

Tourist Services Quality Gap Analysis in National Parks of Ethiopia: Evidence from Nech Sar National Park

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Abstract

Because of their stupendous animal displays and the often attractive scenery, the national parks of Ethiopia are drawing increasing numbers of tourists. Nevertheless, most parks are blamed as the facilities are being below the expectations of the visitors. The study employed a modified Importance-Performance Analysis (IPA) model. To achieve the desired objective 87 sample visitors were used to evaluate Nech Sar Park and the gap between importance and performance was assessed. The results of the empirical analysis confirmed that transportation (accessibility), safety (security), livelihood option, and availability of shower facilities were found to have high importance and low performance. As a result, for the effective management of the park and to manage visitors' expectations, the administrators of Nech Sar National Park should focus on the attributes which have high importance and low performance.

Keywords: National park; Tourist; Nech Sar; Ethiopia; Destination; Service quality and gap analysis

Introduction

It is important for (national) parks to constantly measure their service quality, which will allow them to better understand customer attitudes and to direct their strategies more effectively [1]. Studies suggest that the focus on pricing or number of attractions is no longer an effective strategy for parks to draw more customers [2]. Today it is claimed that, parks should concentrate on providing high quality service to satisfy customers' expectation [1]. Precisely identifying the decisive elements that match customer satisfaction should be taken into consideration by managers and researchers so that more effective marketing strategies will be implemented. Since the 1970s, the world has seen a shift toward a service-based economy [3]. The service sector has grown at ever faster pace and more companies are now concentrating on selling services rather than goods [4].

This study intends to achieve two objectives such as to identify key attributes that influence national park choice from visitors' perspective and to investigate service quality of parks in Ethiopia taking Nech Sar national park as a case study. The findings will be applied to improving service quality, which will serve as the basis for park stakeholders to improve their service strategies in response to tourist needs. In this study, it is attempted to answer three specific but important questions:

1. What are the key attributes of national parks from the visitors perspective?
2. What are the expectations of the parks visitor?
3. Is there a gap between the perceptions and expectations of the park visitors?
4. Which strategies should park managers follow to achieve the desirable level of service quality?

Literature Review

Service quality

A quality service must consistently meet customer expectations. Lewis and Booms [5] defined service quality as a measure of how well the service provided satisfies customer expectations. However, it is not an easy task to evaluate service quality precisely. Literature includes

various methods for this purpose. Parasuraman, et al. [6] suggested that there are three key characteristics of services that organizations and scholars need to take into consideration if they want to have a thorough measure of service quality. Importance-Performance Analysis (IPA) is a popular tool for service quality management which has been performed and studied by many scholars [7-9]. There have been various attempts to measure the quality of service. One of the most popular approaches is the "SERVQUAL" model which includes five dimensions of service quality [6] tangibles, reliability, responsiveness, assurance and empathy [6]. However, the applicability of SERVQUAL model has been questioned by many researchers, as some believe it is too generic [10].

The Importance Performance Analysis (IPA) model was pioneered by Martilla and James [11] and has been applied widely by many organizations and researchers in order to evaluate the strongest performance factors in customer satisfaction [12-14]. The IPA model seeks to identify two areas of customer attributes: the importance to customers and performance level in delivery. Through the analysis of the mean performance and mean importance for specific attributes, managers can gain a better understanding of the factors that (i) are performing well, (ii) are underperforming, (iii) are low priority, and (iv) are at risk for overinvestment [7]. These four classifications can be shown in the importance-performance grid (Figure 1).

The IPA technique has been widely accepted and applied because it is an easy-to-use and effective technique for companies seeking 1) to determine which factors to address and 2) to develop their marketing strategies [15]. Tyrell and Okrant [16] noted that IPA is useful for

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facilitating communication between managers and for establishing organizational focus. From findings of importance-performance analysis companies can make better decisions on setting improvement priorities, continuing investment on the best factors to ensure customer satisfaction, and identifying areas of “possible overkill” or “acceptable” disadvantage where competitive weakness is not a major factor in gaining customer support [17].

In terms of tourism, many useful findings have been discovered by researchers using the traditional and modified IPA technique. For example, factors such as cost, security, accommodation, and quality of food have been proven as critical for the growth of rural tourism [18-21]. Fotiadis and Vassiliadis [22] have also claimed that scenery/natural attractions, cost, and friendliness of local people play an important role in quality service. In addition, they found that the greatest positive gap lies on attributes “nightlife,” “safety,” and “quality of food.” A negative gap was determined for “scenery/natural attraction,” “cost,” and “transportation” when assessing the IPA model for a rural tourism destination. Taplin [8] used a modified IPA technique called Competitive Importance-Performance Analysis (CIPA) along with the standard IPA to observe and provide insights for the management in an Australian wildlife park.

From the traditional IPA results, Taplin [8] discovered a significantly positive difference in the attribute “having a rest,” while the attribute “seeing wildlife/birds/plants” yielded the greatest negative gap. However, the correlation between performance and importance under CIPA provided a different result [8], in particular, that significantly larger positive gaps are found in the attributes “information concerning attractions at the park” and “knowledgeable staff.” On the basis of this, Taplin [8] suggested that CIPA should be employed along with IPA in order to provide companies thorough insights about their performance and their position versus competitors. Using an IPA Mikulić and Prebežac [23], Coghlan [7] discovered that reef tourism segment of people could be divided into six categories, including: frustrators, dissatisfiers, hybrids, satisfiers, and delighters. In addition, Coghlan [7] proposed that some attributes cannot be controlled by operators, although they significantly influence performance evaluation, for example, weather, coral quality, and marine biodiversity. It is questionable whether such factors should be included in managerial oriented results of IPA.

Methodology

Study area - Nech Sar national park

Location and area coverage : Nech Sar National Park (also spelled as Nech Sar) is one of the national parks of Ethiopia, in the Southern Nations, Nationalities, and Peoples’ Region (SNNPR). The Park is one of the most important biodiversity centers in the country. It is located in the Great Rift Valley, within the southwestern Ethiopian Highlands (Figure 1). Nech Sar, meaning ‘white grass’ in Amharic language (Official language of Ethiopia), is an IUCN (International Union for Conservation of Nature) category II National park that was established in 1974. The name Nech Sar is derived from a creamy color of grass *Chrysopogon plumulosus* that whitens during the dry season at Nech Sar Plain [24]. It is situated 510 km south of Addis Ababa with an altitudinal range of 1100-1650 m above sea level. The park combines different landscapes including savannah grasslands, hill areas, lakes, riparian and ground water forests, woodlands, shrub and thickets [24,25]. NSNP covers 514 km² with 85 % terrestrial ecosystems and 15 % are aquatic formed by Lake Abaya and Lake Chamo, including 55 km of shoreline from Lake Abaya and 41 km of shoreline from Lake Chamo [26] (Figure 2).

Landscape

The park combines different landscapes including savannah grasslands, hill areas, lakes, riparian and ground water forests, woodlands, shrub and thickets.

Climate

Mean annual temperature is around 21°C. The highest temperatures are from January to March with daily maxima about 35°C; November and December have the lowest temperatures, around 28°C. The average annual rainfall is about 900mm. The rainy season is from March to May with a minor period from September to November. The annual pattern of precipitation around NSNP is bimodal. Monsoon winds from the Indian Ocean bring the majority of rain during the first rain season between March and May. Prevailing winds from the Atlantic Ocean are responsible for a second, shorter rain season between September and November [26].

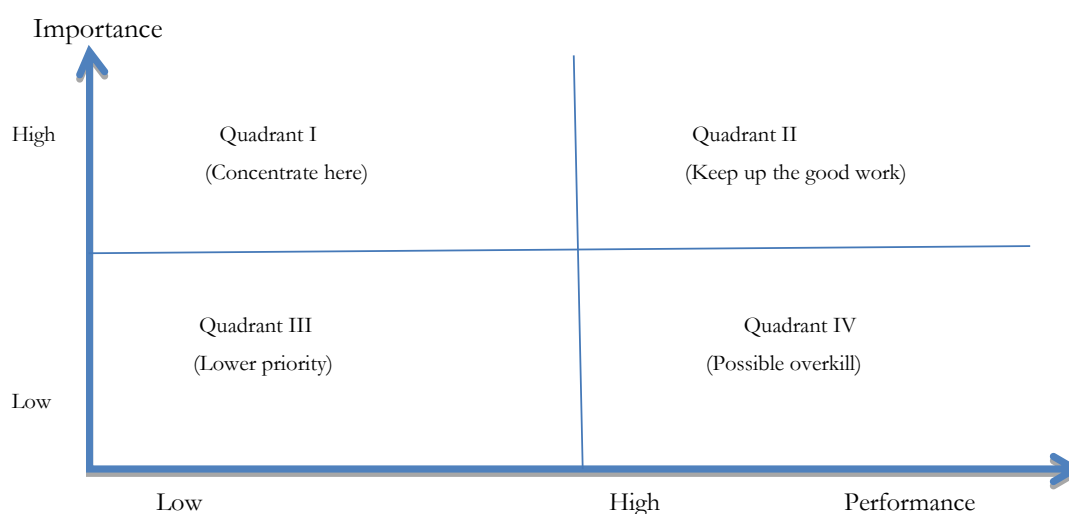
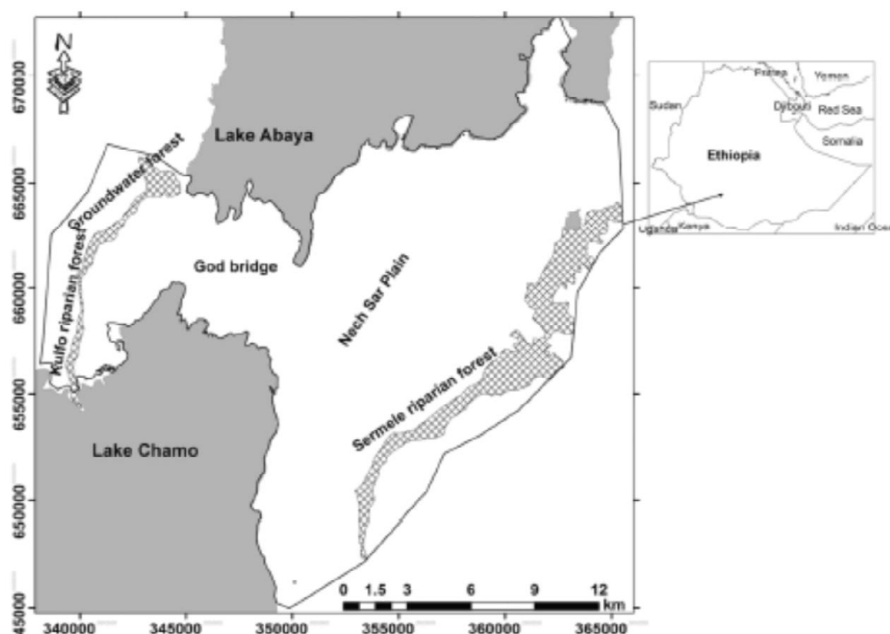


Figure 1: Importance performance grid.



Source: Fetene et al. [35].

Figure 2: Map of the study area.

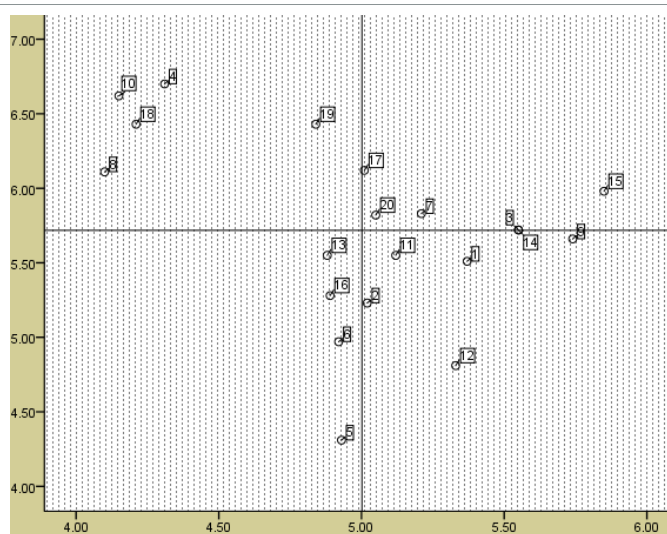


Figure 3: Importance-Performance Matrix.

Method

According to the knowledge of the area, many studies have been examined about many issues of the park, but none used IPA to evaluate service quality in the study area. Therefore, the researcher used the IPA model as the basis for the analysis to provide service quality information on the park.

Importance Performance Analysis has been widely accepted and applied among researchers and many organizations. This type of analysis is a good choice, owing to its ease of application and effectiveness in specifying important performance factors that generate customer satisfaction [12-14]. This is especially important because

service quality information is critical to decisions about quality improvements or marketing strategy.

To evaluate visitor's behavior and service quality, a questionnaire was developed based on Taplin's [8] work and other literatures. There are three parts in the questionnaire. The first part consists of demographic questions on visitors. The second part investigates customers' experience and satisfaction level on parks in general. The third part directly involves visitors' experience and satisfaction with Nech sar park using the standard IPA instrument. The questionnaire was distributed on January 2017 by a face to face method. The questionnaire was distributed on 93 people but 87 are found suitable for the analysis.

Results

Reliability and validity analysis

Total value of reliability analysis were 0.919 for the 87 questions of our questionnaire and the alpha reliability values for the importance and performance items were 0.842 and 0.840, respectively (Table 1). The Cronbach α statistical test is applied to check the reliability of the evaluation tool scale used in our analysis. The α coefficient was set higher than the minimum value of 0.70. As shown in Table 1, the subscales coefficient was above 0.70 which is acceptable for the limit of internal consistency.

In this article, the content validity is based upon the literature review and expert opinions [27,28]. Information acquired from questionnaires sent to three experts who are managers of national parks and appears to be a useful evaluation tool in analyzing customer behavior.

Demographic characteristics

Results from the survey showed that 48.6% of respondents are female and 52.4% are male. In terms of marital status, 53% of respondents were single and 47% were married at the time of the survey

Reliability Statistics		
	Cronbach's α	Items, N
Total	.823	87
Importance	.842	20
Performance	.840	20

Table 1: Reliability analysis.

S. No	Scale	Importance for the park in general	Performance of NSNP
1	7	Very important	Great performance
2	6	Somewhat important	Almost great performance
3	5	Important	Good performance
4	4	Average	Average performance
5	3	Not so important	Not so good performance
6	2	Almost unimportant	Poor performance
7	1	Totally unimportant	Very poor performance

Table 2: The 7-point Likert scale.

S. No	Variable	Mean Importance	Mean Performance	Gap
1	Well-maintained park facilities (lodges, resorts, etc.)	5.51	5.37	0.14
2	View point facilities	5.23	5.02	0.21
3	Value for Money	5.72	5.55	0.17
4	Transportation/accessibility	6.70	4.31	2.39
5	Availability of pre-visit parks information	4.31	4.93	0.01
6	Sit and rest	4.97	4.92	0.05
7	Signposts for directions throughout the park	5.83	5.21	0.62
8	Shower facilities	6.11	4.10	2.01
9	Scenery and unique natural features	5.66	5.74	-.08
10	Safety	6.62	4.15	2.47
11	Range of easy and well maintained walking tracks	5.55	4.73	0.43
12	Parking	4.81	5.33	-0.52
13	Knowledgeable Staff	5.57	4.88	0.69
14	Information concerning attractions in the park	5.72	5.55	0.17
15	Friendliness of Staff	5.98	5.85	0.13
16	Park conservation activities/efforts	5.28	4.89	0.39
17	Easily accessible wildlife	6.12	5.01	1.11
18	Diversified Livelihood options for locals	6.43	4.21	2.22
19	Availability of camping facilities	6.43	4.84	1.59
20	Availabilities of clean and well-maintained toilets	5.82	5.05	0.77

Table 3: Importance performance analysis.

(Table 2). Regarding educational level, it can be said that respondents were highly educated, with almost 80.0% of them holding a college, university, or Master's Degree. Specifically, 10.0% of participants held a postgraduate degree, 69.7% of respondents are educated at the tertiary (college or university) level, and 18.1% had achieved secondary educational level (high school). The study also pointed out that most of visitors come from Europe.

General park impressions

Information from survey shows that 91.6% of visitors were the first-time visitors, 5.3% had been in the park once before, and 3.1% previously visited the place twice. Most visitors were accompanied by friends (67.5%), family (22.3%) or a partner (6.2%). Only 4% said that they went to the park alone. Another variable assessed by the survey was the amount of time people spent in the park. The majority of visitors (63.8%) only spent a few hours in the park. There are 32.9 percent of respondents replied that they stayed for 1 days. Only 3.3% of respondents chose to spend more than 1 day in the park.

Importance performance analysis

The researcher used 20 items on performance scale and the same 20 items on importance scale. The research instrument design bases on the examples from the literature from which the researcher created the list of attributes shown in Table 3. Using the importance scale, the researcher wanted to investigate importance of service quality in national parks. Initially the researcher requested respondents to evaluate national parks in general and not Nech Sar park specifically using a 7-point Likert-type scale (where 7=very important, 6=somewhat important, 5=important, 4=average, 3=not so important, 2=almost unimportant, and 1=totally unimportant). For the performance scale, the study wished to determine the performance of service quality at Nech Sar park and therefore asked the respondent to evaluate the park using a 7-point Likert-type scale (where 7=great performance, 6=almost great performance, 5=good performance, 4=average performance, 3=not so good performance, 2=poor performance, 1=very poor performance).

As we can see in Table 3 the four most important variables for visitor in parks in general are transportation/accessibility (6.70),

safety/security (6.62), livelihood options (6.43), availability of camping facilities (6.43), and easily accessible wildlife (6.12) (Figure 3).

The four least important variables are availability of pre-visit parks information (4.31), parking (4.81), sit and rest (4.97), and view point facilities (5.23). As we can see on the performance scale the park has a very good performance on friendliness of staffs (5.85), scenery (5.74), and value for money (5.55). The three least important variables are Shower facilities (4.30), safety (4.15), diversified Livelihood options for locals (4.21), and transportation/accessibility (4.31).

As we can see in Figure 3 managers of Nech sar park should take extra care on several variables. They should first focus on the three attributes that seem to have high importance and low performance: transportation/accessibility, safety/security, camping facilities and diversified Livelihood options for locals. Managers should give due emphasis for the accessibility of the park and should create a safer environment for the visitors to make sure that they are feeling free and relaxed. Moreover, for the sustainability of the park various livelihood options should be diversified. There are four cases where both performance and importance are low (availability of pre-visit parks information, sit and rest, knowledgeable staff, and park conservation activities/efforts), and four cases where importance is low and performance is high. These cases are well-maintained park facilities (lodges, resorts, etc.), view point facilities, range of easy and well maintained walking tracks, and parking.

Conclusions

The progressively imperative protagonist of service-based economy has raised a need for more thorough knowledge of service quality and analysis techniques that can help organizations and researchers determine how to improve their performance. In providing an eminence service it is indispensable that service meets customer expectations. For the park sector, the effective management of service quality has become an important task as they have to face intense competition from other entertainment services. A good understanding of visitor behavior could be a decisive factor to help parks improve their management and marketing of attractions, thus improving customer satisfaction [29-31]. It has been said that customer tastes and preferences must be taken into account when parks provide their services [32]. Following a review of the literature and considering visitors' characteristics, a modified IPA was used as the methodological tool for the analysis of the study.

Outcomes from the study showed that the four factors of paramount concern to visitors were transportation/accessibility, safety/security, livelihood option diversification, availability of camping and shower facilities. This confirms the findings of former researches, who determined that visitor satisfaction is directly correlated with security, safety and quality [33,34]. In order to have a more representative view of parks in Ethiopia, it would be useful to employ the same research to all competitors and to compare the results obtained from those studies [35-38].

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