Article

Total Quality Management in Sport Tourism and the Hospitality Industry: The Case of Greek Luxury Resorts with Sport and Recreation Facilities and Services

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Abstract: Total quality management (TQM) refers to a way of management wherein senior management is committed to guiding employees in continuous improvement in all processes, services and products, with the ultimate goal of satisfying customer requirements and expectations. The purpose of the present study was to examine the impact of leadership, organization culture (OC), customer-oriented strategy (COS) and human resource empowerment (HRE) on innovation, as well as the effect of innovation on TQM for sustainable development in Greek luxury resorts with sport and recreation facilities and services. A quantitative 5-point Likert scale method was utilized for the purpose of this study, and an online questionnaire survey was adopted for the data collection. To evaluate the resilience of our model, we conducted structural equation modeling using SPSS and AMOS software. Varimax rotation with Kaiser normalization was utilized to enhance the robustness of the analysis. A total of 895 questionnaires were successfully gathered from 454 luxury resorts. This study validated that leadership, OC, COS and HRE positively impact the luxury resorts’ innovation and thus support that innovation had a significant impact on TQM, which in turn leads to their sustainability and effectiveness and is supported by the resource-based view (RBV). Furthermore, this study is the first within the Greek hotel industry that jointly estimates the influence of leadership, OC, COS and HRE on innovation and its concurrent effect on TQM for sustainable development, which has not been methodologically considered before and provides useful policy implications for managers within the hotel industry.

Keywords: TQM; leadership; organization culture; customer-oriented strategy; human resource empowerment; innovation; sustainability; sport tourism; hospitality industry

1. Introduction

The provision of sport and recreational services is now a profitable activity for businesses, bringing increased profits, repeated customers, an enriched experience for audiences of all ages and higher value to the hotel product [1]. As the customer holiday experience is enhanced, overall customer satisfaction and positive behaviors are also expected to increase. Recreational services are one of the most important elements for hoteliers.

Therefore, it can be argued that competitiveness in tourism mainly depends on innovation to achieve lower costs and higher-quality outcomes [2,3], such as improved services (especially in sport and recreational services) and products, interaction with environmental issues and information and communication technologies (ICT) [4]. Technological innovation in recreation can be used as a marketing tool to enhance place attachment and upscale
tourist experience [5]. Furthermore, innovation in technology is an effective way to create more impactful and memorable tourist experiences [6].

The introduction of new content, the promotion of tourism opportunities based on a modern marketing approach, the involvement of professional staff in the tourism sector and sport and physical culture are the main conditions for the development and confirmation of sport and recreational tourism in this sector [7].

Greek luxury resorts with sport and recreational facilities and services are a fast-growing service industry of sport tourism that is subject to recurrent approval by delighted consumers or the creation of competitive advantages through novel methods of service delivery processes [8]. Consequently, Greek luxury resorts have been urged to amend their operational activities to meet their customers' expectations [8]. In view of the fact that the sport and recreation industry encounters intense competition both with other equivalent organizations and against other sports or entertainment facilities, it should enhance its service quality so as to improve its customers' satisfaction, achieve desired business results and reinforce its sustainability [8].

With respect to this fact, leadership is a key factor in the development of innovation in the work environment because leaders significantly influence employees’ innovation behavior from the development to the execution of innovative ideas or solutions [9,10]. Additionally, leadership has been proven to be an essential factor for guiding sport and service organizations and their human capital toward the achievement of their strategic objectives and contributing to their long-term development and viability [11,12].

Following the literature, one should find a significant accordance between organizational culture and innovation in the work behavior in the sport tourism sector [11,13]. It seems that organizational culture contributes to creating a favorable environment for designing new services, products and processes and planning to penetrate new markets in an innovative, attractive and effective way [14].

Moreover, the research has proven that customer orientation influences innovativeness, as customer orientation drives employees’ capacity to problem-solve and helps with creativity. Hence, customer orientation is of major importance for innovation [15], as the philosophy of customer-oriented management focuses on the customer, and the goal is customer satisfaction, so companies must develop innovative services that adapt to the changing needs of their customers with the aim of a long-term relationship and customer loyalty with the company [16].

Also, empirical research has proven human resource empowerment to be a critical element of service innovation [10,11,17]. Human resource empowerment practices that develop a favorable environment for innovation include authorizing and giving autonomy to subordinates so that they can exercise control over decisions concerning their work. It also enhances skill and confidence building through cooperation, sharing and team learning. In principle, it is the encouragement and reward of initiative and imagination that result in increased innovation capability [11].

Innovation may be considered a driver of TQM in the service sector [18]. Moreover, research results of previous studies have shown that innovation significantly affects a firm's TQM implementation in the service industry [19]. Following the literature, it seems that TQM supports a company’s strategies for sustainability because through commitment to continuous quality improvement and process control, waste and resource reduction are achieved, and there is less mismanagement [20]. The holistic dimension of TQM has been recognized by companies and has been included in their sustainability policies as it ensures the continuous improvement of quality in an effective way, saving resources and strengthening their resilience and long-term development [21]. Moreover, the research has proven that the utilization of total quality management by firms increases their corporate performance by differentiating their goods and services and acquiring a sustainable competitive advantage in the marketplace [22,23].

Following the abovementioned discussion and based on the fact that while total quality management (TQM) implementation is widely accepted in manufacturing industries, it
is still limited in the service industry, particularly in the hospitality sector [24], the scope of this study was to examine the impact of leadership, organization culture, customer-oriented strategy and human resource empowerment on innovation, as well as the effect of innovation on total TQM for sustainable development in Greek luxury resorts with sport and recreation facilities and services. We respond to calls for more research on TQM (within the hospitality industry) made by Hussain and Khan [24], and we add to the existing literature with several merits. Firstly, we provide an empirical (quantitative) setting on the association of leadership, organization culture, customer-oriented strategy and human resource empowerment with innovation, as well as the effect of innovation on TQM, adding to a small fraction of quantitative studies on this matter. Secondly, this study is the first within the Greek hotel industry that jointly estimates the impact of the significance of leadership, organization culture, customer-oriented strategy and human resource empowerment regarding innovation and its concurrent effect on TQM for sustainable development in Greek luxury resorts with sport and recreation facilities and services, which has not been methodologically considered before, reaching useful policy implications for managers within the hotel industry.

2. Literature Review

2.1. Leadership and Innovation

The effect of leadership on innovation in the work environment has been studied in many fields, such as technology, industry, construction, manufacturing, sports, etc. [25], but in the field of hospitality, research is still limited [11,26]. The hospitality sector and its provided services favor the development of innovation as employees, in order to face and solve problems that arise with customers and to satisfy their expectations, develop innovative behaviors and processes with the aim of improving services [27].

Hospitality businesses develop sustainability and innovation strategies at all levels with the aim of continuously improving services and creating a competitive advantage in the hospitality and sport tourism market [28]. The style of leadership (e.g., transformational, entrepreneurial, ethical) applied in companies significantly influences the development of innovation by encouraging employees to utilize their skills and abilities, motivating them to adopt new innovative behaviors to serve customers [29]. Visionary leaders can inspire and shape employees’ beliefs about innovation and encourage and motivate them to develop innovative behaviors consistent with the values, philosophy and vision of the business or organization [30].

In the field of hospitality, research results showed that leadership has direct and indirect effects on the innovation of the services provided, that it has a positive impact on innovative work behavior and that the creation of favorable conditions for the development of innovation has a direct and positive impact on the behavior of employees by strengthening generating innovative ideas and solutions [31,32].

Hypothesis 1. Leadership has a positive and significant effect on innovation.

2.2. Organizational Culture and Innovation

Employee behavior can affect the functioning of an organization either positively or negatively [33]. When their behavior follows principles, philosophy, rules and training, there is a positive effect supporting the smooth operation and development of the organization [33]. This basic behavior that agrees with the philosophy and vision of the organization constitutes the organizational culture and, when cultivated, can ensure a harmonious work environment with prospects for innovation and growth [34]. Employees can be more effective when they have common goals (a common attitude on work matters as well) and when they are encouraged by management to cultivate this behavior by building the organizational culture [35].
The development of organizational culture is related to innovation at work because it ensures a framework of safety and creativity for employees, improving their performance by implementing innovative ideas [36].

Organizational innovation is part of the organization’s strategic planning as it contributes to the realization of goals and its development [37]. Strategic planning incorporates both individual innovation, which refers to how each employee perceives innovation, and organizational innovation, which includes the organization’s processes and behavior in new services, products and techniques [38].

The sustainability of an organization is strongly influenced by organizational innovation because it offers the organization a competitive advantage and, by extension, economic growth and longevity [39]. The development of organizational culture creates a favorable environment for the development of innovation both at the individual and group level by supporting innovative practices, behaviors and processes, resulting in the growth and development of the organization [11,40].

**Hypothesis 2.** *Organizational culture has a positive and significant effect on innovation.*

### 2.3. Customer-Oriented Strategy and Innovation

The customer-oriented approach has been developed in the field of hospitality and refers to business strategies that are customer-oriented, focusing on providing positive experiences by creating long-term and loyal relationships [41]. Orientation to the customer, satisfying their wishes and expectations, creates the need to find new services, benefits and processes that emerge through the innovative operation of the business [15,42]. According to Deshpandé [43] and his colleagues (1993), customer orientation can be defined as “the set of beliefs that puts the customer’s interest first, while not excluding those of all other stakeholders such as owners, managers, and employees, in order to develop a long-term profitable enterprise” [43]. This way of operating the business is related to the development of innovation and performance as you seek service differentiation from the competition and support the continuous willingness of the business to respond and satisfy customer needs [44]. Due to the strong competition that exists in the field of hospitality, businesses adopt innovative behaviors, services and products to meet customer expectations [15].

Innovative strategies in communication, market research, the creation of new products and services to fill the market gap and gathering information about customer expectations and preferences and societal trends are strongly related to the customer-centric management of a business because, in this way, the business can respond to the competition and become sustainable in the service and hospitality industry [16,42,45].

**Hypothesis 3.** *Customer-oriented strategy has a positive and significant effect on innovation.*

### 2.4. Human Resource Empowerment and Innovation

The relationship between human resource management and innovation development has been studied in recent years in many fields, such as industry, technology, business and sports [11,46]. Human resources are an important factor in the viability of a business, and the way they are managed can encourage innovation and business development with new products, new services for customer service and new processes for faster and more efficient operation [41]. The behavior of management executives can create a climate for encouraging innovation when there is a supportive mood, encouragement of initiative and freedom of expression for employees [46]. Results of a retrospective study that studied the relationship between human resource management and innovation revealed that the mediating mechanism and staff training have a positive impact on the development of innovation [47].

Innovative work behavior can be developed when human resource management follows the trends and evolves from management models [10]. Applied human resource
management practices like employee empowerment encourage employees to develop their skills, abilities and behavior in a creative and innovative way [11]. Employees can think innovatively when there are conditions that favor this behavior and when they feel satisfied with their work [48]. HRM managers can encourage employees to achieve the development of innovation through the implementation of favorable policies and practices, such as human resource empowerment, that will significantly contribute to the organizational and financial sustainability of the firm [11,49].

Human resource management practices concerning employee empowerment that develop a favorable environment for innovation are the selection and recruitment of suitable personnel, rewards and compensations, the possibility of professional development, the involvement and contribution of employees in decisions in different parts of the business and education and training in specialized subjects [11,50]. Human resource empowerment practices have a positive effect on the development of innovation by increasing the performance of employees as they feel that they themselves participate in decision making and are strongly involved in achieving the company’s goals [11,17]. Employee involvement, which is at the core of human resource empowerment, creates a commitment to the company’s goals, and through this innovative approach, the growth and sustainability of the company are enhanced [11,51].

Hypothesis 4. Human resource empowerment has a positive and significant effect on innovation.

2.5. Innovation and Total Quality Management

The philosophy of total quality management (TQM) is based on the continuous improvement of an organization’s operations. All executives, employees, customers and suppliers are involved in the process of continuous improvement with a customer-centric–human-centric approach [52]. The goal of the management and all those involved is to satisfy the customer’s expectations through the continuous improvement of the organization’s operations [53].

This method of management has been applied and studied quite a bit in the industry sector, but in the service sector, and especially hospitality, research is quite limited [24]. In these aforementioned studies, it was found that its application has positive results and that there are good practices for increasing efficiency in all operational systems of the sector, especially in the financial sector [54]. TQM also has a positive impact on innovation performance in the hospitality industry through the implementation of good practices that enhance the operational performance of the organization [55]. The application of TQM contributes to the creation of a competitive advantage because it ensures continuous improvement of the services provided, products, working relationships, communication and organizational culture in the organization, which creates a favorable and suitable environment for the development of innovation at all levels [56,57].

TQM is a commitment in which this process for continuous improvement must be carried out long-term and forever at all levels [58]. Management should inform and guide staff about goals, procedures and techniques and provide for their training and development [59]. The success of TQM is based on the commitment of employees to continuous improvement, increasing the overall quality of services and products and creating a stable environment for growth, development and innovation [60]. Innovation can be developed and implemented either in one area or in many within the organization, with the ultimate goal of creating satisfied and loyal customers [61]. TQM supports good practices and creates a favorable environment for the development of service innovation, the creation of a new product, the identification of a market gap and its filling with a new product, the successful training of personnel for more efficient work and the creation of a work culture for continuous growth and improvement [62].

Moreover, the suggested findings of previous relevant research have demonstrated not only the inconsistency between innovation and TQM in the service sector but also the interconnection between them and have highlighted that both innovation and TQM
contribute to a firm’s business performance in all aspects [19,22,23]. Additionally, the positive relationship between innovation and TQM has been supported by some studies in different industries [57,62], and it seems to also have a positive relationship and application in the field of hospitality and sport tourism [55]. Total quality management (TQM) refers to continuous improvement in all areas of a business in the manufacturing, product and service industries [63]. Firms with total quality management are committed to the continuous improvement of service quality, adopt quality control techniques, set quality goals, modify processes for more efficient services and implement controls to ensure the quality of services and processes [20,64,65]. Moreover, training staff on sustainability, strengthening the workforce by developing new skills, ensuring decent working conditions and remuneration and employing strategies for environmental protection in all areas of the business are practices and procedures applied in total quality management with the aim of business sustainability [66]. These practices foster the creation of new, improved services and products that outperform competition and make a business sustainable [66,67].

**Hypothesis 5. Innovation has a positive and significant effect on total quality management.**

The concepts and relationships posited in the five hypotheses stated above are briefly represented in the following Figure 1.

![Figure 1. Proposed model.](image)

### 3. Materials and Methods

The sample of the research consisted of 895 managers/directors of 454 Greek luxury hotels that provide sport and recreation services. In total, of the 895 participants of this study, 590 were males (65.92%), and 305 were females (34.08%). For the collection of the survey data, telephone contact was made with the executives of the hotels to see if they would agree to participate in this research. The hotel managers/directors who agreed to participate in the survey had to complete an electronic questionnaire during the period of March–October 2023, covering the entire tourist season. A quantitative 5-point Likert scale method was utilized for the purpose of this study, where 1 corresponds to very little, 2 = little, 3 = some, 4 = great, and finally, 5 = very great. The questionnaire used included 40 items and was developed by [68] and was founded on the reviewed literature on leadership, organizational culture, human resource empowerment [68–71], innovation [72], customer-oriented strategy [73] and TQM [74]. These scales are widely used in the abovementioned areas of study (since they have been used in many studies) and have been proven to be well-established, valid and reliable. Also, suggestions offered by a selected panel of experts have been taken into account. More specifically, the questionnaire comprises the following key units:
1. Human resource empowerment (six questions);
2. Transformational leadership (nine questions);
3. Organizational culture (six questions);
4. Innovation (six questions);
5. Customer-oriented strategy (seven questions);
6. TQM (six questions).

Due to the vast number of questions, it is possible to categorize the relevance of each question using a multivariate statistical analysis technique [75,76] when there are several independent variables that have varied degrees of correlation. The idea behind any multivariate analysis is the reduction of data dimension under the condition that the new data could be expressed as a linear transformation of the original data. A linear transformation is a mathematical operation that changes the coordinates of a data set in a linear way. This means that the transformation preserves the properties of linearity, such as the ability to add and scale data points. The total variability is measured based on the $\sum_{i=1}^{p} \text{Var}(X_i)$, where $X_i$ is the original data, $p$ is the sum of the data $X_1, X_2, \ldots, X_p$, and $\text{Var}(X_i)$ is the variable of the data. The goal is to introduce another subset $k < p$ with $Y_1, Y_2, \ldots, Y_k$, where $\sum_{i=1}^{p} \text{Var}(X_i) < \sum_{i=1}^{k} \text{Var}(Y_i)$. There are many types of linear transformations that can be applied to data, such as the variables scaling, the rotation and the reflection. These transformations can be represented by matrices and can be combined to produce more complex transformations. One common linear transformation is the principal component analysis (PCA), which finds the directions in the data that explain the most variance and uses these directions to transform the data into a new set of variables called principal component scores. This transformation can be useful for reducing the dimensionality of the data and for identifying patterns and relationships among the variables. Another example of linear transformation is normalization, which is a method of scaling the data so that it has a zero mean and unit variance. This can be useful for comparing the data on the same scale and for some machine learning algorithms [77,78]. The mathematical explanation of the PCA is the following:

1. The dataset is centered by subtracting the mean of each variable from all the observations of that variable;
2. Then, the covariance matrix of the centered data is calculated. The covariance matrix is a square matrix that gives the covariance between all pairs of variables in the dataset;
3. The eigenvectors and eigenvalues of the covariance matrix are then calculated. Eigenvectors are unit vectors that describe the directions of maximum variance in the data, and eigenvalues are scalars that give the magnitude of the variance in the data along the corresponding eigenvector;
4. The eigenvectors with the largest eigenvalues are chosen as the principal components of the data. These eigenvectors can be used to transform the original data into a new coordinate system, where the first principal component corresponds to the first eigenvector, the second principal component corresponds to the second eigenvector, and so on;
5. Finally, the transformed data can then be projected onto the new coordinate system, effectively reducing the dimensionality of the data.

The resulting principal components are orthogonal to each other and arranged in descending order of importance [79]. The importance of the variables in a PCA model is determined by the magnitude of their corresponding eigenvalues. Eigenvalues represent the amount of variance in the data that is explained by each principal component. The larger the eigenvalue, the more variance in the data is explained by the corresponding principal component, and thus, the more important that component is in describing the structure of the data. The proportion of variance explained by each component can be calculated by dividing the eigenvalue of each component by the sum of all eigenvalues. It is also possible to use the explained variance ratio, which is the proportion of the total
variance that each principal component explains. This is a useful measure to determine which principal component to keep, as they should explain a meaningful proportion of the total variance.

Another way to determine the importance of variables in a PCA model is by looking at the loading of each variable in the principal components. The loading of a variable in a principal component is a measure of the correlation between the variable and the component. A high positive loading indicates that the variable is positively correlated with the component, while a high negative loading indicates that the variable is negatively correlated with the component. Variables with high loading on the first principal component are considered more important [77,79]. To determine if the data are appropriate for factor analysis, the Kaiser–Meyer–Olkin measure of sampling adequacy must be calculated [80]. Small values of the KMO indicate problems with sampling. Values higher than 0.5 are acceptable [81]. Finally, the final structural equation model (SEM) is presented, encapsulating the relationships between key variables examined in this study. The SEM offers a comprehensive depiction of the associations between innovation, leadership, organizational culture, human resource empowerment, customer-oriented strategy and total quality management within the context of luxury resorts with sport and recreation facilities and services. Each path coefficient represents the strength and significance of the relationships identified, shedding light on the interplay between these constructs and their influence on innovation processes.

4. Results

A total of 895 questionnaires were successfully gathered from 454 luxury resorts with sport and recreation facilities and services. The dataset was analyzed using the SPSS and AMOS 22 software. In total, of the 895 participants of the study, 590 were males (65.92%), and 305 were females (34.08%). Most of the participants were between 26 and 35 years old (n = 305), which represents 34.08%, while 18.10% (n = 162) were between 46 and 55 years old. In addition, most of the participants were between 19 and 25 years old (n = 322, 35.98%), while significantly fewer were over 56 years old (n = 106, 11.84%). As far as the educational level of the respondents is concerned, 30.28% of them (n = 271) were holders of postgraduate degrees, 38.21% (n = 342) of the sample graduated from high school, while slightly fewer, 31.51% (n = 282), were holders of master’s degrees. Results regarding marital status showed that 51.51% (n = 461) of the respondents were married, and 48.49% (n = 434) were unmarried or divorced.

The analysis is based on six directions with a total of 40 questions. Table 1 presents the \( \alpha \)-Cronbach measures for every directional question. Cronbach’s alpha is a measure of the internal consistency or reliability of a multi-item scale, such as a survey or questionnaire. It is typically used to assess the consistency and relatedness of the items within a scale and to indicate how well the items are measuring a single underlying construct. To calculate Cronbach’s alpha for a set of directional questions, one needs to have multiple items that measure the same construct or trait. Each item would need to be a binary or ordinal variable. The formula for Cronbach’s alpha is

\[
\alpha = \left( \frac{n}{n-1} \right) \times (1 - \text{sum of item variances/total variance})
\]

where \( n \) is the number of items in the scale, the variable item variances represents the variance of each item, and the total variance is the variance of the scale. A high Cronbach’s alpha value indicates that the items in the scale are highly consistent and reliable, while a low value indicates that the items are not consistent or reliable. A value of 0.7 or higher is generally considered acceptable for research purposes. It is worth noting that Cronbach’s alpha is sensitive to the number of items in the scale, so increasing the number of items in a scale will tend to increase the value of alpha. Therefore, it is important to consider the number of items included in the scale when interpreting the alpha value. The reliability of the answers considering the questionnaire, given by the \( \alpha \)-Cronbach measure, is significantly high, with a value of 0.904. In particular, the corresponding results for every
different direction are given in Table 1, where human resource empowerment: $\alpha = 0.911$; customer-oriented strategy: $\alpha = 0.883$; leadership: $\alpha = 0.820$; organization culture: $\alpha = 0.953$; innovation: $\alpha = 0.977$; and total quality management: $\alpha = 0.889$.

Table 1. $\alpha$-Cronbach values for the directional questions.

<table>
<thead>
<tr>
<th>Directions</th>
<th>$\alpha$-Cronbach</th>
<th>Number of Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resource empowerment</td>
<td>0.911</td>
<td>6</td>
</tr>
<tr>
<td>Customer-oriented strategy</td>
<td>0.883</td>
<td>7</td>
</tr>
<tr>
<td>Leadership</td>
<td>0.820</td>
<td>9</td>
</tr>
<tr>
<td>Organization culture</td>
<td>0.953</td>
<td>6</td>
</tr>
<tr>
<td>Innovation</td>
<td>0.977</td>
<td>6</td>
</tr>
<tr>
<td>Total quality management</td>
<td>0.889</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>0.906</td>
<td>40</td>
</tr>
</tbody>
</table>

Principal component analysis (PCA) showed that all the utilized loadings had satisfactory adaptation (Table 2). The variance of the data explained by factors varied from 71.8% to 91.1% for the six scales. CFA showed that all the scales had Normed $\chi^2 < 1$, RMSEA < 0.1, NFI > 0.95 and CFI > 0.9. The findings from principal component analysis (Table 2) reveal that the non-presented questions exhibit loading coefficients between 0.437 and 0.575. These loading coefficients signify the degree of association between individual questions and the underlying principal components extracted through PCA. Concurrently, the total number of questions, as evaluated by Cronbach’s alpha coefficient, provides a measure of internal consistency for the questionnaire. Cronbach’s alpha coefficient reflects the extent of interrelatedness among all questionnaire items, indicating the reliability of the instrument in assessing the targeted constructs. To facilitate a comprehensive examination, the complete questionnaire acknowledges the detailed scrutiny of its items and structure. Additionally, a significant correlation existed between the variables human resource and innovation (0.483). Additionally, the other scale’s correlation coefficient ranged from (0.064) to (0.511).

Table 2. Principal component analysis for human resource empowerment, customer-oriented strategy, leadership, organizational, innovation and TQM scales.

<table>
<thead>
<tr>
<th></th>
<th>HR Empowerment</th>
<th>Customer-Oriented Strategy</th>
<th>Leadership</th>
<th>Organizational Culture</th>
<th>Innovation</th>
<th>TQM</th>
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</thead>
<tbody>
<tr>
<td>System evaluation and internal control skills</td>
<td>0.793</td>
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<tr>
<td>Leadership motivation and reward system skills</td>
<td>0.812</td>
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<tr>
<td>Efficient customer service</td>
<td>0.793</td>
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<tr>
<td>Decision making in area of responsibility</td>
<td>0.841</td>
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<tr>
<td>Improving service delivery</td>
<td>0.793</td>
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<tr>
<td>Good performance recognition and employment rewards</td>
<td>0.722</td>
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<tr>
<td>Training for job effectively</td>
<td>0.928</td>
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<tr>
<td>Keeping promises</td>
<td>0.938</td>
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<tr>
<td>Feelings of managers</td>
<td>0.957</td>
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<tr>
<td>Listening to the feelings and ideas of managers</td>
<td>0.663</td>
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<tr>
<td>Helping managers learn from mistakes</td>
<td>0.788</td>
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<tr>
<td>Customer support and solving problems</td>
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<td></td>
<td></td>
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<td>0.717</td>
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</tbody>
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Table 2. Cont.

<table>
<thead>
<tr>
<th>HR Empowerment</th>
<th>Customer-Oriented Strategy</th>
<th>Leadership</th>
<th>Organizational Culture</th>
<th>Innovation</th>
<th>TQM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant system of values, beliefs and behaviors</td>
<td>0.821</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Effective problem solutions and goal achievement</td>
<td>0.735</td>
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<tr>
<td>Work together to solve common problems and reach mutual objectives</td>
<td>0.651</td>
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<tr>
<td>Vision or mission</td>
<td>0.912</td>
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<tr>
<td>Strategy</td>
<td>0.783</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Necessary tools to support innovation</td>
<td>0.915</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate training and techniques for improvement</td>
<td>0.914</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific quality tools and techniques for measuring</td>
<td>0.814</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide service quality</td>
<td>0.739</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusion of all its managers</td>
<td>0.682</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term plan for quality</td>
<td>0.699</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvement plan and strategic planning</td>
<td>0.698</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>1.71</td>
<td>1.23</td>
<td>2.71</td>
<td>1.33</td>
<td>3.31</td>
</tr>
<tr>
<td>% of variance</td>
<td>8.27</td>
<td>10.06</td>
<td>12.39</td>
<td>17.11</td>
<td>10.17</td>
</tr>
<tr>
<td>Alpha</td>
<td>0.803</td>
<td>0.979</td>
<td>0.955</td>
<td>0.812</td>
<td>0.913</td>
</tr>
<tr>
<td>Total variance explained</td>
<td>77.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A path diagram, besides showing the direction of relationships, also includes and estimates the strength of those relationships [82]. A path coefficient is the standardized slope of the regression of the dependent variable on the independent variable [83]. In this study, a correlation has been noticed between innovation and leadership with a Pearson correlation coefficient of 0.77 ($p < 0.001$), which is statistically significant. This result is consistent with the other studies in the field and provides support for the concept that innovation and leadership are related. It is essential to emphasize, however, that correlation does not imply causality; additional research is required to identify the nature of the relationship between these variables. Yet, our findings suggest that innovation and leadership are potentially significant predictors of each other, and additional research may assist in clarifying their relationship. Considering Table 3, the strong relationship (greater than 0.7) between parameters is given by the following combinations.

The investigated model is presented in Table 4, and the results show that innovation was significantly affected by leadership ($b = 0.584, p < 0.001$), organizational culture ($b = 0.791, p < 0.001$), customer-oriented strategy (COS) ($b = 0.521, p < 0.001$) and human resource empowerment ($b = 0.618, p < 0.001$). Furthermore, quality management is significantly affected by innovation ($b = 0.709, p < 0.001$). These findings confirm the importance of innovation in luxury resorts with sport and recreation facilities and services. The best-fitting criteria were confirmed based on the results (normed x-square = 17.4, CFI = 0.973, RMSEA = 0.084 and NNFI = 0.961).
Table 3. Correlation matrix for the parameters with the highest weights.

<table>
<thead>
<tr>
<th>Good Performance Recognition and Employment Rewards</th>
<th>Keeping Promises</th>
<th>Vision or Mission</th>
<th>Strategy</th>
<th>Appropriate Training and Techniques for Improvement</th>
<th>Long-Term Plan for Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good performance recognition and employment rewards</td>
<td>0.629</td>
<td>0.667</td>
<td>0.666</td>
<td>0.73</td>
<td>0.664</td>
</tr>
<tr>
<td>Keeping promises</td>
<td>0.963</td>
<td>0.969</td>
<td>0.66</td>
<td>0.637</td>
<td>0.637</td>
</tr>
<tr>
<td>Vision or mission</td>
<td>0.676</td>
<td>0.762</td>
<td>0.772</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
<td></td>
<td>0.604</td>
<td>0.795</td>
<td></td>
</tr>
<tr>
<td>Appropriate training and techniques for improvement</td>
<td></td>
<td></td>
<td></td>
<td>0.602</td>
<td></td>
</tr>
<tr>
<td>Long-term plan for quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Final SEM model.

<table>
<thead>
<tr>
<th>Affect</th>
<th>Estimation</th>
<th>P</th>
<th>SE</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Leadership</td>
<td>← Innovation</td>
<td>0.584</td>
<td>***</td>
<td>0.013</td>
</tr>
<tr>
<td>H2 Organization culture</td>
<td>← Innovation</td>
<td>0.791</td>
<td>***</td>
<td>0.134</td>
</tr>
<tr>
<td>H3 Customer-oriented strategy (COS)</td>
<td>← Innovation</td>
<td>0.521</td>
<td>***</td>
<td>0.009</td>
</tr>
<tr>
<td>H4 Human resource empowerment</td>
<td>← Innovation</td>
<td>0.618</td>
<td>***</td>
<td>0.059</td>
</tr>
<tr>
<td>H5 Innovation</td>
<td>← Quality Management</td>
<td>0.709</td>
<td>***</td>
<td>0.116</td>
</tr>
</tbody>
</table>

S = supported; R = rejected; SE = standard error; NNFI = 0.961; CFI = 0.973; SRMR = 0.039; RMSEA = 0.084. *** ≤ 0.01.

5. Discussion and Conclusions

The existing study aimed to investigate the impact of leadership, organization culture, customer-oriented strategy and human resource empowerment on innovation, as well as the effect of innovation on quality management for sustainable development in Greek luxury resorts with sport and recreation facilities and services.

Sustainability has been a concern of the international community for the last decades, and according to the sustainable development goals set by the UN, all companies are modifying their processes and activities with the aim of achieving sustainability [84]. Consequently, critical business practices such as leadership, organization culture, customer-oriented strategy, human resource empowerment, innovation and quality management comprise fundamental elements of companies’ implementation strategies for sustainable development in their business operations [85].

This study validated that leadership, organization culture, customer-oriented strategy and human resource empowerment positively impact the Greek luxury resorts’ innovation, supporting our first four research hypotheses: H1, H2, H3 and H4. H5 was also supported, as innovation had a significant impact on the total quality management of Greek luxury resorts with sport and recreation facilities and services ($b = 0.709$, $p < 0.001$).

Following the literature, the effective management, utilization and development of firms’ internal resources can assist them in achieving economies of scale and sustaining favorable business outcomes [86]. In other words, the implementation of quality management principles in all their business activities, from obtaining resources to consumer service [85], contributes to the advancement of their sustainability goals in many sectors, which reflects the resource-based view (RBV) [65]. Hence, the findings of this study offer empirical evidence to support the philosophy of this theory. More specifically, this also indicates that the luxury resorts’ internal resources such as leadership, OC, HRE and COS significantly contribute to innovation, and subsequently, innovation has an influential and positive effect on TQM, which in turn leads to their sustainability and effectiveness, as suggested by the
literature and supported by the RBV, which aims to ensure that enterprises optimally utilize their limited internal resources to maximize their profitable outcomes [22,23].

6. Theoretical Implications

The results of this study showed that leadership significantly influenced the innovative capabilities of luxury resorts. Concerning the hospitality industry, it appears that the managers encouraged good performance recognition and offered employment rewards, provided on-the-job training to their workforce so as to act effectively, listened to the ideas of their employees and assisted them in learning from their mistakes, which inherently promoted innovative behavior [70]. The present findings concur with previous research, which refers to the influential role of leadership on innovative employees’ behavior in the service, hospitality and sport sectors [11,23,32,87]. Moreover, they suggested that it is essential to investigate the components that foster innovative work behavior and to comprehend the procedures by which (transformational) leadership affects subordinates’ innovative work behavior.

Also, luxury resorts emphasize the importance of a supportive culture, which usually helps employees perform smoothly, deal with their customers’ requests, find solutions regarding their customers’ concerns and be more productive and innovative. Moreover, it appears that organizational culture was the factor that limited and characterized employees’ behavior and affected the way employees cooperate, feel, think and act to align with the organizational objectives [11,69,88]. The present findings are in accordance with the suggested findings by [11,13], who claimed that organizational culture generates advantageous circumstances for the development of employees’ innovative capabilities, which may lead to the organization’s sustainability within the sport tourism context [11,13,88].

The favorable relation that was associated with customer orientation and innovation demonstrated that luxury resorts created new services and products so as to meet new needs and ever-changing customer expectations while understanding and fulfilling them [45,89]. Also, the employees of luxury resorts had more control over job-related issues and decisions, which allowed them to have more flexibility and responsibility with respect to various customers’ needs. Moreover, it seems that the hospitality industry finds itself continuously responding to customer demands through the creation of service value, and their employees were encouraged sufficiently to go above and beyond to serve customers well, which is difficult to imitate and is directly related to the development of innovativeness, as well as the acquisition of a competitive advantage [73,89]. This finding is compatible with previous studies on customer-oriented strategy and innovation in the service and hospitality sector and shows that customer orientation is of major importance for innovation [15,23,44,89] due to the fact that in the hospitality industry, which is composed of bundled services, the customer orientation should make memorable experiences available and involve customers in the service delivery process as well as renovate its portfolio to meet the changing needs of their customers.

Moreover, the findings of this study line up with [11,51], which refer to human resource empowerment in the service and sport sector and its positive role in employees’ innovative behaviors. Concerning the luxury resorts, it appears that innovative behavior is reinforced by the authorization of the workforce with the use of empowered teams, which usually are involved in the decision-making process and apply their decisions relative to their part of the business, which usually leads to increased innovation capability [11,71]. Also, the current findings agree with previous suggested findings by [11,23,49,71], who pointed out that people’s management has shown a positive impact on innovation performance and emphasized the importance of HRM’s active involvement in the formation of business strategies, not just its adaptation to that which already exists.

Finally, the results proved that the innovative approach had an influential effect on the TQM of luxury resorts. It seems that luxury resorts’ visions or mission statements contained a mention of innovative policies that supported the business/TQM strategy implementation and the accomplishment of their strategic goals. These findings are in
line with previous research, which supported the idea that innovation is considered a driver of TQM in the service sector and underlined the positive relationship between the two variables (innovation and TQM) [19,22]. The application of TQM contributes to the creation of a competitive advantage because it ensures continuous improvement in all areas by satisfying all customer expectations in the long term [22,23,54]. Organizations and businesses that apply TQM ensure, through the programs, that implementing quality certification, quality awards and continuous improvement practices [90,91] fosters the creation of new, improved services and products that outperform competition and make the business sustainable [66,67].

The forenamed outcomes are in accordance with the literature in the service sector, which generally states that when the enterprises are thought to be a compilation of organizational, physical and human resources or tangible and intangible resources (e.g., financial, physical, technological, organizational, human, innovation, reputational) that are invaluable, scarce, imperfectly capable of being imitated and substituted and are the main source of sustainable competitive advantage for sustained superior performance [92] and refers to the resource-based view (RBV). The RBV of enterprise holds that characteristics regarding the previous experiences, organizational culture and abilities are crucial for the effectiveness of the enterprise and may be perceived as useful guidance for managers seeking favorable outcomes and strategic effectiveness.

7. Practical Implications

The current study pointed out that higher levels of innovation and TQM are related to leadership, human resource empowerment, organizational culture and customer-oriented strategy in luxury resorts with sport and recreation facilities and services.

Considering that leadership is crucial to the management of a hotel because it sets the tone for the entire business, as well as positively influences employees’ creativity and innovation in luxury resorts with sport and recreation facilities and services, as illustrated by the results, luxury resorts should encourage managers to behave according to the common principles and beliefs and make the essential data available to them so as to productively plan and help them do their work. Also, the leadership of the luxury resort with sport and recreation facilities and services should keep its promises, show concern for the feelings of their employees and be available to provide direction and assistance to them in order to facilitate positive organizational functioning. Finally, leadership in the hotel business must be able to successfully communicate the hotel’s mission, policies and processes to customers and employees [70].

Also, another influential part of innovation activities in luxury resorts was the organizational culture. Thus, it must be illustrated that a luxury resort should clearly be adaptive and modified contextually. Moreover, the workforce of luxury resorts should be urged by their managers to recommend pioneering suggestions beneficial for fostering luxury resorts’ improvement. Also, the employees and teams of luxury resorts should not only anticipate meeting goals that they think are impossible to achieve but they should also be allowed to access substantial information concerning the current matters that luxury resorts confront [11,69,92].

Another important result of this study was that customer orientation had a positive and significant impact on the innovation of the luxury resort. Therefore, hotel managers should utilize information from customers when designing the resorts’ products and services. Moreover, they should not only keep consumers’ complaints under systematic review but also observe and check them as well as ask for their feedback so as to assess the quality problems of their services frequently. Hence, the hotels should continue to implement internal plans of action, principles and methods to eradicate problems for their consumers. This could be achieved using electronic information technologies (e.g., newsletters, email, websites, intranet, databases and platforms, utilizing focus groups, surveys, reviews and consumer visits). Finally, there should be a record of complaints to foster consumer part-
nerships and relationships, which in turn can result in further enhancement of innovative performance [45,73,89].

Given that human resource empowerment in luxury resorts with sport and recreation facilities and services has been shown to produce favorable outcomes regarding innovation (as suggested by the literature), managers should originate feedback techniques and interactive communication to encourage their employees’ awareness concerning their performance and in what areas they need improvement. Moreover, managers should provoke their workforce to serve as an example and work jointly with them. Finally, they should provide formative education to their employees that focuses attention on self-growth and results in/leads to business improvement [11,71].

Finally, one more significant outcome was that innovation was favorably associated with TQM. Considering that innovation is essential to maintaining competitiveness in the hotel business and is also considered a driver of TQM in the service sector [19], luxury resorts should continuously seek out novel and inventive methods to distinguish themselves from their rivals, such as by offering new classes, implementing new technology or developing unique sport and recreation challenges, which may contribute to the achievement of their strategic goals. Moreover, they should use virtual workouts or expand into new sport and recreation trends that can also assist hotels in adapting to changing client needs and tastes as part of their strategy and TQM application, which assures continuous improvement in all areas of the business and long-term customer satisfaction and loyalty and, in turn, contributes to business sustainability [23,56,66,67]. According to the literature, TQM supports a company’s strategies for sustainability because through a commitment to continuous quality improvement and process control, waste and resource reductions are achieved, and mismanagement is minimized [20]. The holistic dimension of TQM has been recognized by companies and has been included in their sustainability policies as it ensures the continuous improvement of quality in an effective way, saving resources and strengthening their resilience and long-term development [21,23].

8. Limitations and Future Research

Although the research methodology utilized in this study is comprehensive, it is important to recognize several limitations and avenues for future research. Initially, the use of a quantitative 5-point Likert scale method and an online questionnaire survey may have inherent constraints in capturing the nuanced aspects of the constructs under examination. Subsequent research endeavors could integrate qualitative approaches such as interviews or focus groups to delve deeper into participants’ perceptions and experiences. Additionally, statistical techniques, including the bias for the questioners, such as the Bayesian structural equation model, might allow the generalizability of the findings to other contexts or industries.

Further studies should seek to investigate the interrelationships of innovation quality between TQM and other dimensions of innovation, providing useful insights into the proposed conceptual framework. A useful investigation might also be undertaken to assess the specific characteristics of luxury resorts, such as the utilization of new technologies and other customer approaches, human resource management, adaptation to environmental changes and the distinguishing features of luxury resorts’ quality certifications.

Future investigations could replicate this study with larger and more diverse samples to enhance the broader applicability of the results. In conclusion, addressing these limitations and exploring novel research trajectories can foster a more nuanced comprehension of innovation dynamics and facilitate strategic decision making within the hospitality sector.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data supporting reported results can be shared after communication with the researchers.

Conflicts of Interest: The authors declare no conflicts of interest.

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