The Impact of Total Quality Management Practices on Key Performance Indicators of Star Hotels

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Abstract

This paper examines the impact of TQM on Key performance indicators in four star and five star hotels. Further studies of recent times in the Indian Hospitality sector proves to be the fastest growing sectors across the globe as it is estimated to grow at 16.1% by 2022 and is currently contributing 7.5% towards GDP, owing to the rich historical and cultural heritage and the variety of terrains and places of natural beauty. Since the measurement of quality of service in the hospitality sector is challenging, implementing TQM in this sector poses as a challenge. This study identified 10 KPIs through review of literature and a survey was conducted by collecting 125 responses to assess the impact of implementation of TQM practices on such identified KPIs. The study concludes by stating that implementing Total Quality Management has a significant impact of KPIs.

Keywords: *Total Quality Management, Key Performance Indicators, Hospitality Industry, Star Hotels*

1. Introduction

Total Quality Management being a comprehensive management technique, merges the eastern and western mentality on practices of the three core areas of management such as: operations, human resource and strategic management. (Al-sabi, Al-ababneh, & Masadeh, 2017)**Error! Bookmark not defined.**. It is a management technique which allows all stakeholders of the organization to express their opinion and perform activities that enhances business performances (Al-ababneh & Lockwood, 2015). Although, a specific and precise definition on service quality is not possible in the hospitality industry, many researchers have developed theories revolving around customer perception, customer expectation and the performance of delivering services (Parasuraman, Zeithaml, & Berry, 1988). Further studies of recent times proves that the hospitality sector is one among the fastest augmenting sectors across the globe as it is establishes to be one of the core basic factors towards the economic growth of a country. Research on implementation of Total Quality Management in Hospitality sector indicates that by providing quality services leads to positive word-of-mouth marketing, attracting new customers, gaining customer loyalty, enhancing their corporate image and increasingly the overall business performances (Parasuraman et al., 1988). The utmost important sector of the Industry of Tourism is the hospitality sector, it includes cafeterias, restaurants, Star and Budget Hotels, Guest-Houses, Motels, Lodges, Clubs and Pubs. The Hotels of various kinds are the biggest contributors to the hospitality sector. The hospitality and tourism services sector being at the core, showcased significant progress and has brought about a global economic transformation with the removal of barriers on trade and travel (Bharwani & Butt, 2012). The Report from World Economic Forum (2009) on competitiveness in travel and tourism places India at the 11th position in the Asia Pacific zone, for its natural resources it places India as the 14[Th] best tourist destination and for its world class heritage of cultural resources, India stands at the 24th position (Talib, Rahman, & Qureshi, 2012).

The implementation of the New Economic Reforms in 1991 and the effects of globalization in India has witnessed the hospitality industry to be estimated over 3.5 trillion dollars within the global economy. Thus, the twentieth century can be called as an era of the entry of big, modern, national and international Star Hotels, where star hotels such as Sheraton, Hyaat, Radisson, Meridien, Four Seasons regent, Marriot International, The Leela, The Taj, The Oberoi, Trident, Shangri-la, and Carlson Hospitality

started its operations in India after the commencement of big business establishments and the entry, existence and operations of multinational companies operating here. In order to make Total Quality Management widely accepted and successful, especially in the service sector, initiatives such as: Identifying key areas of facility services, key practices for effective implementation of Total Quality Management, the Top-Level management's commitment in implementing Total Quality Management for constant improvement, prophecy for change, focusing on satisfaction of customers, focusing on human resource, environmental concerns, focusing on innovation can organizations in achieving better results (Talib et al., 2012) are pivotal.

2. Literature review

The study between Total Quality Management and Competitive advantage using eight heterogeneous elements revealed a positive relationship of increase in customer satisfaction, employee satisfaction and an increase in efficiency of operational results leading to creation and enhancement of Hotel image and a distinction among competitors in the hotel industry. (Yeng, 2018)[**Error! Reference source not found.**]

The study was conducted to identify the critical determinants of Total Quality Management and its influence on the firm's performances, carried out by examining a sample consisting of 153 Top-Level and Middle-Level managers of homogenous hotels in Greece. It is testified that the effectiveness in implementing strategic planning, employee of quality education and knowledge, management of supplier's commitment of Top Management are crucial in impacting the performance results on customers. (Bouranta, Psomas, & Pantouvakis, 2017)[**Error! Reference source not found.**]

The Author is of the opinion that the Top management is responsible for recruiting employees who not just empower the management at various levels in decision-making process but also share the same beliefs and value system by creating a customer friendly environment and offering customers an experience of a life time with personal attachments. Therefore, Top Management trains all staff members to be customer-conscious to maintain a high level in providing quality services. (Peng, 2014)[**Error! Reference source not found.**]

The authors pointed out that patience plays an essential role in successful and effective application of Total Quality Management, as the outcome of better business performance in sectors such as hospitality, education, banking, health care and software service lies on the rigorous implementation of Total Quality Management involving pre-requirement major changes in cultural aspects and employees' mindset. (Talib et al., 2012)**Error! Reference source not found.Error! Reference source not found.**]

The authors focused on analyzing the influence of customer service, food & beverage, rates and advertising on 330 consumers in the hotel industry in luxury segment of four star and five star hotels in Guadalajara with an objective of formulating an effective strategy that promotes quality services to achieve higher level of consumer satisfaction. The outcome from analysis proved that customers perceived the hotel's service quality to be reasonable through its treatment and services provided and special attention to be given to the Food & Beverage department and advertisements. (Genaro & Coton, 2011)[**Error! Reference source not found.Error! Reference source not found.**]

The author is of the opinion that the managers in the hotel industry in Alexandria must emphasis on continuous training and education on employees to acquire new skills, knowledge and abilities which can enable them to act professionally and empathize with customers through conversations to understand their satisfaction; and treat employees as their first customers as they are a crucial part of the hotel. (El Masry, Hamido, & Hilaly, 2015)[**Error! Reference source not found.Error! Reference source not found.**]

The authors used DINESERV framework states that by providing more resources to the service staff at the front-line, will offer advanced level of quality services thus, increasing the level of customers satisfaction of first-time customers than revisiting customers, as revisiting customers are accustomed with the service of employees and the dinning atmosphere and are more forgiving even if employees are less responsive. (Kuo, Chen, & Cheng, 2018)[**Error! Reference source not found.**]

The author investigated five dimensional structure in SERVQUAL to identify areas where actions are needed to design service strategies. The results discovered that the highest expectations was borne by business travelers for dimensions as such 'convenience', 'assurance', 'tangibles', 'adequacy in service supply' and 'understanding and caring' respectively. While 'tangibles' emerged as the best predictor to assess the overall service quality, at the attribute level, 'food and beverage served' received the highest mean score which was pursued by 'providing a safe and secure place' and 'resolving guest complaints'. (Akbaba, 2006)[**Error! Reference source not found.Error! Reference source not found.**]

This article explores the influence of 5 dimensions of hotel's cordiality on guest satisfaction from Malaysia in luxury hotel services. The responses revealed that only 3 factors were significant for prediction on guest satisfaction, which are personalization, comfort and "straight from the heart". Personalization emphasized on emotional dimension of service,

Comfort emphasized the satisfaction of guest and "Straight from the heart" focused on the service delivery of Star Hotel employees. (Ariffin, Atefeh Maghzi, Jason Lam Mun Soon, & Syed Shah Alam, 2018)[**Error! Reference source not found.**]

The author aimed at discussing and evaluating the fundamental challenges in the hospitality industry on a global context and its influence on the management of human resource and its development. The responses collected through semi-structural interviews and informal discussions from selected practitioners at the senior level vice presidents, general managers and HR directors of leading hospitality organizations in India revealed that the work-life balance, training and development, career progression and growth strategies which are the cornerstones in talent management should be giving due diligence if organizations are to succeed. (Bharwani & Butt, 2012)[**Error! Reference source not found.**]

This paper aimed at evaluating the outcome of implementation of Total Quality Management on 400 five-star hotels employees' service recovery performance in Jordan. To measure the effect of implementing of Total Quality Management regression analysis was used and the analysis from principle component measured the factor structure, indicated a positive impact on the performance of employees' service recovery, declaring that employees were professionally fully capable of effectively handling and implementing policies on commitment towards quality and quality training and education. Therefore, the authors considered service recovery performance pivotal for effective implementations of Total Quality Management as a quality strategy which empowers employees to carry out actions that were necessary and appropriate in order to restore interactions with customers.(Al-Ababneh, Masadeh, Al-Shakhsheer, & Habiballah, 2018) [**Error! Reference source not found.**] (Al-sabi et al., 2017)[**Error! Reference source not found.**]

The author having conducted a qualitative research on 100 customers in Sicily assessed 5 positive and 5 negative facets on the overall services offered by the hotel management in Italy, advocated the need for implementing a structured Customer Relationship Management to realize greater levels of customer satisfaction on prime targets such as families as they were considered very sensitive towards customer loyalty. (Dominici & Guzzo, 2010)[**Error! Reference source not found.**]

The conclusion of this paper indicated a significant impact at the senior level as compared to the operational and middle level employees supported the author's view on HR managers who play a crucial role in influencing employees to reach desired levels of job outcomes in terms of job satisfaction, work engagement, organizational commitment and employee turnover and retaining employees in the Indian hotel industry. (Mahal, 2012) [**Error! Reference source not found.**]

The author aimed to explore the influence of customers' perceptions on price fairness, service quality and product quality and customer loyalty in intangible services such as Banks, Filling stations and the auto-repair and maintenance shops. The results marked that a significant undeviating impact of perceived quality services had on customer loyalty in the banking industry, whereas, an indirect effect applied to the auto-repair and maintenance industry and the Filling station showed either a direct not indirect impact on customer loyalty. (Bei & Chiao, 2006) [**Error! Reference source not found.**]

This paper studies the influence of social and technical dimensions of Total Quality Management factors on the performance of 182 Chinese firms in the service industry. Senior Leadership and Customer Orientation was recognized as a social dimension and process management was recognized as a technical dimension. The author's analysis stated, the influence of process management plays a crucial role in mediating senior leadership and customer orientation towards the performance of service firms. Although, there was no direct significant impact of senior leadership and customer orientation towards firms service performance, the author visualizes that allocation of resources on these social and technical dimension may not be beneficial in the short-run but will contribute towards sustainability on the long-run. The findings also portrayed that the social dimension significantly impacts the technical dimension towards service and in the absence of technical dimension, social dimension has no significant impact on the performances of service firms. (Zhang, Kang, & Hu, 2018)[**Error! Reference source not found.**]

Research GAP: The author identifies the gap as no such studies of Total Quality Management using 10 Key Performance Indicators on Five Star Hotels in Bangalore

3. Materials and Methods

Though there is a decrease in the number of children per family, there has been a rapid increase in the level of population in the country. Since there is a bigger portion of disposable income per family, families tend to have a better standard of living. Thus, a large number of customers prefer visiting star hotels in seek of quality services. Thus, making the Hospitality Industry the biggest contributor to the country's GDP. Therefore, there is a need to examine the impact of implementing Total Quality Management in the hotel industry as per the recent developments. To understand the impact on the Star Hotel's performance, it is essential to take into consideration the Key Performance indicators: *Popularity of Hotel, Client's Satisfaction, Reservation of Hotels, Food & Beverage Sales,*

Average Daily Rate, Occupancy Rate, Revenue Per Room Available, Revenue Per Room Occupied, Waiting Time for Service and Reduction in Cost. Hence, *the main objective of this research paper is to examine the impact of Total Quality Implementation on Key Performance Indicators on Five Star Hotels in Bangalore City.*

The study was conducted in fastest growing metropolitan city in the country, Bangalore, Capital of Karnataka. This megacity has a population of over 10 million which includes all ethnicities from various parts of the country. Bangalore city is otherwise famously known as "The silicon city", "the IT Capital of India", "Garden City", "Pub Capital of India" etc. As per the survey records of the Karnataka Department of Tourism, Bangalore consists of over 430 hotels, out of which 18 are five-star hotels. The researcher has chosen 6 five-star hotels as per tippet random sampling technique.

A pilot study was conducted consisting of a sample size of 30 to validate the questionnaire and check the reliability. The results pointed to be reliable as the Cronbach Alpha value was above 0.7 which is considered to be satisfactory. Later, the data collected was analyzed using Chi-square technique.

The Data was primarily collected from 125 respondents consisting of 4 senior level managers, 12 junior level managers and 109 employees, through a self-developed questionnaire pertaining of three sections. Section 'A' involved questions pertaining to personal information and demographics of the respondents. Section 'B' involved questions pertaining to the level of Total Quality Management implementation in the Star Hotels. And Section 'C' consists of information pertaining to selected Key Performance Indicators of Star Hotels.

4. Results and discussion

To measure the level of Total Quality Management implementation, the researchers added all the responses from the above mentioned variables and the Total score for all the responses, the Mean and Std. deviation was used to classify according to the level of Implementation of Total Quality Management in Four-Star and Five-Star Hotels. The researchers added the Mean+ SD score and the Co measures with total score. The respondents who scored more than Mean + SD is considered as *"Fully Implemented"*. The respondents who scored ≤ Mean – SD were considered as *"Poorly Implemented"* and the scores in between them are considered as *"Moderately Implemented"*.

In order to examine the results, the researcher has framed 10 Hypothesis to fulfil the research objective of the study:

H01: There is no significance between the level of Total Quality Management Implementation and increase in the popularity of Star hotel.

H02: There is no significance between the level of Total Quality Management Implementation and increase in the client's satisfaction of Star hotels.

H03: There is no significance between the level of Total Quality Management Implementation and increase in the Hotel Reservation of Star hotels.

H04: There is no significance between the level of Total Quality Management Implementation and increase in Food & Beverage Sales of Star hotels.

H05: There is no significance between the level of Total Quality Management Implementation and increase in Average Daily Rate of Star hotels.

H06: There is no significance between the level of Total Quality Management Implementation and increase in Occupant Rate in Star hotels.

H07: There is no significance between the level of Total Quality Management Implementation and increase in Revenue per room available in Star hotels.

H08: There is no significance between the level of Total Quality Management Implementation and increase in Revenue per room occupied in Star hotels.

H09: There is no significance between the level of Total Quality Management Implementation and decrease in the waiting time for services in Star hotels.

H10: There is no significance between the level of Total Quality Management Implementation and in Reduction in cost in hotels.

5. Tables, figures and equations

Table 1.1: Cross Table Showing the Level of Total Quality Management Implementation and Increase in Hotel Popularity

According to section 3, Hotel Law, 1935, signifies that hotel refers to an establishment constituted for temporary stay or lodging for travelers in return for acceptance of receipts from such travelers. Therefore, any hotel providing such services to travelers and is popular in the tourism industry, is known as Hotel Popularity.

Level of Implementation		Increase in Hotel Popularity			Total	Chi-Square	Sig.
		Poor	Moderate	Good			
Poorly Implemented	Count	12	21	0	33	58.366	0
	% within Level of Implementation	36.40%	63.60%	0.00%	100.00%		
Moderately Implemented	Count	5	37	18	60		
	% within Level of Implementation	8.30%	61.70%	30.00%	100.00%		
Fully Implemented	Count	0	6	26	32		
	% within Level of Implementation	0.00%	18.80%	81.30%	100.00%		
Total	Count	17	64	44	125		
	% within Level of Implementation	13.60%	51.20%	35.20%	100.00%		

Source: Primary Data

As per Table 1.1, a total response of 33 which had poorly implemented Total Quality Management in their hotels showed that 12 responses (36.4%) stated a poor effect on the increase in hotel popularity and 21 responses (63.6%) stated a moderate effect in increasing the popularity of the hotels. A total response of 60 which had moderately implemented Total Quality Management in their hotels displayed that 5 responses (8.3%) stated had a poor affect, 37 (61.7%) responses stated had a moderate effect and 18 (30%) responses had a positive effect in increasing the popularity of the hotels. A total response of 32 which had fully implemented Total Quality Management in their hotels, displayed that 6 response (18.8%) showed a moderate effect whereas 26 (81.3%) responses indicated a positive effect in increasing the popularity of their hotels. Chi-square test was performed to test the statistical significance which was valued at 58.366 and since the P value is 0.000 (which is less than 0.05), the researcher has not accepted the null hypothesis, stating a significance between the level of Implementation of Total Quality Management and increase in the popularity of Star hotel exists. Therefore from the above results we can infer that by full implementation of Total Quality Management practices in Star hotels shows an increase of 81.3% in the quality of services delivered to customers. As customers tend to be more satisfied with such services provided resulted in a positive word of mouth references to such service provider, Hence increasing the popularity of Star Hotel.

Table 1.2: Cross Table showing the Level of Total Quality Management implementation and Increase in Client's Satisfaction

Client satisfaction is usually accepted as customer satisfaction, which is conceptualized as the emotional response and experience a customer receives from using the product or service. (Ernest R. Cadotte, 1987)

Source: Primary Data

As per Table 1.2, a total response of 33 which had poorly implemented Total Quality Management in their hotels showed that 31 responses (93.9%) stated a moderate effect in increasing client's satisfaction whereas 2 responses (6.1%) showed it had a Good effect in increasing client's satisfaction. A total response of 60 which had moderately implemented Total Quality Management in their hotels displayed 7 responses (11.67%) had a poor effect, 5 responses (8.33%) stated a moderate effect, whereas 48 responses (80%) exhibited had a Good effect in increasing client's satisfaction. A total response of 32 which had fully implemented Total Quality Management in their hotels displayed 3 responses (9.38%) had a poor effect, whereas 29 responses (90.62%) had a Good effect in increasing the client's satisfaction. Chi-square test was performed to test the statistical significance which was valued at 93.486 and since the P value is 0.000 (which is less than 0.05), the researcher has not accepted the null hypothesis, stating a significant difference between the levels of Total Quality Management Implementation and increase in client's satisfaction. From the above results, we can understand that by full implementation of Total Quality Management practices in Star Hotels, shows 90.62% increase in client's satisfaction as clients' expectation are taken into consideration at the arrival and during the checking-in process in the Star Hotel which is executed in a systematic sequence initiated by the Hotel management, to understand customer sentiments and deliver beyond their expectation. A Feedback system at the time of checking-out helps such Star Hotels to understand the level of satisfaction of client's and through this process it helps the management to ascertain the areas of improvement so as to gain customer loyalty.

Table 1.3: Cross Table showing the Level of Total Quality Management implementation and Increase in Hotel Reservation

Hotel Reservation refers to the bookings made by travelers either directly or in-directly for rooms and any other such services offered by Hotels for a temporary period and for a certain sum of amount.

Level of Implementation		Increase in Client's			Total	Chi-Square	Sig.
		Poor	Moderate	Good			
Poorly Implemented	Count	0	31	2	33		
	% within Level of Implementation	0.00%	93.90%	6.10%	100.00%		
Moderately Implemented	Count	7	5	48	60		
	% within Level of Implementation	11.67%	8.33%	80.00%	100.00%		
Fully Implemented	Count	3	0	29	32	93.486	0
	% within Level of Implementation	9.38%	0.00%	90.62%	100.00%		
Total	Count	10	36	79	125		
	% within Level of Implementation	8.00%	28.80%	63.20%	100.00%		

Level of Implementation		Increase in Hotel			Total	Chi-Square	Sig.
		Poor	Moderate	Good			
Poorly Implemented	Count	0	32	1	33	62.818	0
	% within Level of Implementation	0.00%	97.00%	3.00%	100.00%		
Moderately Implemented	Count	11	35	14	60		
	% within Level of Implementation	18.30%	58.30%	23.30%	100.00%		
Fully Implemented	Count	12	0	20	32		
	% within Level of Implementation	37.50%	0.00%	62.50%	100.00%		
Total	Count	23	67	35	125		
	% within Level of Implementation	18.40%	53.60%	28.00%	100.00%		

Source: Primary Data

As per Table 1.3, a Total of 33 respondents which had poorly implemented Total Quality Management in their hotels stated 32 responses (97%) had a moderate effect in increasing the reservation in Star Hotels. A total 60 respondents which had moderately implemented Total Quality Management in their hotels displayed 11 responses (18.3%) showed a poor affect whereas 35 responses (58.3%) showed a moderate effect and 14 responses (23.3%) showed a Good effect in increasing the reservations in hotels. A total of 32 respondents which had fully implemented Total Quality Management in their hotels showed 12 responses (37.5%) displayed had a poor effect and 20 responses (62.5%) displayed a good positive effect in increasing the reservations in hotels. Chi-square test was performed to test the statistical significance which was valued at 62.818 and since the P value is 0.000 (which is less than 0.05), the researcher has not accepted the null hypothesis stating a significant difference between the level of Total Quality Management Implementation and increase in reservations in Star hotels. From the above results, we can infer that by full implementation of Total Quality Management practices in Star Hotels shows 62.5% increase in Hotel Reservation. The Hotel management makes optimum use of internet and digital technology by creating an online portal for advertising and promoting its rooms and suites and other services offered. The creation of an online portal which can be accessed through the internet caters to the needs of the Hotel Staff Management and the customers directly. This benefits the customers in knowing the availability of rooms and the price per night for its rooms and suites and benefits the Hotel Staff management by creating a database of interested potential customers. The customers through the internet can easily make reservations and bookings which increases the Star Hotel's revenue generation.

Table 1.4: Cross Table showing the Level of Total Quality Management implementation and Increase in Food & Beverage Sales

Food & Beverage Sales refers to the sale of meals prepared by the Chef and the various drinks (Alcoholic and Non-Alcoholic) prepared by the bar-tender which is served within the premises of the hotel to the customers in return for money.

Level of Implementation		Increase in Food &			Total	Chi-Square	Sig.
		Poor	Moderate	Good			
Poorly Implemented	Count	0	31	2	33	61.316	0
	% within Level of Implementation	0.00%	93.90%	6.10%	100.00%		
Moderately Implemented	Count	11	22	27	60		
	% within Level of Implementation	18.30%	36.70%	45.00%	100.00%		
Fully Implemented	Count	12	0	20	32		
	% within Level of Implementation	37.50%	0.00%	62.50%	100.00%		
Total	Count	23	53	49	125		
	% within Level of Implementation	18.40%	42.40%	39.20%	100.00%		

Source: Primary Data

As per Table 1.4, A total of 33 respondents which had poorly implemented Total Quality Management in their hotels showed that 31 responses (93.9%) had a moderate effect in increasing the sales of Food & Beverages and 2 responses (61.1%) showed a good effect towards the sales of Food & Beverages in hotels. A total of 60 respondents which had moderately implemented Total Quality Management in their hotels showed that 11 responses (18.3%) had a poor effect whereas 22 responses (36.7%) showed a moderate effect and 27 responses (45%) showed a Good effect in increasing the sales of Food & Beverages in hotels. A total of 32 respondents which had fully implemented Total Quality Management in their hotels displayed 12 responses (37.5%) had a poor effect, whereas 20 responses (62.5%) displayed a good positive effect in increasing the sales of Food & Beverages in Star Hotels. Chi-square test was performed to test the statistical significance which was valued at 61.316 and since the P value is 0.000 (which is less than 0.05), the researcher has not accepted the null hypothesis, stating a significant difference between the implementation of Total Quality Management and increases in sales of Food & Beverages exists. From the above results, we can surmise that by full implementation of Total Quality Management practices in Star Hotels shows 62.5% positive effect as the hotel management can get a feedback from customers with respect to the dynamic change in customer preference on variety of cuisines and the dishes mentioned in menu, the price of dishes, service time of meal, quality of service and taste of meal.

Table 1.5: Cross Table showing the Level of Total Quality Management Implementation and Increase in Average Daily Rate

Average Daily Rate (ADR) is a metric universally used in the hospitality industry to indicate the average rental income earned per paid occupied room in given period of time.

Increase in Average Daily Rate		Increase in Average Daily			Total	Chi-Square	Sig.
		Poor	Moderate	Good			
Poorly Implemented	Count	12	20	1	33		
	% within Increase in Average Daily Rate	36.40%	60.60%	3.00%	100.00%		
Moderately Implemented	Count	16	30	14	60		
	% within Increase in Average Daily Rate	26.70%	50.00%	23.30%	100.00%	40.253	0
Fully Implemented	Count	12	0	20	32		
	% within Increase in Average Daily Rate	37.50%	0.00%	62.50%	100.00%		
Total	Count	40	50	35	125		
	% within Increase in Average Daily Rate	32.00%	40.00%	28.00%	100.00%		

Source: Primary Data

As per Table 1.5, a total response of 33 which had poorly implemented Total Quality Management in their hotels showed that 12 responses (36.4%) stated a poor effect on the increase in Average Daily Rate, 20 responses showed it had a moderate effect in increasing the Average Daily Rate and 1 response (3.0%) showed a good effect towards the Average Daily Rate in Star Hotels. A total response of 60 which had moderately implemented Total Quality Management in their hotels stated 16 responses (26.7%) showed a poor affect, 30 responses (50%) had a moderate effect and 14 responses (23.3%) had a Good effect in increasing the Average Daily Rate in hotels. A total response of 32 which had fully implemented Total Quality Management in their hotels showed that 12 responses (37.5%) had a poor effect and 20 responses (62.5%) displayed a good positive effect in increasing the Average Daily Rate in Star Hotels. Chi-square test was performed to test the statistical significance which was valued at 40.253 and since the P value is 0.00 (which is less than 0.05), the researcher has not accepted the null hypothesis stating a significant difference between the level of Total Quality Management Implementation and increase in Average Daily Rate in Star Hotels. From the above results, we can infer that by full implementation of Total Quality Management practices in Star Hotels shows a 62.5% increase in Average Daily Rate, this is due to the accommodation of flexible customers and offering

Table 1.6: Cross Table showing the Level of Total Quality Management implementation and Increase in Occupancy Rate

Occupancy Rate refers ration between the numbers of rooms occupied to the total number of rooms offered during a particular period of time.

Increase in Occupancy Rate		Increase in Occupancy			Total	Chi-Square	Sig.
		Poor	Moderate	Good			
Poorly Implemented	Count	0	12	21	33		
	% within Increase in Occupancy Rate	0.00%	36.40%	63.60%	100.00%		
Moderately Implemented	Count	11	22	27	60		
	% within Increase in Occupancy Rate	18.30%	36.70%	45.00%	100.00%	25.994	0
Fully Implemented	Count	12	0	20	32		
	% within Increase in Occupancy Rate	37.50%	0.00%	62.50%	100.00%		
Total	Count	23	34	68	125		
	% within Increase in Occupancy Rate	18.40%	27.20%	54.40%	100.00%		

Source: Primary Data

customers various packages and promotions such as free breakfast, local tour around the city or tickets to an event in the hotel or offering free car rentals for privileged customers. The Respondents also stated that offering customers discounts to extend their length of stay helps in increasing the Average Daily Rate during off-seasons and during mid-week periods.

As per Table 1.6, a total response of 33 which had poorly implemented Total Quality Management in their hotels showed that 12 (36.4%) moderate effect and 21 (63.6%) responses showed a good effect in increasing the occupancy rate of the hotels. A total response of 60 which had moderately implemented Total Quality Management in their hotels displayed 11 responses having a poor effect, 22 responses stated a moderate effect and 27 (45%) responses showed a good effect in increasing the Occupancy Rate in hotels. A total response of 32 which had fully implemented Total Quality Management in their hotels displayed 12 (37.5%) responses having a poor effect and 20 (62.5%) response displayed a good positive effect in increasing the Occupancy Rate in Star hotels. Chi-square test was performed to test the statistical significance which was valued at 25.994 and since the P value is 0.00 (which is less than 0.05), the researcher has not accepted the null hypothesis, stating a significant difference between the level of Total Quality Management Implementation and increase in Occupancy Rate. From the above results we can infer that by full implementation of Total Quality Management practices in Star hotels, shows an increase of 62.5% in the Occupancy Rate, this is due to the various internal and external approaches used by the hotel management to increase the Occupancy Rate. The findings stated that offering discounted rates on different rooms to customers who spend multiple nights, guest package deals to loyal customers, hosting weddings and conferences, advertising in popular magazines and participating in Hotel ratings were credible measures used to increase the Occupancy Rate.

Table 1.7: Cross Table showing the Level of Total Quality Management implementation and Increase in Revenue Per Available Room

Revenue per Room Available refers the calculation of multiplying Average Daily Rate per room into the Occupancy Rate.

Increase in Revenue Per Available Room		Increase in Revenue Per			Total	Chi-Square	Sig.
		Poor	Moderate	Good			
Poorly Implemented	Count	12	1	20	33		
	% within Increase in Revenue Per Available Room	36.40%	3.00%	60.60%	100.00%		
Moderately Implemented	Count	16	30	14	60		
	% within Increase in Revenue Per Available Room	26.70%	50.00%	23.30%	100.00%	41.194	0
Fully Implemented	Count	12	0	20	32		
	% within Increase in Revenue Per Available Room	37.50%	0.00%	62.50%	100.00%		
Total	Count	40	31	54	125		
	% within Increase in Revenue Per Available Room	32.00%	24.80%	43.20%	100.00%		

Source: Primary Data

As per table 1.7, a total response of 33 which had poorly implemented Total Quality Management in their hotels showed 12 (36.4%) responses had a poor effect in the increase in Revenue per room available and 20 (60.6%) responses showed a good effect towards the Revenue per room available in hotels. A total response of 60 which had moderately implemented Total Quality Management in their hotels displayed 16 (26.7%) having a poor affect, 30 (50%) responses showed a moderate effect and 14 responses (23.3%) had a Good effect in increasing the Revenue per room available in hotels. A total response of 32 which had fully implemented Total Quality Management in their hotels displayed 12 responses (37.5%) showed a poor effect and 20 responses (62.5%) displayed a good positive effect in increasing the Revenue per room available in hotels. Chi-square test was performed to test the statistical significance which was valued at 41.194 and since the P value is 0.000 (which is less than 0.05), the researcher has not accepted the null hypothesis stating a significant difference between the level of Total Quality Management Implementation and increase in the Revenue per room available in Star Hotels. From the above results we can infer that by full implementation of Total Quality Management practices in Star hotels shows an increase of 62.5% in the Revenue per room available (RevPAR) analyzing the Star Hotel's demand pattern of guests visiting on various occasions so as to appropriately modify prices to make it an attractive option to customers on the rooms offered.

Table 1.8: Cross Table showing the Level of Total Quality Management implementation and Increase in Revenue Per Occupied Room

Revenue Per Room Occupied refers to the Total Revenue divided by the number of rooms occupied by guests. It is a performance measurement tool where the Hotel management can calculate the amount received and profits gained through rendering such rooms to travelers for a temporary period.

Increase in Revenue Per Occupied Room		Increase in Revenue Per			Total	Chi-Square	Sig.
		Poor	Moderate	Good			
Poorly Implemented	Count	0	19	14	33		
	% within Increase in Revenue Per Occupied Room	0.00%	57.60%	42.40%	100.00%		
Moderately Implemented	Count	11	17	32	60		
	% within Increase in Revenue Per Occupied Room	18.30%	28.30%	53.30%	100.00%	32.372	0
Fully Implemented	Count	12	0	20	32		
	% within Increase in Revenue Per Occupied Room	37.50%	0.00%	62.50%	100.00%		
Total	Count	23	36	66	125		
	% within Increase in Revenue Per Occupied Room	18.40%	28.80%	52.80%	100.00%		

Source: Primary Data

As per table 1.8, a total response of 33 which had poorly implemented Total Quality Management in their hotels out displayed 19 responses (57.6%) showed a moderate effect in increasing the Revenue per occupied room and 14 responses (42.4%) showed a good effect towards the Revenue per occupied room in hotels. A total response of 60 which had moderately implemented Total Quality Management in their hotels displayed 11 responses (18.3%) showed a poor affect, 17 responses (28.3%) stated a moderate effect and 32 responses (53.3%) had a Good effect in increasing the Revenue per occupied room in hotels. A total response of 32 which had fully implemented Total Quality Management in

their hotels displayed 12 responses (37.5%) showed a poor effect and 20 responses (62.5%) displayed a good positive effect in increasing the Revenue per occupied room in hotels. Chi-square test was performed to test the statistical significance which was valued at 32.372 and since the P value is 0.000 (which is less than 0.05), the researcher has not accepted the null hypothesis stating that there is significant difference between the level of Total Quality Management Implementation and increase the Revenue per occupied room in Star Hotels. From the above results we can infer that by full implementation of Total Quality Management practices in Star hotels shows an increase of 62.5% in Star Hotels this is due to understanding and analysis on length of stay (LOS) and the dynamic customer oriented activities offered to extend the LOS. Respondents stated offering add-ons on different rooms enhances the service value; such as for Deluxe and Executive Rooms providing them with a free meals, rooms such as Sea View/Mountain View and Executive Suite provided with minibars and rooms such Royal Suite or the Presidential Suite providing them local tour around the city in luxury cars set a standard.

Table 1.9: Cross Table showing the Level of Total Quality Management implementation and Decrease in Waiting Time for Service
Waiting Time for Service refers to the difference in the duration period between the requests raised by customers and the delivery time of such services provided by the service providers.

Decrease in Waiting Time for Service		Decrease in Waiting Time			Total	Chi-Square	Sig.
		Poor	Moderate	Good			
Poorly Implemented	Count	19	1	13	33		
	% within Decrease in Waiting Time for Service	57.60%	3.00%	39.40%	100.00%		
Moderately Implemented	Count	17	13	30	60		
	% within Decrease in Waiting Time for Service	28.30%	21.70%	50.00%	100.00%	41.997	0
Fully Implemented	Count	0	0	32	32		
	% within Decrease in Waiting Time for Service	0.00%	0.00%	100.00%	100.00%		
Total	Count	36	14	75	125		
	% within Decrease in Waiting Time for Service	28.80%	11.20%	60.00%	100.00%		

Source: Primary Data

As per Table 1.9, a total response of 33 which had poorly implemented Total Quality Management in

their hotels displayed 19 responses (57.6%) had a poor effect on the Decrease in Waiting Time for Services, 1 response (3.0%) showed it had a moderate effect and 13 response (39.4%) showed a good effect towards the Decrease in Waiting Time for Services in hotels. A total response of 60 which had moderately implemented Total Quality Management in their hotels displayed 17 responses (28.3%) had a poor affect, 13 responses (21.7%) had a moderate effect and 30 (50%) responses had a Good effect in Decrease in Waiting Time for Services in hotels. A total responses of 32 which had fully implemented Total Quality Management in their hotels of portrayed neither poor nor moderate effects displayed in decrease in the waiting time for service and 32 responses (100%) showcased good effects in decreasing the waiting time for services in four-star and five-star hotels that implemented Total Quality Management practices. Chi-square test was performed to test the statistical significance which was valued at 41.997 and since the P value is 0.000 (which is less than 0.05), the researcher has not accepted the null hypothesis stating a significant difference between the level of Total Quality Management Implementation and Decrease in Waiting Time for Services in Star Hotels. From the above results we can infer that by full implementation of Total Quality Management practices in Star hotels, shows an increase of 100% in decreasing the waiting time for services due to adaptation of technology in the hotels. The use of electronic gadgets enable the hotel staff to receive and process orders at a faster rate. As such orders are channelized through digital technology, the occurrence of errors in receiving orders are minimized. Thus, enabling efficiency in services which decreases the waiting time for services.

Table 1.10: Cross Table showing the Level of Total Quality Management implementation and Reduction in Cost
Cost reduction refers to the various practices that can be used for cutting down of expenses of the Star Hotel, to increase the revenue, therefore resulting in more profits.

Reduction in Cost		Reduction in Cost			Total	Chi-Square	Sig.
		Poor	Moderate	Good			
Poorly Implemented	Count	19	12	2	33		
	% within Reduction in Cost	57.60%	36.40%	6.10%	100.00%		
Moderately Implemented	Count	28	5	27	60		
	% within Reduction in Cost	46.70%	8.30%	45.00%	100.00%	33.735	0
Fully Implemented	Count	12	0	20	32		
	% within Reduction in Cost	37.50%	0.00%	62.50%	100.00%		
Total	Count	59	17	49	125		
	% within Reduction in Cost	47.20%	13.60%	39.20%	100.00%		

Source: Primary Data

As per table 1.10, a total response of 33 which had poorly implemented Total Quality Management in their hotels displayed 19 responses (57.6%) had a poor effect reducing cost, 12 responses (36.4%) showed a moderate effect in reducing cost and 2 responses (6.1%) showed a good effect towards the Reduction in cost in hotels. A total response of 60 which had moderately implemented Total Quality Management in their hotels showed 28 responses (46.7%) had a poor effect, 5 responses (8.3%) had a moderate effect and 27 responses (45%) had a good effect in Reduction in cost in hotels. A total response of 32 which had fully implemented Total Quality Management in their hotels of showed 12 responses (37.5%) in poor effects in reducing cost and 20 response (62.5%) stated a good effect in Reduction in cost in hotels that implemented Total Quality Management. Chi-square test was performed to test the statistical significance which was valued at 33.735 and since the P value is 0.000 (which is less than 0.05), the researcher has not accepted the null hypothesis stating a significant difference between the level of Total Quality Management Implementation and Reduction in cost of Star Hotels. From the above results, we can infer that by full implementation of Total Quality Management practices in Star hotels shows an increase of 62.5% in reducing the cost this is due to the implementation and strict adherence of management policies and budget on variables costs incurred. The various variables costs incurred in a hotel are stationeries and printing charges used by front desk and restaurant, Telephone and Fax charges, utilities charges, Transportation and Fuel charges, Flower arrangement charges, House-keeping and Linen cleaning supplies, guest room amenities, chemicals for laundry, Credit card commissions and Reservation fee.

6. Conclusion

The researcher infers that Total Quality Management voices all stakeholders of the hotel such as the Receptionist, Front Desk Staff, F&B managers, floor managers and managers of various levels and department, this enables the hotel staff to recommend necessary adjustments to bring in efficiency to deliver services that reach beyond customers' expectation, thus causing greater customers satisfaction. The researcher concludes that the implementation of Total Quality Management on Key Performance Indicators (KPIs) showed a direct positive effect. The author observes that the management emphasized the modern use of digital technology which directly helps in improving the popularity of the hotel by advertising on socials media which in-turn increases the occupancy rate leading to generation of revenue from the various rooms and services offered. Implementing modern advanced technology to handle the affairs of the hotelier proves to reduce variable cost, brimming

efficiency in services and catering to a customers' needs at any given time. Furthermore, offering add-ons, extras, promotional packages and discounts to customers provides greater customer satisfaction. The Hotel management must stress on regular training and leadership of employees as it builds an inclusive culture that is customer-oriented. As such satisfied customers spread a positive word-of-mouth regarding the services provided by hoteliers, this builds a wider customer base, therefore increasing the popularity and capturing the market the base in the Hotel industry. Finally it is suggested that the hotel managers should provide their unique products to customers as this not only reduces "accidental cost" but also adds value to customers as they tend to use this article as an object of souvenir in remembrance of their stay.

Further scope:

This paper was limited to collecting responses from 4 senior level managers, 12 junior level managers and 109 employees from various departments in Star Hotels in Bangalore City. For further replication on this study, the research can be done by shifting its attention on quantifying Key Performance Indicators and collection of responses from customers. Since there is a rise in standard of living and the rapid increase in employment in the corporate sector, a detailed study can be done to understand how Total Quality Management can assist Five Star hotels in capturing the demand of corporate customers.

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