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Visitor Experience and Sustainable Management of Urban Religious Heritage: Google Review Evidence from Three Heritage Mosques in Klang, Malaysia

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ABSTRACT: Urban heritage mosques are living religious landscapes that function as places of worship, community spaces and cultural landmarks. This study examines online evaluations of three heritage mosques in Klang, Malaysia: Masjid Diraja Sultan Suleiman, Masjid Kampung Dato' Dagang and Masjid India Muslim Tengku Kelana. Descriptive analysis summarised 2,160 Google star ratings displayed at collection. Separately, 856 review records containing comments were collected for the January 2019–May 2026 review period; 853 were retained for deductive thematic coding after three emoji-only entries were excluded. Each textual review received one primary code within five experiential dimensions. More than 90% of ratings were four or five stars at each mosque. Physical environment and destination management formed the largest category at Masjid Diraja Sultan Suleiman (61.7%) and Masjid India Muslim Tengku Kelana (38.3%). At Masjid Kampung Dato' Dagang, symbolic meaning and sacredness (32.3%) were closely followed by physical environment and destination management (30.8%). These descriptive patterns identify topics prominent in reviewers' accounts, rather than causal determinants of satisfaction or measured sustainability outcomes. Google Reviews may complement heritage management by identifying issues for further investigation, but interpretation requires attention to self-selection, language and temporal limitations. Proposed actions should be assessed through field observation and consultation with mosque committees and local communities, with worship activities and heritage significance remaining central.

1. INTRODUCTION

Urban heritage mosques occupy a distinctive position within Malaysian historic cities because they operate not only as places of worship but also as repositories of architectural identity, collective memory, neighbourhood attachment and cultural learning. Within the heritage tourism literature, visitor experience is not merely a reaction to the physical fabric; it is constructed through

meanings, emotions, learning, social encounters, memory, and perceived personal relevance (Poria et al., 2003; Pekarik et al., 1999; Kim et al., 2012). This perspective is particularly relevant to mosques because their significance is shaped by both tangible elements, such as architecture and spatial organisation, and intangible elements, such as ritual continuity, religious etiquette, sacred atmosphere, and community use.

In contemporary urban contexts, religious tourism cannot be reduced to pilgrimage or devotional travel alone (Terzidou et al., 2018). Visitors may approach religious sites through overlapping motives, including worship, reflection, photography, architectural appreciation, curiosity about heritage, cultural learning, and participation in community events. Terzidou et al. (2018) argue that religious tourism motivations are dynamic and embedded in the lived performances of religion, rather than fixed solely by a destination's sacred status. This means that visitor experience at mosque heritage sites must be understood as a relational process involving sacred meaning, everyday religious practice and the practical conditions through which visitors access and use the place.

The sustainable management of mosque-based heritage destinations therefore requires a balance between conservation, worship needs, visitor interpretation and operational quality (Al Khalaf et al., 2024; Jamail et al., 2023). This is consistent with UNESCO's Historic Urban Landscape approach, which frames urban heritage as a layered system of tangible and intangible values embedded within broader urban development processes (UNESCO World Heritage Centre, 2011). For Klang, this perspective is important because the selected mosques are located within a historically layered royal city where religious institutions, commercial streets, ethnic communities and heritage landmarks intersect. The local governance context has also changed: the former Klang Municipal Council became Majlis Bandaraya Diraja Klang (MBDK) (Majlis Bandaraya Diraja Klang, 2024), reinforcing Klang's contemporary identity as a royal city and strengthening the relevance of heritage-led urban management.

At the same time, digital platforms have transformed how visitors evaluate and publicly represent heritage destinations. Google Reviews, TripAdvisor, travel blogs and other forms of user-generated content have become influential sources of destination image, electronic word-of-mouth and public feedback (Litvin et al., 2008; Xiang & Gretzel, 2010; Marine-Roig & Anton Clavé, 2016). Unlike conventional surveys, online reviews are often unsolicited and written in the visitor's own words, allowing researchers to identify recurring expressions of satisfaction, complaint, emotion and place meaning. For mosque heritage sites, these reviews may reveal not only comments about cleanliness, parking and facilities, but also expressions of peace, gratitude, sacredness, memory and belonging.

Research relevant to mosque heritage addresses religious tourism motivations (Terzidou et al., 2018), mosque-based pilgrimage (Izudin, 2026), architectural and urban design considerations (Asif et al., 2019), interpretive signage (Othman et al., 2025), and community-driven conservation (Primayudha et al., 2026). These strands provide a basis for examining how sacred meaning, continuing community use and practical management conditions appear together in online reviews. The present study contributes a comparative account of three heritage mosques in Klang, using visitor-generated digital evidence to identify issues that may warrant further management assessment. This focus is relevant because mosques remain active sacred spaces while also attracting interest in their historical, architectural and social significance.

This study analyses Google Reviews of three heritage mosques in Klang: Masjid Diraja Sultan Suleiman, Masjid Kampung Dato' Dagang and Masjid India Muslim Tengku Kelana. Specifically, the study aims to: (1) describe patterns of online evaluation using Google rating distributions; (2) identify dominant experiential themes in textual reviews; (3) compare the distribution of primary experiential codes across the three mosques; and (4) discuss how visitor-generated content can inform sustainable management of urban religious heritage. The contribution is a contextual application of sacred-place and visitor-experience concepts to digital feedback from three living heritage sites. The findings provide a basis for proposing issues that mosque administrators, local authorities and heritage planners can investigate further.

1.1 Urban Religious Heritage and Sustainable Tourism Management

Religious heritage sites are complex urban resources because their meanings are produced through the interaction of sacred symbolism, historical identity, architectural form and community practice. In heritage tourism, visitors do not merely consume physical attractions; they interpret places through perceived personal relevance, authenticity and the meanings attached to the site (Poria et al., 2003). For heritage mosques, this means that the building, the congregation, the rituals, the surrounding neighbourhood and the broader urban history all contribute to the experience of place.

A sustainable heritage management approach must therefore move beyond monument-centred conservation. The Historic Urban Landscape approach emphasises that conservation should be integrated with social, economic and urban development goals, rather than being isolated from the living city (UNESCO World Heritage Centre, 2011). Similarly, the living heritage approach argues that sites with continuing community functions should be managed through continuity, community association and respect for ongoing use (Poulios, 2014). These ideas are particularly relevant for mosques because they are not preserved as static monuments; they are continuously used, maintained, adapted and interpreted by religious communities.

The management challenge is to balance three overlapping responsibilities. First, the mosque must continue to support worship, religious learning and community life. Second, its historical and architectural identity must be protected from insensitive alteration. Third, its public and visitor-facing functions must be managed through accessible, clean, safe and legible facilities. In dense urban settings, these responsibilities become more urgent because issues such as parking, pedestrian access, congestion, wayfinding, universal design and maintenance directly affect both worshippers and visitors.

1.2 Visitor Experience in Sacred and Religious Heritage Spaces

Visitor experience in sacred and religious heritage spaces is multidimensional and situated. It includes emotional responses, ritual participation, sensory atmosphere, social encounter, memory, interpretation and practical comfort. General tourism experience research shows that memorable experiences are shaped by meaningfulness, knowledge, involvement, novelty, affective engagement and post-visit recollection (Oh et al., 2007; Kim et al., 2012). Museum and heritage visitor studies further show that satisfying experiences may be object-based, cognitive, introspective and social, while interpretation can facilitate emotional engagement rather than only transmit factual knowledge (Pekarik et al., 1999; Poria et al., 2009). Consequently, visitor experience at heritage mosques should be understood as a combined spiritual, social, symbolic, interpretive and infrastructural process.

Accessibility is especially important in sacred-site experience. Aulet and Duda (2020) show that accessibility is not only physical but also intellectual and emotional, encompassing visitors' ability to understand, approach, and meaningfully experience sacred places. For heritage mosques, accessibility includes parking, ramps, step-free routes, toilets, ablution facilities, clear signage, respectful interpretation and the management of visitor movement during peak worship periods. These factors can support or disrupt the spiritual atmosphere of a site.

Authenticity and sacredness are equally significant. A heritage mosque may be valued for its age, vernacular form, royal association, diasporic community identity, architectural hybridity, or role in local memory (Othman et al., 2025). However, authenticity should not be treated as a fixed physical condition. In living heritage settings, authenticity is sustained through continuity of use, community stewardship and the careful negotiation between conservation and adaptation. This is why upgrading works must be sensitive: improvements to facilities should enhance access and comfort without weakening the visual character, ritual integrity or historical narrative of the mosque.

1.3 Visitor-Generated Content and Google Reviews as Complementary Evidence

Visitor-generated content has become an important empirical source in tourism and destination studies. Electronic word-of-mouth influences how destinations are evaluated and circulated, while online review platforms provide large volumes of publicly available visitor feedback (Litvin et al., 2008; Xiang & Gretzel, 2010). For destination management, such data can reveal what visitors appreciate, what they complain about and how they construct the image of a place over time.

Google Reviews are particularly useful because they combine numerical star ratings with short textual narratives. Star ratings provide a broad signal of favourable or unfavourable online evaluation, while comments offer contextual accounts that require interpretation; neither is a validated measure of all users' satisfaction. Marine-Roig and Anton Clavé (2016) argue that user-generated content can support tourism analytics by turning dispersed online narratives into structured evidence for destination planning. Similarly, Nguyen and Tong (2023) demonstrate that user-generated content shapes destination image and visitor intention. In the present study, Google Reviews are treated as a complementary source of digital evidence rather than a substitute for on-site research.

The limitations of online reviews must be acknowledged. Reviewers are self-selecting, comments vary in depth, and the platform does not represent all worshippers or visitors. Some users may post only very positive or very negative impressions, while others may provide ratings without explanations. For this reason, Google Reviews should be interpreted as digital representations of public perception rather than statistically representative visitor surveys (Rosley et al., 2024). Their strongest value lies in

identifying recurring issues, monitoring changes over time and supporting early diagnosis of management concerns. However, monitoring change requires repeated observations or an explicit analysis of review dates.

Based on the literature, this study applies five experiential dimensions to analyse visitor reviews: spiritual and religious experience; symbolic meaning and sacredness of place; ritual practice and religious activity; social and community experience; and physical environment and destination management (shown in Table 1). These dimensions organise the primary meanings expressed in the reviews; they do not independently measure interactions among dimensions or validate a new visitor-experience scale.

Table 1. Analytical dimensions for coding visitor experience in heritage mosques

Dimension	Definition	Illustrative coding cues
Spiritual and religious experience	Inner feelings of peace, gratitude, devotion, reflection and spiritual fulfilment.	peaceful, calm, gratitude, spiritual, close to God, prayerful atmosphere
Symbolic meaning and sacredness of place	Perception of the mosque as historically meaningful, sacred, authentic or architecturally significant.	heritage, old mosque, royal identity, architecture, sacredness, memory, authenticity
Ritual practice and religious activity	References to worship practices and religious programmes that sustain the mosque as living heritage.	daily prayer, Friday prayer, lectures, supplication, religious events
Social and community experience	Expressions of hospitality, community belonging, cross-cultural encounter and social use.	friendly community, gathering, visitors from different backgrounds, ukhuwah
Physical environment and destination management	Operational and physical conditions affecting comfort, access and satisfaction.	cleanliness, parking, toilets, ablution, accessibility, maintenance, crowding, facilities

2. MATERIALS AND METHODS

2.1 Research Design

This study adopted a qualitative-dominant research design supported by descriptive quantitative analysis. The quantitative component was used to summarise Google rating distributions, while the qualitative component was used to interpret visitor-generated textual reviews through thematic analysis. This design was appropriate because the study sought not only to describe online rating patterns but also to understand the meanings, concerns and experiential values embedded in visitor comments.

The textual analysis used a deductive coding framework derived from the visitor-experience and religious-heritage literature. The five dimensions in Table 1 served as predefined categories. Reviews were interpreted within these categories, with recurring topics such as parking, cleanliness, accessibility and heritage identity informing the discussion. Braun and Clarke (2006) provided a general reference for identifying and interpreting patterns in qualitative data. The present implementation used a structured codebook and one primary category per review; the category labels were not generated inductively from the corpus.

2.2 Study Area and Case Selection

The study focused on three heritage mosques in Klang, Selangor: Masjid Diraja Sultan Suleiman, Masjid Kampung Dato' Dagang and Masjid India Muslim Tengku Kelana. Klang was selected because it is a historically layered royal city with strong religious, commercial and multicultural identities. The local authority is currently Majlis Bandaraya Diraja Klang (MBDK), following the official declaration of Klang as a royal city. This administrative context strengthens the relevance of linking mosque heritage with urban heritage governance.

The three mosques were selected purposively based on three criteria: (1) historical, religious or architectural significance; (2) continuing function as active community mosques; and (3) sufficient visibility on Google Maps through ratings and textual reviews. The cases provide contrasting historical and community settings for descriptive comparison, rather than representative samples of distinct mosque typologies. Masjid Diraja Sultan Suleiman represents a royal mosque with a substantial online review presence; Masjid Kampung Dato' Dagang represents a historically meaningful community mosque; and Masjid India Muslim Tengku Kelana represents the relationship between religious heritage, urban diversity and the Klang heritage setting. The location of the case study and the mosques are shown in Figure 1 below.

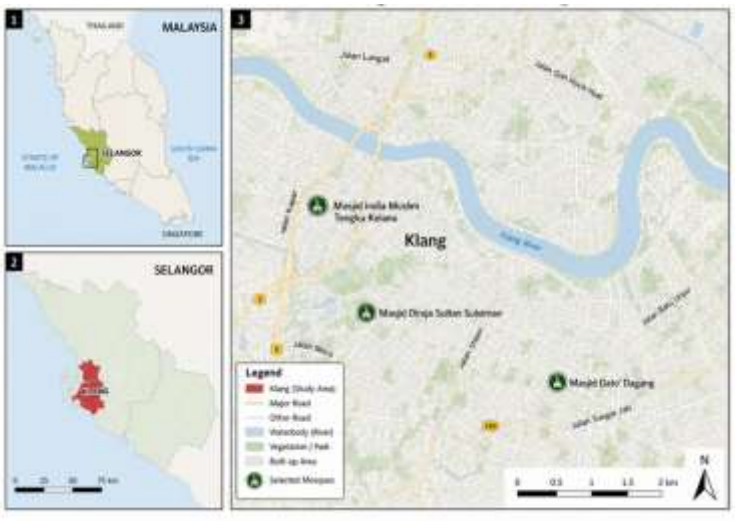


Figure 1. Location and site plans of the case study



Figure 2. Selected mosques in Klang, clockwise from the top: (i) Masjid Diraja Sultan Suleiman; (ii) Masjid India Muslim Tengku Kelana; and (iii) Masjid Kampung Dato' Dagang.

2.3 Data Source and Sampling

The primary data source was publicly available Google Reviews. Two related datasets were used. The rating dataset comprised 2,160 ratings displayed on the three Google Maps listings at collection: 1,594 for Masjid Diraja Sultan Suleiman, 382 for Masjid India Muslim Tengku Kelana and 184 for Masjid Kampung Dato' Dagang. Separately, 856 review records containing comments were collected for the January 2019–May 2026 review period: 613, 175 and 68, respectively. This period refers to the textual corpus and should be distinguished from the rating totals displayed by Google Maps.

For thematic coding, three emoji-only entries from Masjid Kampung Dato' Dagang were excluded because they did not provide textual material for assignment to the experiential dimensions. The final coded corpus therefore comprised 853 reviews: 613 for Masjid Diraja Sultan Suleiman, 175 for Masjid India Muslim Tengku Kelana and 65 for Masjid Kampung Dato' Dagang. The rating analysis included ratings without written comments and used its own site-specific denominators. Rating totals and textual-review totals were therefore not interchangeable.

2.4 Data Collection and Cleaning Procedure

Data were collected manually from the Google Maps listing of each mosque. The recorded fields included mosque name, star rating, review text and review language. Reviewer names, profile photographs and other personal identifiers were not collected. Data preparation included screening for duplicate, empty or irrelevant entries and standardising obvious spelling inconsistencies. Malay and English reviews were analysed directly; reviews in other languages were translated into English, with checks intended to preserve their meaning. The documented reduction from 856 collected records to 853 coded reviews reflects the exclusion of three emoji-only entries. Publicly accessible reviews should not be assumed to provide independently verified accounts of site conditions.

2.5 Data Analysis

First, star-rating distributions were tabulated separately for each mosque using all ratings in the rating dataset. Four- and five-star ratings were classified as favourable online evaluations, three-star ratings as intermediate evaluations, and one- and two-star ratings as unfavourable evaluations. These categories were used descriptively and should not be interpreted as validated measurements of visitor satisfaction or heritage sustainability.

Second, each textual review was read and assigned one primary code corresponding to its dominant meaning within the five predefined experiential dimensions. Expressions of peace, gratitude and spiritual fulfilment were classified as spiritual and religious experience; references to historical identity, sacred significance or architectural character as symbolic meaning and sacredness of place; and comments about parking, toilets, ablution facilities, cleanliness or maintenance as physical environment and destination management. The resulting percentages describe the distribution of primary codes within each mosque's coded corpus. They do not measure every experience mentioned, because secondary meanings in a review were not counted separately. Category frequency also does not indicate whether the associated experience was positive or negative.

2.6 Trustworthiness, Reliability and Ethics

To strengthen trustworthiness, the coding framework was developed from established concepts in religious tourism, heritage management, visitor experience and destination management. A sample of coded reviews was iteratively checked to ensure conceptual clarity across themes. Intercoder reliability was assessed by independently coding a random sample representing 15% of the textual corpus. Disagreements were discussed until consensus was reached, particularly for border cases where physical facilities also shaped ritual readiness. Cohen's kappa was calculated to assess agreement beyond chance (Cohen, 1960), producing a value of $\varkappa = 0.84$, which indicates strong coding agreement for the purposes of this study.

The study used publicly accessible online reviews, but public accessibility was not treated as equivalent to individual consent to research use. Personal identifiers were not collected or reported, and findings are presented as aggregate patterns. The manuscript does not reproduce individual review quotations. These measures reduce identification risks while recognising the sensitivity of religious experiences and community settings.

Google Reviews provide self-selected accounts and do not represent all mosque users. Reviewer demographics and visitor status were not established, preventing comparisons between tourists, regular worshippers and other groups. Digital participation and language use may affect which experiences appear in the corpus, while translation may obscure culturally specific or religious meanings. Some reviews are brief, and their authenticity and descriptions of site conditions cannot be

independently established from the online material alone. Reviews from January 2019 to May 2026 were analysed collectively; no temporal comparison was conducted. The findings therefore do not establish changes associated with the pandemic, subsequent recovery or alterations to facilities. Unequal corpus sizes and the single-primary-code approach also limit comparison, particularly for Masjid Kampung Dato' Dagang (n = 65). No field observation, stakeholder interviews or structured accessibility audits were included. The results should be interpreted as patterns in publicly expressed online accounts rather than a comprehensive assessment of user experience or heritage sustainability. The research process is summarised in Figure 3.

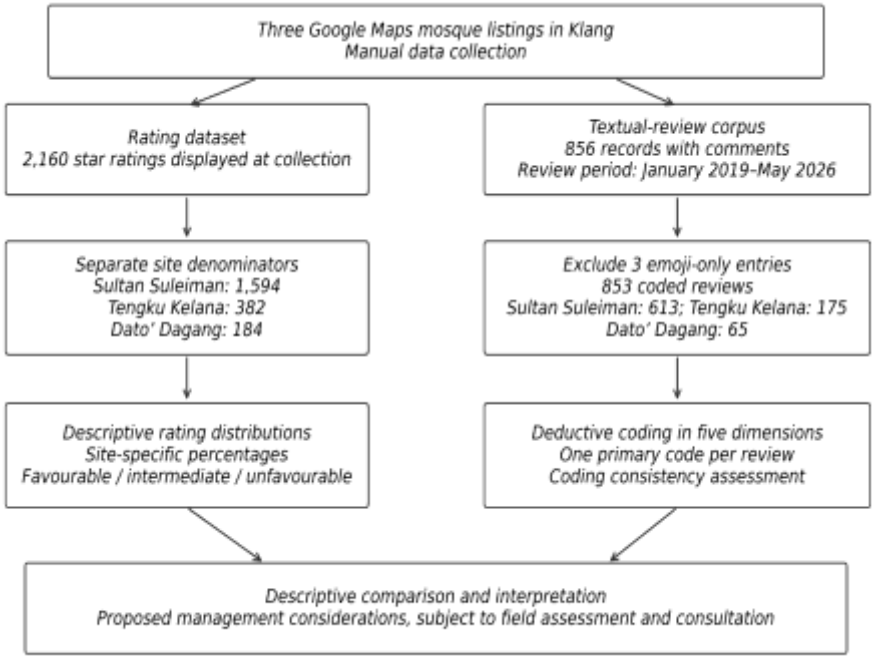


Figure 3. Research process showing the separate rating dataset and textual-review corpus.

3. RESULTS AND DISCUSSION

3.1 Overview of the Google Review Dataset

Table 2 distinguishes the rating dataset from the collected and coded textual-review records. Masjid Diraja Sultan Suleiman had the largest online review presence in these data, followed by Masjid India Muslim Tengku Kelana and Masjid Kampung Dato' Dagang. These differences describe the available digital records and should not be interpreted as direct measures of visitation, heritage significance or the representativeness of the reviewer populations.

Table 2. Rating totals and textual-review records by mosque

Mosque	Star ratings	Collected records with comments	Coded textual reviews
Masjid Diraja Sultan Suleiman	1,594	613	613
Masjid India Muslim Tengku Kelana	382	175	175
Masjid Kampung Dato' Dagang	184	68	65
Total	2,160	856	853

3.2 Online Evaluations Based on Rating Distribution

The rating analysis in Figure 4 shows predominantly favourable online evaluations at all three mosques. Four- and five-star ratings accounted for 93.1% of ratings at Masjid Diraja Sultan Suleiman, 90.2% at Masjid Kampung Dato' Dagang and 90.3% at Masjid India Muslim Tengku Kelana. These percentages use the rating denominators of 1,594, 184 and 382, respectively, rather than the coded-text denominators. The results describe evaluations by users who posted ratings and cannot establish the satisfaction of all visitors or explain the causes of positive and negative evaluations.

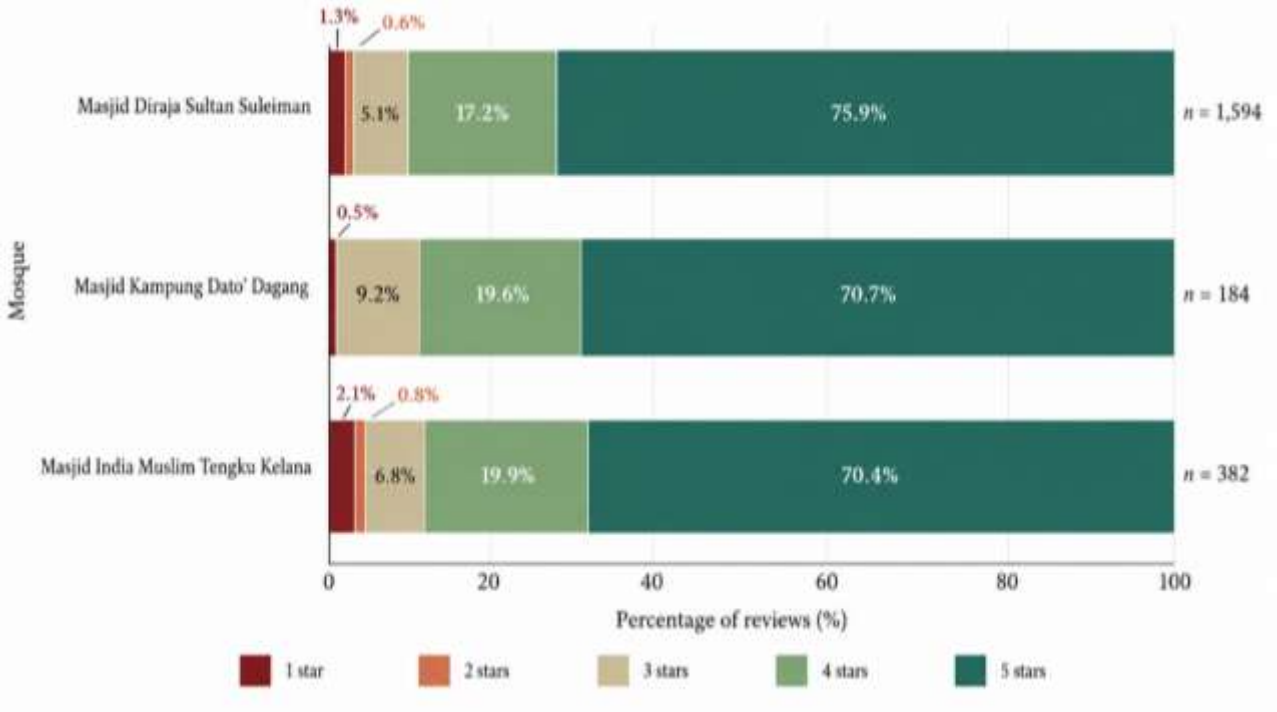


Figure 4. Google star-rating distributions by mosque. Denominators are all ratings in the rating dataset, including ratings without written comments; percentages are rounded.

3.3 Distribution of Visitor Experience Themes

The thematic analysis in Figure 5 reveals that visitor experience is not uniform across the three mosques. For Masjid Diraja Sultan Suleiman, physical environment and destination management were the dominant theme, representing 61.7% of coded reviews. This indicates the prominence of physical and operational topics in reviewers' accounts, without establishing their causal influence on satisfaction. Spiritual and religious experience formed the second-largest theme at 19.1%.

At Masjid India Muslim Tengku Kelana, physical environment and destination management formed the largest primary-code category (38.3%), while spiritual and religious experience and symbolic meaning and sacredness each accounted for 22.3%. At Masjid Kampung Dato' Dagang, symbolic meaning and sacredness formed the largest category (32.3%), closely followed by physical environment and destination management (30.8%). The difference of 1.5 percentage points indicates comparable prominence of these two dimensions within the small coded corpus, rather than a strongly dominant symbolic profile. These comparisons are descriptive and do not establish statistically significant differences between mosques.

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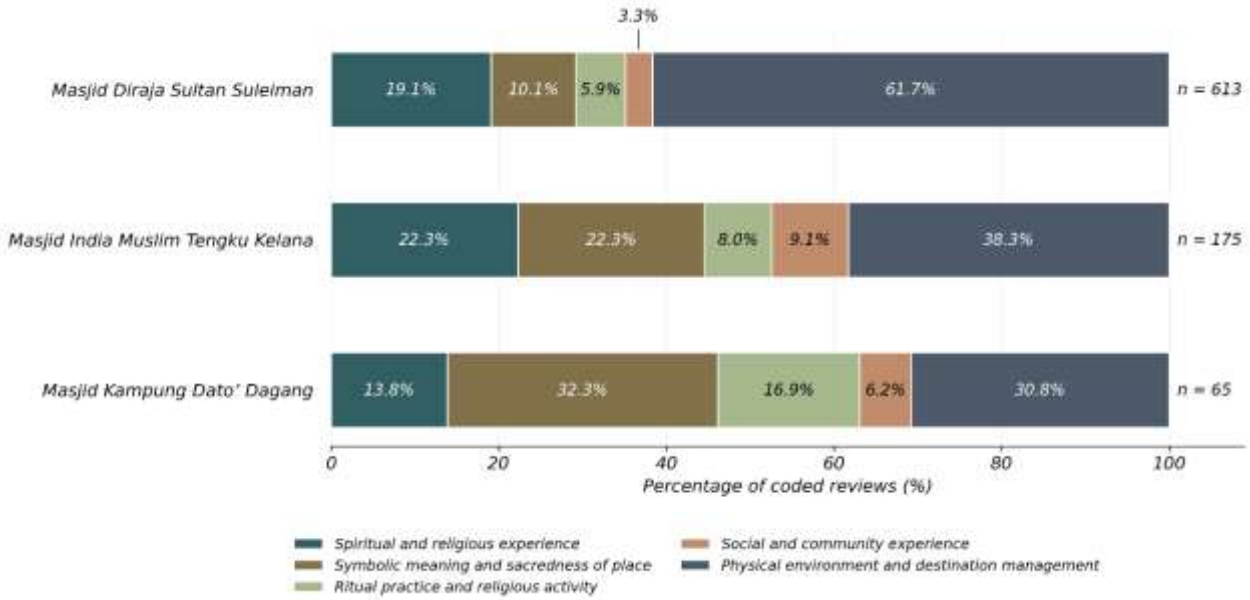


Figure 5. Distribution of primary experiential codes by mosque. Each review received one primary code; percentages use the coded-text denominators and are rounded.

Note: Three emoji-only entries from Masjid Kampung Dato' Dagang were excluded from thematic coding, leaving 65 coded reviews rather than 68 collected records. Percentages may not sum to exactly 100% because of rounding.

3.4 Comparative Patterns of Visitor Experience

The three cases show different distributions of primary experiential codes. At Masjid Diraja Sultan Suleiman, physical environment and destination management accounted for most coded reviews. This pattern identifies operational and environmental topics as prominent in the available accounts, but it does not establish that these conditions were satisfactory, inadequate or more influential than other experiences.

Masjid India Muslim Tengku Kelana showed a more even distribution across physical-management, spiritual and symbolic categories than Masjid Diraja Sultan Suleiman. This pattern is compatible with the mosque's multiple roles as a place of worship and an urban heritage site. The coding does not, however, test whether destination management and heritage identity reinforce one another.

At Masjid Kampung Dato' Dagang, symbolic meaning and sacredness and physical environment and destination management were similarly prominent. Both heritage meaning and practical conditions therefore warrant attention in further assessment. The findings support a case-specific discussion and should not be generalised to all community mosques or interpreted as evidence that one dimension determines satisfaction.

3.5 Digital Review Presence and Online Evaluations

The high proportion of positive ratings across all three mosques indicates favourable evaluations among users who posted ratings. Nevertheless, high ratings should be interpreted cautiously. Online rating scores are broad indicators of online evaluation; they do not reveal why visitors were satisfied, what management concerns exist or how different user groups experience the mosque. Textual reviews, therefore, provide essential qualitative depth by identifying specific issues such as cleanliness, parking, comfort, sacred atmosphere and heritage identity.

Masjid Diraja Sultan Suleiman's larger review volume indicates a greater online review presence in the collected data, rather than a measured difference in site visitation. In destination studies, digital visibility matters because user-generated content influences how potential visitors discover, evaluate and imagine a place (Xiang & Gretzel, 2010; Nguyen & Tong, 2023). For urban heritage management, this means that Google Reviews can function as a public-facing feedback channel. However, the absence of many reviews for a site should not be interpreted as low value; it may simply reflect a more localised user base or lower digital engagement (Rosley et al., 2024).

3.6 Physical Environment as Part of Sacred Experience

Physical environment and destination management were prominent in reviews of Masjid Diraja Sultan Suleiman and Masjid India Muslim Tengku Kelana. This observation supports examining practical conditions alongside spirituality, pilgrimage and sacred meaning. Research on multifunctional urban mosques also highlights architectural and social adaptation (Amaliyah et al., 2026), while studies of sacred-site accessibility and inclusive mosque design provide a basis for considering entrances, ablution areas, toilets, prayer spaces and circulation in management assessments (Aulet & Duda, 2020; Jamail et al., 2023). The present review frequencies identify areas of attention; they do not establish causal effects on satisfaction.

The finding aligns with the argument that accessibility and management systems influence the spiritual sustainability of sacred sites (Aulet & Duda, 2020). It also supports broader visitor-experience literature showing that memorable and satisfying experiences are shaped by the interaction between affective response, learning, sensory environment and service setting (Oh et al., 2007; Kim et al., 2012). In mosque contexts, physical conditions are not external to religious experience; they help structure the visitor's ability to prepare, pray, move, rest and interpret the place respectfully. Therefore, sustainable mosque heritage management should treat operational quality as part of sacred-place stewardship rather than as a purely technical matter (Jamail et al., 2023).

3.7 Sacredness, Authenticity and Conservation-Sensitive Upgrading

The near-equal prominence of symbolic meaning and physical management at Masjid Kampung Dato' Dagang suggests that heritage identity and practical conditions both feature in reviewers' accounts. References to history, architectural character and local memory can be interpreted through heritage tourism research on relationships between people and places (Poria et al., 2003). However, the small corpus and narrow difference between the two leading categories do not support a broad claim that community mosques are experienced primarily through symbolic meaning.

At the same time, authenticity can become a management challenge. Functional upgrading is necessary to improve comfort, access and safety, yet insensitive renovation may weaken the architectural character or symbolic meanings that visitors value. Heritage interpretation research indicates that visitors often seek emotionally meaningful and personally relevant encounters with heritage, rather than only factual information (Othman et al., 2025). A conservation-sensitive approach is therefore required. Upgrading should prioritise reversible interventions, compatible materials, clear documentation, heritage interpretation and consultation with religious and community stakeholders. This approach is consistent with living heritage thinking, which recognises both continuity of use and adaptation to present needs (Poulios, 2014; Primayudha et al., 2026).

3.8 Ritual Practice and the Mosque as Living Heritage

The reviews also show that the selected mosques remain active religious spaces. References to prayer, Friday congregation, religious lectures and supplication are consistent with the mosques' continuing functions as places of worship. This has important implications for visitor management. Tourism-related improvements should not disturb prayer activities, compromise sacred atmosphere or displace local worshippers. Instead, interpretation, wayfinding, visitor etiquette signage and tour arrangements should be designed around the mosque's primary religious function.

The living heritage perspective places continued use, community association and intangible practice at the centre of conservation (Poulios, 2014). In the present study, references to religious activities indicate their presence in publicly expressed accounts, although a single primary code may underrepresent ritual content in reviews assigned to other dimensions. Management recommendations should therefore protect worship and community use alongside material heritage, rather than rank their importance solely by coding frequency.

3.9 Social and Community Experience

Although social and community experience appeared less frequently than the physical-management theme, it remains conceptually important. Mosques are social institutions as well as sacred spaces. Reviews referring to hospitality, gathering, community interaction and diverse visitors suggest that mosque heritage contributes to everyday urban social life. This is especially relevant in Klang, where religious buildings are embedded within a multicultural and historically layered urban setting.

For heritage interpretation, this means that mosque narratives should not focus only on architecture or chronology. They should also include community stories, religious learning, social programmes, charitable functions and intergenerational memory. Such interpretation can strengthen public appreciation of mosques as living urban institutions rather than isolated heritage objects.

This argument is consistent with heritage co-creation literature, which suggests that heritage experiences are formed through interactions among visitors, settings, interpretation, and social meanings (Minkiewicz et al., 2014).

3.10 Inclusive Access and Sustainable Religious Heritage Management

Accessibility is a relevant management consideration raised by the discussion of access and facilities. The thematic categories do not constitute an accessibility audit or establish the prevalence of particular barriers at each mosque. Parking arrangements, pedestrian routes, changes in level, entrances, ablution areas and toilets are therefore proposed as subjects for site-specific assessment, especially in relation to older worshippers, persons with disabilities and families with children.

Possible interventions include accessible parking, step-free routes where feasible, readable wayfinding and appropriate toilet facilities, subject to assessment of need, heritage impact and available space. Mosque committees and local communities should guide decisions about visitor routes, access to prayer areas, dress, footwear, photography and visiting times. Any information for visitors should reflect the rules of the individual mosque and protect worship activities, particularly during peak prayer periods. These are proposed management considerations rather than interventions evaluated by this study.

3.11 Google Reviews as Complementary Management Evidence

The findings suggest that Google Reviews may provide a complementary source of feedback for mosque administrators, local authorities and heritage planners. Repeated comments about cleanliness, parking, accessibility or facilities can help identify operational priorities. Positive comments about peaceful atmosphere, architecture or heritage identity can also help managers recognise strengths that should be protected. This use of online reviews is consistent with tourism analytics approaches that transform user-generated content into structured evidence for destination management (Marine-Roig & Anton Clavé, 2016), while relating reviewers' accounts to research on memory, evaluation and place meaning (Kim et al., 2012; Nguyen & Tong, 2023).

Online feedback should be considered alongside site observation, consultation with mosque committees and local users, visitor surveys, accessibility audits and heritage condition assessments. Repeated collection may support monitoring, but the present pooled analysis did not evaluate trends or the effectiveness and cost of a monitoring programme. Theme frequencies indicate what reviewers discussed, not whether each aspect was praised or criticised. High ratings do not independently demonstrate conservation quality, equitable access, community well-being or long-term sustainability. The experiences of people who do not post reviews remain outside the dataset.

3.12 Management Implications

The three case studies suggest issues for further assessment rather than validated priorities for distinct mosque typologies. Operational and environmental topics were prominent at Masjid Diraja Sultan Suleiman and Masjid India Muslim Tengku Kelana. At Masjid Kampung Dato' Dagang, symbolic meaning and physical management were similarly prominent. Decisions should combine these observations with field evidence and consultation, including the views of regular worshippers. Table 3 distinguishes the review-derived rationale from proposed actions and their potential contribution to sustainable management.

Table 3. Management matrix for sustainable urban mosque heritage management

Management issue	Review-derived rationale	Proposed action	Potential contribution to sustainable management
Physical environment and facilities	Physical environment and destination management was the largest primary-code category at two mosques; category frequency does not establish facility deficiencies.	Assess facilities on site and develop maintenance priorities with mosque committees.	Improves comfort, dignity and usability.

Management issue	Review-derived rationale	Proposed action	Potential contribution to sustainable management
Parking and access	Access and parking are topics within the physical-management dimension; specific barriers require verification.	Assess circulation and peak-time access before selecting parking, drop-off or wayfinding measures.	Supports inclusive access and safer mobility.
Heritage authenticity	Symbolic meaning (32.3%) and physical management (30.8%) were similarly prominent at Masjid Kampung Dato' Dagang.	Assess heritage significance and proposed changes with relevant authorities and community stakeholders.	Protects identity and memory.
Ritual continuity	Ritual practice was a primary-code category; single-code assignment may underrepresent ritual references.	Agree visiting times, routes and etiquette with mosque committees, protecting prayer and community activities.	Maintains living religious heritage.
Digital monitoring	Online reviews provide complementary accounts; monitoring trends and management outcomes was not tested.	Consider periodic review of feedback alongside field checks and community consultation.	Enables evidence-based improvement.

4. CONCLUSION

This study examined online evaluations and textual accounts of three heritage mosques in Klang using Google Reviews. The rating dataset comprised 2,160 ratings, while 853 textual reviews were assigned one primary experiential code after three emoji-only entries were excluded from 856 collected records. More than 90% of ratings at each mosque were four or five stars. These results indicate favourable evaluations among users who posted ratings, rather than representative satisfaction levels for all mosque users.

Physical environment and destination management formed the largest primary-code category at Masjid Diraja Sultan Suleiman and Masjid India Muslim Tengku Kelana. At Masjid Kampung Dato' Dagang, symbolic meaning and sacredness (32.3%) and physical environment and destination management (30.8%) were similarly prominent. These distributions describe topics emphasised in the available accounts; they do not establish causal relationships, the direction of evaluations within each category or general differences between mosque typologies.

The study contributes a contextual application of visitor-experience and living-heritage concepts to online feedback from active religious sites. It identifies issues that may inform further assessment of heritage interpretation, operational conditions and community use. Self-selection, unknown reviewer characteristics, language and translation issues, unequal corpus sizes, pooled review dates and the single-primary-code approach constrain interpretation. Google Reviews should therefore complement field observation, stakeholder consultation and condition or accessibility assessments throughout management decision-making.

For mosque administrators, MBDK, religious authorities and heritage planners, the findings suggest examining access, maintenance, interpretation and heritage-sensitive adaptation in consultation with mosque committees and local communities. Proposed visitor arrangements should respect worship times, site-specific etiquette and continuing community needs. The study does not measure long-term heritage sustainability or demonstrate the effectiveness of these recommendations; their suitability and outcomes require subsequent assessment.

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AUTHOR CONTRIBUTIONS

Raidil W. Zulkifli: Conceptualization, Investigation & Writing.

Muhamad S. F. Rosley: Supervision, Methodology and Writing—Review & Editing.

Syumi R. A. Rahman: Analysis, Discussion, Writing—Review & Editing.

Sri Y. Mahadzir: Data Collection, Analysis

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CONFLICT OF INTEREST

The authors declare no competing interests.

ETHICS STATEMENT

This study analysed publicly accessible Google Reviews. Reviewer names, profile photographs and other personal identifiers were not collected or reported. Findings are presented in aggregate, without individual review quotations, to reduce identification risks and respect reviewer privacy and religious sensitivities.

DECLARATION OF AI-USAGE

During manuscript preparation, the authors used QuillBot and ChatGPT to assist with language, readability and manuscript revision. The authors reviewed and edited the resulting material and take full responsibility for the accuracy, integrity and originality of the manuscript.

DATA AVAILABILITY STATEMENT

Requests for aggregate rating counts, the coding framework and de-identified coding records may be directed to the corresponding author. Access is subject to record availability, privacy protection and applicable restrictions on redistribution of platform content.

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