

Impact of Total Quality Management (TQM) on Productivity in the Hospitality Sector: The Case of Lebanon

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Abstract The increasing competition in the hospitality sector in Lebanon, along with the decreased demand due to economic downturns and decreased tourist inflows has put pressure on hospitality organizations in the country to improve their value proposition to customers across the entire value chain. However, little has been invested by these organizations when it comes to Total Quality Management as more attention has been given on the services, advertisements and customer relations. Accordingly, this paper addresses this gap by discussing the topic of total quality management in the case of hospitality organizations in Lebanon. It aims to test whether the dissemination of a culture of quality (TQM) influences the productivity of hotel employees in Lebanon. To that end the paper uses the ANOVA (analysis of variance) which measures the relationship between variables using a survey of 100 respondents from various hospitality organizations in Lebanon.

Keywords Productivity, Total Quality Management, Hospitality Sector, Organizational culture

1. Introduction

Quality is the common denominator of the interests of managers and specialists in the industrial and service sectors. Quality has been considered one of the priorities in the contemporary manager's interest in achieving high levels of performance especially after the success of many organizations worldwide after it has adopted the philosophy that quality is everyone's responsibility. Total Quality today is one of the main pillars of the application adopted by organizations as initiatives to solve quality problems and to meet the customer's requirements continuously and by improving the performance of operations and better management of working for individuals within the organization. More studies suggest that many organizations fail to implement the quality of that reason initiatives back in to the culture of organizations in general and the culture of quality in particular. This is because they are perceived as the values, beliefs and behaviors that must change in the mentality of all participants in the organization in order to move towards the application of contemporary ideas that contribute to the development of the performance of organizations.

Based on the above, the research attempts to present the concept of total quality management as the most important aspects to focus on when spreading the culture of quality in service organizations in general and hotel organizations in particular in Lebanon and the steps of the departments towards spreading the culture of quality in their organizations and through the following:

Theoretical aspect that includes:

1. The concept of quality and dimensions of quality hotel service
2. Quality Culture - Concept and importance
3. Essential elements for quality hotel organizations culture

The application side that includes:

1. Research Methodology
2. Hypothesis testing - Description and diagnosis of search variables and statistical analysis of data
3. Conclusions and proposals

Research Questions:

- 1) What are the main elements of Total Quality Management?
- 2) How can Total Quality management support hotel services?
- 3) What is the relationship between TQM and employee productivity?

Research Objectives:

- 1) To explore the various elements of TQM through secondary research

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- 2) To explain the importance of TQM for organizations through secondary research
- 3) To provide empirical evidence that proves the relationship between TQM and employee productivity in the case of the Lebanese hospitality sector

Methodology and Scope:

The research will use a mixed methodological design that includes qualitative and quantitative research approaches, utilizing a literature review in addition to a statistical test of correlation.

Significance of the Study:

The significance of the study is in the fact that quality is the most important and best standard for judging organizations in general and hotel organizations in particular. Quality is a prominent competitive weapon for organizations, as well as a tool to get a more significant market share and gain consumer satisfaction, it has multiplied the views of the writers and researchers in determining the quality of goods and services concept, led by (Juran) As defined quality as appropriate for use (Juran *et al.*, 1974: 4.5), And between Feigenbaum, 1991:7) Quality as the overall characteristics of the goods and services related to marketing, engineering, manufacturing and maintenance through which the goods and services are met when used customer expectations, has been defined in the Oxford Dictionary as the degree or level of excellence Russell & Taylor, 1998: 76), And also defined by the British Institute of Standards as the qualities and features integrated product or service specific to have the ability to satisfy the needs and apparent and implicit (Tae, 189: 2000), As well as (Aqili, 17: 2001) In a broader sense that it is a product or a product Service with a high level of quality excellence through which it is able to meet the needs and desires of customers in a manner consistent with their expectations and to achieve satisfaction and happiness to them, and the International Organization for Standardization ISO And we view quality as the degree to which the needs and expectations of virtual and implicit saturation through a number of critical characteristics of pre - defined (Al-Azzawi, 19: 2002), And some have gone on to develop a definition of quality of service, including definition (Loveloch & Wright, 1999), Which is considered to be the degree of satisfaction achieved by the service to the customer by meeting their needs and desires and expectations. The hotel is also known as quality activities that are immaterial or intangible, which can be submitted separately or independently and provide satisfying desires and needs not necessarily be associated with the sale of a commodity or other service.

Literature Review:

A number of literature review findings discussed the elements of total quality management in handling food, safety and hospitality-related elements. First, in the article "Self-reported food safety knowledge and practices of Lebanese food handlers in Lebanese households", the authors Hassan, Dimassi & Karam (2018), from the Department of Natural Sciences, School of Arts and

Sciences at the Lebanese American University, Beirut, Lebanon aimed to evaluate the food safety knowledge level and the self-reported practices levels among food handlers in Lebanon, specifically in the Lebanese household, besides identifying the link between the socio-demographic features of these handlers and their practices and knowledge. To do so, the author used a cross-sectional study targeting a sample of 1,500 participants from a variety of areas, ages, genders, marital status and income levels. Using a questionnaire as a data collection instrument, the respondents were asked about their food handling, usage and storage knowledge, in addition to SPSS for statistical analysis (Hassan, Dimassi & Karam, 2018). The authors found that there is a strong need for educational and awareness initiatives to enhance the food safety knowledge and practices levels because they turned out to be low among the food handlers in the Lebanese households. The importance of this study is that it is the first that provides information on food safety and self-reported practices and knowledge in Lebanese households (Hassan, Dimassi & Karam, 2018). In another study entitled "Monitoring performance indicators in the Portuguese hospitality sector" by Ribeiro, M., Vasconcelos, M., & Rocha from the Faculty of Humanities and Social Sciences, Universidade Fernando Pessoa, Porto, Portugal, focused on the hospitality sector in Portugal where it analyzed its performance evaluation. Namely, the frequency of monitoring these performance indicators, their relevance and how the two variables (frequency and relevance) are related. More so, it assessed if the evaluation of performance in the hospitality sector in Portugal was properly based on the BSC (balanced scorecard) approach. In terms of its methodology, the study capitalized on previous literature findings on the topic and considered the case of four and five star hotels in Portugal from the year 2012 (Ribeiro, Vasconcelos and Rocha, 2019). An additional data collection instrument was the questionnaire which considered the four BSC perspectives. The authors found that "performance indicators cover the four perspectives of BSC in a balanced way, which confirms its relevance as a strategic management tool" (Ribeiro, Vasconcelos and Rocha, 2019, p.1), nevertheless, they did not find any coincidence between the frequently monitored performance indicators and those that are relevant (Ribeiro, Vasconcelos and Rocha, 2019). The importance of this study is that it identifies and reviews the suitable performance indicators needed for the hospitality sector while also providing recommendations to improve their use. This will long term positive benefits to the hospitality industry on the financial and organizational levels. A final study entitled "Servant leadership: Development and validation of a multidimensional measure in the Chinese hospitality industry" by Shaoping Qiu and Dooley (2019) from the Department of Educational Administration and Human Resource Development, Texas A&M University, College Station, Texas, USA aimed to develop a measurement instrument to measure "servant leadership behavior" in the case of the hospitality industry in China and to validate that instrument. To that end, it reviewed the literature and used a

nine-dimension scale with 81 items and a sample of 600 respondents (Qiu & Dooley, 2019). The main findings of the authors was that there was a good internal consistency reliability and internal consistency for the servant leadership scale which was based on the following dimensions: “dimensions were named integrity, self-sacrifice, building community, empowering people, emotional healing and visioning” (Qiu & Dooley, 2019, p.1). They also found a difference between scales that were western-developed and the instrument which the author used (Qiu & Dooley, 2019). The importance of this study is that it helped in shortening the servant leadership scale while also supporting cultural psychology theory in this topic.

While these literature review findings add strong value to the understanding of the topic and the specific tools and approaches that are used to measure and monitor the quality of handling safety-related and hospitality related elements, they fall short of specifically addressing the case of the Total Quality Management in the Lebanese hospitality sector and its impact on productivity. This paper will utilize primary information and a questionnaire instrument to collect and analyze data that would fill this gap.

Dimensions of a Hotel Quality of service

The quality of service, in general, is measured through several dimensions of the service and represents the most critical requirements of customers. Many writers and researchers in the field of production management, operations, and quality have measured the quality of service in general and classified into several classifications, and the dimensions of the quality of the hotel service can be counted ten dimensions As follows:

1. Dependability

This is the dimension of the most important dimensions that have priority in the services sector also confirmed that most of the studies as the reliability and confidence in the hotel organization is a fundamental criterion for the guest in the quality of services provided assessment when the guest room booked at a hotel-specific specification requires hotel management to equip his room In time and meet all the services agreed with the management of the hotel without any defect.

2. Concrete aspects

Although the hotel organizations rely on the human element primarily in the provision of services, but it is nevertheless there should be a high degree of concrete technology aspects that can provide services better for guests, as well as a decoration, furniture and decent appearance for workers commensurate with the degree The hotel, though guests look at the hotel aesthetic organization to enable them to assess the quality of its services.

3. Response

It requires service providers desire and willingness to serve guests without any hesitation or ego or boredom, as the

response to the requirements and needs of the guests and their needs and work to meet them at the time that the hotel makes them feel their organization is interested in working to provide the best services to them.

4. Competence and qualifications

This dimension is concerned with the efficiency and qualifications of the service provider to the guests since the competence and qualifications of service providers are obtaining certificates or certificates of experience in their field make them deal with the guests more understanding of their needs.

5. Courtesy

The service provider can sometimes earn guest satisfaction through compliments, courteous and respectful manner, as it should possess service providers in hotel organizations with the ability to talk courteous and polite manner with guests.

6. Credibility

The credibility of an vital evaluation measure, hotel organizations are obliged to show this dimension with their guests, as the guest who books a room at the hotel comes on time and find the room had been sold to someone else or were not the room ready to receive, or the guest comes out of the hotel and wants to pay off User account and finds that there is manipulation in the amount of decision, this would lead to weakness in the credibility, as the organization requires that the hotel be fully ratified and dealing with its guests.

7. Safety

That the priorities of the hotel organizations is the ability to provide safety and security for its guests, whether safety from fire, theft or attacks or accidents, it should ensure that the formal of hotel security for the guest and his belongings in the hotel provide and not to provide security for them may weaken the hotel occupancy rate even if the availability of other quality dimensions.

8. Access to Service

The services provided by the hotel organization require that it be easy for the guest to get them at the right time and place, and not there will be difficult for these services to receive and be available to guests at all time and the clock.

9. Communication

It should be of hotel organizations attention to this dimension as that most of the guests may not They have sufficient knowledge about what it is available services, so it requires the provision of methods and techniques to clarify, and service providers possess their ability to answer questions and provide the needed clarifications to the guests in a way that is clear and understandable manner by the guests.

10. Understand and know the guest

Should the hotel organizations and continuously work for the understanding and knowledge of the needs of the guest so you can meet them as required, as to continuously identify the wishes of the guests and the needs of their organization from the hotel can provide service commensurate with the requirements of its guests.

2. Methodology

Problem Being Addressed:

The increase in the competitive environment of the hospitality sector is also being faced with a decline in the quality of its services and the decline the share of these organizations substantially. In this context and under the concept of a culture of quality and we found it appropriate to highlight the fundamental pillars of the concept of quality and dissemination of this concept or philosophy throughout the organization culture, and jointly with the research topic, the questions the following reflect the content of the research problem:

1. What are the pillars or core values of quality culture and how should senior management deal with them?
2. What does quality culture mean to senior management and employees in the Lebanese hospitality industry?
3. How is the senior management aware of the importance of quality culture in enhancing its employee productivity?

The importance and purpose of research:

The importance of the research is that the dissemination of the culture of quality in the organization depends on changing the culture of senior management commensurate with the current competition data and dissemination of this culture to all employees in the organization, which will reflect on the improvement of performance as a result of this, and consistent with that, the research is trying to achieve its core objectives that revolve around Analysis of the reality of the culture of quality in the organization sample of the research and then to determine how to activate and disseminate the culture of quality at the level of operations and individuals and customers of the Organization.

Proposed Hypothesis:

H0: The dissemination of quality culture (TQM) does not influence the productivity of hotel employees in Lebanon

H1: The dissemination of a culture of quality (TQM) positively influences the productivity of hotel employees in Lebanon

Data Collection Method:

In order to provide the necessary and scientific remedies for the problem of the study, the researchers used two methods of data collection:

Questionnaire being the main data collection instrument. It was designed by the researcher and included questions that focused on the sources influencing employee productivity and performance from within the hospitality organization. It also included questions that explored the level of total quality management implementation in the hospitality organization. The questionnaire was presented to a random sample of 116 employees working in the Lebanese hospitality sector. They included ranking and Likert scale questions, besides basic demographic questions. The independent variable was TQM (Total Quality Management) while the dependent variable was employee productivity.

The second data collection method was online research through journals, scholarly articles, books, credible news websites and other published works on the topic of total quality management and the Lebanese hospitality sector performance. This included the use of Google Scholar database, besides the JSTOR, ERIC, PROQUEST and the Harvard Business Review database which were searched using keywords such as "total quality management in hospitality" "TQM and employee productivity", "hospitality sector in Lebanon".

Data processing and Analysis

To achieve the objectives of the study and learn about relationship between total quality management and employee productivity, the descriptive statistical method has been used and was based on the statistical program SPSS to test the hypothesis and find:

- Duplicates answers
- Computational circles
- Standard Deviations and Regression tests using ANOVA

Diagnosis and analysis of research variables

In order to determine the possibility of deploying and enhancing quality hotel organizations surveyed culture and the statement of individual respondents' attitudes towards the subject and by responding to the research variables analysis, analysis was performed through the use of frequency distribution in response to the research sample circles and standard deviations to show the reality of variables related to the dissemination of TQM in the organization.

It should be noted that the overall response rate was 86 percent (100 respondents).

Frequency Tables

Below are the frequency tables of each variable and their respective interpretations

Table: Statistics

	Age	Gender	Education	Years of Work Experience	Employed	Organizational Level
N	Valid	100	100	100	100	100
	Missing	0	0	0	0	0
Std. Deviation	1.040	.408	.762	.603	.668	.415

Statistics

		Sample Size
N	Valid	100
	Missing	0
Mean		2.56
Std. Deviation		.738

Age Groups

Table: Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 - 29	20	20	20.0
	30 - 39	13	13	33.0
	40 - 49	46	46	79.0
	50 - 59	18	18	97.0
	60+	2	2.0	100.0
	Total	100	100.0	100.0

The figures above show a vast majority of the hotel employees respondents are between 40 and 49 years of age, which represent an experienced age group.

Table: Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	60	60.0	60.0
	Female	40	40.0	100.0
	Total	100	100.0	100.0

Regression Analysis:

Table: Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Avg_TQM	.	Enter

a. Dependent Variable: Avg_PRDVT

Above are the independent variable entered (TQM in the organization), which will be studied as per its influence on the employee productivity (AVG_PRDVT) in the hospitality institution.

Table: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.838 ^a	.603	.687	.22249

a. Predictors: (Constant), Avg_TQM

Table: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	42.001	5	7.312	35.293	.000 ^b
	Residual	15.002	81	.178		
	Total	57.003	86			

a. Dependent Variable: Avg_PRDVT

b. Predictors: (Constant), Avg_TQM

The specific relationship between the independent and dependent variables is shown below:

Table: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.345	.362		.832	.357
1 Avg_TQM	.348	.210	.117	1.821	.002

a. Dependent Variable: Avg_PRDVT

Reviewing the SPSS analysis results above, we can see that the F-value = 35.293 is significant at 0.000 as alpha is less than < 0.05). We can conclude from the coefficient of determination R square which is equal to 0.603 (shown in the model summary table) that 60.3% of the variation in the dependent variables (employee productivity) is explained by variations in the independent variables (TQM level). This shows that the increase of TQM levels in the hospitality organization can have an impact on the level of employee productivity in the organization.

This allows us to prove the following hypothesis as true:

H1: The dissemination of a culture of quality (TQM) positively influences the productivity of hotel employees in Lebanon

3. Conclusions and Recommendations

Conclusions:

The main findings of the research can be summarized as follows:

1. Quality culture is a sensitive and essential concept in hospitality organizations that needs considerable attention and great attention to its development and dissemination to all sections of the organization in order to improve performance and achieve excellence. This requires leadership from top to bottom: the senior management in every hotel sponsoring the application of TQM throughout the establishment.
2. The adoption and dissemination of the concept of quality culture is not an easy task, as organizations spend years focusing efforts and allocating the necessary funds to promote and develop the culture of quality in individuals in line with the current competition variables.
3. Total Quality culture is based on a set of values, beliefs, and behaviors that define the direction of departments and individuals. These values may vary from one organization to another according to the nature and work of these organizations and the surrounding environment.
4. The majority of the research sample has a perception of the concept of quality culture and how it affects the

performance of the organization in general and hotel quality in particular, but there is a lack of attention by the higher authorities towards strengthening this culture in order to improve and strengthen the competitive position.

5. The quantitative results prove that the dissemination of TQM has a positive influence on employee productivity in the case of hospitality organizations in Lebanon.

Recommendations

1. Spreading a culture of quality is one of the basic requirements for implementing quality management systems, achieving excellence and improving performance. It is a shared philosophy that is an essential part of the values and culture of the organization, helps explain why the organization exists, what it does and how it does so.
2. The support of senior management is a fundamental pillar in the dissemination of culture as the culture of senior management reflected on the culture of employees and therefore must focus on the culture of senior management and strengthen it to ensure the dissemination of quality culture to the workers properly.
3. Consistent with developments and increasing competition, hotel organizations must seek to align their characteristics (according to their current circumstances) with the characteristics of competing organizations through the belief of senior management in their ability to build a quality culture in the organization.
4. The focus on giving the strategic dimension wide attention, because it has a direct impact on the deepening of the culture of quality because it is the tool used by senior management to implement the organization's mission and vision and policy of comprehensive quality.
5. It is essential to focus the attention of the management of hotel organizations in Lebanon to study the elements of quality culture and the required environment, which reflects the importance of achieving TQM programs to enhance the position of competitive companies.

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Appendix 1: Questionnaire

Kindly provide answers to the questions below regarding the application of TQM in your hospitality organization. Your identity will remain confidential.

First Section:

1- Your age group

- 20-25
- 25-35
- Above 35

2- Are you familiar with TQM?

- Yes
- No

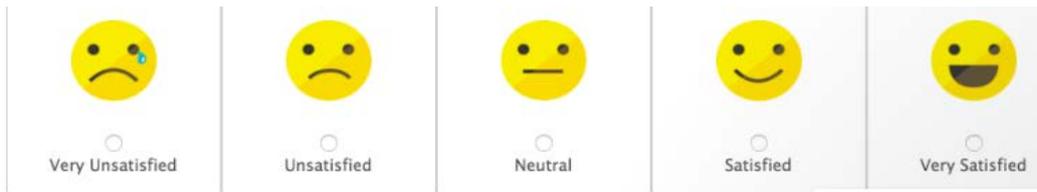
3- Have you ever attended a TQM training?

- Yes
- No

4- Do you believe TQM is being fully implemented in your organization?

- Yes
- No
- Not Sure

5- How satisfied are you with the quality of management in your organization?



Second Section:

How much do you personally agree on the following questions?

To what Extent do you Agree?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6- The management is exerting sufficient effort towards applying TQM across the organization					
7- You feel you can trust your coworkers and senior managers					
8- Your organization gives you the recognition you're looking for					
9- You receive regular training by your organization					
10- There is proactive leadership in your organization					
11- The communication in your organization is structured and easy					
12- There is a teamwork spirit in your organization					
13- Your organization is ethically oriented					
14- There is a whole level of integrity in your organization					
15- There is a balanced delegation of tasks throughout your organization					

16- How do you describe the culture in your organization?

- It is empowering
- It is positive
- It is negative
- It is toxic
- It is formal
- It is ethical

17- Based on what you know about TQM, do you think your organization needs it?

- Yes
- No

18- What elements of TQM are most needed in your organization?

- No
- Yes

19- Current employment level in your hotel

- Front Line
- Middle Management
- Senior Management

20- Total family income over the past 12 months

- < Less than \$20,000
- Between \$20-40,000
- Between \$40-60,000
- Between \$60-80,000
- Between \$80-100,000
- Between \$100-150,000
- More than \$150,000

21- From which region do you originally come from?

- Beirut
- North
- Bekaa
- South
- Jounieh / Keserwan
- Mount Lebanon / Metn
- Mount Lebanon / Bhamdoun

22- Which best describes your relationship status?

- Single

- Married
 Divorced
 Domestic partnership
 Other

23- Highest level of education completed

- Below high school
 Completed high school
 Associate degree (AA)
 Bachelor degree (BA, BS)
 Master (MS, MBA, MPH, etc)

Section Three: TQM In your hospitality organization:

24- Please rank from 1-7, how do you rank the implementation of each of the below in your organization (1 being the most implemented)?

Leadership	Ethics and Integrity	Quality of the Position	Teamwork spirit	Training Frequency	Quality of communication	Leadership

25- Please rank from 1-6, which influences your productivity the most (1 being the most used)

Leadership	Ethics and Integrity	Quality of the Position	Teamwork spirit	Training Frequency	Quality of communication

26- How do you obtain news about quality management throughout your organization?

Verbal communication	Newsletters	Social media posts	Email	Official meetings	No News

27- Please rank the importance of the TQM elements based on the needs of your organization

Rank	News type
	Ethics
	Integrity
	Training
	Teamwork
	Communication
	Recognition

THANK YOU
Mohammad Yassine