

Service Quality of Museums for Sustainable Tourism: An Empirical Study of Museums in Bangladesh

Dilruba Sharmin* and Farina Haque**

Abstract

Museums are the major cultural resources of a country that emphasize tourism and economic growth. For this, the service quality is important, and should be measured by systematic methods and analysis on a yearly basis. In Bangladesh, due to the lack of knowledge, these cultural resources are not properly utilized and managed, which affects the conservation and preservation of our historical resources as well as national development. This study aims to understand the quality of service of museums in Bangladesh. It helps us understand the concepts prominent among visitors engaging in museum experiences and the barriers for museums to provide a better quality of service to their visitors. The study was conducted on 16 renowned museums across three divisions of Bangladesh: Dhaka, Rajshahi, and Chattogram. Field visits and in-depth interviews are applied as a methodology for data collection. The study suggests that most of the known Bangladeshi museums need help in providing a better quality of service for their visitors due to inadequate and unplanned infrastructure, exhibition style, service provided, and supportive attitude. This article aims to create a service quality measurement database for museums, enhancing their service quality and promoting sustainable tourism. The increased visitor numbers will boost local communities' income, contribute to the country's Sustainable Development goal 8, and protect local culture.

Key words: Service Quality, Museums, Cultural Heritage, Tourism, SDG, Bangladesh.

1. Background Study

Museums promote variety and sustainability by being open to the public and easy to get to. They operate ethically, communicate professionally, and involve the community. In addition, they provide various opportunities for learning, enjoyment, reflection, and knowledge sharing. As a result, museums are a valuable asset that helps to build sustainable tourism by utilizing the cultural and historical tourist environment. At the ICOM General Conference in Prague, Czech Republic, on August 24, 2022, the International Council of Museums accepted a new definition for museums. Following an 18-month participation process that involves hundreds of

* Associate Professor, Department of Japanese Studies, University of Dhaka, Dhaka-1000

** Independent Researcher, Graduated from Department of Japanese Studies, University of Dhaka, Dhaka-1000

museum professionals from 126 National ICOM committees worldwide, the idea was adopted in a vote for members. The new museum definition by ICOM reads:

A museum is a not-for-profit, permanent institution in the service of society that researches, collects, conserves, interprets and exhibits tangible and intangible heritage. Open to the public, accessible and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally and with the participation of communities, offering varied experiences for education, enjoyment, reflection and knowledge sharing.¹

The updated definition honors the fundamental functions of a museum while also making room for the evolving practices of museums throughout the globe. ICOM Netherlands Chair Caroline Breunese said that "It is a great step forward that the new definition has been adopted, as it now includes elements such as sustainability, inclusiveness and community cooperation in addition to the core tasks. This definition is widely supported by museum professionals worldwide."²

Located in the central region of South Asia, Bangladesh is renowned for its abundant historical heritage, diverse cultural traditions, and captivating natural landscapes. The realm of museum tourism in Bangladesh offers a gateway to comprehending the nation's captivating historical background, dynamic contemporary state, and encouraging prospects, presenting many treasures awaiting exploration. These institutions, which range from ancient archaeological wonders to modern art galleries, serve as a guide to the nation's cultural memory, preserving objects, papers, and artworks that tell the stories of generations. Each museum represents a different era in the country's history, demonstrating the progression of its people, customs, and traditions. The history of museums in Bangladesh is more than a hundred years old. Museums are scattered all over the country. Museum tourism has peaked worldwide, though this sector still needs to be fully developed in Bangladesh. As the tourism sector has been mentioned explicitly in the SDG's 2030 planning, it is essential to understand the status of Bangladeshi museums, their service capability, and contemporary challenges.

Museums are more than just receptacles for artifacts and exhibits; they are creators of our collective heritage and invaluable resources for disseminating knowledge and cultural understanding. As international travel and tourism expand, museums play an

¹ <https://icom.nl/en/about-icom/museum-definition> (24 August 2022). Retrieved in 29 October, 2024

² Ibid.

increasingly crucial role in attracting visitors seeking immersive experiences and meaningful encounters with the past. In pursuit of sustainable tourism, museums must prioritize not only the preservation and display of their collections but also the improvement of the services they provide to visitors. The concept of 'Museum Service Quality Measurement for Sustainable Tourism' represents a multifaceted approach that combines the principles of sustainable tourism with the pursuit of exceptional visitor experiences. The term 'quality', originating from the Latin word 'qualis', is commonly used to describe the condition of an item or service, its level of perfectness in specific conditions, and its capacity to fulfill a particular requirement. A considerable number of definitions pertaining to the concept of quality as documented in the academic literature. According to Victor, quality management is still not seen as a top concern in museums and other cultural and artistic organizations, where quality instruments have only been in use for a brief time.³

Parasuraman *et al* made a major contribution to service quality conceptualization and measurement by proposing five-dimensional concepts and results by comparing visitors' expectations and perceptions of provided services.⁴ Yücelt conducted a study to assess the attitudes of museum visitors about the quality of services. The research result indicates that visitors express high satisfaction with various aspects of the collection and exhibitions, including warning signs, educational and entertainment value, visual and auditory experiences, entrance fees, parking facilities, seating and leisure options, and the availability of direction signage.⁵ Yilmaz discovered that the research conducted at the Göreme Open Air Museum unveiled the existence of four distinct factors that identify the visitors' perceptions. These characteristics encompass physical attributes associated with the service, elements of exhibitions, empathy, price, and other service-related components.⁶ In the survey, the museum visitors assess the service provided to them across various dimensions at a moderate level. In

³ I. Victor, 'Museums and quality, from the concept of the museum that carries out functions to the museum that provides services', *Cadernos de Sociomuseologia*, 2007, Vol. 27(27), p. 45-61.

⁴ A. Parasuraman, L. L. Berry, & V. A. Zeithaml, 'Refinement and reassessment of the SERVQUAL scale', *Journal of retailing*, 67(4), 1991, p. 420.

⁵ U. Yucelt, 'Marketing museums: An empirical investigation among museum visitors', *Journal of Nonprofit & Public Sector Marketing*, 8(3), 2001, p. 3-13.

⁶ İ. Yılmaz, 'Service quality perceptions of museum visitors: the case of Göreme Open Air Museum. *Anatolia: Journal of Tourism Research*, Vol. 22(2), 2011, p. 183-193.

essence, tourists anticipate receiving a higher standard of service. Empathy emerges as the primary determinant of visitors' perception quality, whereas factors such as pricing and other service components exhibit comparatively lower perception value.

In the modern era, we need to measure the service quality of the existing museums so that tourists and visitors can quickly get access and find the pathway of their interest. The study was conducted in the Dhaka, Rajshahi, and Chattogram divisions, as these three divisions contain many museums. Most of this work was done to find out what services are offered to museum visitors, how good they are, what visitors' hopes are, and how they feel about the quality of museum services in Bangladesh. This study also looks at how to measure service quality for sustainable tourism and how museums could evaluate this field. Throughout this study, the problems with giving tourists better service have been discussed, and policy suggestions have been made to ensure that museums provide the best service possible to meet the SDG's tourism goal.

2. Objectives of the study

This study aims to address a knowledge gap in the existing literature and provide valuable recommendations for scholars and professionals working in museum contexts in Bangladesh regarding the anticipated and perceived quality of services. Present research was carried out in Dhaka, Rajshahi, and Chattogram due to the presence of numerous museums pertinent to the study.

- a) Identifying the service for museum visitors and the quality assessment is the central goal of this study.
- b) To investigate the perceptions and expectations of museum service quality among visitors in Bangladesh.
- c) To analyse the existing challenges associated with delivering exceptional service to visitors.
- d) To offer a policy recommendation to ensure museums' highest service quality to meet the SDG's tourism target.

3. Methodology

The current state of this sector has been depicted by analysing qualitative data obtained from existing literature, journals, books, and reports. Primary data was collected through a survey, while in-depth interviews were conducted with museum

personnel to gain insights into the facts and challenges associated with sustainable museum tourism.

3.1 Research Method

- a) The first step involved conducting a comprehensive review of the existing literature and developing a semi-structured questionnaire that would be administered to museum visitors and personnel.
- b) The study used participant information sheets, informed consent forms, and organisational consent forms to follow the research ethics guidelines and interview protocol.
- c) Field visits were conducted to collect quantitative data through a survey.
- d) Field visits have been conducted to collect qualitative data through in-depth interviews (IDIs).
- e) KII (key informant interview) also have been conducted to collect information from a wide range of people including museum directors and professionals.
- f) Transcribing and coding interview data involves converting spoken information into written form, followed by categorising and analysing the transcribed content.
- g) Data analysis and checking have been based on this study's triangulation method of report writing.

3.2 Sampling Method, Population and Size

For this study, the survey sampling method has been chosen for the visitors of the selected museums and the sample size is 260. The in-depth interview method has been selected for the personnel of the selected museums and the sample size is 16.

Table 1: Sampling Method, Sampling Population and Sample Size of this Study

Sampling Method	Sampling Population	Sample Size
Survey Sampling	Visitors of the Selected Museums	260
In-depth Interview	Personnel of the Selected Museums	16

4. Overview of the Selected Museums

4.1 Dhaka Division: In the capital city Dhaka, there are approximately fifty museums of different categories present to provide knowledge of history, science, war memory, technology, art heritage, etc. Including these, nine specific museums were undertaken to obtain data for the present research.

Table 2: Overall Characteristics of selected Museums in Dhaka Division

Location and name	Characteristics
Bangladesh Folk Arts and Crafts Foundation, Dhaka	The Foundation, based in Sonargaon, Narayanganj district, was established on May 6, 1998. It preserves historical folk art and crafts, organizes training programs, establishes museums, and promotes traditional values. It also conducts research, encourages study, and publishes findings, promoting the practice of these arts.
Bangladesh National Museum, Dhaka	The Bangladesh National Museum was officially opened on November 17, 1983, is among the most extensive museums in South Asia. It houses a vast collection of archaeological, contemporary art, and historical artifacts, showcasing the country's history, freedom struggle, and the liberation struggle.
Liberation War Museum, Dhaka	The Liberation War Museum in Dhaka houses six galleries and 21,000 objects commemorating Bangladesh's Liberation War, including rare photographs, documents, and materials used by freedom fighters and martyrs.
Museum of Independence, Dhaka	The Museum of Independence was opened to the public on March 25, 2015, Bangladesh's 45th Independence Day. The underground museum in Bangladesh showcases the nation's history from the Mughal era to 1971's independence. It includes a multimedia projection theater, amphitheater, water pools, Shikha Chirantony, mural, auditorium, and over 300 historical photographs. The museum also features terracotta, photographs, and newspaper clippings from the War of Liberation.
National Museum of Science and Technology, Dhaka	The National Museum of Science and Technology initially established in 1966, and finally relocated its permanent residence in 1981. The museum showcases technology, biological, and physical science, showcasing various experiments and inventions. It also showcases Earth's treasures, space travel history, and a dinosaur diorama. Visitors can also explore the diverse marine life in the ocean depths.
National Zoo Museum, Dhaka	The National Zoo Museum opened in June 23, 1974. The museum houses rare and endangered wild animal carcasses, aiming to preserve their diversity. Displays provide introductory notes, detailed descriptions, and accurate labeling to raise awareness.

Bangabandhu Memorial Museum, Dhaka	The museum was located in Dhanmondi, Dhaka, was often referred to as Bangabandhu Bhaban or Dhanmondi 32. It is no longer open for visitors after July-August Revolution 2024.
Nature History Museum, Dhaka	The Nature History Museum, situated in the Bangabandhu Safari Park, officially opened on October 31, 2013. It is one of Asia's largest and largest. It houses a collection of vertebrate and invertebrate carcasses and remains, as well as a butterfly garden.
Bangladesh Currency (Taka) Museum, Dhaka	The first Bangladeshi currency museum, initially set up at Bangladesh Bank in 2009, inaugurated by Prime Minister Sheikh Hasina, houses nearly 10,100 currency collections from Bangladesh's metal and paper currency to foreign currencies.

4.2 Chattogram Division: There are approximately eight museums located in the Chattogram division and five museums were surveyed for research goal purposes.

Table 3: Overall Characteristics of selected Museums in Chattogram Division

Name & Location	Characteristics
Anatomy Museum, Chattogram	It was established in 2013, the sub-project 'Establishment of an Anatomy Museum at CVASU, CP-2179' created the country's first anatomy museum. CVASU in Chattogram, Bangladesh, houses a unique anatomy museum with 260 preserved animal and bird carcasses, 120 models, 180 organs, and 2,000 bones.
Ethnological Museum, Chattogram	The Ethnological Museum opened in 1974, exhibit showcases the lifestyles of 29 ethnic groups in the country, including twelve from the Chattogram hill region, using maps, photographs, models, and artificial environments.
Fisheries Museum, Chattogram	Chattogram Veterinary and Animal Sciences University established a fisheries museum in 2013 to educate students and researchers about Bangladesh's fisheries resources, preserve biodiversity, support maritime research, and promote ecological sustainability. The museum features an aquarium and traditional fishing crafts.
Maritime Museum, Chattogram	The Jaldia Marine Academy expanded with the Bangladesh Maritime Museum, showcasing marine artifacts donated by the Jaldia Marine Academy Alumni Association.
Tribal Cultural Institute Museum, Chattogram	The Tribal Cultural Institute, established in 1978, safeguards and promotes tribal cultures in Rangamati, preserving their traditions, ceremonies, and methodologies through the Tribal Cultural Museum.

4.3 Rajshahi Division: In this division, there are approximately five museums present, including these, two museums that are very famous for their ancientness and also popularity among visitors.

Table 4: Overall Characteristics of selected Museums in Rajshahi Division

Name & Location	Characteristics
Paharpur Buddhist Vihar Museum, Rajshahi	Paharpur Buddhist Vihar, Bangladesh's second-largest monastery, houses a cruciform-shaped museum showcasing archaeological artifacts from the region, dating back to pre-Pala, Pala, and Islamic periods.
Varendra Research Museum, Rajshahi	Varendra Research Museum, established 1910, houses ancient civilization antiquities, including artifacts, scripts, and sculptures from Indus Valley, Sanskrit, Arabic, Persian, and Rajshahi regions.

5. Visitors' Perception on the Facilities Provided by the Museums

5.1. Demographic Information

Demographic information for research typically collects data on age, sex, occupation, income level, race, location, and educational attainment. In order to identify customers, demographic information draws certain generalizations about groups. For this study, demographic information collects data on the age and gender of the museums' visitors. The male respondents constituted 60 percent of the total sample, while the female respondents accounted for 40 percent. The research results indicate that most respondents are 10-29 years old, comprising 63.5 percent of the sample. Additionally, 32.3 percent of the respondents were found to be between the ages of 30-49, while a smaller proportion of 4.2 percent were aged between 50-79 years old.

5.2 Services Provided by the Museum

5.2.1. Basic Facilities

The basic facilities encompass the museum authority's tangible services to accommodate all visitors. The facilities include the provision of effective museum navigation through exhibits, appropriate seating arrangements for visitors, sufficient lighting within the museum premises, the upkeep and maintenance of the museum, and the appropriateness of the entrance fee for the museum.

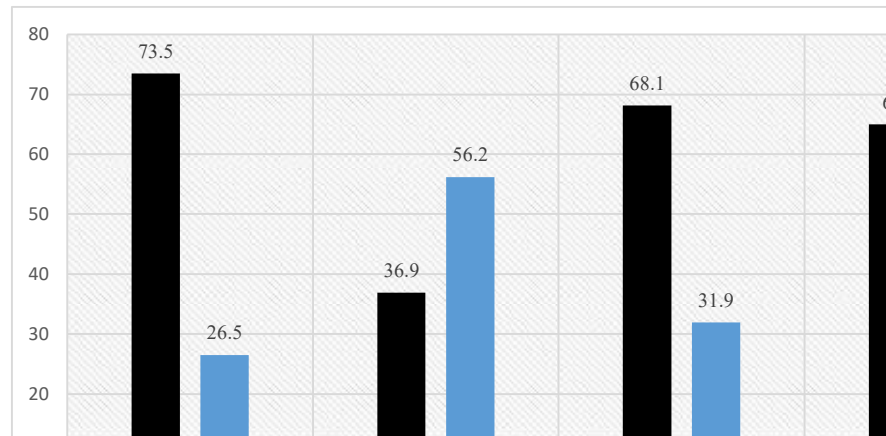


Figure 1: Visitors' Opinion on the Basic Facilities Provided by the Museums

The distribution of visitors' opinions regarding the quality of basic museum facilities across five major categories-navigation, seating arrangements, lighting, maintenance, and admission fees is shown in Figure 1. Both the affirmative (or 'Yes') and negative (or 'No') replies are represented by green and blue bars, respectively, in the data, which is shown as percentages.

- **Navigation of the Museum through Exhibits:** The vast majority of visitors (73.5%) said they were satisfied with the navigation system, suggesting that most people had little trouble navigating the exhibits. On the other hand, 26.5 percent of visitors said the navigation was inadequate.
- **Sitting Arrangement for Visitors:** The seating arrangements at the museum were deemed unsatisfactory by 39.67 percent of visitors, whilst 60.33 percent thought it was satisfactory. This indicates that while a sizable percentage of guests felt that the seats might be improved, the majority had a favourable experience.
- **Adequacy of Lighting in the Museum:** The museum successfully provided enough illumination for spotting the exhibits, as evidenced by the 68.1 percent of visitors who rated the lighting sufficiency a positive review. Nonetheless, 31.9 percent expressed dissatisfaction, which would imply that some sections need better lighting.
- **Maintenance of the Museum:** The museum's maintenance was criticized by 35 percent of visitors, compared to 65 percent who did not. This response implies that even if upkeep is generally sufficient, a sizable portion of visitors still think additional enhancements may be helpful.

- **Proper Entrance Fee:** Finally, 35.3 percent of tourists thought the entrance price was inappropriate, while 64.7 percent thought it was right. This suggests that although the majority thought the admission charge was reasonable, a sizable minority thought it would be troublesome or out of proportion to the services provided.

Overall, these results highlight that the majority of visitors are generally satisfied with the basic facilities provided by the museum. However, there is a consistent minority of visitors in each category who perceive deficiencies, suggesting areas where museums might consider enhancements to improve the visitor experience further.

5.2.2. Specialized Facilities

The museum authority provides a range of specialized facilities, including tangible and intangible services, to cater to the needs of unique museum visitors. The amenities comprise gender-segregated washrooms, a child and elderly-friendly atmosphere, and services tailored for older people and those with physical disabilities at the museum.

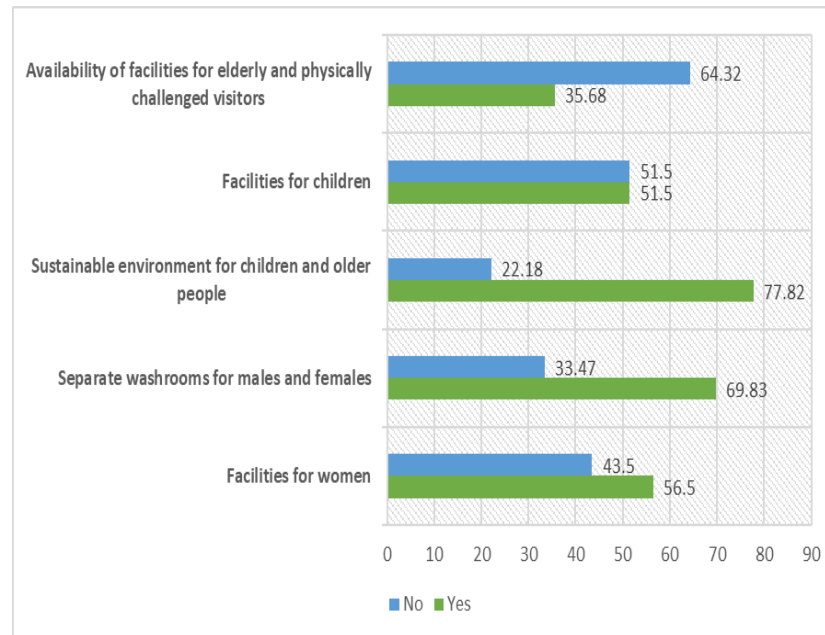


Figure 2: Visitors' Opinion on the Specialized Facilities Provided by the Museums

The bar chart, labelled as Figure 2: Visitors' Opinion on the Specialized Facilities Provided by the Museums, shows the availability of specific facilities within museums based on visitors' responses. Here's a detailed analysis of each category:

a) Availability of facilities for elderly and physically challenged visitors:

- According to the survey, 63 percent of visitors said 'no', suggesting that most people believe museums don't provide enough amenities for the elderly and those with physical disabilities. On the contrary 35.68 percent responded 'Yes', showing that while some facilities are present, there's a notable gap in accessibility for these groups.

b) Facilities for children:

- Responses are evenly split, with 51.5 percent answering 'Yes' and 51.5 percent answering 'No'. This balance suggests that while some museums provide facilities for children, this is not consistently the case across all institutions.

c) Sustainable environment for children and older people:

- Most museums offer a sustainable setting that can handle both young and old visitors, according to 77.82 percent of visitors who said 'yes'.
- Only 22.18 percent responded 'No', showing that most visitors find this aspect satisfactory in the museums.

d) Separate washrooms for males and females:

- Of those who responded, 69.83 percent said 'yes', indicating that museums typically provide separate restrooms.
- Although the majority of museums have separate facilities, 33.47 percent said 'no', indicating that some still do not.

e) Facilities for women:

- More than half of the museums had facilities specifically designed for women, as seen by the 56.5 percent of visitors who said 'yes'.
- There is still opportunity for improvement in terms of providing women with suitable facilities, as evidenced by the 43.5 percent who said 'No'.

Overall, this data suggests that while museums have made strides in providing certain specialized facilities, there are still notable areas that require improvement, particularly in terms of accessibility for elderly and physically challenged visitors and facilities dedicated to women. Sustainable environments and separate washrooms are relatively well-covered, but children's facilities show inconsistency across museums.

6. Existing Barriers of Museums to Provide Better Services to the Visitors

As archives of information, history, art, and science, museums are essential cultural organizations that provide the general public with chances for learning, introspection, and pleasure. Nevertheless, despite their significance, museums frequently encounter major obstacles that make it difficult for them to offer tourists top-notch services. These difficulties can include budgetary limitations as well as problems with staffing, accessibility, and integrating new technologies. For museums to continue serving the changing demands of many audiences while carrying out their social, cultural, and educational purposes, these obstacles must be removed. This part examines the current impediments that keep museums from providing their patrons with improved services, giving a thorough grasp of the problems they encounter and possible ways to overcome them. We learned about numerous obstacles to museum development from KII substance gathered through in-person interviews with professionals and museum directors. A brief explanation based on the data analysis is given below.

6.1 Insufficient Government Investment

All museum officials cited a scarcity of government investment as the primary cause of their institutions' difficulties. They require adequate funding to operate their institutions, regardless of the fundamental factors supporting the sector's growth. Admission fees are the primary source of funding for the museums' operations. Again, they must also consider the frequent visits of the guests, so they could only slightly increase the ticket prices.

The director of an ethnological museum stated that he used to organize many cultural events in Rangamati and Dhaka with funding from the Ministry of Finance; however, he no longer does so because the ministry no longer considers these events productive.⁷ He also started to arrange for an art competition, in which 20 artists participated, and they stayed in camp for three days. These days, they had to prepare art and give it to the museum, and later they were gifted with twenty thousand takas, and the cost for each artist in three days for the museum was thirty-five thousand takas. Annually, this museum was able to collect 1 or 2 pieces of art, and following the process, they could make a collection of 30 works of art in total. They have collected 150 to 200 more works of art from different sources. And, for the activities mentioned earlier, they do not get any funding from the government. Instead, they are considering arranging art exhibitions as the other activity of the museum to attract visitors and generate revenue. Deputy Chief Conservation Officer of Varendra

⁷ KII (key informant interview), no 1, interviewed on September, 2022

Research Museum claimed that a lack of funds could be a significant concern for the museum, which will continue to be administered by Rajshahi University.⁸

6.2 Inadequate and Unplanned Infrastructure

Most Bangladeshi museums need help due to inadequate and unplanned infrastructure. The Curator of the Ethnographic Museum of Chittagong believes that the museum's infrastructure has to be more modern and robust. They have significant hurdles in preserving antiquities and other cultural heritage throughout the wet season.⁹ The director of the 'Khudra Nri-Gosthi Cultural Institute' in Rangamati, stated that the museum's structure needs to be improved to present all of its resources as user-friendly. The museum's infrastructure dissatisfied the authorities, who thought more major and well-planned buildings might support them and prevent various issues.¹⁰

The director of the National Zoo Museum in Dhaka stated that the National Zoo Museum contains numerous exhibits. Nonetheless, the space must be enhanced in comparison to that. He believes a significantly larger area is required to add and accommodate contemporary exhibits, which could improve the museum's quality of service.¹¹ One of the curators of the Bangladesh National Museum in Dhaka stated that the museum needs adequate planning for better service quality.¹²

The museum's infrastructure is new and cutting-edge, with a solid foundation, as Achia Khanom, Curator of the Taka Museum in Dhaka, notes. Although she already needs additional space to exhibit coins from Bengal and global history, she is thinking of creating a new gallery dedicated to Mughal coinage.¹³ This museum's new gallery will be divided into sections dedicated to each Mughal emperor. Chattogram Veterinary and Animal Sciences University's Dean of the Faculty of Fisheries, Mohammed Nurul Absar Khan, reveals that the museum needs more space to make it public and to show the different species of fish available in Bangladesh that we still do not recognize properly; other museums have similar plans.¹⁴

6.3 Shortage of Competent Workers

Another critical challenge in Bangladeshi museums is the need for more competent workers. As they are government-oriented museums, there are positions available.

⁸ KII, no 6, interviewed on 20 July 2022

⁹ KII, no 2, interviewed on 15 September 2022

¹⁰ KII, no 3, interviewed on 15 September 2022

¹¹ KII, no 8, interviewed on 16 February 2023

¹² KII, no 9, 16 February 2023

¹³ KII, no 10, 17 February 2023

¹⁴ KII, no 4, interviewed on 16 September 2022

However, the recruits must still be executed due to various bureaucratic issues. Many responsible personnel stated that a seat for 30 talented people specializing in museum management is available, although the museum only has 13 members.¹⁵ Many positions, including those of interpreter and guide, have been vacant for several years. One of the key personnel of the ethnological museum remarked that they had 25 workers ten years ago and will still have 25 in 2023. There was no new hiring, and four Assistant Directors are also vacant; he is still in charge of five positions as Director.¹⁶

The additional space and staff requirement is especially problematic during winter or when students from various educational institutions visit these museums. Museums in these predicaments require legislation to help them out. The guests are divided into smaller groups, and museum staff members are assigned to each group to lead them through the exhibition. Some museums even open up additional floors to keep up with the overwhelming number of visitors. Some of these museums have requested security guards but have not received them, despite having positions available for Ansar and Police forces. The museums have hired security guards using money from within the institutions.¹⁷

6.4 Failing to Ensure Visitor Facilities

Most museums need to provide adequate visitor services. There must be an improvement to the presentation and layout system to make it more appealing to guests. Most museums would benefit from being digitalized and having a catalog or map available. Museum officials acknowledged that they could only provide limited services for the public and encourage more people to visit. They also mentioned the need for more advertising for these museums due to the large proportion of absent visitors. On the other hand, they argued that enough lighting and ventilation were still required. They could not consider the necessity of facilities exclusively for women, infants, older people, or youngsters with special needs.¹⁸

6.5 Absence of Comprehensive Exhibits

Many museums in Bangladesh need a comprehensive collection of exhibits, which indicates a lack of inclusivity in addressing various topics that may interest an informed visitor. The National Science and Technology Museum's Director remarked

¹⁵ KII, no 3, interviewed on 17 September, 2022

¹⁶ KII, no 5, interviewed on 18 September, 2022

¹⁷ KII, no 7, interviewed on 21 July, 2022

¹⁸ KII, no 4, interviewed on 18 September 2022

that the museum is in excellent condition. Nonetheless, they continually try to add new displays to their collection as science and technology improve. He also noted that the goal is to introduce more updated exhibitions. The director of the National Zoo Museum stated that the zoo authority as a whole has several policies and plans for the upcoming days. But in general, they hope to add more exhibits to the existing collection.¹⁹ The Bangladesh Folk Arts and Crafts Foundation's Director claimed that this museum foundation is a beautiful emblem of folk arts in our country and precisely depicts it. The only thing that could be improved is the addition of more folk arts and crafts by minorities throughout the country. This will assist the visitor in learning more about our country's minorities. He also stated that their museum aspires to satisfy sustainable tourism criteria, currently their larger goal.²⁰

6.6 Lack of Informed Visitors

An essential concern in enhancing service quality for museums pertains to the requirement for visitors to possess higher knowledge and information when a visitor needs more accurate information regarding the exhibits and optimal utilization of the museum's services. Under such circumstances, uninformed visitors' presence could challenge museums' ability to manage effectively. According to the Head of the Liberation War Museum's research section, the most significant barrier to maintaining quality service is the need for more knowledgeable visitors. Many visitors must know the requirements necessary to maintain the museum's atmosphere. Except for this issue, the museum's quality of service is satisfactory. She also stated that our education sector is working to raise public awareness of the museum and its upkeep. Their moving museum does this. One team was assigned to visit the museum to raise awareness of it.²¹

6.7 Political Influence

Political influences can exert biased effects on institutions, particularly in the context of museums. According to the Custodian of the Paharpur Buddhist Vihara Museum, local political influences hinder the museum's security measures sometimes, and in many cases, museum authorities have no courage to show a non-supportive attitude to local power.²²

6.8 Research Work

Lastly, it is vital to address the concerns pertaining to research conducted within museums. Museums serve a purpose beyond mere repositories for artifacts and displays; they function as custodians of our shared heritage and serve as invaluable

¹⁹ KII, no 11, interviewed on 8 February, 2023

²⁰ KII, no 12, interviewed on 9 February, 2023

²¹ KII, no 13, interviewed on 9 February, 2023

²² KII, no 6, interviewed on 21 July, 2022

conduits for disseminating knowledge and cultural comprehension. Research is an essential component of effectively managing a museum. Achia Khanom stated that one of the museum sector's main issues is research and promotion. She also added that they attempted to publish their research journal on behalf of the Taka Museum; however, she wanted more interest in Taka research.²³ The director of the ethnic museum explained that they used to publish their journals or periodicals annually and acquire high-quality ethnography and culture research papers. However, the authors must demonstrate tremendous enthusiasm for writing to compensate for their low pay. And the other institutions must receive adequate funding and publishing opportunities for their journals. However, they recognize the significance and benefits of publishing journals annually.²⁴

7. Discussion

Service quality assessment has played a pivotal role in enhancing the competitiveness of service-oriented sectors. The contemporary age of accountability within the museum industry demands that it succeed in augmenting visitor numbers and improving accessibility. As Maher *et. al* said, the approach used to measure public quality can be characterized as the discrepancy between the expectations and perceptions of patrons regarding the services offered by a museum.²⁵

The results of this study suggest a greater variety of factors influencing visitors' satisfaction through surveys. According to the findings, 41.2 percent of the respondents said that the quality of the museum service was moderate. It shows that most visitors have a mild perception of the quality of the services provided by the museums in these three regions. It means that the service quality of the museums is average. According to 73.5 percent of respondents, they required assistance navigating the exhibits in museums, and 61.8 percent of the respondents agreed that the lighting system of the museums was adequate. Of the respondents, 56.2 percent were satisfied with the entrance charge, and 41.2 percent thought the cost of the tickets was moderate. According to 67.7 percent of participants, they had no difficulties when they were at the museums. These numbers show the museums are doing quite well with essential quality service management. However, more than 55 percent of the visitors agreed that there were no seating arrangements in the museums, which can impact the visitors' perceptions of the museum's quality of

²³ KII, no 14, interviewed on April 2023

²⁴ KII, no 4 & 5, interviewed on September 2022

²⁵ J.K. Maher, J. Clark, D.G. Motley, 'Measuring Museum Service Quality in Relationship to Visitor Membership: The Case of a Children's Museum', *Marketing Management*, 13(2), 2011, p. 29-42.

service. There are introductory notes for the contents of the museums, but more is needed. Most of the museums in Bangladesh need guides to navigate eager visitors through the contents of the museums, which make it harder for visitors to understand, learn, and appreciate them. According to 38.1 percent of participants, the service provided by museum staff is mediocre and needs to be improved.

Pop and Borza suggested that, the ability of museums to draw visitors and modify their offerings to simultaneously support the growth of tourism in their local regions and the expansion of social inclusion is the basis for a significant number of indicators used to measure museum sustainability.²⁶ In the present study, responses suggest enhancing the services offered to improve the overall visitor experience. Institutions like museums, which preserve our culture and heritage, should be appropriately cared for and maintained. The majority of participants (65 percent) agreed that museums are clean and well-maintained; nevertheless, this percentage has to rise, therefore museums should prioritize sanitation and upkeep. Maintaining privacy and hygiene in a public space is also essential, as museums are public institutions crawling with visitors daily. In order to preserve privacy standards and safety concerns, 64.6 percent of participants stated that separate restrooms are provided for men and women, whereas 56.5 percent agreed that facilities are available for women. Museums are great places to learn and absorb knowledge, and people of all ages can enjoy visiting them. According to 70.4 percent of respondents, museums are appropriate for people of all ages. However, 49.6 percent of the respondents said the facilities for bringing and keeping children at the museums could be better. This can impact the frequency of visits, as families with children might not want to visit a museum because of the low facilities for children. Museums should consider the amenities they provide their consumers, considering age, gender, and physical abilities. According to 49.2 percent of the respondents, museums do not offer any particular amenities for elderly or physically disabled visitors.

The museums in these three regions have unique corners or desks to support the elderly or physically challenged visitors, but the facilities are limited. The inadequate facilities for older and physically challenged people create a big gap between the visitors and their perceptions of the museums, and most museums need to understand this to improve the services they provide to their consumers. The study suggests that the visitors had a favorable opinion of the e-ticket option before they visited the museum. E-tickets would be an excellent complement to museum visits, according to 61.5 percent of respondents. To add e-tickets as a purchase option, museums should

²⁶ I. L. Pop, A. Borza, 'Factors Influencing Museum Sustainability and Indicators for Museum Sustainability', *Measurement. Sustainability*, Vol. 8(1), 2016, p. 101.

have updated their websites. It would help visitors enjoy visiting the museums without standing in line and physically purchasing the tickets. This will undoubtedly digitalize the traditional museum concept.

The curators explained several areas where museums need improvement. For example, the National Zoo Museum in Dhaka needs a larger space to accommodate contemporary exhibits and improve the quality of service. The Taka Museum in Dhaka is considering opening a new gallery for Mughal coins. At the same time, Chattogram Veterinary and Animal Sciences University's Dean of the Faculty of Fisheries reveals that the museum needs more space to make it public and show different fish species. The need for competent workers is another critical challenge in Bangladeshi museums. Government-oriented museums have available positions but face bureaucratic issues, such as the need for new hires and legislation to help them. Museums must improve their presentation and layout systems, digitalize their plans, and have a catalog or map available. Museum officials acknowledge that they can only provide limited services for the public and encourage more visitors. They also need more advertising and adequate lighting and ventilation. Government investment is a primary cause of their institutions' difficulties, with admission fees being the primary funding source.

The museum has also started organizing cultural events and art competitions but has yet to receive government funding. The Deputy Chief Conservation Officer of the Varendra Research Museum thinks that a lack of funding could be a severe issue for the museum, which Rajshahi University will continue to run. Bangladesh's museums face challenges addressing inclusivity and various topics that may interest informed visitors. The National Science and Technology Museum, the National Zoo Museum, and the Bangladesh Folk Arts & Crafts Foundation aim to improve their collections. However, the need for knowledgeable visitors and public awareness are significant barriers to maintaining a quality service. The education sector is working to raise public awareness, while political influences can affect museum security measures.

Additionally, research is crucial for effective management, and museums serve as custodians of shared heritage and cultural comprehension. To address these issues, museums should focus on more research and promotion, such as publishing journals or periodicals. Actually, visitors' loyalty stems from their level of satisfaction, which is based on the caliber of the experience they receive from the time they park their cars or choose to call a museum until they leave the building after obtaining the necessary information or the leisure activity they had wanted, said by Rowly.²⁷

²⁷ J. Rowley, Measuring total customer experience in museums, *International Journal of Contemporary Hospitality Management*, Vol. 11(6), 1999, pp. 303-308.

It is also notable that there is a difference in visitors' perceptions of museums located in Dhaka and the other two regions (Chattogram and Rajshahi). Most museums in Chattogram and Rajshahi did not have separate washrooms for males and females, which was different in Dhaka. There were also a higher number of negative responses to the idea of e-tickets for museums. Museums are regarded as exceptional institutions packed with rich cultural and historical significance and capable of furnishing learners with valuable information. Museums in Bangladesh should focus on enhancing their abilities to provide facilities for their visitors to improve their mediocre status and quality of service.

8. Policy Recommendations

It is imperative that legislators adopt proactive measures to support and strengthen museums so they can continue to carry out their mission and adapt to changing socioeconomic, technical, and environmental concerns. Whether they specialize in natural history, science, art, or history, museums need well-considered policy frameworks that tackle important issues like funding, accessibility, sustainability, digital transformation, and diversity. The following policy suggestions are intended to improve museums' long-term sustainability, public involvement, and operational effectiveness. In order to encourage museums' continued growth as essential cultural, educational, and scientific institutions, these guidelines are based on best practices from the museum industry.

A. Infrastructure Development: Comprehensive infrastructure development for museums can foster appreciation for the craft, enhance visitor experience, and create a lasting legacy for future generations. Below is a short exploration of the components, benefits, and implementation strategies for developing infrastructure for museums.

- Commence a thorough evaluation of the prevailing museum infrastructure to identify deficiencies, safety issues, and opportunities for enhancement.
- Developing a comprehensive national or regional strategy for advancing museum infrastructure entails delineating key priorities, allocating financial resources, and establishing a timeline for effective implementation.
- It is imperative to foster collaborations among governmental entities, private enterprises, and philanthropic institutions to secure financial resources and assist in advancing infrastructure development initiatives.

B. Worker Shortage: Lack of employees is a serious problem at museums, particularly those that focus on specialized cultural fields. This scarcity may make it more difficult for the museum to properly conserve, curate, and market its holdings.

The problem goes beyond simple staffing limitations to include the availability of qualified individuals who can perform a range of tasks, from research and preservation to visitor interaction and administrative administration. In the sections that follow, we examine the various aspects of the museum staffing shortage issue and offer a variety of solutions.

- Implement training programmes and workshops to augment museum personnel's competencies and expertise, encompassing curators, conservators, and educators.
- Engage in partnerships with educational institutions and museum associations to establish internship opportunities and mentorship programmes to attract and nurture young talent.
- In order to effectively retain and attract skilled workers, museums must provide competitive salaries and benefits to professionals in the field.

C. Government Investment: The issue of how museum sustainability and excellence are related comes up. It is common knowledge that increased costs are required for every improvement in quality. One could consider this to be a financial disadvantage.²⁸ Museums are essential organizations that protect cultural heritage, advance education, encourage community involvement, and stimulate local development and tourism to boost the economy. However, significant financial and strategic assistance is needed to sustain and grow these roles. For museums to remain viable and continue to contribute to society, government funding is essential. Governments may protect their historical and cultural assets while tackling contemporary issues and possibilities by giving museums top priority when it comes to funding and resources. The importance, areas of focus, and approaches for government investment in museums are covered in detail below -

- Engage in collaborative efforts with museum associations and cultural organisations to actively promote the pursuit of augmented public funding and enhance societal recognition of the significance of museums.
- Establishing a designated financial allocation is imperative to safeguard and advance cultural heritage, encompassing museums, historical sites, and artefacts.
- Propose the establishment of a national endowment fund dedicated to museums to ensure a consistent and reliable financial resource for their ongoing operations and strategic initiatives.

²⁸ L. Zima, S. Sabou, 'Quality and the consumer', *Studia Universitatis "Vasile Goldiș" Arad, Seria Științe Economice*, 2010, part III, pp. 56-63.

D. Ensuring Visitor Facilities: In order to create an atmosphere that caters to a variety of audiences, promotes return visits, and cultivates a deeper engagement with museum collections and programming, it is imperative that high-quality visitor facilities be provided. Providing complete visitor amenities is essential to the contemporary museum experience, from comfort and accessibility to educational resources and technological advancements. An examination of the many elements, advantages, and tactics for guaranteeing first-rate visitor amenities in museums is provided here.

- Regular surveys and feedback collection should be conducted in order to evaluate the needs and expectations of visitors, with the aim of identifying potential areas for improvement in facilities.
- The allocation of funds is recommended to upgrade visitor facilities, encompassing restrooms, seating areas, and visitor information centers, to augment the overall visitor experience.
- To enhance the experience of international visitors and foster inclusivity, it is recommended to implement various measures such as providing multilingual signage, audio guides, and well-trained staff.

E. Informed Visitors: Museums are vibrant learning spaces that include a variety of activities aimed at involving guests of all ages, interests, and backgrounds. From interactive tours and practical workshops to special exhibitions, talks, and community gatherings, these programs can cover it all. Making sure that guests are aware of the different activities that are offered is essential to making the most of their time at the museum and encouraging more in-depth interaction with the displays.

- Facilitate communication and cooperation among museums by hosting conferences, seminars, and other networking activities.
- Teaching Museology might help visitors learn more about museums and understand what to expect before they visit a museum.
- Utilize technological advancements to enhance the accessibility of museums, thereby appealing to younger demographics and fostering greater diversity within the sector.
- Museums may create a more engaging and customized experience for every visitor by actively promoting the variety and scheduling of their events.

F. Education & Research Work: In order for museums to fulfill their role as active learning and discovery venues rather than merely passive storage of artifacts, education and research are essential to their goal. Visitors are not the only people involved; staff, faculty, and the general public are also involved. By serving as links between the past and present, museums promote lifelong learning and connect the

study of history with current events. An examination of museums' research and teaching initiatives, their significance, and the ways in which they foster knowledge creation, critical thinking, and community involvement is provided below.

- Teaching Museology as a diploma course can help fill the gap for lack of informed visitors and competent workers for the museums in Bangladesh.
- Undertake research endeavors that illustrate the economic advantages of museums for nearby communities, exemplifying their capacity to generate tourism income and foster employment opportunities.

9. Conclusion

This study aims to understand the quality of service of museums in Bangladesh, focusing on the concepts prominent among visitors and the barriers for museums to provide better service quality. This topic explores the significance of measuring museum service quality to ensure their long-term viability, social relevance, and contribution to sustainable tourism practices. The result shows that most of the museums in Bangladesh need guides to navigate visitors through the contents of the museums. Without a guide, it is harder for visitors to understand, learn, and appreciate them. Museums have started organizing cultural events and art competitions but have yet to receive government funding in Bangladesh. The need for knowledgeable visitors and public awareness are significant barriers to maintaining quality service. Research is crucial for effective management, and museums serve as custodians of shared heritage and cultural comprehension. To address these issues, museums should focus on more research and promotion, such as publishing journals or periodicals.

Acknowledgment: The research team would like to express its gratitude to University of Dhaka for providing Centennial Research Grant (CRG) for the submitted proposal. We are also thankful to all the museum authority to provide adequate information and unlimited support to collect data. The authors personally want to thanks the student's group of the Department of Japanese Studies, University of Dhaka, who helped in the survey and collect all data. Without their endless effort this study would never end.