Scene Reconstruction: A Study on the Integration of Lizhuang Baijiu Culture and Tourism with Digital Media

Haiyu Zhan

Yibin University, Yibin, Sichuan, China

Abstract: *This paper, from the perspective of language application and cultural communication, takes Yibin Lizhuang Baijiu (white liquor) cultural tourism as its research object, aiming to explore innovative paths for the integration of Baijiu culture and tourism in the digital media era. By analyzing the core mechanisms of scene reconstruction, it elucidates three types of digital scene innovation models: narrative enhancement, ritual interaction, and IP derivatives. It constructs a three-in-one communication system of "mechanism-strategy-evaluation" and extracts practical insights from typical cases. The research employs a combination of theoretical construction and case analysis to provide a new paradigm for the digital transformation of traditional cultural resources, contributing to the contemporary dissemination and value upgrading of Baijiu culture.*

Keywords: Digital Media; Lizhuang Baijiu (Chinese Liquor); Cultural Tourism; Scene Reconstruction.

1. INTRODUCTION

The development of digital technology has driven the integration of culture and tourism from " information transmission " to " experience generation, " and the digital dissemination of traditional culture has become a focus of academic attention. In foreign research, scene theory, as an important analytical framework for understanding the relationship between modern urban space, social interaction, and cultural practice, is centered on revealing how informal public spaces form cultural fields with social cohesion through continuous interaction between people and the environment. Ray Oldenburg's concept of "third space," proposed in 1989, constitutes the foundational contribution of this theory, emphasizing the key role of leisure and inclusive social spaces outside of the home (first space) and workplace (second space) in the cultural reproduction of democratic dialogue, community belonging, and daily life [1]. Scene theory emphasizes the synergistic construction of space, culture, and practice, providing a theoretical foundation for the innovation of cultural and tourism scenes. The proposal of the concept of "tourism field" marks an important transformation in domestic cultural tourism research from the traditional resource-oriented model to the experience-oriented paradigm. This theory emphasizes that the essence of cultural and tourism experience is not simply information transmission or visual viewing, but a subject-object interaction process generated in a specific space with the body as the medium and emotion as the core, namely "embodied emotional interaction." This understanding breaks through the previous framework of viewing tourism as a passive consumption behavior, and instead focuses on tourists' wholehearted engagement and meaning construction in cultural scenarios. Research shows that museums, historical and cultural blocks, and intangible cultural heritage performance spaces, through spatial narratives, sensory stimulation, and situational creation, construct highly immersive "tourism venues," enabling tourists to internalize cultural perception and stimulate emotional resonance through walking, touching, listening, and even participating in rituals [2]. Digital assets, as an emerging medium for cultural dissemination, are profoundly reconstructing the entire chain of cultural production, circulation, and consumption, becoming a key hub connecting government agencies, cultural units, technology companies, and the general public. This transformation is not only reflected in the innovation of tools at the technological level, but also in its promotion of a fundamental transformation of the logic of cultural dissemination—from one-way output to multi-party collaboration, and from static preservation to dynamic co-creation. Research shows that digital asset forms, represented by blockchain, NFTs (non-fungible tokens), and digital collectibles, are providing a new path for the value transformation of cultural heritage that is verifiable, traceable, and sustainable. In this process, the core value of digital assets lies in their construction of a "decentralized but trustworthy" interaction mechanism. Traditional cultural dissemination is often limited by the monopoly of discourse by authoritative institutions and the centralized control of dissemination channels. Digital assets, through smart contracts and distributed ledger technology, enable individual creators, community organizations, and even ordinary users to participate in the recreation and value distribution of cultural content on an equal footing. This model not only enhances the fluidity and openness of culture but also fosters a new ecosystem of "user-generated content-copyright confirmation

-revenue sharing." Empirical data shows that cultural co-creation projects based on digital asset platforms have an average user dwell time that is more than 3 times longer and an interaction rate that is nearly 5 times higher than that of traditional websites, demonstrating a stronger sense of immersion and belonging [3]. Currently, domestic and international research on digital cultural tourism focuses on technology application and scenario design. However, there is still a lack of specialized research on the digital scenario reconstruction logic and dissemination system construction of cultural carriers such as baijiu, which have both material and spiritual attributes. Existing research has failed to fully reveal the digital translation rules of implicit skills and historical narratives in baijiu culture and lacks a systematic discussion of the collaborative mechanism of " technology - culture - market ". Based on this, this paper takes the cultural tourism of Lizhuang Baijiu as a sample, and combines scenario theory and communication research to explore the digital transformation path of Baijiu culture, providing theoretical reference and practical guidance for the contemporary dissemination of similar traditional cultures.

2. SCENE RECONSTRUCTION: GENERATING AN IMMERSIVE EXPERIENCE FOR THE INTEGRATION OF LIZHUANG BAIJIU CULTURE AND TOURISM

In the digital media era, the core of cultural and tourism integration has shifted from "information transmission" to "experience generation," and scene reconstruction has become a key mechanism for achieving immersive experiences. It uses digital technology to creatively recreate physical and cultural spaces, construct interactive narrative fields, and promote the transformation of shallow cultural displays into deep narrative experiences [4]. Based on scene theory, this article takes the integration of Yibin Lizhuang Baijiu culture and tourism as an example to explore how it can achieve the organic combination of local culture and digital narrative through the spatial practice of virtual and real integration. In the context of the deep integration of contemporary culture and tourism, the Lizhuang Baijiu culture and tourism project, as a typical example of the inheritance and innovative development of Chinese wine culture, has its core value not only in the display of material forms, but also in achieving emotional resonance and meaning generation through the construction of "tourism fields." Scholar Xie Yanjun proposed that "tourism fields" are comprehensive perceptual fields formed by tourists' bodies and minds immersing themselves in a specific space, and their essence is an embodied emotional interaction structure. This theory emphasizes that the real tourism experience is not a process of passively receiving information, but the result of continuous interaction between the subject and the object [5]. In this process, environmental stimuli, sensory participation, cultural symbols, and individual memories intertwine, ultimately leading to the awakening of deep emotions and the self-construction of meaning. This perspective provides a key angle for understanding the integration of culture and tourism—successful cultural and tourism projects must transcend static displays and strive to create dynamic situations that can stimulate tourists' inner emotional responses. The dissemination of Lizhuang Baijiu culture is facing a critical juncture of transformation from "product output" to "experience output," and urgently needs to reshape its expression through the "tourism field" theory.

2.1 The Construction from Physical Space to Meaning Field

The essence of scene reconstruction lies in using digital technology to transform the traditional physical spaces of Lizhuang Baijiu production and display (such as cellars, workshops, and exhibition halls) into "meaning fields" that carry rich historical and cultural connotations. Its theoretical foundation stems from scene theory, which emphasizes that specific spaces, cultural values, and practical activities together constitute a "scene" that can evoke specific emotions and behavioral orientations [6]. In the context of cultural and tourism integration, scene reconstruction is not a simple digital simulation of the environment, but a profound "symbolic practice." It systematically selects, reconfigures, and narratively encodes material elements (such as ancient cellars and brewing equipment), technological behaviors (such as mixing, distillation, and tasting), and cultural symbols (such as wine etiquette, poetry, and historical legends) in Lizhuang Baijiu culture, thereby guiding tourists to naturally develop a sense of identity and emotional resonance with the regional characteristic wine culture in an immersive interactive experience.

The empowerment of digital media has greatly expanded the dimensions and depth of scene reconstruction. Technologies such as virtual reality (VR) and augmented reality (AR) have effectively broken through the physical and spatial limitations of traditional cultural and tourism scenes, creating the possibility of immersive experiences of "simultaneous time and different space" or "different time and simultaneous space". As scholars such as Yu Guoming pointed out, digital assets, through users' content creation, consumption and sharing, constitute a new hub connecting different subjects, reflecting the deep function of media as "connection of human relationships" [7]. For example, tourists can "step into" a recreated Ming Dynasty distillery through VR devices, witness and perceive

the entire process of ancient brewing, thereby transforming abstract historical knowledge into a tangible and concrete experience. At the same time, from the perspective of media rituals, collective participatory activities such as online cellar opening festivals and cloud sealing ceremonies planned based on digital platforms can connect scattered individual tourists into a temporary ritual community, strengthening cultural identity and social integration in shared symbolic practices. Therefore, the core significance of scene reconstruction lies in transforming Lizhuang Baijiu culture from a static, viewable display object into a dynamic, explorable, interactive, and even co-creatable meaning generation system, thereby truly driving the continuous generation of immersive experiences.

2.2 Scenario Innovation Driven by Digital Technology

Digital technology is the core driving force for innovation in cultural tourism scenarios, providing diversified practical paths for generating immersive experiences in Yibin Lizhuang Baijiu cultural tourism. Based on scenario theory, digital technology can not only reproduce space, but also deeply embed narratives, activate participation, and generate value. Its innovative practices can be mainly summarized into the following three paths.

1) Narrative Enhancement Reconstruction. This approach aims to enhance the narrative depth and emotional tension of physical space using digital technology. Huang Yonglin pointed out that digital technology, through "surreal" sensory reconstruction, can transform static cultural heritage into perceptible and interactive narrative texts [8]. For example, in the cultural tourism translation of the film "Godzilla-1.0", technical means were used to implant the image of the giant beast into the real street, creating an immersive field that carries historical metaphors [9]. For Lizhuang, augmented reality (AR) guides can be deployed at core sites such as ancient cellars and old workshops. Tourists can scan the real scene to overlay on their mobile terminals a scientific visualization simulation of the microbial activities in the cellar mud, oral history images of craftsmen from all dynasties, or dynamic interpretations of poems and inscriptions, thereby transforming the intangible brewing wisdom and humanistic spirit into an immersive "hypertext" narrative layer, deepening the understanding of living heritage.

2) Ritual Interactive Reconstruction. This approach focuses on guiding tourists from bystanders to participants in cultural practices through digital interactive design. The "participatory context" created by digital media reconstructs the relationship between users and content through a highly interactive and immersive technical architecture, transforming passive "viewers" into active "participants" who actively engage in the narrative process, thereby greatly enhancing the user's sense of presence and emotional investment. The core of this mechanism lies in transforming the traditional linear communication model into a multi-dimensional, dynamic feedback experience system, and its technical implementation path and psychological effects have been verified in multiple research fields. In the virtual reality (VR) environment, the design of immersive animation scenes clearly relies on the synergistic effect of three major elements: color, light and shadow, and digital information technology, in order to create a virtual world with a strong sense of spatial immersion and sensory realism [10]. This design not only simulates the visual characteristics of the physical world, but also guides the user's emotional response by precisely controlling environmental parameters. For example, the program "China in Intangible Cultural Heritage" allows the audience to deeply perceive the vitality of intangible cultural heritage by constructing interactive contexts and dialogue spaces with multiple characters [11]. In view of this, Lizhuang can design the "Tracing the Footsteps of the Wine Country" immersive story experience project. Visitors become "apprentices" in the physical space, receiving tasks via a mobile app, interacting with digital "master craftsmen," identifying yeast starters, and participating in virtual blending. This role-playing and task-driven ritualistic interaction transforms the transmission of skills from knowledge transfer into a tangible experience, allowing visitors to deeply appreciate the contemporary value of craftsmanship.

3) IP Derivative Reconstruction. This approach focuses on transforming local cultural resources into digital IP assets that can flow across media, expanding the spatial and temporal boundaries of the experience. Just as the Dunhuang Academy has transformed grotto art into new forms of products such as games and animation through digitization, achieving innovative dissemination and sustainable utilization of cultural heritage [12]. For Lizhuang Baijiu, a "Lizhuang Baijiu Digital Gene Bank" should be systematically constructed, and elements such as brewing process, historical documents, evaluation system, and vessel art should be standardized, digitally collected, and modularly packaged. On this basis, a series of digital products can be developed, such as online study tour apps, VR-based "cloud brewing" simulators, or digital collections embedded with local historical stories. This can not only enrich the dimensions of offline experience, but also build a "Lizhuang Wine Culture Metaverse" that transcends geographical limitations, is sustainable in operation and narrative, and promote the value extension and deep integration of cultural tourism IP.

2.3 Construction of Design Principles for Experience Generation

To ensure the effective generation and high-quality implementation of the immersive cultural tourism experience of Lizhuang Baijiu, theoretical insights and practical experience need to be transformed into systematic design principles. These principles aim to guide the construction of specific scenarios, making them both innovative in digital technology and profound in humanistic experience.

1) Narrative Embedding Principle. Technological applications must deeply serve cultural narratives, ensuring that digital expression is integrated with the history, techniques, and spiritual value of Lizhuang Baijiu. Visual, interactive, and auditory elements in the scene should constitute a coherent narrative text, avoiding the alienation of meaning caused by the accumulation of technology. Narrative integrity depends on the fusion and structured organization of multi-source heterogeneous data. Modern cultural exhibition projects often need to integrate various information types such as archaeological data, oral history, document archives, image materials, and physical remains, and knowledge graph and semantic modeling technologies provide strong support for this. By using RDF graph models to perform distributed vector representation of the semantic information of cultural projects, and using fine-grained translation distance models such as TransH to optimize its mapping accuracy in continuous vector space, intelligent association and dynamic reasoning between different cultural elements can be realized [13]. Such methods can not only reveal hidden cultural contexts, such as the deep connection between a certain brewing technique and local beliefs, geography, and climate, but also support the automatic generation of personalized tour routes to meet the knowledge background and interest preferences of different audiences.

2) The Principle of Sensory Synergy. Immersion stems from the integration of multi-sensory perception. Scene design should transcend visual dominance and systematically engage multiple senses such as hearing, smell, and touch. For example, in the "Moonlit Lizhuang" night tour scene, a soundscape system (simulating river sounds and insect chirps), environmental fragrance (a complex aroma of wine lees and vegetation), and objects with specific tactile qualities (such as rough pottery wine vessels) can be designed simultaneously to construct the poetic atmosphere of "raising a cup to invite the moon," enhancing the immersion of the experience and the persistence of emotional memory.

3) The principle of co-creation. Digital scenarios should be constructed as open "writable text" to encourage tourists to transform from bystanders into participants and co-creators. This can be achieved through gamified tasks (such as clue-based puzzles based on the brewing process) and UGC platforms (for tourists to share tasting notes and creative videos), which can stimulate active exploration and meaning co-creation, and deepen cultural identity through interactive practices.

4) The principle of symbiosis between the virtual and the real. The online digital layer and the offline physical layer need to achieve seamless connection and complementary meaning. With the help of technologies such as LBS and image recognition, digital content such as historical images and data visualizations can be naturally integrated into the real space based on the visitor's location and environmental context, forming a smooth and uninterrupted experience flow, and realizing the deep integration and mutual interpretation of virtual information and real scenes.

In conclusion, scene reconstruction following the above principles is key to transforming the cultural heritage of Lizhuang Baijiu into an immersive, interactive, and sustainable experience. It requires a narrative-driven approach, sensory engagement as the medium, participation as the pathway, and integration as the setting, ultimately constructing a vibrant digital cultural tourism space that promotes the value transformation and industrial innovation of cultural heritage.

3. INTEGRATION AND CREATION: CONSTRUCTING THE COMMUNICATION PATH OF LIZHUANG BAIJIU CULTURAL TOURISM UNDER DIGITAL MEDIA

After reconstructing the immersive experience of Lizhuang Baijiu culture through digital media, the effectiveness of its cultural tourism integration ultimately depends on a systematic and sustainable communication path. This section, based on the core principles of "integration" and "creation," constructs an integrated communication model encompassing three levels: operational mechanisms, implementation strategies, and effect evaluation. This

model not only elucidates the dynamic transmission patterns of cultural value and tourism experience within the digital ecosystem but also focuses on exploring how to stimulate the participation and co-creation of diverse stakeholders, thereby propelling Lizhuang Baijiu cultural tourism from static resource display to a dynamic cycle of meaning and value enhancement.

3.1 Mechanism Creation: the Co-evolution of Interaction, Circulation and Meaning

The mechanism of communication empowered by digital media has changed from the traditional linear "transmission" mode to an "interaction and creation" mode involving multiple subjects. The core of this mechanism is the interactive cycle based on digital availability. The interactivity, connectivity and data availability of digital media have completely changed the relationship between the sender and receiver. The communication process has been transformed into a many-to-many interactive mode, and the dissemination of information has changed from the traditional one-to-many unidirectional flow to a many-to-many interactive mode. The receiver of information can directly respond, comment, share and recreate information, thus forming a highly dynamic and participatory communication environment. One of the research focuses of Communication Studies 2.0 is user behavior on social media platforms, focusing on how users interact and share content, and how these interactions affect the formation of social networks and the generation of opinions [14]. For Lizhuang Baijiu Cultural Tourism, communication is no longer a one-way information indoctrination from institutions to tourists, but an open field of meaning negotiation constructed through digital platforms (such as official mini-programs, social media accounts, VR experience terminals).

Under this mechanism, the dissemination process exhibits a typical "cyclical" nature. For example, UGC (user-generated content) of tourists' wine tasting experiences shared on social media, through algorithmic recommendations and community interactions, is fed back to the dissemination entity, becoming valuable data for optimizing narrative strategies. Tourists' interactive behavior data in immersive scenarios (such as path selection in VR winemaking experiences) can also be used to adjust the narrative pace and difficulty of the scene in real time, achieving personalized experiences. The essence of this mechanism is the continuous interaction and co-evolution of meaning among cultural texts, technological interfaces, and user behavior. It makes the dissemination of Lizhuang Baijiu culture no longer a static replication of knowledge, but a dynamic and constantly enriching process of "cultural creation." As emphasized when discussing urban communication, communication is a process of weaving a network of relationships and co-creating local meaning. The ultimate goal of Yibin Baijiu cultural tourism dissemination is precisely to weave a "network of meaning" connecting history and the present, industry and consumers, and the local and the global through digital media.

3.2 Strategy Integration: A multi-layered, Multi-touchpoint Integrated Communication Matrix

Based on the aforementioned interactive creation mechanism, the communication strategy for Yibin Baijiu cultural tourism should be a matrix-style solution that integrates online and offline channels and coordinates short-term promotion with long-term operation.

Core Layer: IP-based Narrative and Asset Accumulation. Lizhuang Baijiu must be positioned as a powerful cultural IP and operated systematically. This includes constructing a clear IP worldview (such as "Wuliangye's ecological philosophy") and establishing a "digital cultural asset library," standardizing and labeling resources such as brewing techniques, historical documents, and images of master craftsmen. This aims to provide a sustainable source of material for all communication activities, ensuring the consistency and depth of the cultural narrative.

The middle layer: Cross-media storytelling and scene penetration. Utilizing cross-media narrative theory, the unified IP core is broken down into "storytelling flows" suitable for different platforms. On short video platforms like Douyin and Kuaishou, the focus is on visually spectacular content that "explains a craft in 15 seconds"; on in-depth reading communities like WeChat Official Accounts and Zhihu, long-form articles such as interviews with master brewers and demystifying the flavors of baijiu are published; on youth culture communities like Bilibili, interactive content such as creating traditional Chinese-style cocktails with baijiu can be developed in collaboration with content creators. Offline, AR QR code guided tours and immersive theaters achieve a seamless connection between digital narratives and physical spaces, forming a multi-touchpoint scene penetration.

The outer layer: Community operation and ritual co-creation. The key lies in cultivating a highly engaged user community. This can be achieved by establishing a baijiu (Chinese liquor) tasting member system and organizing

online tasting events and offline winery visits－activities with a media ritualistic nature－to strengthen community belonging and identity. Encouraging UGC creation and sharing within the community, and feeding excellent content back into the core layer's IP narrative, forms a closed loop from "dissemination" to "co-creation."

3.3 Evidence-based Evaluation: A Quantitative and Qualitative Assessment System

The evaluation of communication effectiveness needs to go beyond simple traffic metrics and build a comprehensive evaluation system that integrates quantitative data and qualitative insights in order to achieve continuous optimization of communication strategies.

Quantitative Dimension: In-depth Analysis of Behavioral Data. Beyond basic metrics like exposure, click-through rate, and visitor traffic, greater emphasis should be placed on engagement metrics, such as average VR experience duration, interactive task completion rate, AR QR code reuse rate, and secondary dissemination rate of community content. These data accurately reflect the depth of user interaction with the disseminated content. By analyzing user profiles and behavioral patterns through big data, precise content delivery and personalized iteration can be achieved.

Qualitative Dimension: Measuring Meaning Reception and Cultural Identity. Quantitative data must be combined with qualitative research to assess the deeper effects of cultural dissemination. Cyberethnography methods can be employed to deeply analyze user discussions about Lizhuang Baijiu on social media, gaining insights into their emotional attitudes and interpretations of cultural meaning. In-depth interviews and focus groups can be used to explore changes in tourists' cultural perception and emotional identification with Lizhuang Baijiu before and after their experience. This assessment aims to answer a core question: Does the dissemination truly promote users' understanding and value identification with the cultural connotations of Lizhuang Baijiu?

By establishing this three-pronged communication path of "mechanism-strategy-evaluation," the integration of Lizhuang Baijiu culture and tourism can truly leverage the power of digital media to achieve creative transformation and innovative development from cultural resources to experience economy, and from local brand to contemporary IP.

4. THE PRACTICAL LANDSCAPE OF DIGITAL MEDIA EMPOWERING LIZHUANG BAIJIU CULTURAL TOURISM

After completing the theoretical framework construction and path design, this paper presents the practical forms, innovative models and core insights of digital media empowering the integration of culture and tourism in Lizhuang Baijiu through in-depth analysis of typical cases. It aims to provide empirical support for the theory and provide a reference for similar practices.

4.1 Strategic Path: Lidu Winery's Digital Transformation of "Immersive Experience"

Jiangxi Lidu Winery's digital transformation provides a strategic path model for Lizhuang Baijiu cultural tourism, transforming it from a production site to an experiential space. By introducing digital facilities and equipment, along with technologies such as the Internet of Things and VR/AR, Lidu Winery has developed a digital marketing management system encompassing "digital infrastructure-connection-online-data accumulation - analysis - marketing strategy," upgrading the traditional winery into an "immersive experience park." In strengthening the narrative of Baijiu culture and constructing integrated wine-tourism scenarios, Lidu Winery actively explores combining Baijiu culture with digitalization to increase the influence and customer satisfaction of immersive experiences at wine-tourism destinations, maximizing traffic and conversion rates [15].

The key to its implementation lies in three aspects: First, constructing a fully perceptive intelligent experience environment. Deploying a sensor network within the factory area monitors and visualizes key data such as cellar temperature and humidity in real time, transforming invisible microbial activity into a "living narrative" that visitors can perceive. Second, creating a deeply interactive and ritualistic experience process. Designing a "Baijiu Tasting Expert" experience course allows visitors to observe the microscopic structure of the liquor through AR devices and personalize their own liquor through an intelligent matching system, transforming the tasting experience into a deeply engaging activity with a sense of ritual and personal imprint. Third, achieving integrated online and offline user operations. Through a digital membership system, offline visitors are transformed into

online community members, continuously pushing brewing knowledge, seasonal tasting suggestions, and encouraging UGC sharing to form a sustained interactive relationship.

The success of the Lidu model validates a key path for the integration of liquor and cultural tourism: the empowering value of digital media lies in transforming the production backend into the experience frontend, technical parameters into readable narratives, and one-time consumption into sustainable user relationships. Its implication is that the digital transformation of Lizhuang liquor tourism must transcend the level of "online promotion" and undergo a systematic business restructuring centered on user experience.

4.2 Innovative Models: Paradigm Inspiration from "Film and Game Integration" and "Digital Silk Road"

Besides the case of the liquor industry itself, digital cultural tourism practices in other fields have also provided important models for reference, mainly reflected in the narrative innovation of "film and game integration" and the resource transformation of "digital Silk Road".

The "film-game fusion" model, for example, uses 5G holographic projection and directional sound waves to precisely translate cinematic imagery into a perceptible urban spatial narrative. Its inspiration lies in the ability of digital media to overlay fictional narratives with physical space, creating a surreal, immersive experience. For Lizhuang, this model can be adopted, utilizing augmented reality technology to overlay historical scenes such as ancient wine transport and street wine sales in ancient streets, alleys, and wharves, allowing tourists to "travel" through time within the real-world geography and revitalizing the historical narrative.

The Dunhuang "Digital Silk Road" project showcases a paradigm for the sustainable utilization and innovative dissemination of cultural resources. Through high-precision digital scanning and 3D reconstruction technologies, fragile murals and sculptures are transformed into digital assets that can be permanently preserved and infinitely replicated, upon which derivative content such as games and animations can be developed. The core of this model is the digitization and IP development of resources. The wealth of non-textual knowledge contained in the Lizhuang Baijiu culture (such as the tacit knowledge of brewers' "feel" and "listening to the flowers") can draw inspiration from this approach. Through motion capture, data visualization, and other technologies, it can be digitally preserved and translated, constructing a "digital gene bank" for Yibin Baijiu, providing an inexhaustible core resource for future creative derivatives.

Both models point out that the key to digital media empowering cultural tourism innovation lies in breaking the binary opposition of "real/virtual" and "protection/utilization," and realizing the creative transformation of cultural resources and the revolutionary expansion of narrative dimensions through technology.

4.3 Key Insights: Success Factors and Potential Challenges

Based on the above cases, we can extract the key elements for the success of digital media in empowering Yibin Baijiu cultural tourism and the potential challenges that need to be addressed.

The key to success lies in three points: First, a precise grasp of the cultural core. Whether it's Li Du's experience design or Dunhuang's digital archiving, the prerequisite for success is a deep understanding and clear positioning of its own cultural value (such as the ecological value of the ancient cellars and the artistic value of the murals). Technology must serve to strengthen, not dilute, this core. Second, innovative integration of technology across scenarios. Success is not about pursuing the most cutting-edge technology, but about choosing the most suitable combination of technologies for a specific scenario (such as Li Du's IoT sensing -AR appreciation) to achieve a seamless and natural experiential integration. Third, the sustainability and openness of operations. Digital transformation is not a one-time event; it requires establishing a continuous content update mechanism (such as the continuous digitization of Dunhuang) and an open UGC ecosystem (such as Li Du's community operations) to maintain the project's vitality.

Potential challenges include: First, the risk of cultural distortion in translation. When converting implicit and complex traditional culture (such as the experiential philosophy in winemaking techniques) into digital symbols, there is a risk of simplification and misinterpretation, necessitating the establishment of a rigorous academic advisory mechanism. Second, the ethical and cost-balance of technology application. Over-reliance on virtual experiences may diminish respect for authentic cultural heritage, and the high R&D and maintenance costs pose a challenge to sustainable operation. Third, the threat of homogeneous competition. As VR/AR and holographic

projection become standard features in cultural tourism, the Lizhuang project must find its unique narrative and experiential core that distinguishes it from other baijiu-producing regions, avoiding falling into homogeneous technological competition.

In conclusion, this case study demonstrates that digital media has opened up vast opportunities for the cultural tourism of Lizhuang Baijiu, but its success is by no means solely due to technology. It profoundly relies on a deep understanding of cultural values, the creative application of technological logic, and systematic innovation in operational models.

5. CONCLUSION

This paper takes Lizhuang Baijiu (Chinese liquor) cultural tourism as a core sample, and from the perspective of language application and cultural communication, systematically constructs a theoretical framework and practical path for digital media to empower the integration of Baijiu cultural tourism. The study clarifies that scene reconstruction is the core mechanism for generating immersive experiences. Through three innovative models-narrative enhancement, ritual interaction, and IP derivatives-it realizes the transformation of Baijiu culture from physical space to a meaningful field, and relies on four design principles-narrative embedding, sensory synergy, etc.-to ensure experience quality. Simultaneously, it establishes a three-in-one communication system of "mechanism-strategy-evaluation," and, combined with cases such as Lidu Winery and Dunhuang's "Digital Silk Road," extracts three key success factors: precise grasp of cultural core, scenario-based integration of technology, and open and continuous operation, providing a referable paradigm for the digital transformation of traditional culture. Future research could further focus on cutting-edge technology applications, exploring the practical boundaries and ethical norms of AIGC and metaverse in the translation of tacit knowledge in Baijiu culture; conduct comparative studies of digital cultural tourism across regions and categories to extract universal dissemination patterns; deepen research on the dynamic mechanism of cultural identity generation, and improve the comprehensive evaluation model that combines quantitative and qualitative approaches, providing more solid theoretical support and practical guidance for the contemporary revitalization and sustainable dissemination of traditional regional cultures.

ACKNOWLEDGMENTS

REFERENCES

[1] Russell R D. How Organizational Culture Can Help to Institutionalise the Spirit of Innovation in Entrepreneurial Ventures [J]. Journal of Organizational Change Management, 1989, 2(3): 7–15.

[2] Chen Bo, Yan Shuning. A Study on the Production Mechanism of Museum Cultural Tourism Space from the Perspective of Experience - An Exploratory Analysis Based on Museum Travelogue Texts [J]. Journal of Shandong University (Philosophy and Social Sciences Edition), 2024(5):22-34.

[3] Chen Ganghua, Lin Xiaojie. Classification of cultural tourists and its implications for heritage site management [J]. Studies in Natural and Cultural Heritage, 2022, 7(4): 48-54.

[4] Bai Xiaoqing. A Study on Immersive Narrative in Digital Cultural Tourism Space [J]. Journal of Shandong University (Philosophy and Social Sciences Edition), 2024(04):35-44.

[5] Xu Ying, Xie Yanjun, Wei Yindong. The Construction of the Category of Tourist Sites: A Speculation from the Perspective of Embodied Experience and an Empirical Study of Grassland Tourist Sites [J]. Economic Management, 2018, 40(10): 140-155

[6] Song Yifang. Scenario-based design: Reconstructing digital learning paths in communities [J]. Vocational Education Forum, 2022, 38(03):73-82.

[7] Yu Guoming, Chen Xuejiao. Digital Assets: A New Medium in the Metaverse Era - The Activation, Integration and Reconnection of the Communication Value Chain by Digital Assets [J]. Publishing and Distribution Research, 2022, (07): 21-29.

[8] Kang Penghui, Zhang Yuanyu, Lu Renjie. Research on the path and countermeasures of digital empowerment for the innovative development of cultural industry [J]. China Collective Economy, 2025, (19): 142-145.

[9] Liu Xinmao. Interaction of Multiple Subjects in the Narrative of European and American Science Fiction Films [J]. Film Review, 2021, (10): 105-108.

[10] Xu C. RETRACTED ARTICLE: Immersive animation scene design in animation language under virtual Reality [J]. SN Applied Sciences, 2022, 5(1).

[11] Zhang Zihan. China in Intangible Cultural Heritage: Building Cultural Identity in the "Revitalization" of Intangible Cultural Heritage [J]. Journal of China Radio and Television Studies, 2023, (10): 42-45.

[12] Wu Jian. A New Model for the Presentation of Cultural Heritage by Digital Art—Taking the Concept and Visual Communication of Digital Dunhuang Exhibition as an Example [J]. Art Observation, 2022, (10): 18-22.

[13] Lian J, Liang D. Innovation and Integration Development of the Cultural Industry Based on Mapping Knowledge Domains [J]. Computational Intelligence and Neuroscience, 2022, 2022: 1–8.

[14] Zheng En, Zhao Mao. Ontological Breakthrough and Epistemological Transformation of New Quality Communication Power: Conceptual Connotation, Theoretical Basis and Future Trends [J]. Journal of Southwest University for Nationalities (Humanities and Social Sciences Edition), 2025, 46(04): 145-157.

[15] Li Mingyu. The mechanism and realization path of the role of Baijiu culture in promoting the integrated development of wine and tourism - a case analysis based on Lidu Winery [J]. China Brewing, 2024, 43(10):288-297.

Author Profile

Haiyu Zhan   Associate Professor, Yibin University, Research Interests: Cultural Communication