recognized the critical problems affecting them (Shacheraghi, 2016). As workers better understand the essential issues, they may develop more effective ways to solve them. Nevertheless, the case studies fail to provide compelling evidence of the potential benefits of TQM on Innovation. As a result, more research into this aspect is necessary. Additionally, it is emphasized that identifying problems is a critical component of effective TQM implementation. Conducting a root cause analysis is vital since it allows businesses to be informed of issues and develop solutions. Additionally, it is emphasized that another essential element of implementing TQM is

identifying suitable performance indicators. It is claimed that firms should establish performance indicators based on their awareness of quality before deciding on a TQM implementation plan. Additionally, it is emphasized that cultivating a quality culture is essential for effective TQM implementation. According to the case studies, it is critical to include significant stakeholders such as workers and executives while developing a TQM environment. Additionally, leadership involvement is deemed necessary for effective TQM adoption.

## **V. CONCLUSION:**

The critical problem in the existing literature is that numerous studies reveal the impact of TQM on different aspects of an organisation. However, there remains a limited understanding of the impact of TQM on the effectiveness of the organisation. Therefore, there remains a significant research gap in how TQM influences an organisation's effectiveness. In this regard, there is a significant research gap in the literature. Therefore, this research aimed to examine the impact of total quality management on the effectiveness of an organisation.

The research has used a multi-case study approach and utilized primary and secondary data. The research found that TQM has a positive impact on different components of organizational effectiveness. The research notes that TQM has a positive effect on market share, firm's profitability, consumer satisfaction, lowered production costs, sales, and returns. The analysis demonstrates that implementing TQM has unquestionably benefited firms. One of the significant evidences is that TQM has a favorable correlation with an organisation's financial success (Netland, 2016). TQM has a beneficial effect on a firm's productivity, earnings, sales, and various financial metrics. Simply put, TQM has a beneficial impact on the

economic efficiency of firms regardless of their sector. Additionally, the research shows a strong correlation between TQM and the commercial success of a product. Evidence-informed that the adoption of TQM strategies across several businesses led to increased consumer satisfaction repeat consumers, and total consumer base, along with many other benefits, demonstrating that implementing TQM improves product competitiveness, implying a positive link between the two. As firms are not publicly listed, it is impossible to make conclusions regarding investor returns. Nevertheless, when the firm's efficiency, earnings, and sales improve, there is a high probability that investment returns will also increase. With regards to Innovation, there is a shortage of data available on the influence of TQM on Innovation. However, the analysis informed that before implementing TQM, firms recognized the critical problems affecting them. As employees better understand the essential issues, they may develop more effective ways to solve them. Nevertheless, the case studies fail to provide compelling evidence of the potential benefits of TQM on Innovation. As a result, more research into this aspect is necessary.

Additionally, it is emphasized that identifying problems is a critical component of effective TQM implementation. Conducting a root cause analysis is vital since it allows businesses to be informed of issues and develop solutions. Additionally, it is emphasized that another essential element of implementing TQM is identifying suitable performance indicators. It is claimed that firms should establish performance indicators based on their awareness of quality before deciding on a TQM implementation plan. Additionally, it is emphasized that cultivating a quality culture is essential for effective TQM implementation. According to the case studies, it is critical to include significant stakeholders such as workers and executives while developing a TQM

environment. Additionally, leadership involvement is deemed necessary for effective TQM adoption.

In summary, the study reviewed the link between Total Quality Management and organizational effectiveness. Based on the examination of case studies, this thesis discovered that TQM has a favorable effect on product and financial performance market share. There is also no evidence that investor returns have an impact. However, it is claimed that since productivity, sales, and earnings are favorably affected, the probability of investor returns is increased, indicating that TQM has a favorable effect on investor returns. Hence, the study shows that TQM has a beneficial impact on organizational effectiveness. In terms of Innovation, the study concludes that there is insufficient evidence on the effect of TQM on Innovation. One of the primary factors is that there is no particular metric for evaluating Innovation, which makes it difficult for firms to track innovation improvements after the adoption of TQM. As a result, the study advises doing further research to determine the effect of TQM on Innovation. The study shows that a thorough understanding of quality indicators, selecting adequate performance indicators, the determination of weak points, leadership support, the development of a quality culture, and staff and management involvement are key success variables for implementing TQM.

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