
| RESEARCH ARTICLE

Quantitative Assessment of Destination Service Quality of the Buddhist Circuit Using Relative Importance Index

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| ABSTRACT

This paper aims to quantitatively assess the destination service quality of the Buddhist Circuit, a network of sacred Buddhist sites located in India. The quality of destination services is critical to visitor satisfaction, which, in turn, affects the sustainability of the tourism industry. Despite the popularity of the Buddhist Circuit as an iconic tourism circuit, little is known about the quality of services offered at the site, which could impact the overall visitor experience. A quantitative research design is followed based on a structured questionnaire survey. The empirical data for the study was collected at five prominent destinations along the Buddhist Circuit: Bodh Gaya, Nalanda, Rajgir, Vaishali, and Sarnath. The data gathered from the survey was analyzed using the relative importance index (RII) method. The study identified key service attributes that shape the destination service quality of the Buddhist Circuit and highlighted areas for improvement. The study provides valuable insights for policymakers, destination management organizations (DMOs), and service providers to enhance service quality and improve the visitor experience at the Buddhist Circuit.

| KEYWORDS

Buddhist Circuit, destination service quality, relative importance index (RII)

| ARTICLE INFORMATION

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1. Introduction

Tourism has emerged as one of the most dynamic and rapidly growing industries in the world. This sector has contributed significantly to economic development, employment, and cultural exchange. In this context, the quality of services provided at a destination has been recognized as a pivotal element in determining the achievement of a tourism destination. The quality of services offered at a destination directly influences tourists' satisfaction, loyalty, and future intentions to visit (Kasiri, 2017). Previous studies (e.g. Eraqi, 2006; Kozak and Remington, 2000; Tian-Cole and Crompton, 2003) have highlighted the importance of service quality in enhancing tourists' experience and ensuring the sustainability of the tourism industry. Given the highly competitive nature of the tourism market, destinations must strive to provide exceptional service quality to their visitors to remain ahead of the competition.

The European Communities (2000) emphasized the importance of destination quality management by providing ten reasons and benefits for DMOs and their stakeholders. These include competitive advantage, easier marketing, customer loyalty, higher profits, a stable tourism industry, better quality of life for local residents, improved access to finance, effective monitoring of progress, careful data collection, and proactive management. Quality management also contributes to a stable tourism industry and protects jobs. The UNWTO Think Tank's (UNWTO 2016) initiative on quality management in tourism destinations has been widely recognized as a comprehensive and holistic approach to improving the quality of tourism services. It has resulted in numerous benefits, such as enhancing the destination's image and competitiveness, facilitating stronger business negotiations, promoting

stakeholder engagement, encouraging changes in planning and management strategies, and providing viable options for legislation frameworks. It has also been found to generate direct gains for the local community and reduce costs for operators.

The quality of services is a crucial factor that influences tourists' decision-making when selecting a tourism destination. As a result, there has been a growing interest in studying the quality of service in tourism destinations. In India, the Buddhist Circuit has emerged as a popular tourism destination, attracting a considerable number of domestic and international visitors. However, there is a dearth of comprehensive studies that evaluate the destination service quality from the tourists' perspective. This study aims to fill this gap by using the Relative Importance Index (RII) to quantitatively assess the destination service quality of the Buddhist Circuit.

2. Littérature Review

2.1 Concept of Tourism Destination

Tourism destination has been defined differently by various authors. Medlik (1993) views it as countries, regions, towns or other areas visited by tourists. Gunn (1994) defines it as a travel market area or geographic region that contains a significant concentration of tourism-related infrastructure and activities. Buhalis (2000) suggests that it is a geographical region which is understood by its visitors as a distinctive entity with a political and legislative framework for tourism and marketing planning. According to UNWTO (2002), it is a physical space in which a tourist spends at least one overnight and includes tourism products such as support services and attractions and tourist resources within one day's return travel time. Morrison (2013) sees it as an interdependent mixture of material and immaterial components that comprise physical features, people, packages, and programs. Blasco et al. (2014) define it as a place where a tourist can rest, walk, spend time in nature, see historical monuments, attend festivals and events, taste local cuisine, and be part of the unique features of a destination.

2.2 Components of Tourism Destinations

The components of a tourism destination are multifaceted and encompass a variety of tangible and intangible elements that collectively create a unique and attractive location for visitors. A summary of the components of tourism destinations, as identified in previous research studies, is presented in Table 1.

Table 1: Components of Tourism Destination

Author (Year)	Components of Tourism Destinations
Buhalis (2000)	Attractions, activities, available packages, accessibility, amenities, and ancillary services
Kozak (2001)	Local transport services, hospitality and customer care, level of prices, accommodation services, language communication, hygiene and cleanliness, destination airport services, and facilities and activities
Mill & Morrison (2012)	Infrastructure, facilities, transportation, attractions and events, and hospitality services
Morrison (2013)	Awareness, attractiveness, availability, access, appearance, activities, assurance, appreciation, action, and accountability

Previous research studies have identified that the components of a tourism destination are complex and varied, consisting of both tangible and intangible elements. Understanding the components of a tourism destination is critical for creating satisfying tourist experiences and developing successful marketing strategies.

2.3 Destination Service Quality

The concept of destination service quality (DSQ) is a subset of the broader idea of service quality and involves evaluating the performance of services consumed by tourists in a particular destination (Tosun et al. 2015). According to the UNWTO (2016), the quality of a tourism destination is defined as the outcome of a procedure that guarantees the fulfilment of all the needs, demands, and anticipations of tourists concerning the products and services offered at a reasonable cost and in compliance with the agreed-upon contractual terms and implicit safety, security, hygiene, accessibility, communication, infrastructure, and public amenities and services. The definition also highlights the significance of ethical principles, transparency, and respect for the natural, human, and cultural environment.

In the realm of service quality, Seakhoa-King (2007) posited that the abstract nature of service quality could be better understood by examining its dimensions. In further support of this, Blose & Tankersley (2004) contended that a single measure of service quality could not be applied to all industries, implying that service quality is generally viewed as a multi-dimensional construct at

different levels. To better understand the various dimensions of destination service quality, a summary of these dimensions is presented in Table 2.

Table 2: Summary of Destination Service Quality Dimensions

Author (Year)	Study Context	Service Quality Dimensions
Narayan (2009)	Indian Tourism Industry	Core-tourism experience, information, hospitality, fairness of price, hygiene, amenities, value for money, logistics,
Ali & Howaidee (2012)	Tourism destination (Jerash)	Restaurant, tour guide, souvenir, parking, map guide, public services, transportation, museum, and toilet
Moutinho & Caber (2012)	Tourism destination	Health and hygiene, shopping, information, local transportation, and accommodation
Markovic et al. (2015)	Lakeside Tourist Destinations (Serbia)	Tourist infrastructure, lake water quality, natural environment, hospitality, and cleanness of the place.
Tosun et al. (2015)	Alanya, Turkey	Accommodation, local transport, cleanliness, hospitality, activities, language communication, and airport services
Uzunboylu (2016)	Tourism Destination (Nha Trang)	Attraction, accommodation and food service, retail and souvenir shops, transportation, and local people
Hallak et al. (2017)	Tourism destination (Australia)	Natural and well-known attractions, variety of tourist services, quality of the general atmosphere, and entertainment and recreation, general environment, and accessibility
Mukherjee et al. (2018)	Tourism destination (Kolkata and Kharagpur)	Quality of safety, quality of information, quality of regulatory factors, quality of staff, quality of food, quality of transport, value for money offer, quality of emotional responses, quality of uniqueness, quality of people, and quality of climate
Pena-Alonso et al.(2018)	Canary Islands (Spain)	Accessibility, environmental quality, water quality, comfort, scenic quality, human activity and infrastructure, and facilities and safety
Cheunkamon et al. (2022)	Tourism supply chains in Thailand	Customer relationship management, order process management, service performance management, capacity and resource management, demand management, sustainability management, and information and technology management

Tourism research has long emphasized the importance of the quality of tourism destinations. However, researchers have not reached a consensus on how to measure destination service quality, resulting in an evolving field of study. Improving the service quality of tourism destinations is critical for their survival and success, yet, a suitable method of measuring destination service quality remains undeveloped. Previous studies have mostly focused on assessing the service quality of tourism industry clusters, such as hotels, aviation, restaurants, and attractions, rather than measuring the overall service quality of a destination. Moreover, despite the significance of the Buddhist circuit as a tourism destination in India, there is a lack of research in this area, underscoring the need for further investigation.

3. Methodology

This study employed a cross-sectional research design to assess the destination service quality of the Buddhist circuit in India. A quantitative research approach was used, which involved collecting numerical data through a structured questionnaire. The study was conducted in the Buddhist Circuit of India, which comprises important Buddhist pilgrimages destinations such as Bodh Gaya (one of the most significant and sacred Buddhist pilgrimage centres in the world where Gautama attained supreme knowledge to become an enlightened one), Nalanda (the first residential international university of the world), Rajgir (the ancient capital of the great Magadhan empire where the first Buddhist council was organized), Vaishali (world's first democratic republic and Buddha preached his last sermon), and Sarnath (Buddha delivered his first sermon, and the new doctrine of Buddhism was established here).

The study used a survey questionnaire to collect data from tourists who had visited the Buddhist Circuit in the past. The survey questionnaire was developed based on a review of the literature and included 48 items related to various aspects of destination

service quality. The respondents were asked to rate the destination service quality attributes on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The survey was administered in person to tourists at various sites along the circuit. The 432 well-completed questionnaires returned by respondents served as the basis for the study. The data collected was analyzed using the Relative Importance Index (RII) method, which is a widely used technique for analyzing survey data in tourism research. The RII method involves calculating the weighted mean score for each item in the survey questionnaire, which is then used to rank the importance of the various aspects of destination service quality. The RII values range from 0 to 1, with higher values indicating greater importance. The data was analyzed using SPSS 23 software. The formula for calculating RII is as follows:

$$RII = \frac{\sum W}{A \cdot N}$$

Where,

- RII = relative importance index;
- W = weighting given to each factor by respondents (ranging from 1 to 5);
- A = highest weight (i.e., 5 in this case);
- N = total number of respondents.

4. Results and Discussion

Table 3 provides data related to the destination service quality attributes of the Buddhist Circuit, which has been evaluated using the Relative Importance Index. The RII is a technique used to analyze the importance of each attribute, which is determined by calculating the mean value of each attribute's frequency of ranking and then dividing it by the sum of all the frequencies of ranking. The RII for each attribute has been calculated and listed in the last column of Table 3.

Table 3: Relative Importance Index of destination service quality of the Buddhist Circuit

Destination Service Quality Attributes of the Buddhist Circuit	Frequency of Ranking					ΣW	MEAN	RII
	1	2	3	4	5			
Vibrant culture and rich heritage.	3	3	13	188	225	1925	4.45	0.891203704
Exciting and interesting attractions.	3	9	17	200	203	1887	4.36	0.873611111
Breathtaking scenery and natural attractions.	1	14	34	254	129	1792	4.14	0.82962963
Wide variety of events and entertainment activities.	7	40	44	216	125	1708	3.95	0.790740741
Variety of things to do and see.	2	32	38	234	126	1746	4.04	0.808333333
Unique and authentic local experience.	2	14	37	223	156	1813	4.19	0.839351852
Good connectivity/network with roads, rail and airports.	5	27	33	276	91	1717	3.97	0.794907407
Transportation facilities.	4	46	35	287	60	1649	3.81	0.763425926
Traffic congestion.	16	109	56	216	35	1441	3.33	0.66712963
Convenient parking spaces.	28	96	59	213	36	1429	3.30	0.661574074
The travel to and from the destination is hassle-free.	9	64	54	247	58	1577	3.65	0.730092593
Adequate basic facilities.	37	115	56	201	23	1354	3.13	0.626851852
Adequate way side amenities.	59	171	82	108	12	1139	2.63	0.527314815
Dedicated tourist facilities.	40	104	78	184	26	1348	3.12	0.624074074
Quality restaurants/ eating outlets.	27	89	54	214	48	1463	3.38	0.677314815
Clean and comfortable dining environment.	17	93	65	216	41	1467	3.39	0.679166667
Well trained tour guides.	44	140	99	126	23	1240	2.87	0.574074074
Multi-lingual audio guide facilities.	124	163	63	71	11	978	2.26	0.452777778
Skilled manpower.	88	156	90	88	10	1072	2.48	0.496296296
Availability of quality food and beverage services.	41	53	55	237	46	1490	3.44	0.689814815

Wide varieties of cuisines.	25	45	54	245	63	1572	3.63	0.727777778
Good name and reputation in national and international markets.	11	36	37	190	158	1744	4.03	0.807407407
International awareness of destination products.	12	29	86	195	110	1658	3.83	0.767592593
The characteristics of the destination.	7	22	43	270	90	1710	3.95	0.791666667
Appropriate signage.	13	37	55	270	57	1617	3.74	0.748611111
Local maps are user-friendly.	11	49	48	278	46	1595	3.69	0.738425926
Service providers are knowledgeable.	6	39	51	258	78	1659	3.84	0.768055556
The infrastructure of the destination.	11	38	58	272	53	1614	3.73	0.747222222
Aesthetically attractive destination.	8	36	39	294	55	1648	3.81	0.762962963
Service providers dress professionally.	14	90	70	227	31	1467	3.39	0.679166667
Tourist facilities.	18	97	74	219	24	1430	3.31	0.662037037
Neat and clean tourist areas around the destination.	21	115	65	204	27	1397	3.23	0.646759259
High public safety, particularly for vulnerable groups.	10	54	92	217	59	1557	3.60	0.720833333
Local stakeholders actively develop tourism.	10	50	93	236	43	1548	3.58	0.716666667
Safe and secure destination.	5	27	42	281	77	1694	3.92	0.784259259
Polite, friendly, and helpful service providers.	4	25	41	279	83	1708	3.95	0.790740741
Knowledgeable and experienced tour guides.	6	30	58	266	72	1664	3.85	0.77037037
Service providers are always eager to serve.	5	26	43	287	71	1689	3.90	0.781944444
Service providers are prompt and always available to offer quick assistance.	5	20	53	285	69	1689	3.90	0.781944444
Best possible service from tourism service provider.	6	34	56	273	63	1649	3.81	0.763425926
Service providers pay attention to the tourists' needs.	7	30	46	319	30	1631	3.77	0.755092593
Polite and friendly service providers.	6	26	40	92	68	1686	3.90	0.780555556
Service providers aim to satisfy tourists.	11	20	43	279	79	1691	3.91	0.78287037
Destination managers provide clear direction.	9	27	55	293	48	1640	3.79	0.759259259
Reliable Service providers.	11	33	66	292	30	1593	3.68	0.7375
Suitable visiting hours for tourists.	16	41	61	255	59	1596	3.69	0.738888889
Promptness and hospitality in services.	10	32	58	268	64	1640	3.79	0.759259259
Street vendors, kiosks, and souvenir stalls are well-managed.	14	48	57	265	48	1581	3.65	0.731944444

The attributes are ranked according to their RII values, and the top ten attributes with the highest RII values are: vibrant culture and rich heritage (RII=0.891203704), exciting and interesting attractions to visit (RII=0.873611111), unique and authentic local experience (RII=0.839351852), breathtaking scenery and natural attractions (RII=0.82962963), variety of things to do and see (RII=0.808333333), good name and reputation in national and international markets (RII=0.807407407), good connectivity/network with roads, rail, and airports (RII=0.794907407), characteristics of the destination (RII=0.791666667), wide varieties of events and entertainment activities (RII=0.790740741), polite, friendly, and helpful service providers (RII=0.790740741). These attributes are considered to be the most important indicators that determine the quality of the destination services of the Buddhist Circuit. Hence, efforts should be made to ensure that these attributes are adequately developed and maintained to attract and retain tourists.

In contrast, some attributes have relatively low RII scores, indicating their lesser importance for tourists when selecting the Buddhist Circuit as a tourism destination. These attributes include multi-lingual audio guide facilities (RII=0.452777778), skilled manpower (RII=0.496296296), adequate way side amenities (RII=0.527314815), well-trained tour guides (RII=0.574074074), dedicated tourist facilities (RII=0.624074074), adequate basic facilities (RII=0.626851852), neat and clean tourist areas around the destination (RII=0.646759259), tourist facilities (RII=0.662037037), convenient parking spaces (RII=0.661574074), and quality restaurants/eating outlets (RII=0.677314815).

5. Conclusion

The study uses a novel approach to quantitatively assess the service quality of the Buddhist Circuit in India, using the Relative Importance Index (RII). This approach provides a comprehensive understanding of the relative importance of different service quality attributes and helps to identify the key areas that need improvement. The study contributes to the existing body of knowledge by offering insights into the measurement of destination service quality and provides a new methodological framework for assessing service quality that can be applied to other tourism destinations.

The study shows that the most important attributes of destination service quality are vibrant culture and rich heritage, exciting and interesting attractions, and a good name and reputation in national and international markets. The study also shows that some attributes of destination service quality, such as availability of quality food and beverage services, wide varieties of cuisines, and good connectivity/network with roads, rail, and airports, are moderately important. Other attributes like multi-lingual audio guide facilities, skilled manpower, and neat and clean tourist areas around the destination have low importance. Therefore, the study recommends that destination management organizations and tourism service providers should focus on enhancing destination service quality, responsible destination marketing efforts, collaborating with stakeholders, and developing visitor feedback mechanisms. The study provides valuable insights for policymakers, DMOs, and service providers to improve service quality and enhance the visitor experience at the Buddhist Circuit. These recommendations can guide future efforts aimed at promoting sustainable development of the tourism industry in the region.

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