

IMPACT OF TOTAL QUALITY MANAGEMENT (TQM) IN THE AIRLINE INDUSTRY

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Abstract

The primary focus of Total Quality Management (TQM) is to improve the quality of an organization's outputs (i.e., goods and services) through continuous improvement of internal practices (Barone, 2021). TQM is commonly used in detecting and reducing (or eliminating) errors in manufacturing, streamlining supply chain management, improving customer services, and ensuring proper employee training. Airline services are performed by an airline when transporting passengers, freight, and mail. Many airline passengers consider airline services to be more important than price (Derrick, 2019).

The purpose of this poster is two-folded.

- To showcase the impact of TQM on airline services, such as safety, customer experience, punctuality, and baggage delivery.
- To highlight the risks, costs, and challenges of implementing TQM in airline services.

What is TQM?

- TQM is used to effectively control available resources and ensure standardized quality of multiple aspects.
- TQM assists eliminating errors and deviations from the desired approach to accomplish a task while increasing the quality of operations.

Importance of TQM

Consistent improvisation and innovative ideas come through under the utility scope of TQM. TQM also:

- Identifies the skill deficiencies and helps the employees to gain expertise.
- Increases the communication network between the employees and assists building the bridge among staff members.
- Improves the institutional knowledge and flexibility. (Ahire, 1988)
- Promotes effective customer service and collaboration with the organization.

TQM in Airline Industry

- Air transport has evolved to become the most widely used option for mid and long-distance traveling and logistics
- The variety of users and beneficiaries of this industry is vast, and their needs and requirements are demanding and exigent
- TQM can assure no delays or incidences happen in the operations carried out, having a positive impact on clients and services
- The airline industry is a very competitive environment where customer loyalty and brand image is crucial to businesses' prosperity
- TQM helps companies in these aspects as it involves all members of the company to ensure all parts act with the same methods, culture and values and this helps to give a unified image

What is an Airline Service?

- An airline service is the act of transporting people, freight, or both, from one place to another by the means of an airplane.
- The quality of an airline service plays an important role in establishing a successful airline.
- According to the SERVQUAL model, service quality has five dimensions: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman, Ziethaml, & Berry, 1988).

Five Dimensions of SERVQUAL

- **Tangibles:** Physical facilities that an airline provides. Include basic facilities like number of check-in counters, number of customer service agents, disability provisions, airline terminal facilities and airline employee appearance.
- **Reliability:** The airline's ability to be dependable. Includes timely departures and arrivals with less frequent delays and cancellations. Also includes proper baggage handling and delivery.
- **Responsiveness:** The promptness and the eagerness of airline employees to help customers with anything that they are entitled to within the bounds of the service bought by them. Involves dealing with customer requests and complaints
- **Assurance:** The ability of the employees to successfully inspire customers with trust and confidence before they fly to combat the fear of flying.
- **Empathy:** The provision of caring, individualized attention to customers.

Literature Review

Lazur, Jagadeesh, Karthikeyan, and Shanmugaraja (2013)

- TQM improves the quality and cost of maintenance operation.
- It may take 10 years to implement TQM fully.
- TQM can be implemented in each production stage.

Qasim and Zafar (2016)

- The TQM process helped the APOLLO information system at Delta Air Lines in terms of performance, durability, responsiveness, reliability, aesthetics, and reputation.

Kim (2016)

- TQM implementation helps in attaining a stand over the competitors, which increases performance.

References

- Ahire, S. G. (1966). Development and validation of TQM implementation constructs. *Decision Sciences*, Vol. 27 No. 1, pp. 23-56.
- Kim, G. S. (2016). Effect of total quality management on customer satisfaction. *International Journal of Engineering Sciences & Research Technology*, vol. 5, no. 6, pp. 507-514, 2016.
- Lazur, B. I., Jagadeesh, L., Karthikeyan, B., & Shanmugaraja, M. (2013). An Initiative to Practice Total Quality Management in Aircraft Maintenance. *Advances in Aerospace Science and Applications*, 3(2), 2013, pp. 63-68.
- Parasuraman, A, Ziethaml, V. and Berry, L.L. (1988). SERVQUAL: A Multiple- Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, Vol. 62, no. 1, 1988, p. 25
- Qasim, S. and Zafar, A. (2016). Information System Strategy for Total Quality Management (TQM) in Aviation Industry. *International Journal of Computer Applications*, vol. 135, no. 3, 2016, pp. 37-42.