The Augmented Leader Model (ALM): Mastering Human-AI Synergy for Islamic Tourism Excellence

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ABSTRACT

As organizations move beyond basic automation, a new archetype, "the augmented leader," is emerging. Driven by the complexity of the Halal ecosystem, the convergence of technological disruption and the need to preserve faith-based service authenticity is rewiring the global Halal tourism sector. Consequently, this conceptual paper explores the synergy between human capital and AI in driving sustainable Islamic tourism excellence. While mainstream literature focuses on automation and efficiency, this study addresses a critical gap by highlighting how faith-based leadership leverages AI as a strategic partner to navigate the industry within a broader sustainability context. Grounded in the Unified Theory of Acceptance and Use of Technology (UTAUT2) and value co-creation theory, this study proposes the "Augmented Leader Model (ALM)." Guided by Maqasid Shariah, the ALM provides a practical framework for human–AI value co-creation. The model specifically drives three core objectives: optimizing Halal supply chain transparency, personalizing spiritual itineraries, and managing sustainable resource allocation. By mapping these operational dimensions against Sustainable Development Goals (SDG) 8, 12, and 17, the framework demonstrates how human–AI synergy operationalizes faith-based values to foster a sustainable Islamic tourism future. Employing a conceptual synthesis approach, this study delineates the unique competencies of the augmented leader, balancing advanced AI analytics with the cultural and emotional intelligence required in faith-based leadership to drive organizational excellence. The study's implications provide a strategic roadmap for Islamic tourism stakeholders to leverage AI without compromising Islamic values. Ultimately, this study advances the cross-field theoretical discourse for achieving innovative, sustainable, and culturally resilient Islamic tourism practices.

Keywords: Augmented Leader Model (ALM), Islamic tourism excellence, Maqasid Shariah, value co-creation, Sustainable Development Goals (SDGs)

INTRODUCTION

The global Halal industry is valued at USD 7.36 trillion, driven by Halal Food and Beverages as the largest foundational sector accounting for USD 1.43 trillion, alongside the Muslim-friendly travel component generating USD 150 billion, and is expected to surge to USD 10.89 trillion by 2028 (DinarStandard, 2025). This robust performance is increasingly shaped by cutting-edge technology such as Artificial Intelligence (AI). In the Islamic tourism sector, AI helps organizations drive excellence while maintaining compliance with faith-based values. Instead of functioning merely as basic automated booking engines, chatbots, and algorithmic check-ins, AI is actively shifting the dynamic into organizational value co-creation, powered by the augmented leadership model.

While mainstream literature focuses on AI benefits for operational efficiency, cost-saving, and mechanization (Gorian & Osman, 2024; Gursoy et al., 2023; Soomro & Khan, 2025), faith-based

preservation and sustainable resources are often overlooked. The sanctity of Islamic tourism value relies heavily on adherence to Syara' (Islamic jurisprudence) and Maqasid Shariah (the objectives of Shariah). In a highly complex Halal ecosystem, these elements cannot be replicated by automation. This raises the question of how Islamic tourism organizations harness the transformative analytical capabilities of advanced AI. Consequently, this study addresses this gap by exploring how faith-based leadership leverages AI as a symbiotic collaborator.

1. Employing the Unified Theory of Acceptance and Use of Technology (UTAUT2) and value co-creation theory, this study proposes the Augmented Leader Model (ALM). Specifically, the study objectives are:
2. To develop the Augmented Leader Model (ALM), a comprehensive conceptual framework that links human–AI synergy with organizational value co-creation and Islamic tourism excellence.
3. To propose a strategic, actionable roadmap for Islamic tourism stakeholders to leverage advanced technology without compromising core faith-based values.

These objectives provide a strong theoretical foundation for future research to empirically test the framework while offering clear operational guidelines for industry practitioners.

LITERATURE REVIEW AND PROPOSITION DEVELOPMENT

Mainstream AI in Tourism vs. Faith-Based Service Authenticity

AI has evolved beyond basic automation to enable socio-technical human-AI partnerships, accelerating innovation and sentiment analysis (Doshi & Hauser, 2024; Gursoy et al., 2023; Tu et al., 2024). In tourism, real-time big data analytics optimizes visitor flow management, overtourism mitigation, and resource efficiency, advancing Sustainable Development Goals (SDGs) (Liu et al., 2025; Tuo et al., 2025). However, automated systems lack organic empathy, emotional intelligence, and experiential authenticity, creating a critical service deficit in high-touch, value-driven contexts (Ameen et al., 2024; Bui et al., 2025; Fan et al., 2024; Han et al., 2024).

Because algorithmic systems cannot process moral values, justice, or religious jurisprudence (Shneiderman, 2020), AI alone cannot navigate Maqasid Shariah. Maintaining faith-based authenticity, spiritual trust, and regulatory compliance in Islamic tourism necessitates strong human ethical stewardship. To bridge this gap, this study synthesizes UTAUT2, value co-creation theory, Maqasid Shariah, and SDGs 8, 12, and 17 into the Augmented Leader Model (ALM).

The Augmented Leader Model (ALM) Conceptual Architecture

The Augmented Leader Model (ALM) is a conceptual framework guided by Maqasid Shariah principles. This framework posits that it is vital for faith-based leadership to leverage AI as a strategic partner, thereby cultivating human–AI value co-creation. In the modern technology-driven market dominated by tech-dependent generations (Gen Y, Z, and Alpha), the paramount challenge is establishing a robust Shariah-compliant AI governance framework.

This governance structure is necessary to ensure AI policies and tools align with Maqasid Shariah principles (the protection of faith, life, intellect, wealth, and lineage), systematically avoiding haram content and algorithmic bias while guaranteeing equity, fairness, and compliance for all Islamic tourism stakeholders. This governance and ethical challenge presents a critical theoretical gap that the ALM framework aims to resolve.

By embedding Maqasid Shariah as a structural boundary condition, performance expectancy under UTAUT2 expands beyond technical speed to encompass spiritual execution (driven by ihsan, itqan, and amanah). Simultaneously, the firm–customer dyad in value co-creation theory is transformed into a triadic collaboration (Human Leader ↔ Synthesis AI ↔ Muslim Travelers). Within this triadic system, AI acts as a cognitive collaborator under human ethical stewardship, preventing data commodification and ensuring that

predictive analytics directly foster sustainable organizational excellence and global development targets (SDGs 8, 12, and 17).

To operationalize the Augmented Leader Model (ALM), this study integrates four different theoretical lenses to explain how faith-based values and AI optimization co-create sustainable organizational excellence. Ultimately, this model underscores that within the Islamic tourism sector, human-AI synergistic co-creation yields a threefold advantage: (1) optimizing halal supply chain transparency; (2) personalizing spiritual itineraries; and (3) managing sustainable resource allocation.

Technology Offloading via UTAUT2 and Supply Chain Transparency (SDG 12)

Originally designed to study consumer tech, UTAUT2 explains the behavioral intentions behind why people choose to adopt and use new technology through seven core drivers: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit (Venkatesh et al., 2012). Traditionally, this relationship is viewed as a direct, consumer-centric technology adoption model.

Shneiderman (2020) further argues that a tool (AI) should function as an amplifier that expands human capability, not a replacement. Within the ALM, UTAUT2 ensures the faith-based leader feels capable, comfortable, motivated, and culturally aligned when integrating AI systems. Performance expectancy is reframed around the concept of cognitive offloading to advanced synthesis systems. In other words, fragmented global Halal supply chains—which suffer from conflicting regional rules and shifting international regulations—create procedural inefficiencies across the Halal ecosystem that threaten Halalan-toyyiban (permissible and wholesome) integrity.

Furthermore, these systemic friction points risk stripping the customers' experience of its relational essence, resulting in a cold, transactional environment that compromises the traveler's spiritual intent. Leveraging AI as a cognitive collaborator offloads these massive data-synthesis burdens from human operators as the system continually ingests data and flags cross-border compliance anomalies. Consequently, this enhances operational performance expectancy by increasing execution speed, reducing human error, and enhancing organizational credibility.

Hedonic motivation is reframed as spiritual fulfillment or the pursuit of ihsan (spiritual excellence—doing the right thing at the highest possible standard, driven by a deep awareness that God is always watching) and itqan (technical perfection and mastery). Price value, on the other hand, balances material cost with ethical investments through the Halalan-toyyiban concept, where value is determined by safeguarding amanah through capital investment. Habit requires seamless integration between AI and human decision-making in how travel environments are managed.

Ultimately, these dynamics enhance the leader's cognitive capacity to enforce Halal supply chain integrity, foster strategic ethical enforcement, ensure resource allocation efficiency, and prevent structural waste (SDG 12). By extending the UTAUT2 framework into faith-based environments, this study's first proposition posits that:

P_1: When leaders in faith-based industries adopt AI, their motivation and performance measures are transformed into two complementary engines:

1. Technological performance expectancy, which is achieved through AI-driven cognitive offloading such as managing and tracking cross-border compliance, and
2. Spiritual performance expectancy, where the leader's drive and success are guided by core Islamic values: ihsan (spiritual excellence), itqan (precision/mastery), and amanah (trust/stewardship).

The alignment of these dual dimensions expands a leader's operational capacity to enforce Halalan-toyyiban supply chain integrity, thereby providing a new theoretical pathway to achieve structural sustainability (SDG 12).

Triadic Value Co-Creation and Spiritual Itineraries (SDG 8)

Value co-creation theory has redefined how an organization views value: from inherently built within the organization to dynamically shared outcomes with customers through personalized experiences (Prahalad & Ramaswamy, 2004). Similarly, Vargo and Lusch (2004) argue that products are merely delivery mechanisms for services; hence, value must be dynamically co-created through "value-in-use," which requires users' active engagement with knowledge and resources.

Traditionally, this relationship is viewed as a dyadic or two-way firm–customer relationship. Within the ALM framework, the relationship is extended into a triadic collaboration between the AI infrastructure (the cognitive collaborator), the human leader (the ethical steward), and the traveler. While mainstream AI systems can effectively optimize operational efficiency, they lack organic empathy, which creates an experiential deficit in spiritual authenticity (Bui et al., 2025; Han et al., 2024).

Because AI functions as an expansion tool rather than an autonomous replacement (Shneiderman, 2020), it cannot co-create spiritual experiences alone. Instead, it enters a triadic value co-creation loop (P_2), where the AI manages the structural data logistics, while the human leader injects the organic, high-empathy affective values that software lacks. Accordingly, it is proposed that:

P_2: Triadic collaboration (Human Leader ↔ Synthesis AI ↔ Muslim Travelers) enhances sustainable value co-creation in faith-based tourism organizations. Within this ecosystem, AI optimizes structural data logistics while the human leader injects the organic affective resonance required for authentic spiritual itineraries, collectively accelerating sustainable, high-yield economic growth in alignment with SDG 8.

Maqasid Shariah Governance and Resource Allocation (SDG 17)

While Maqasid Shariah (the objectives of Shariah) traditionally functioned as a classical tool for legal deduction, it has contemporarily been transformed into a dynamic, forward-looking paradigm for modern global governance. Grounded in the five core pillars established by Al-Ghazali—namely, protection of faith (hifz al-din), protection of life (hifz al-nafs), protection of intellect (hifz al-aql), protection of lineage (hifz al-nasb), and protection of wealth (hifz al-mal)—it was later expanded by Abu Ishaq al-Shatibi (Al-Ghazali, 2018; Al-Shatibi, 2011).

Through his seminal work Al-Muwafaqat fi Usul al-Shariah (The Reconciliation of the Fundamentals of Islamic Law), Al-Shatibi (2011) incorporated maslahah (public interest) and mafsadah (prevention of harm), turning the framework into a dynamic, system-wide governance philosophy. The father of modern Maqasid reform, Muhammad al-Tahir ibn Ashur (1957), later decoupled the theory into a macro-level governance framework capable of addressing systemic socio-economic challenges (Ibn Ashur, 2006).

We argue that Maqasid-based governance ensures that public interest (maslahah) is maximized while systemic harm (mafsadah) is mitigated. Within contemporary socio-economic policies, this modernized Maqasid paradigm directly aligns with the SDG 17 framework. Ultimately, Kamali (2008) and Dusuki (2007) assert that these two paradigms serve as an ethical blueprint for cross-sector collaborations and sustainable resource management. By integrating Maqasid Shariah with the SDGs framework, collective partnerships formalize the prevention of structural waste (israf) and the hoarding of wealth (ihtikar). This analysis leads to the third proposition:

P_3: The integration of Maqasid Shariah governance mechanisms and multi-stakeholder partnerships (SDG 17) positively moderates the relationship between AI predictive analytics and sustainable resource allocation within the Augmented Leader Model (ALM).

METHODOLOGY

To develop the Augmented Leader Model (ALM), this study employs a conceptual synthesis approach, which according to MacInnis (2011) and Xin et al. (2025), integrates previously fragmented theoretical

domains into a cohesive, novel conceptual framework. By doing so, this study leverages the benefits of conceptual research outlined by Jaakkola (2020). First, the Augmented Leader Model (ALM) construct enables the conceptualization of emerging, unmapped socio-technical relationships that traditional, rigid empirical instruments cannot yet capture or measure. Second, it facilitates paradigm bridging by synthesizing various disciplines like technology adoption, service marketing, tourism management, and Islamic jurisprudence into a unified framework. This allows organizations to navigate and operate effectively within a highly complex Halal ecosystem.

The study uses established databases, specifically Scopus and Web of Science (WoS). Specialized institutional documents, such as international halal industry reports published by DinarStandard, further complemented the data sources to capture critical, industry-specific economic input. A unified Boolean search string across article titles, abstracts, and keywords was then executed using three distinct theoretical clusters (AND, OR) as follows:

("Artificial Intelligence" OR "AI Analytics" OR "UTAUT2") AND ("Value Co-Creation" OR "Halal Ecosystem" OR "Islamic Tourism") AND ("Maqasid Shariah" OR "Ethical Governance")

In terms of sourcing strategy, this study adopts a dual-layered, foundational-anchoring strategy espoused by Jaakkola (2020). Twenty-two unique, peer-reviewed sources were examined by complementing seminal, classic works of theoretical pioneers with contemporary, operational literature to balance theoretical validity with modern contextual relevance and how they connect to global development goals summarized in Table 1.

Table 1 Methodological Sourcing Matrix and SDG Mapping

Core Theoretical Component	Primary Fields Integrated	Sample Count and Source Types	Key Foundational Anchors	Target SDG and ALM Integration
Technology Adoption	Information Systems, AI Ethics	5 Articles (Scopus/WoS)	Venkatesh et al. (2012); Jaakkola (2020); MacInnis (2011); Shneiderman (2020); Xin et al. (2025)	SDG 12 (Responsible Consumption) reframes user habits and amanah (trust) into digital supply chain transparency.
Service Value Ecosystems	Service Marketing, Hospitality	12 Articles (Scopus/WoS & Policy)	Ameen et al. (2024); Buhalis (2023); Bui (2025); Han et al. (2024); OECD (2024); Prahalad (2004); Shneiderman (2020); Vargo & Lusch (2004)	SDG 8 (Decent Work) drives triadic human-AI collaboration and spiritual hospitality (Diyafa).
Ethical Governance	Islamic Jurisprudence, CSR	5 Articles (Treatises, Journals)	Al-Ghazali (2018); Al-Shatibi (2011); Ibn Ashur (2006); Dusuki (2007); Kamali (2008)	SDG 17 (Partnerships for Goals) uses Maqasid protections as algorithmic guardrails for public welfare.
Total Domain Sample	Cross-Disciplinary Pool	Total: 22 Sources	Synthesized into the ALM Framework	Macro-Impact Outcomes

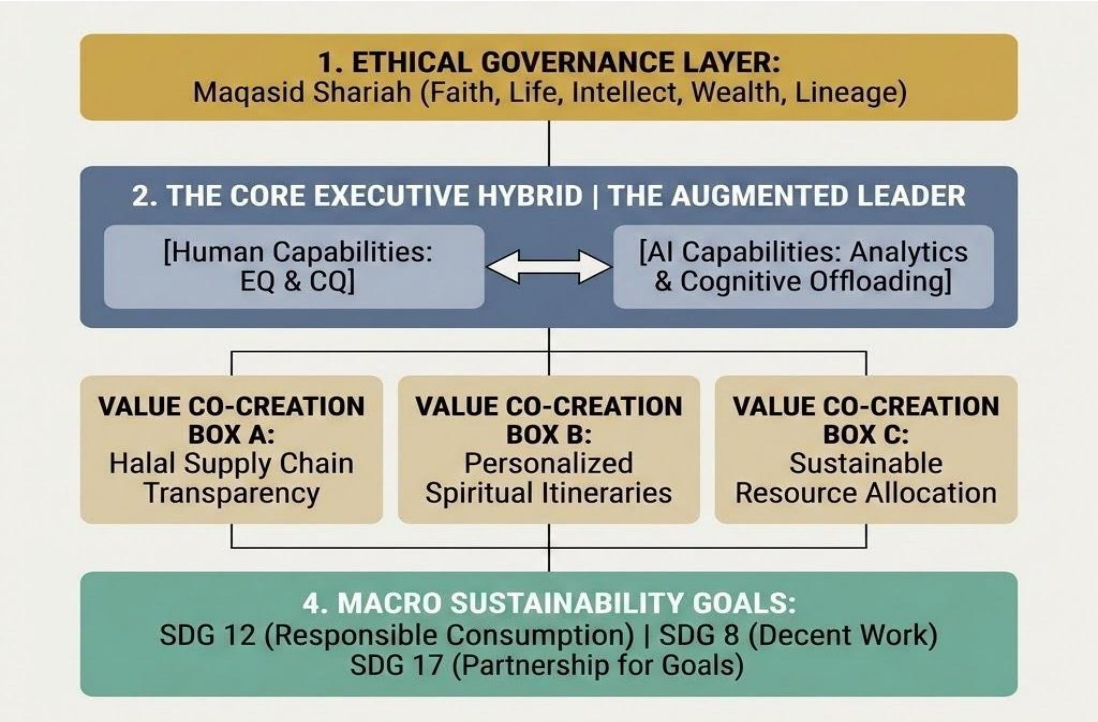
Note. Adapted from "Designing conceptual articles: Four approaches," by E. Jaakkola, 2020, Industrial

Marketing Management, 90, p. 18–26. Sample sizes and domain mappings represent the researchers' original operational data pool.

1. To ensure the proposed Augmented Leader Model (ALM) remains both theoretically robust in its foundation and operationally executable within today's technological landscape, this study adapted MacInnis (2011) and Xin et al. (2025) structured, conceptual synthesis workflow described below:
2. Domain exploration and identification (the baseline narrative): This phase isolates the core tensions between mainstream AI literature in tourism and the Halal ecosystem. It exposes the key gap in AI technology: its inability to process and operate in its affective domain.
3. This phase specifically points out the gap in AI technology due to the inability to process and operate in its affective domain (e.g., inability to feel or understand human emotions), which is vital in the Halal ecosystem.
4. Theoretical deconstruction (the operant resources): This phase systematically isolates specific constructs from otherwise disjointed theoretical paradigms and prepares them for faith-based adaptation such as re-specifying the performance expectancy metrics under the UTAUT2 model.
5. Conceptual integration and modeling (conceptual mapping): This stage combines the deconstructed theoretical fragments into a unified, four-layer conceptual architecture. It establishes the formal academic logic for Propositions 1, 2, and 3, and maps the operational pillars to targeted Sustainable Development Goals (SDGs).
6. Paradigm validation and proposition bounding (the safeguard check): The final phase positions Maqasid Shariah as the absolute, top-down moral boundary layer governing the entire system.

RESULTS AND DISCUSSION

This chapter discusses the primary findings to fulfill the core research objectives (RO1). The study aims to develop the Augmented Leader Model (ALM), which connects human-AI synergy with organizational value co-creation and Islamic tourism excellence. Concurrently, it proposes a strategic, actionable roadmap to guide Islamic tourism stakeholders without compromising faith-based values. By achieving these objectives, this chapter unveils the structural outcomes, system layers, and formal propositions resulting from the conceptual synthesis in the subsequent subtopics.



The Augmented Leader Model (ALM)

Figure 2: The architectural design of the proposed ALM framework

AI Cognitive Offloading

Figure 2 depicts the architectural design of the proposed ALM framework to achieve organizational excellence within the Islamic tourism and modern Halal ecosystem. Grounded in the synthesis of UTAUT2 and value co-creation theory, the model conceptualizes how AI cognitive offloading deliberately assists complex data delegation, such as tracking real-time global Halal supply chain compliance using advanced AI systems.

In the Islamic tourism context, the application of these systems is scalable into various aspects, ranging from AI concierge services, crowd control and safety, smart tracking, and risk prevention to responsible production. The generative AI persona engine and conversational agents power virtual concierges for Umrah/Hajj packages, Islamic heritage sites, and Halal-certified luxury resorts. Besides, computer vision crowd-flow analytics and spatial optimizations manage crowd safety, logistics, and spatial comfort during peak seasons at major Islamic monuments, festivals, or holy sites.

In a broader Halal ecosystem context, the application of computer vision and IoT sensor networks enables real-time cross-contamination prevention, while predictive graph neural networks allow multi-tier supplier risk mapping. Consequently, delegating these high-velocity demands onto advanced algorithmic engines while aligning them with SDG 12 (Responsible Consumption) via Islamic precepts like itqan (precision) and amanah (trustworthiness) into digital supply chain transparency directly boosts technological and spiritual performance expectancy.

P_1 posits that traditional technology adoption drivers are transformed into a dual-engine mechanism within faith-based environments. Our conceptual synthesis supports this by demonstrating that AI-driven cognitive offloading shifts the leader's focus from routine monitoring to strategic governance. As AI automates operational tasks, technological performance expectancy is met, thereby effectively unlocking cognitive bandwidth. Simultaneously, Halalan-toyyiban integrity is rigorously enforced when the leader operationalizes ihsan, itqan, and amanah.

By supporting Proposition 1, this study extends the UTAUT2 framework, which previously isolated spiritual motivators. While mainstream literature views AI strictly for its cost-savings and speed (Gorian & Osman, 2024), the ALM model positions AI as an ethical catalyst. By aligning this with value co-creation theory where the leader and AI work as a team (the dual-engine), they create a brand-new blueprint for running an organization. This novel theoretical pathway to structural sustainability (SDG 12) provides a conceptual basis for how tech-driven efficiency and faith-based authenticity can co-exist synergistically.

The Triadic Value Co-Creation Loop (P_2)

This study's conceptual synthesis theoretically suggests that the conventional dyadic relationship between firm and customer is becoming obsolete. Triadic collaboration between the AI infrastructure (the cognitive collaborator), the human leader (the ethical steward), and the traveler is required in the contemporary world. Within this framework, the AI infrastructure provides structural logistics by automating data-heavy tracking, such as monitoring real-time geographical shifts, prayer timings, and mosque locations.

Since AI systems are devoid of organic empathy (Bui et al., 2025; Han et al., 2024), the human leader must complement this technological incapacity by anchoring affective resonance. Leveraging emotional intelligence, empathy, and cultural nuances fills the authenticity deficit that AI lacks. Offloading computational tracking to AI saves human employees from repetitive tasks and cognitive exhaustion. The Muslim traveler (value-in-use), on the other hand, experiences hyper-personalized travel paths through active engagement with the system.

Consequently, the triadic model redefines workplace structures within Islamic tourism organizations. This transition results in genuine hospitality (diyafa) and directly satisfies key Maqasid Shariah values: first, hifz al-aql (preservation of intellect), as AI mechanically eliminates burnout and mental exhaustion; second, hifz al-nafs (preservation of life/soul), by nurturing a respectful workplace that honors emotional health; and

third, hifz al-mal (preservation of wealth), through high-yield tourism revenue circulation within local communities.

In the ALM ecosystem, the triadic partnership (Human Leader ↔ Synthesis AI ↔ Muslim Travelers) requires interrelationship competency. While AI functions as a logistical engine processing complex data, the human leader instills organic empathy, interpersonal warmth, cultural intelligence, and emotional resonance, thereby enhancing the personalized authentic spiritual experiences that customers encounter.

Consequently, this triadic integration fosters sustainable, decent work environments within local communities (SDG 8). Offloading repetitive data-synthesis tasks to AI eliminates cognitive drudgery (dehumanizing work), protecting the human mind from numbing, mechanical burnout. Simultaneously, this model upgrades the role of the human worker or leader to high-value human hospitality (diyafa). This structural shift ultimately preserves human intellect (hifz al-aql), fosters sustainable, dignity-driven work environments that safeguard physical and spiritual well-being (hifz al-nafs), and retains as well as protects economic wealth within local communities (hifz al-mal).

Macro Governance and Resource Allocation

Modern predictive AI models lack an understanding of justice or moral value (Shneiderman, 2020). Within the proposed Augmented Leader Model (ALM) architecture, Maqasid Shariah governance functions as an ethical filter against algorithmic bias, data commodification, and local wealth extraction. Implementing this Shariah-compliant data governance ensures transparency, eliminates monopolization of travel channels, mitigates price exploitation during peak seasons, and optimizes logistics to minimize environmental waste.

Filtering data-driven insights through the Maqasid Shariah pillars systematically gears technological and algorithmic augmentation toward prioritizing societal welfare (maslahah) and preventing systemic depletion (mafsadah). Consequently, the ALM provides leaders with the objective criteria needed to execute the collaborative mandates of SDG 17.

Ultimately, this framework demonstrates that sustainable resource allocation is a co-created milestone achieved through macro-partnership governance (SDG 17). Crucially, this structural alignment proposes a positive moderation effect hypothesized in P_3: that the integration of Maqasid Shariah and multi-stakeholder partnerships (SDG 17) significantly strengthens the relationship between AI predictive analytics and sustainable resource allocation.macro-partnership governance (SDG 17). Crucially, this structural alignment proposes a positive moderation effect hypothesized in P_3: that the integration of Maqasid Shariah and multi-stakeholder partnerships (SDG 17) significantly strengthens the relationship between AI predictive analytics and sustainable resource allocation.

Within the Augmented Leader Model (ALM), the human leader's role as a responsible steward (khalifah) actively prevents structural market waste (israf). This dynamic governance mechanism stabilizes demand and supply within the Islamic tourism ecosystem, fostering deep institutional resilience. Consequently, this heightens the resilience of faith-based tourism organizations by securing a transparent, equitable, and sustainable return on investment (ROI) across all industry partnerships (SDG 17). Ultimately, this macro-governance framework translates AI predictive insights into ethical, collaborative, and waste-free resource management.

The ALM Three Strategic Objectives

At its functional core, the ALM translates theoretical propositions into field practice via three strategic objectives critical to a sustainable Islamic tourism future:

1. Halal Supply Chain Transparency (Farm-to-Fork Traceability). This logistical dimension provides absolute, data-verified traceabilities of hospitality and culinary services to all Islamic tourism stakeholders. By addressing SDG 12 (Responsible Consumption and Production), this operational vector guarantees authenticity and ethical resource sourcing.

2. Personalized Spiritual Itineraries (Co-created Travel Paths). Integrating human empathy and AI precision creates deeply meaningful, custom-tailored travel routes that optimize traveler experiences. Consequently, this human-AI co-creation promotes cross-cultural appreciation and supports SDG 8 (Decent Work and Economic Growth) through specialized niche tourism.
3. Sustainable Resource Allocation (Predictive Environmental Modeling). Leveraging predictive analytics and AI tracking to mitigate various tourism issues like overtourism, optimize crowd control management especially during peak seasons, and minimize environmental strain. This intersection of artificial intelligence, public ecosystem management, and religious jurisprudence satisfies SDG 17 (Partnerships for the Goals) through robust cross-sectoral networks.

By mapping these three operational dimensions against the United Nations Sustainable Development Goals (SDG 8, SDG 12, and SDG 17), the framework proposes how faith-based values influence human–AI synergy in fostering a sustainable, resilient future.

Strategic, Actionable Roadmap for Ethical AI Implementation for Islamic Tourism Stakeholders

To fulfill the second objective, this study presents a strategic, actionable roadmap embedded within the Augmented Leader Model (ALM). This roadmap enables human leaders to leverage advanced technology without compromising core faith-based values, progressing through three sequential stages: Phase 1: Ethical & Shariah Alignment ➔ Phase 2: Human–AI Value Co-Creation ➔ Phase 3: Macro-Partnerships and Scale.

Phase 1: Foundational Ethical Alignment and Data Shariah Governance

The initial phase strictly focuses on governance, where the data role is to establish policy to achieve absolute Shariah compliance. This phase serves as a strategic governance blueprint and must be executed before any algorithms are coded, purchased, or deployed. It defines how the human leader transitions into an Augmented Leader who acts as the organization's ultimate ethical anchor. At this stage, the Islamic tourism stakeholders establish the organizational mandate by converging technocrats (CTOs, developers) and religious experts (Shariah advisors) to co-create AI's core operating rules.

By institutionalizing these executive guardrails, organizations establish non-negotiable boundaries by determining what data is acceptable (e.g., customer data collection respects privacy to evoke trust [amanah] and explicitly bans non-compliant outputs, such as AI recommending or partnering with non-Halal entities). Formulating these Shariah-compliant data protocols and ethical filter codes of conduct ultimately protects public welfare (maslahah) and prohibits predatory commercial behavior (mafsadah).

Phase 2: Operationalizing Human-AI Value Co-Creation

This phase centers on operation, utilizing data for utility to deliver a seamless spiritual experience. This phase transitions from phase 1's policy creation to technical execution, shifting the strategic focus toward deployment and value generation. Achieving this requires a strategic balance between technological capability and spiritual integrity within the three core operational vectors:

1. Sovereign Personalization vs. Data Commodification. The augmented leader deploys AI by training the dataset to prioritize personalization, such as sourcing verified local Halal culinary options or predicting transit prayer times without succumbing to data commodification. Unlike standard commercial systems engineered for maximum revenue per click, the dataset is optimized for value and spiritual utility, keeping the user in control of their profile (sovereign personalization). These active operational guardrails or feedback loops prevent algorithmic drift. By maintaining data privacy and avoiding aggressive data monetization that compromises the sacred or authentic nature of the journey, the principle of amanah (trustworthiness) is guaranteed.
2. Augmented Human Agency. Here, diyafa (the concept of Islamic hospitality) is introduced. As AI handles logistical optimization to support service provision, human leaders are freed from repetitive emotional and physical burdens. This emotional relief enables them to deliver empathetic, culturally resonant, and spiritually fulfilling customer experiences, effectively upskilling human leaders into

responsible stewards (khalifah). Crucially, AI insights are used solely to enhance service quality, thereby retaining final decision-making power for human leaders. Ultimately, this human-centric automation ensures resource allocation actively avoids structural market waste (israf).

3. Continuous Feedback Loops. Over time, this quality control mechanism relies on active real-time monitoring systems, enabling Shariah advisors and technocrats to continuously audit AI recommendations. This live oversight ensures that machine-learning adaptations do not violate Islamic ethics through exploitative upselling or inadvertent service recommendations.

Ultimately, operationalizing this triadic partnership ensures that efficiency gains do not compromise the traveler experience, thereby maintaining a high-tech, high-touch environment.

Phase 3: Multi-Stakeholder Macro-Partnerships (SDG 17 Integration)

The final phase elevates the architecture from an individual organizational level to an industry-wide ecosystem, utilizing cross-border data interoperability to achieve global industry standardization. In this phase, institutionalized cross-sector data-sharing partnerships are established to create a transparent Islamic tourism marketplace. This open network prevents the monopolization or hoarding of market advantages (ihtikar) and directly supports SDG 17 (Partnerships for the Goals).

Consequently, this collaborative macro-network establishes a robust benchmark for sustainable resource allocation. By continuously mapping operational outcomes against SDG 8 (Decent Work and Economic Growth) and SDG 12 (Responsible Consumption and Production), this human-AI partnership guarantees a long-term, equitable return on investment (ROI) that actively protects and sustains local communities.

Ultimately, this three-phased roadmap answers RO2 by proving that technology and faith are mutually inclusive. The systematic transition from ethical alignment to operational co-creation, and finally to macro-partnerships, equips Islamic tourism stakeholders with the full analytical capabilities of predictive AI. Operating within the ALM framework, this strategic pathway ensures that technological innovation actively propels value preservation without compromising core faith-based principles.

CONCLUSION

This study conceptually introduces the Augmented Leader Model (ALM), aiming to address the critical research gap at the convergence of technological innovation, faith-based governance, and sustainable tourism. By synthesizing UTAUT2, value co-creation theory, Maqasid Shariah, and the UN Sustainable Development Goals (SDGs 8, 12, and 17), the ALM provides a robust theoretical framework for mastering human–AI synergy within the global Halal tourism ecosystem. It also offers a strategic, phase-by-phase roadmap for Islamic tourism stakeholders to implement the framework.

Theoretically, this study extends UTAUT2 into faith-based environments by introducing a two-pronged mechanism that balances technological performance expectancy (AI cognitive offloading) with spiritual performance expectancy (ihsan, itqan, and amanah). Besides, it advances dyadic value co-creation into a triadic model, demonstrating how AI logistics and human emotional/cultural intelligence (EQ/CQ) co-create authentic spiritual experiences. In addition, it operationalizes Maqasid Shariah as the ultimate top-down governance filter that governs algorithmic systems, theorizing that technological speed and religious integrity can operate synergistically to advance macro sustainability targets (SDGs 8, 12, and 17).

Operationally, the ALM provides Islamic tourism stakeholders, including policymakers, with a three-phase actionable roadmap (Ethical alignment ➔ Value co-creation ➔ Macro-partnerships). The framework enables organizations to leverage AI analytics for Halal supply chain transparency, crowd safety, and itinerary personalization without compromising human agency or faith-based authenticity (diyafa) and enables synergistic cross-industry partnerships.

From a managerial perspective, the augmented leader does not have to be an expert Shariah scholar or an advanced data scientist. Instead, the institutionalization of cross-functional governance structures, such as

pairing chief technology officers and data teams directly with resident Shariah advisors, ensures continuous ethical alignment without stifling technical innovation. Furthermore, the model's three propositions are empirically testable using quantitative structural equation modeling approaches (e.g., PLS-SEM) by operationalizing construct dimensions such as cognitive offloading, triadic synergy, and Maqasid-based governance filters.

As a conceptual paper based on theoretical synthesis and qualitative literature analysis, this work requires empirical validation across diverse operational contexts. Additionally, the ALM application is subject to regional boundary conditions; institutional variations between Muslim-majority and Muslim-minority markets, fragmented regulatory standards, and limited governance assets can either facilitate seamless adoption or hinder implementation. Establishing private, organization-level compliance boards that partner with accredited international certification bodies and leverage decentralized digital audit trails may overcome these regional disparities and bridge the governance gap. This localized institutional architecture ensures that faith-based guardrails remain operational even in the absence of centralized national infrastructure.

To build upon the ALM framework, future researchers are encouraged to:

1. Empirically validate the model: Test the structural relationships and propositions across diverse sectors (e.g., hospitality, Hajj/Umrah travel, Halal supply chain) using quantitative approaches such as Partial Least Squares Structural Equation Modeling (PLS-SEM) or mixed-methods designs.

2. Conduct cross-cultural comparisons: Examine whether the ALM operational dynamics differ between Muslim-majority countries (e.g., Malaysia, Saudi Arabia, Indonesia) and Muslim-minority destination markets.

Explore longitudinal governance impact: Track the long-term effectiveness of Shariah-compliant AI governance frameworks and algorithmic audit mechanisms in mitigating algorithmic bias and preserving cultural authenticity.

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