



Consumer Protection in AI-Driven Halal Tourism: Assessing Malaysia's Regulatory Framework from the Sarawak Perspective

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Abstract

The use of Artificial Intelligence (AI) in the halal tourism industry can be seen particularly through the use of smart chatbots, custom recommendation engines, automated booking setups and digital trip planners. Although these tools offer better efficiency and smoother user experiences, there are serious issues concerning AI-generated systems when they accidentally provide inaccurate or wrong information on halal-certified products and services. In consequence, it may mislead Muslim travellers and thus break the consumers' trust. Sarawak, as a multicultural destination, is currently working to expand its market as a Muslim-friendly travel hub in Malaysia. This study examines whether Malaysia's current legal and regulatory framework is robust enough to protect consumers by focusing specifically on the challenges within Sarawak. Using a qualitative doctrinal legal approach, the study concentrates on federal laws governing consumer rights, tourism operations, data privacy, halal trade descriptions, together with the AI ethical guidelines. The analysis indicates several gaps, including the lack of a statutory mechanism for AI transparency, algorithm accountability and liability for automated errors. It also argues that the existing commercial laws were designed for a conventional approach and, as such, are insufficient for digital platforms. Guided by the concept of *maqasid al-Shariah*, this study proposes a regulatory model that integrates AI transparency, human oversight and halal safeguards.

Keywords: Artificial Intelligence (AI), AI Governance, Consumer Protection, Halal Tourism, *Maqasid al-Shariah*

1. Introduction

Artificial Intelligence (AI) is increasingly embedded in tourism decision-making. Consumers can now obtain destination suggestions through conversational chatbots, receive personalised accommodation and restaurant recommendations, compare travel packages automatically, and generate itineraries without directly interacting with a human travel adviser. In halal and Muslim-friendly tourism, these applications can be especially valuable because travellers may seek information about halal food, prayer facilities, Muslim-friendly accommodation, tour activities and the availability of religiously appropriate services before and during a trip. Generative AI also enables tourism businesses to respond to large numbers of enquiries at relatively low cost and to personalise information according to a traveller's preferences. However, the convenience of AI creates a corresponding consumer-protection problem: the output may be plausible, fluent and persuasive even when the underlying information is incomplete, outdated or wrong. In a halal tourism context, an incorrect statement is not merely a technical inconvenience. A recommendation that describes a restaurant as halal-certified when its certification has expired, identifies a non-certified establishment as halal, or represents a hotel as Muslim-friendly without a reliable basis may affect a traveller's religious observance, expenditure, safety expectations and trust in the tourism ecosystem. Recent research on generative AI in hospitality and tourism similarly identifies consumer safety, reliability and the need for a consumer-centred approach as important research concerns. Malaysia provides a particularly relevant regulatory setting. The country has developed a relatively mature halal ecosystem, tourism licensing regime and consumer-protection framework, while national policy increasingly encourages responsible AI. Malaysia also continues to be recognised as a leading Muslim-friendly tourism destination. In the 2026 Global Muslim Travel Index, Malaysia ranked first among 150 destinations with a score of 82/100, with Services as its strongest ACES pillar. Such leadership increases the importance of maintaining the accuracy and integrity of digital information offered to Muslim travellers.

Sarawak provides a useful case study because its tourism identity is strongly multicultural and its halal administration operates within a distinctive institutional environment. The Jabatan Agama Islam Sarawak (JAIS) states that Sarawak's halal certification procedure has been in force since 1 December 2004 and that halal certification is managed through its Halal Development Unit. Sarawak Tourism Board materials also actively promote halal food experiences and Muslim-friendly travel information. At the same time, digital tourism platforms may aggregate information from multiple sources, including third-party businesses, user-generated content and automated systems. This creates a risk that the legal status of an establishment and the digital representation of that status may diverge.



This article therefore asks whether Malaysia's current legal and regulatory framework adequately protects consumers when AI is used to generate or deliver halal tourism information in Sarawak. It argues that Malaysia has relevant legal building blocks, but they remain fragmented. Consumer law addresses misleading conduct, trade-description law protects the integrity of halal representations, tourism law regulates operators, and data-protection law increasingly addresses automated decision-making and profiling. Nevertheless, no single statutory framework presently allocates AI-specific duties concerning explainability, verification of halal claims, human oversight, auditability and liability for AI-generated misinformation. The paper proposes a layered regulatory model informed by *maqasid al-Shariah*, particularly the protection of religion, life, intellect and property.

2. Literature review

Halal tourism is commonly understood as tourism that facilitates Muslim travellers' religious and lifestyle requirements, including access to halal food, prayer facilities, suitable accommodation and services that are compatible with Islamic principles. El-Gohary (2016) observes that halal tourism extends beyond food to a broader tourism experience and raises questions concerning what makes tourism genuinely halal. Wilson and Liu (2010) further explain the importance of authenticity and trust in halal branding. These perspectives are important in an AI environment because automated systems increasingly become intermediaries between consumers and the underlying halal status of a product or service. Malaysian scholarship has highlighted the role of legal and standardisation mechanisms in Muslim-friendly tourism. The Malaysian Standard MS 2610:2015, Muslim Friendly Hospitality Services - Requirements, provides requirements for tourism facilities, products and services for Muslim travellers in accommodation premises, tour packages and tourist guides. The standard is significant because it provides an operational reference for Muslim-friendly services. Nonetheless, previous legal scholarship has identified limitations in relying on standards without sufficiently strong legal mechanisms, particularly in relation to self-declared Muslim-friendly claims and the absence of comprehensive legal protection for end users. Legal scholarship also demonstrates that halal certification and legal assurance can influence tourist satisfaction and destination choice. Johan, Abd Rahman and Ab Rahim (2025) found that legal factors concerning halal certification, food and accommodation are relevant to tourists' motivations and satisfaction. This supports the proposition that inaccurate AI-generated halal information may have consequences beyond ordinary advertising error: it can undermine a core component of destination trust.

AI and consumer law literature generally identifies opacity, automation bias, information asymmetry and unclear responsibility as recurring risks. In tourism, these risks are increasing because consumers often rely on digital recommendations at a distance and may be unable to independently verify every claim. In Malaysia, the National Guidelines on AI Governance and Ethics (AIGE) promote responsible AI through seven principles, including fairness, reliability, safety and security, inclusiveness, transparency, accountability and human benefit. The Guidelines are an important policy instrument, but their non-statutory character limits their capacity to create enforceable consumer remedies. A further body of literature concerns *maqasid al-Shariah*. The five essential objectives traditionally identified are the protection of religion (*hifz al-din*), life (*hifz al-nafs*), intellect (*hifz al-'aql*), lineage (*hifz al-nasl*) and property (*hifz al-mal*). Contemporary research has increasingly applied *maqasid* to Muslim-friendly tourism to develop a more comprehensive and ethically grounded model. As for AI-driven halal tourism, *maqasid* provides a standardising bridge between consumer law and halal integrity: inaccurate halal information can affect religious observance; unsafe recommendations may affect life and wellbeing; deceptive or manipulative information may impair rational choice; and incorrect bookings or purchases may cause financial loss.

3. Conceptual Framework

The proposed conceptual framework combines four regulatory dimensions with *maqasid al-Shariah* as the foundation. The framework treats the AI tourism platform as a digital intermediary rather than as a legally neutral information channel. Consumer trust and protection are the desired outcomes, while AI-generated misinformation is the central risk.

Regulatory Dimension	Core Safeguards	<i>Maqasid</i> or Consumer Outcome
a. Consumer protection	Truthful representations, disclosure, complaint and redress mechanisms	Protection of property and informed choice
b. Halal integrity	Verification of certification status, prohibition of false halal claims, traceable source data	Protection of religion and trust



c. AI governance	Transparency, human oversight, accountability, testing and audit trails	Protection of intellect, dignity and fair decision-making
d. Data protection	Lawful processing, privacy by design, profiling safeguards and security	Protection of property, dignity and autonomy

Figure 1. Proposed regulatory framework for AI-driven halal tourism in Sarawak

The framework is intentionally layered. Existing consumer, tourism, halal and data laws remain applicable; AI-specific duties should operate across these regimes rather than replace them. The key proposition is that a platform should not be able to rely on the technical autonomy of an AI system to escape responsibility for representations made to consumers.

4. Research Questions

The research questions formulated are as follows:

- (1) To what extent do Malaysia's existing consumer, tourism, halal trade-description and data-protection laws protect Muslim consumers from inaccurate AI-generated information in halal tourism?
- (2) What regulatory gaps arise when AI systems generate, rank or communicate claims concerning halal-certified tourism products and services in Sarawak?
- (3) How can *maqasid al-Shariah* inform a consumer-centred regulatory model for AI-driven halal tourism in Sarawak?

5. Significance of Study

First, the study contributes to the developing literature on the connection of AI governance, consumer law and halal tourism. While AI regulation and halal tourism have each received increasing attention, their intersection from a Malaysian legal perspective remains comparatively under-examined. Second, the Sarawak perspective adds institutional and territorial specificity. Sarawak has its own halal administrative structures under JAIS and a distinctive tourism profile. Examining how automated platforms interact with this ecosystem helps identify practical gaps that may not be visible from a purely federal or abstract analysis. Third, the study is relevant to policymakers. It identifies areas in which soft-law AI ethics should be translated into enforceable obligations, particularly for high-trust claims such as halal status. Fourth, the study is relevant to tourism businesses and digital-platform operators. It proposes verification, escalation and human-review mechanisms that can be incorporated into AI-assisted customer service without preventing technological innovation. Finally, the study has significance for Muslim consumers. A trustworthy digital halal tourism ecosystem should enable travellers to make informed decisions while reducing the risk that automation will convert inaccurate information into a persuasive but unreliable recommendation.

6. Research Methodology

This current research adopts a qualitative doctrinal legal research methodology. The method is appropriate and most relevant because the principal objective is to examine the content, interaction and adequacy of legal rules governing consumer protection in an emerging technological context. Primary legal materials comprise Malaysian legislation, subsidiary legislation, Malaysian Standards and relevant official regulatory guidance. Secondary materials include academic articles, institutional publications and scholarly discussions on halal tourism, AI governance and *maqasid al-Shariah*. The analysis focuses on five regulatory clusters: (i) consumer protection; (ii) tourism licensing and service regulation; (iii) halal trade descriptions and certification; (iv) personal-data protection, including automated decision-making and profiling; and (v) AI governance and ethics. The study then applies a gap-analysis approach. In essence, for each cluster, the paper considers whether the existing framework addresses accuracy, transparency, verification, human oversight, accountability, liability and consumer redress. The Sarawak dimension is analysed through the institutional role of JAIS in halal certification and the tourism context reflected in Sarawak Tourism Board materials. The analysis does not claim that every tourism business in Sarawak uses AI. Rather, Sarawak is used as a regulatory case study to test how existing laws would operate when AI-enabled platforms provide information about local tourism products and services. The research is doctrinal and conceptual; it does not involve surveys, interviews or experiments with tourists. Accordingly, the findings concern legal adequacy and regulatory design rather than measured consumer behaviour.

7. Findings



7.1 Consumer protection and misleading AI-generated information

The Consumer Protection Act 1999 (Act 599) is an important general consumer-protection statute. Its provisions concerning misleading and deceptive conduct can potentially apply where a tourism trader makes false or misleading representations about goods or services. This is relevant where an AI chatbot or recommendation interface communicates information on behalf of a trader. The difficulty is that the statute was not drafted around generative AI, algorithmic content or multi-layer platform relationships. The first gap is attribution. Where an AI system generates an incorrect recommendation, the consumer may not know whether the relevant legal actor is the hotel, tour operator, online travel intermediary, software provider, data supplier or another business. Existing law can impose obligations on identifiable traders, but it does not establish a dedicated rule that assigns responsibility for AI-generated representations according to control over the system and the consumer-facing claim. The second gap is verification. A consumer-protection rule against misleading conduct is generally reactive: a problematic representation exists and enforcement or redress follows. AI systems, however, can generate thousands of recommendations dynamically. Preventive duties such as source verification, monitoring and audit trails may therefore be more effective than relying exclusively on ex-post enforcement.

7.2 Tourism regulation and digital intermediaries

The Tourism Industry Act 1992 (Act 482) and its subsidiary framework provide the principal federal licensing and regulatory structure for tourism operators. The Ministry of Tourism, Arts and Culture (MOTAC) Tourism Licensing and Enforcement Division states that it administers registration, licensing and enforcement under the Act and related regulations. This framework is important for ensuring compliance by tour operators, guides and tourism businesses. Nevertheless, tourism regulation does not expressly establish AI governance duties for digital recommendation systems. A licensed operator may deploy a chatbot, while an online intermediary may aggregate information from numerous providers. The legal framework therefore faces a digital boundary problem: the regulated tourism service and the digital information service may be performed by different entities. The absence of an explicit AI accountability chain can make enforcement and consumer redress more difficult.

7.3 Halal claims, certification and trade descriptions

The Trade Descriptions Act 2011 (Act 730) provides a significant legal foundation for protecting the integrity of halal representations. The Trade Descriptions (Definition of Halal) Order 2011 defines relevant concepts and regulates halal representations. Section 5 of the Act prohibits false trade descriptions in relation to goods, and the wider Act contains enforcement mechanisms for false or misleading trade descriptions. These provisions are directly relevant where a digital platform represents a product as halal. However, a key limitation is that AI-generated information may not originate as a deliberate false statement by the underlying business. A language model can produce a hallucinated certification status by combining stale data, unverified web content or an incorrect inference. The legal issue therefore shifts from merely asking whether the statement is false to asking who had a duty to prevent the false statement from reaching the consumer. In Sarawak, this issue is particularly important because JAIS manages the state's halal certification administration through its Halal Development Unit. The existence of an authoritative certification process creates an opportunity for AI platforms to use verified certification data rather than open-web assumptions. A regulatory model should therefore encourage or require high-risk halal claims to be checked against an authoritative source before being presented as fact. MS 2610:2015 is also relevant. The Malaysian Standard provides requirements for Muslim-friendly hospitality services in accommodation premises, tour packages and tourist guides. It offers a useful operational benchmark, but standards do not automatically create the same legal duties as legislation. The principal gap is therefore not the absence of a standard, but the weak legal bridge between the standard, digital claims and enforceable consumer remedies.

7.4 Personal data and automated decision-making

AI-driven tourism commonly relies on personalisation. A digital trip planner may process travel dates, location, spending preferences, dietary requirements, accommodation choices and previous interactions. The Personal Data Protection Act 2010 (Act 709) applies to persons processing personal data in connection with commercial transactions. Malaysia has also introduced the Personal Data Protection (Amendment) Act 2024, accompanied by developing regulatory guidance on data protection by design and automated decision-making and profiling.

These developments strengthen the governance environment, but privacy protection and consumer protection are not identical. A platform may comply with privacy requirements while still giving inaccurate halal information. Conversely, an AI system may produce an apparently helpful recommendation while making opaque inferences about a consumer. The emerging automated-decision-making and profiling guidance is therefore valuable as part of a broader governance framework, but it should be connected explicitly with accuracy and redress duties for tourism recommendations.



7.5 AI Governance and the absence of binding AI-specific duties

Malaysia's National Guidelines on AI Governance and Ethics (AIGE), launched in September 2024, promote responsible AI and identify seven principles of responsible AI. Transparency and accountability are particularly relevant to halal tourism. A consumer should be able to know when an answer is AI-generated, what source underlies a halal claim, and where to obtain human assistance when the system is uncertain. The principal legal gap is that AIGE is a governance and ethics guideline rather than a comprehensive AI statute establishing civil liability for automated misinformation. Consequently, the guideline can influence responsible practice but does not, by itself, provide a direct statutory cause of action whenever an AI system gives a false halal recommendation.

7.6 Sarawak-specific regulatory considerations

Sarawak's institutional arrangements create both a challenge and an opportunity. JAIS states that its halal certification procedure has operated since 2004 and provides halal-related services and certification information. This means that a reliable institutional source exists for verification. At the same time, tourism information may be disseminated through federal tourism bodies, state tourism organisations, businesses and private platforms. AI systems can combine these sources without distinguishing between official certification and informal descriptions. On top of that, for Sarawak, the most practical regulatory response is therefore compatibility rather than the creation of an entirely separate AI-halal regime. Verified halal information could be made available through structured, machine-readable datasets or authorised interfaces, while platforms could be required to display the source and verification date for halal claims. This would reduce the probability that an AI system treats a blog, user review or outdated listing as equivalent to an official certification record.

8. Discussion

The doctrinal analysis demonstrates that Malaysia is not starting from a regulatory perspective only. Rather, the existing framework contains multiple pieces of a consumer-protection architecture. Consumer law addresses misleading conduct; trade-description law protects halal representations; tourism legislation regulates tourism businesses; data-protection law governs personal-data processing; MS 2610 provides a Muslim-friendly service benchmark; and AIGE articulates responsible-AI principles. The weakness lies in fragmentation and in the absence of an explicit legal mechanism connecting these rules to AI-generated outputs. The first proposed reform is an AI transparency duty for consumer-facing tourism systems. Platforms should clearly disclose when consumers are interacting with AI and identify whether information about halal status has been verified against an authoritative certification source. For high-risk claims, generic disclaimers such as 'AI may make mistakes' should not substitute for substantive verification. Second, a human-oversight duty should apply where a recommendation concerns halal status, religious facilities, safety or material financial commitments. The system should be able to escalate uncertain cases to a competent human operator. This reflects the AIGE principle of accountability and the *maqasid* emphasis on protecting consumers from avoidable harm.

Third, an algorithmic audit trail should be required for material consumer claims. A platform should retain sufficient records to establish the source data, date of verification, system version and material output associated with a disputed recommendation. This would improve enforcement and enable businesses to demonstrate that reasonable preventive measures were taken. Fourth, halal-specific verification should be embedded into digital tourism governance. Where a claim concerns halal certification, the system should distinguish between 'certified', 'Muslim-friendly', 'self-described', and 'unknown'. These categories should not be collapsed into a single label. The distinction is important because halal certification is an institutional status, whereas 'Muslim-friendly' may describe a broader service concept. Fifth, liability should be allocated according to control and benefit. A business that knowingly supplies outdated certification information should not escape responsibility because an AI system repeated it. Conversely, a platform that independently generates a false claim despite having access to authoritative data should bear responsibility where it failed to implement reasonable verification safeguards. This approach is more realistic than assigning automatic liability to developers for every downstream output. Sixth, consumer redress should be technologically accessible. AI-enabled tourism platforms should provide a clear complaint route, human contact, a correction mechanism and a refund or compensation process where a materially false representation causes loss. The ability to challenge an automated recommendation is particularly important because consumers may otherwise face a 'black box' dispute in which the platform cannot explain how the recommendation was produced. *Maqasid al-Shariah* provides a coherent foundation for these reforms. *Hifz al-din* supports the integrity of halal information and the protection of religious observance. *Hifz al-nafs* supports reliable information where tourism decisions may affect safety and wellbeing. *Hifz al-aql* supports transparency and informed decision-making rather than manipulation or unexplained automated persuasion. *Hifz al-mal* supports protection against financial loss caused by inaccurate recommendations. Although *maqasid* should not replace statutory law, it can guide



the design of rules that are both legally enforceable and consistent with the ethical objectives of Muslim-friendly tourism. The proposed model may be described as the 'Verified AI Halal Tourism' model: (1) authoritative halal data; (2) AI transparency; (3) verification before high-risk claims; (4) human oversight; (5) traceable audit records; and (6) accessible consumer redress. In Sarawak, JAIS and tourism stakeholders could cooperate on the data-verification layer, while federal agencies could establish the common legal and technical requirements applicable to tourism platforms nationwide.

9. Conclusion

This study was designed to assess whether Malaysia's existing regulatory framework is sufficient to protect consumers in AI-driven halal tourism from a Sarawak perspective. The analysis concludes that the framework contains substantial legal foundations but remains incomplete for AI-mediated consumer interactions. The principal challenge is not the total absence of law; it is the absence of an integrated accountability structure for automated representations. As for halal tourism, accuracy has a special significance because the consumer may rely on digital information not only for commercial convenience but also for religious compliance. Malaysia's strong position in Muslim-friendly tourism therefore creates a corresponding governance responsibility. Sarawak, with its established halal certification administration and multicultural tourism environment, provides a practical setting in which verified digital halal information can be developed. The study recommends a layered regulatory model combining consumer law, tourism regulation, halal verification, data protection and AI governance. The model should impose transparency and source-verification duties, require meaningful human oversight, preserve audit trails, clarify responsibility across the AI supply chain and strengthen consumer redress. The approach should also encourage machine-readable authoritative halal data so that AI systems can retrieve current information rather than infer halal status from unreliable sources. Ultimately, responsible AI in halal tourism should not be measured solely by efficiency or personalisation. Its legitimacy should also be measured by whether it preserves consumer trust, supports informed choice and protects the values that make Muslim-friendly tourism meaningful. A regulatory framework guided by *maqasid al-Shariah* can help Malaysia and Sarawak particularly to achieve that balance while continuing to encourage responsible technological innovation.

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