Theoretical Perspectives on Sustainable Cultural Tourism: Insights from The Mount Kenya Region

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ABSTRACT

This theoretical review explores how six foundational theories, Stakeholder Theory, Resource-Based View (RBV), Triple Bottom Line (TBL), Institutional Theory, Systems Theory, and the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2), can be integrated to guide the development of sustainable cultural tourism in the Mount Kenya region. The paper critically analyzes how these theories illuminate the relationships among cultural tourism opportunities, development, challenges, AI adoption, and socio-economic outcomes. By applying a multi-theory approach, the review demonstrates how strategic resource utilization, inclusive stakeholder engagement, supportive institutions, and emerging technologies such as Artificial Intelligence (AI) can collectively enhance community-based tourism and cultural heritage preservation. The study presents an integrated conceptual model linking independent, mediating, and dependent variables, offering a coherent theoretical foundation for empirical inquiry and policy design. Findings suggest that theory-driven, AI-enabled cultural tourism can promote equitable development, digital inclusion, and long-term sustainability in heritage-rich regions like Mount Kenya. The review concludes by highlighting the implications for research, practice, and policy, particularly in designing culturally sensitive, technology-driven tourism interventions.

Keywords: Cultural Tourism, Artificial Intelligence, Sustainable Development, Mount Kenya, Resource-Based View, UTAUT2, Stakeholder Engagement, Heritage Conservation, Socio-Economic Development, Tourism Theory Integration.

INTRODUCTION

Cultural Tourism is defined as tourism that focuses on experiencing and engaging with the cultural environments, traditions, and legacies of host communities, both past and present (UNESCO, 2021). It has become a pivotal component of sustainable development strategies, particularly in regions with rich heritage, diverse communities, and untapped indigenous knowledge systems. According to communities (Buhalis & Volchek, 2023; WTTC, 2021), while the global tourism industry is shifting toward more meaningful, inclusive, and experience-based travel, cultural tourism as well is increasingly recognized as a tool for promoting socio-economic growth, preserving heritage, and empowering local. Both the promise and paradox of cultural tourism development are exemplified by the Mount Kenya region . The region continues to underperform in its cultural tourism potential, despite hosting UNESCO-listed heritage sites, vibrant indigenous practices, and communities such as the Ndorobo and Mukogodo, who are custodians of invaluable cultural traditions. Various studies indicate that infrastructural deficits, fragmented policy frameworks, marginalization of minority communities, and minimal integration of digital technologies are persistent challenges (Akama & Kieti, 2019; Msuya & Kihwele, 2022; Njoroge et al., 2021). According to (Rahman et al., 2022; Kim & Shin, 2023), opportunities for innovation in cultural heritage preservation, marketing, and community engagement are limited due to the region's digital divide and slow adoption of Artificial Intelligence (AI).

To guide both analysis and practice, a robust theoretical grounding, is needed to address these challenges. Hence this review draws from six complementary theories including: Stakeholder Theory, the Resource-Based View (RBV), the Triple Bottom Line (TBL) framework, Institutional Theory, Systems Theory, and the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). Unique but interconnected insights into how cultural tourism systems function, how value can be derived from cultural assets, and how technology, particularly

Artificial Intelligence (AI), can be implicitly integrated to drive sustainability are offered by these theories. Aimed at contextualizing these theories within the cultural tourism landscape of Mount Kenya, this review demonstrates their applicability in formulating inclusive, technology-enabled, and sustainable development strategies. Bridging theoretical knowledge with practical interventions that can uplift marginalized communities and enhance Kenya's competitiveness in the global cultural tourism market, the paper also informs the study's conceptual and operational frameworks.

METHODOLOGICAL APPROACH FOR THEORY SELECTION AND APPLICATION

To identify, select, and apply relevant theories that offer comprehensive explanatory power for analyzing sustainable cultural tourism within the Mount Kenya region, a purposive literature synthesis strategy was employed in this theoretical review. The study's overarching goal, to evaluate how sustainable pathways, including Artificial Intelligence (AI) integration, can enhance cultural tourism and promote socio-economic development, guided the selection process.

The process began with a problem-oriented mapping of the key dimensions of the research, the underutilization of cultural assets, marginalization of indigenous communities, infrastructural and policy limitations, slow adoption of emerging technologies like AI and, lack of sustainable socio-economic benefits from tourism. Theoretical grounding is necessitated by each of these dimensions to guide analysis and intervention design. For their thematic relevance, contextual applicability, and interdisciplinary depth the selected theories were duly assessed.

1. **Stakeholder Theory** by (Freeman, 1984) explain the dynamics of participation and power among the multiple actors involved in cultural tourism, such as local communities, government institutions, private investors, and tourists. (Njoroge et al., 2021) notes that its emphasis on inclusive engagement and the alignment of stakeholder interests is particularly relevant in addressing the systemic exclusion of groups like the Ndorobo and Mukogodo communities.

2. The **Resource-Based View (RBV)** by (Barney, 1991) was integrated to conceptualize cultural heritage—rituals, sites, folklore, and knowledge systems—as strategic resources that can yield competitive advantage if preserved and leveraged effectively. This theory underpins the framing of opportunities for tourism development based on the uniqueness and value of Mount Kenya's cultural assets.

3. The **Triple Bottom Line (TBL)** framework (Elkington, 1997) was selected to ensure that the proposed sustainable pathways balance economic, social, and environmental outcomes. It enables the evaluation of development strategies beyond profit motives to include cultural preservation, social equity, and ecological sustainability.

4. **Institutional Theory** (DiMaggio & Powell, 1983) was used to examine how formal rules, governance systems, and normative pressures shape the implementation of cultural tourism initiatives. This theory explains the inertia in policy enforcement and the limited institutional support for inclusive tourism development.

5. **Systems Theory** (von Bertalanffy, 1968) was adopted to structure cultural tourism as an interconnected system involving stakeholders, institutions, resources, technologies, and the environment. It supports the identification of feedback loops and integration points for interventions that enhance the system's resilience and sustainability.

6. Lastly, the **Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)** (Venkatesh et al., 2012) was applied to assess factors influencing AI adoption in cultural tourism. It provides a framework for understanding the behavioral intentions of stakeholders to use AI tools such as digital storytelling platforms, smart tourism analytics, and virtual heritage tours.

The application of these theories was **not isolated**, but **synergistic**. For example, while RBV defines cultural heritage as a valuable resource, UTAUT2 explains how AI can enhance its usability and visibility; Systems

Theory ensures these efforts are holistically aligned with institutional and community dynamics, as explained through Institutional and Stakeholder Theories. TBL, serving as a normative anchor, ensures that all strategic pathways reflect a balance of sustainability priorities.

This theoretically grounded approach ensures that the study is not only methodologically sound but also practically responsive to the complex realities of the Mount Kenya region. By integrating cross-cutting theories into the research design, the study enhances its potential to generate actionable, equitable, and sustainable outcomes for cultural tourism stakeholders.

THEORETICAL REVIEW SECTIONS

Stakeholder Theory

Stakeholder Theory which was originally presented by Freeman (1984) postulates that the success and sustainability of any given organization or development project rests on the extent to which such organization determines and balances the interest of its different stakeholders. As opposed to the model on shareholders or the approach of a single decision-making force, Stakeholder Theory is based on inclusive and participatory involvement of all stakeholders involved in a given project, who might have its influence or be impacted by it. The theory is especially applicable to cultural tourism in the Mount Kenya region that is characterized by involvement of different stakeholders; local people, cultural practitioners, county governments, business players, tourists and conservationists that operate in various levels of governance, resource extraction and cultural conservation. Misalignment between stakeholders in this industry has been associated with marginalization, competition over resource exploitation, and disintegrated tourism development (Njoroge et al., 2021).

The Stakeholder Theory is a welcome perspective that can be used to evaluate the success and failure of some cultural tourism projects, as opposed to others. The theory emphasizes that sustainable tourism cannot be realized without fair distribution of the returns and clear communication of information and cooperation in the decision making between the stakeholders. As an illustration, the local people in the Mount Kenya vicinity, especially the Ndorobo and Mukogodo tribes, are commonly not engrossed in official tourism planning, regardless of bearing access to distinct indigenous cultural heritage (Karani et al., 2022). This outsiderism contributes towards absence of local ownership, tourist expansion resistance and commodification of culture.

The significance of this theory is supported by other research studies found in other African settings. To illustrate, Msuya and Kihwele (2022) in Tanzania discovered the superior effects of community-based tourism ventures, which involved systematic dialogue amongst stakeholders, on cultural preservation policies and the level of income accruing to communities. In Morocco, Benamar and Boutaleb (2020) demonstrated that failure to include the local communities in festival tourism development resulted in unequitable allocation of benefits and loss of local identity.

Stakeholder Theory is used in this study as the background framework in the analysis of the opportunities as well as challenges of cultural tourism development. It deals with the first goal, which pertains to the identification and exploration of the most prominent opportunities, by providing the inquiry into the ways of using community inclusion, public-private partnerships (PPPs), and participatory governance. It also serves the second goal, the evaluation of challenges, by emphasizing the inefficiency of policy gaps, imbalance of power, and practicing exclusion to development activities.

Also, the theory has a fundamental role to play in setting out sustainable routes (Objective 4) by facilitating participatory form of tourism governance. These involve arrangements where local leaders and cultural practitioners collaborate on tourism package delivery, impact on policymakers and administration of tourism incomes in an open manner.

Despite its strengths, Stakeholder Theory has been criticized for being overly normative and lacking operational clarity, especially in situations involving power asymmetries (Jensen, 2002; Phillips et al., 2003). In Mount Kenya, for instance, while the theory promotes inclusivity, it does not inherently address how historically marginalized communities can overcome structural exclusion. This study addresses such limitations by

integrating Stakeholder Theory with Institutional Theory (Section 6) to analyze governance constraints and enabling policies.

Stakeholder Theory offers a critical foundation for evaluating cultural tourism development in Mount Kenya. It informs the study's approach to mapping stakeholder roles, analyzing governance structures, and proposing inclusive frameworks for cultural tourism sustainability. By ensuring that all voices, especially those of marginalized groups—are heard and respected, the theory aligns with the broader objectives of equitable socio-economic development and cultural preservation.

Resource-Based View (RBV)

Presented by Barney (1991), the Resource-Based View (RBV) of the firm assumes that sustained competitive advantage can be attained in organizations or regions when they formulate, combine and implement VRIN (valuable, rare, inimitable, and non-substitutable) internal resources. Unlike other theories that focus on external market-based forces (like the portfolio effect, competitive forces approach) RBV puts a lot of stress on realizing internal capabilities and establishing long-term resiliency and competitiveness.

RBV is particularly relevant in terms of cultural tourism to regions that are abundant in terms of cultural, historical and even ecological richness, like the Mount Kenya area. Such internal resources are represented by traditional customs, indigenous knowledge systems, traditional practices, oral histories, and artistic expressions, which have the potential of being unique value propositions whenever utilized to develop tourism in the case they are managed effectively (Omondi, 2022; Tang & Li, 2021).

RBV is closely related to the first objective of this thesis that consists of determining and analyzing possibilities to develop cultural tourism. Various cultural assets in the Mount Kenya area have not been utilized fully; these include sacred places, such as Mukurwe wa Nyagathanga, among the intangible culture of Ndorobo and Mukogodo communities. These cultural resources are fulfilling the requirements of RBV in terms of VRIN since they are:

1. **Valuable**, in terms of generating socio-economic benefits through tourism.

2. **Rare**, given their uniqueness and limited availability globally.

3. **Inimitable**, as they are deeply embedded in community history and heritage.

4. **Non-substitutable**, as no other resource can replicate the authenticity they offer.

However, RBV does not assume that the mere existence of resources is sufficient for competitive advantage. Instead, the theory requires strategic capability, especially governance, policy support, and marketing, to fully exploit these assets (Barney, 1991). This perspective supports the study's focus on identifying gaps in resource management, stakeholder empowerment, and technological integration in the Mount Kenya region.

Empirical studies support RBV's relevance in cultural tourism development. Abebe and Teka (2021) show how Ethiopia leveraged UNESCO World Heritage Sites and intangible heritage assets to attract global visitors by strategically investing in infrastructure and digital promotion. Similarly, Tang and Li (2021) demonstrate that cultural festivals and heritage landscapes, when positioned as strategic resources, significantly boost regional tourism in Asia.

In Kenya, Omondi (2022) notes that many cultural assets remain "latent resources" due to a lack of community participation, branding, and digital visibility. This study applies RBV to analyze how Mount Kenya's cultural assets can be transformed into active economic drivers through better resource planning, policy alignment, and investment in technologies such as AI for digital storytelling and site management.

While RBV provides a strong rationale for resource utilization, it is complemented in this study by theories such as UTAUT2 (Section 7), which address the behavioral and technological dimensions of resource application.

RBV highlights what resources exist and why they matter; UTAUT2 explains how these resources, particularly technological tools, are adopted and utilized by stakeholders.

RBV serves as a foundational theory in this study, framing cultural heritage as a strategic asset that can drive socio-economic development when properly managed and marketed. It supports the argument that Mount Kenya's cultural tourism potential lies not in acquiring new assets, but in effectively leveraging its existing cultural capital through sustainable pathways, policy support, and digital innovation.

Triple Bottom Line (TBL) Theory

The Triple Bottom Line (TBL) theory, introduced by John Elkington in 1997, extends the traditional economic framework by incorporating two additional dimensions of performance: social and environmental impact. TBL suggests that for any development initiative to be considered truly sustainable, it must balance the "three Ps", People, Planet, and Profit (Elkington, 1997). This paradigm shift has had a profound influence on sustainable tourism, where mere financial viability is no longer sufficient; attention must also be given to cultural preservation, community welfare, and ecological conservation.

TBL is particularly relevant for cultural tourism, as it promotes the equitable distribution of tourism benefits among stakeholders, responsible management of cultural and natural resources, and the creation of inclusive social outcomes. This study applies TBL to frame sustainable pathways as a key independent variable, those strategies, policies, and interventions that balance economic goals with cultural integrity and environmental stewardship.

The TBL framework is directly aligned with Objective 4 of this study: analyzing the influence of sustainable pathways on socio-economic development. In the Mount Kenya context, sustainable cultural tourism is not just about attracting more tourists but ensuring that tourism contributes meaningfully to:

1. **Social sustainability** (e.g., inclusion of marginalized communities like the Ndorobo and Mukogodo, cultural pride, and social cohesion),

2. **Environmental sustainability** (e.g., eco-friendly tourism infrastructure and site preservation),

3. **Economic sustainability** (e.g., job creation, income generation, and entrepreneurship).

In this manner TBL offers a multidimensional view of analyzing whether cultural tourism programs in Mount Kenya are bringing about whole lot sustainability. The growth of tourism introduces the concerns of validity of cultural depictions, balance of sharing benefits, and what might be the cost to the environment of its infrastructure works. TBL offers the prism through which these trade-offs are analyzed.

Literature in tourism all over Africa, and beyond, indicates that tourism models that are linked with TBL are most likely to be more inclusive and resilient. According to Msuya and Kihwele (2022) tourism development projects that focused on community-based tourism with an inclusion of economic, social and environmental factors showed increased results in stakeholder satisfaction and sustainable life in Tanzania. Likewise, Jones et al. (2019) noted that the European heritages that implemented TBL frameworks had better cultural conservation and customer satisfaction and minimized environmental destruction.

As has been found in Kenya, it is through studies like Wamuyu et al. (2021) that emphasize the potential impact cultural tourism could have in improving social cohesion and the transfer of knowledge between generations through the spirit of sustainability. Yet, little have been done to operationalize TBL as a schooling model in rural setting such as Mount Kenya, where issues of socio-cultural complexity, ecological sensitivity and development inequity converge.

Although TBL defines the normative objectives of sustainability, it can be improved by being used together with the Systems Theory (Section 6), where systems in tourism are highlighted that are closely connected to one another. UTAUT2 (Section 7) also provides an instrument to evaluate the possibilities of using technological advancements such as AI to ensure that such technological innovations can reliably facilitate the perspective of

TBL by making it possible to conduct highly efficient marketing, digital conservation, and interactions with stakeholders.

TBL framework allows great conceptual groundwork regarding the assessment of sustainable culture tourism routes within Mount Kenya. It strengthens the fact that cultural tourism success must not be measured only in terms of number of tourists visiting the area and amount of money they spend; rather it should be about how effective tourism is in terms of long-term social inclusion, preserving the environment, and overall locally based economic growth. This is an overall perspective since the study questions do not ignore any of the principles of sustainability, which is of the essence in policy development and feasible application.

Institutional Theory

Institutional Theory, as conceptualized by Dimaggio and Powell (1983), focuses on the role of institutional environments, comprising formal laws, informal norms, and cultural expectations, in shaping organizational behavior and decision-making. It asserts that organizations, including those within the tourism sector, often adopt practices not only for technical efficiency but also for legitimacy in their socio-political environments. The theory identifies three types of isomorphic pressures: coercive (from regulation and policy), normative (from professional standards), and mimetic (from imitation of best practices), which collectively explain institutional conformity.

In cultural tourism, where the interplay of community norms, government regulation, and market dynamics is significant, Institutional Theory offers a robust lens to examine how policy environments, governance structures, and stakeholder alignment affect tourism development outcomes. It is particularly useful in understanding why well-intentioned initiatives fail in weak institutional contexts and how institutional gaps hinder innovation and inclusivity.

The application of Institutional Theory in this study aligns with all four objectives, but it is most relevant to the second and fourth objectives—assessing the challenges hindering cultural tourism and analyzing how sustainable pathways influence socio-economic development. In the Mount Kenya region, tourism initiatives are significantly influenced by institutional actors, such as county governments, cultural agencies, and heritage custodians, whose policies and practices determine resource allocation, community inclusion, and the enforcement of sustainability standards.

Akama and Kieti (2019) found that Kenya's cultural tourism policies often suffer from weak coordination and inconsistent implementation, especially in rural areas. These institutional weaknesses, exemplified by fragmented mandates, limited financial autonomy of counties, and unclear cultural property rights, are major barriers to sustainable cultural tourism. Institutional Theory allows for a systematic investigation into how these limitations affect stakeholder collaboration, funding mechanisms, and the preservation of cultural assets.

Institutional Theory has been applied across various African contexts to explain disparities in tourism outcomes. In South Africa, the success of the "Heritage and Cultural Tourism Strategy" has been linked to institutional reforms that integrated cultural tourism into national economic planning, secured funding for heritage sites, and promoted inclusive governance (South Africa Tourism Report, 2022). In contrast, studies in Ethiopia and Morocco report that institutional fragmentation and regulatory ambiguity have undermined heritage conservation and local stakeholder participation (Benamar & Boutaleb, 2021; Abebe & Teka, 2021).

Within Mount Kenya, local tourism initiatives often lack the institutional support needed to scale. Policies are either not localized or are poorly enforced, and there is minimal legal recognition of indigenous knowledge systems, particularly those of the Ndorobo and Mukogodo communities. Institutional Theory, therefore, helps to frame questions about how governance structures can be improved and how cultural tourism policies can be harmonized across different levels of government to support inclusive development.

Institutional Theory complements Stakeholder Theory by showing how external regulations and cultural norms shape stakeholder behavior. It also intersects with the Triple Bottom Line (TBL) by addressing the policy and governance enablers necessary for balancing social, environmental, and economic outcomes. Furthermore, as

the study introduces Artificial Intelligence (AI) as a mediating variable, Institutional Theory becomes critical in analyzing whether institutional conditions support or hinder technology adoption in tourism governance and cultural documentation.

Institutional Theory provides an essential analytical framework for understanding the role of policy environments, legal frameworks, and regulatory institutions in shaping the development of cultural tourism in Mount Kenya. It brings attention to the institutional voids that may hinder community inclusion, financial investment, and cultural preservation, while also offering a pathway to evaluate policy reforms that can align tourism with sustainable development objectives. By incorporating Institutional Theory, the study not only examines the structural enablers and barriers to tourism growth but also identifies opportunities for institutional innovation and stakeholder legitimacy.

Systems Theory

The Systems Theory that is fronted by the Ludwig von Bertalanffy (1968) contends that systems are interrelated and cannot be regarded as distinct phenomena that exist independently. It reaches as far as stating that elements of the system do not define the nature of systems behavior and the success of systems but rather dynamic interconnections and feedback processes. It is presented in (Zhou, 2019) that in the reflected of tourism case, Systems Theory can be reference as an efficient analytical framework utilized to determine the friction between the sub-systems of the economy, culture, environment, institutions and technologies so that the influences of such relationships on the resulting development can be assessed. The theory is particularly important in the case of cultural tourism that must operate in fairly sophisticated networks of stakeholders, heritage resources, regulations, marketing needs and evolving technologies. The Systems Theory will also help the researchers to assess the way that these factors are connected to each other and how the disturbances or the improvement at one particular level affects the whole tourism system (Getz, 2010).

Regarding Mount Kenya, the Systems Theory may be of substantial value to creating the idea of cultural tourism as the composite system of many interrelated variables, cultural possibilities, socio-economical structures, and mechanisms of control, and the digital inventions. The theory applies to the whole purpose of the study and its 4 th specific objective of investigating the role of the sustainable pathways in the socio-economic life of the local communities.

Mount Kenya cultural tourism ecosystem will include joint vision to encompass the traditional knowledge bearers (e.g. the Ndorobo and the Mukogodo communities), tourism entities, government regulator, infrastructure operator, and digital platforms. When any part of such a system is weak i.e. the poor infrastructure or a lack of digital capacity, it destroys the sustainability of the entire tourist value chain. The depth of analysis provided by the Systems Theory is sufficiently deep to look at these reliances, and the positive-feedback loops that can support resilience and expansion. Academic contributions exist as to the application of the Systems Theory as the tourism development. Abebe and Teka (2021) conducted systemic analysis of cultural tourism in Ethiopia by mentioning that cultural tourism measures have to do with harmonious relations with policies, infrastructure and interested parties. Also, Njoroge et al. (2021) showed that at the stage of Kenya, the tourism project has a fragmented activity that is reflected in local development initiatives, as well as digital quasi-integration, most of which caused unsustainable outcomes, which were eliminated with the help of system planning.

This article adopts Systems Theory in describing the relationship that exists between the independent variables (opportunities, challenges and sustainable pathways), mediating role of AI adoption and the dependent variable (socio-economic development). It provides an AI-empowered application/system feed (that delivers AI-enabled applications insights in real-time visitor analytics or predictive maintenance to cultural sites and parks) or real-time understanding of policy decision, site management refinement and neighborhood improvement. The theory could also be applied in giving us information about the roles of reinforcing loops (e.g. capacity-building of tourism entrepreneurship) and balancing loops (e.g. over-commercialization should be regulated culturally) in terms of system stability.

The combination of such approaches as Resource-Based View (RBV) with System Theory is concerned not only

with the cultural heritage as an existent resource but as a part of the changing adaptive system that must change in consequence to technologies and markets. It also adheres to the Institutional Theory, highlighting that the system runs on formal rules and structure of governance. And, in addition to that, it inserts the Triple Bottom Line (TBL) structure such that the application of the triple bottom line allows such social, environmental, and economic components within an analytical structure.

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Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)

Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) forged by Venkatesh, Thong, and Xu (2012) builds upon the initial UTAUT model by adding new constructs to it to help strengthen its explanatory capacity in the domain of both consumer and community adoption. The main constructs are performance expectancy, effort expectancy, social impact, enabling condition, hedonic motivation, price valuable and habit. All these are determinants of behavioral intention and actual usage behavior towards adopting new technologies (Venkatesh et al., 2012).

UTAUT2 is specifically significant because it helps to comprehend the possibilities of the integration of digital technologies in the industries that have long been considered analog, such as cultural tourism, and in particular, Artificial Intelligence (AI). It offers a healthy structure in which to examine all the preparedness and gumption of individual and organization to embrace Artificial Intelligence applications like digital storytelling plots, virtual reality adventures, and anticipating preservation technologies.

The theoretical background of the mediating variable, which is, adoption of AI in cultural tourism is UTAUT2 in this study. The Mount Kenya region being a cultural heritage is still yet to fully utilize the potentials of digital innovations in heritage preservation or tourism marketing or experience. The paper uses UTAUT2 in investigating what might be happening with regards to the adoption or resistance of AI technologies by major stakeholder groups, such as community leaders, cultural practitioners, and government officials.

By assessing constructs such as performance expectancy (e.g., perceived usefulness of AI for cultural site management), effort expectancy (ease of using AI platforms), and facilitating conditions (availability of training, infrastructure, and support), the study aims to determine the practical feasibility of embedding AI into the cultural tourism ecosystem. It also evaluates how social influence (peer and institutional pressure), hedonic motivation (enjoyment from interactive digital experiences), and price value (cost-benefit perceptions) affect adoption.

Such recent empirical research corroborates the applicability of UTAUT2 in tourism and heritage. According to Alizadeh and Chathoth (2021), AI use during virtual heritage tours was greatly determined among performance expectancy and social influence. According to Rahman et al. (2022), in rural Southeast Asia, the provision of conditions and digital literacy are key accelerators of AI invasion in the field of cultural heritage conservation. In the same sense, Kim and Shin (2023) pointed out that, once introduced correctly, AI technologies only boost visitor satisfaction and operational efficiency in heritage sites.

In Mount Kenya context, UTAUT 2 will enable the research to not only determine whether adoption of AI is taking place or not but also to determine why or why not. An example of low adoption may be because of digital illiteracy, prohibitive cost on implementation or there may be no institutional guidance. On the other hand, perceptions of AI having a positive effect in enhancing storytelling or boosting tourist experiences may lead to an increase in uptake provided that there are enabling conditions.

In conjunction with Systems Theory, UTAUT2 provides perspective on an understanding of technology integration in cultural tourism system in a behavioral lens. Systems Theory concerns itself with structural and relationship dynamics but UTAUT2 is concerned with the individual decision making as well as the organizational choice of adopting innovations. It also matches with the Resource-Based View (RBV) in line with the premise that an AI as a strategic technological resource will have to be embraced and utilized effectively in order to produce the competitive advantages.

Furthermore, UTAUT2 expands the scope of the Institutional Theory to make it applicable in understanding how an institutional pressure can influence the attitudes of stakeholders, towards AI, like a national tourism policy or donor-driven technology programs. These intersections enhance the multi-theoretical ground on which the study relies by providing an in-depth explanation of how culture and technology intersect.

UTAUT2 is an important theoretical pillar of this research, which will allow a detailed study of the mediating variable AI adoption and its influence on the correlation between sustainable cultural tourism paths and the socio-economic development. Using this model, the research determines primary enablers and obstacles associated with the technology adoption, analyses how cultural stakeholders are prepared to pursue digitalization, and provides recommendations that can help to facilitate this effort in the context of rural tourism in places such as the Mount Kenya.

INTEGRATED THEORETICAL FRAMEWORK

To give a broad-based foundation to the study of the dynamics of cultural tourism development within the Mount Kenya region, this research entails an integration of several theoretical levels. Coordinating six interconnected concepts, the Stakeholder Theory, Resource-Based View (RBV), Triple Bottom Line (TBL), Institutional Theory, Systems Theory, and UTAUT2, the paper provides a strong framework to investigate the relationship between the opportunities and challenges, as well as strategic routes and Artificial Intelligence (AI) adoption, regarding the selected socio-economic development outcomes. The identification of the opportunities within the cultural tourism; the cultural heritage, tourism demand, community-based tourism model and the public-private partnerships is premised on RBV that platforms these assets as valuable, rare, inimitable and not replaceable that have the capacity and opportunity of production of competitive power or advantage when adequately tapped (Barney, 1991). This is fortified by the Stakeholder Theory which stresses on the importance of broad-based partnership between the local communities, government, and private investors in the mobilization of such opportunities towards co-generation of value (Freeman, 1984). Conversely, (DiMaggio & Powell, 1983) proposed that infrastructural constraints, poor policy formations, and the marginalization of indigenous ethnicities should be set in the context of Institutional Theory of the state that demonstrates how institutional formations at formal and informal levels have the propensity to empower or restrict the development. These constraints are usually in form of ineffective governance patterns, policy incoherence or unbalanced stakeholder power relations.

Sustainable pathways as conceptualized by both TBL and Systems Theory can be seen as the mechanisms that can be used to translate the opportunities into the development outcomes. TBL highlights the necessity to pursue an economic, social and environmental balance of tourism growth (Elkington, 1997), and Systems Theory highlights the interrelationships between governance, community, resource management and environmental stewardship (von Bertalanffy, 1968). Such visions will make the study more than just focusing on individual factors but take into consideration the dynamic interaction between aspects in tourism ecosystem.

The use of AI itself is a mitigating factor since it turns hidden potentials and long-term practices into significant results. UTAUT2 (Venkatesh et al., 2012) is the main perspective one can use to comprehend which behavioral and structural issues are relevant when it comes to the adoption of technologies. Performance expectancy, effort

expectancy, and the facilitating conditions are the constructs that, to a certain extent, can be used to understand whether and how stakeholders, especially those in the rural and underserved settings, will adopt the use of AI tools in cultural documentation, virtual storytelling, or site management. AI also overlaps with the RBV, which places it a strategic technological asset, as well as Institutional Theory, where its regulatory preparedness and digital policy structure are significant to facilitating or prevent adoption. In addition, the Systems Theory can assist in the process of making AI adoption compatible with the reality of other parts of the tourism infrastructure in such a way that AI is aligned not only with local conditions but also with the capabilities of all stakeholders as well as business sustainability.

The final outcome of interest socio-economic development is represented as better livelihoods, higher income, cultural safeguard and social integration in the local communities. This is in line with TBL paradigm that requires a balanced assessment of the tourism effects in terms of social equity, economic sustainability and ecological stability.

The road between the independent variables (opportunities, challenges, sustainable strategies) to the socio-economic development is not direct; it depends on the quality and level of AI adoption. The embedded model will guarantee that technology is no longer viewed as a discrete intervention but as an intervening factor, which together with effective stake holding practices, a set of strong institutions and the strategic use of resources can serve to greatly increase the developmental role of tourism. This combined theoretical framework hence, brings together structured, behavioural, institutional and sustainability-based views to follow the conceptual model of the study. The role of specific theories within this process is a different one, although complementary in terms of throwing more light on the areas through which cultural tourism can spur socio-economic change in Mount Kenya. The combination of these theories carries the benefit of thoughtful, multi-dimensional construction of the research design, interpretation of data, and policy recommendations thus proving the study theoretically sound, contextually appropriate and with practical implication.

IMPLICATIONS FOR FUTURE RESEARCH AND PRACTICE

The use of several theoretical approaches in the specified work does not only add to the value of the conceptual awareness of cultural tourism development, but also provides a strong outline of practical stages of a research, such as data gathering and analysis. Each of the theories adds a different dimension in relation to the research design and provides an in-depth explanation of results. Indicatively, the stakeholder theory will be used in identifying the participants who will be engaged in the research process so that the community leaders, cultural practitioners, government officials, tourism operators and marginalised groups like the Ndorobo and Mukogodo will make equitable contributions. This inclusiveness will make the data gathered to be fair in terms of the multiple different lives and opinions of everyone participating in the cultural tourism ecosystem.

The selection and the measurement of the variables concerning the uniqueness, value, and the sustainability of cultural assets are informed by Resource-Based View (RBV). It highlights the importance of data capture practice, heritage sites, and community driven initiatives that define strategic assets of the Mount Kenya region. This theory justifies application of observation and structured questionnaire in evaluation of how these resources are being identified, preserved as well as converted in to tourism products. The theory of Triple Bottom Line (TBL) by facilitating the positive consideration of economic, social and environmental impact, contributes to structuring indicators of socio-economic development. It makes sure that economic performance is not the only factor that is being analyzed and that factors like social cohesion, cultural preservation and ecological sustainability are also analyzed. Institutional Theory is used as a way of looking at how governance, policy environments, and formal guide cultural tourism development either limit or enhance. It helps to develop interview questions and the analysis tools of the documents evaluating the correlation between the policy intentions and practice applied in tourism industry. The Systems Theory introduces an integrative approach due to the emphasis of interdependencies of such variables as infrastructure, policy, stakeholder behavior, and technology. This theory is used to conceptualize cultural tourism as dynamic system, hence offering a conceptual guide to the analytical framework to study the relationships between numerous factors relating to the tourism outcomes. Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) will be useful in the operationalization of adoption of Artificial Intelligence (AI) in the tourism sector. It confirms the detection of constructs of performance expectancy, effort expectancy, social influence, based on which the perception and

use of AI applications in the field of tourism marketing, digital storytelling, and heritage preservation by the stakeholders is condensed.

Combined, the theories can be relevant in future studies since they present a universal and flexible model that can be applied in other cultures. They as well can make apt suggestions to the development of tourism, digital inclusion, and policy planning. As an example, the combination of UTAUT2 and Systems Theory may allow considering the principle of AI-enabled policy innovation and models of participatory governance. Likewise, the use of TBL and RBV will promote co-designing of sustainable tourism strategies in order to promote local traditions with the help of technology to achieve greater impact.

CONCLUSION

The present theoretical review has formulated a plural theory of conceptualizing and assessment of sustainable development of cultural tourism in Mount Kenya region. Based on Stakeholder Theory, Resource-Based View, Triple Bottom Line, Institutional Theory, Systems Theory and UTAUT2, the study combines a multitude of, yet complementary views that define the conceptual and methodological framework. Every theory has its perspective: the Stakeholder Theory allows working collectively; RBV highlights the strategic importance of cultural resources; TBL allows prioritizing balanced developmental objectives; Institutional Theory introduces the role of regulation and governance; Systems Theory helps to build a connected analysis of tourism components; UTAUT2 throws light on the way technology is adopted, especially AI, in tourism systems. Combing these theories helps to enact a subtle analysis of the effects of opportunities, challenges, sustainable ways, and AI assimilation together on the socio-economic growth of cultural tourism. The present study can derive a great deal of practical, inclusive, and sustainable tourism policy and practice, in part due to the adoption of this multi-theory approach because it allows the study to ground its conceptual framework in existing bodies of knowledge. This would eventually lead to one that is more resilient and culturally anchored in its tourism form in the Mount Kenya region and possibly capable of providing reproducible expertise in comparison to other areas that were struggling with the same developmental problems.

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