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Research on Digital Communication Strategies for Shenyang Intangible Cultural Heritage Based on Information Space Theory

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Abstract:
The digital dissemination of intangible cultural heritage (hereinafter referred to as "ICH") is an important component of the cultural digitization strategy. However, local practices generally face the systemic dilemma of numerous activities and limited accumulation. This paper takes Shenyang's ICH as the research object, systematically introducing the three-dimensional framework of encoding-abstracting-diffusing from information space theory and four types of Typical regional types are explored to deeply elucidate the adaptive relationship between this theory and the digital dissemination of intangible cultural heritage. Through layered diagnosis, it is found that the core issue of digital dissemination of intangible cultural heritage in Shenyang is not a single technical shortcoming, but a chain imbalance: inconsistent resource collection standards and a lack of precipitation mechanism at the encoding layer; superficial display rather than deep knowledge explanation at the abstraction layer; insufficient platform collaboration and absence of a backflow mechanism at the diffusion layer. The three links are disconnected and mutually exacerbated, resulting in pulsed fluctuations in dissemination that are difficult to sustain.To address the chain imbalance, layered governance is required. This paper proposes a strategic system of encoding first, abstraction second, and diffusion later: the encoding layer needs to establish metadata norms and activity archiving systems, consolidate the foundation of digital assets, and implement tiered opening for different regional types; the abstraction layer needs to construct a five-layer explanation framework of overview-process-standard-context-participation to promote the transformation from being viewable to understandable; the diffusion layer needs to build a platform matrix and participation loop with a unified backflow mechanism to achieve the transition from instantaneous exposure to sustainable precipitation. The research verifies the cross-scenario applicability of information space theory in the field of public cultural dissemination, expands the chain governance analysis model, and provides an operable roadmap for the digital dissemination of local intangible cultural heritage to move from activity-based to asset-based.

Keywords:
Intangible Cultural Heritage; Digital Communication; Cyberspace Theory; Chain Imbalance; Shenyang

1.Introduction

China's protection of intangible cultural heritage (ICH) has spanned two decades, with the policy focus

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shifting from rescue-oriented protection to dynamic inheritance and productive protection. Simultaneously, the iteration of digital technology has reshaped the production and distribution of cultural content. Mechanisms such as short videos, live streaming, social media, and algorithm-based recommendations have profoundly altered the pathways through which the public engages with cultural resources.As a dynamic cultural practice with the basic form of "people-skills-field," ICH has not only gained unprecedented dissemination opportunities but also faced new vulnerabilities. Although digital media have lowered the threshold for ICH to be seen and discussed, the fragmentation, entertainment, and traffic-oriented nature of platform dissemination may also lead to the simplification of ICH knowledge into consumable symbols, the abstraction of traditional contexts, and even the emergence of a dissemination paradox characterized by rising popularity, insufficient understanding, and diluted meaning.

Shenyang boasts abundant intangible cultural heritage resources, with 260 representative projects at or above the municipal level, including those at the national level There are 11 national-level and 40 provincial-level intangible cultural heritage (ICH) items, covering diverse categories such as Northeast Drum, Liaoning cuisine cooking skills, Laolongkou Baijiu brewing, and the religious beliefs and customs of the Xibe people's Xili Mama. These constitute a rich treasure trove of ICH in Northeast China. However, the digital dissemination of ICH in Shenyang also faces deep-seated challenges: some project materials are not systematically collected and recorded, platform dissemination primarily focuses on short, simple, and fast-paced content, there is insufficient connection between online and offline activities, and the integration of digital media is inadequate. These issues collectively manifest as a tension between event-driven prosperity and asset-based accumulation, that is, there are many activities and high exposure, but the content is difficult to reuse, comprehension is difficult to generate, and participation is difficult to sustain.

Existing research has primarily focused on the application of single technologies or platform practices, lacking a systematic diagnosis of the entire communication chain. This paper introduces the "encoding-abstraction-diffusion" three-dimensional framework of Information Space Theory (I-Space) to conduct a layered diagnosis, mechanism explanation, and strategy construction for the digital communication of Shenyang's intangible cultural heritage. The aim is to answer the following questions: What structural imbalances are currently present in the digital communication of Shenyang's intangible cultural heritage? How does Information Space Theory explain the generation and transmission logic of these imbalances? What layered governance strategies should be constructed to achieve the transformation from event-based promotion to asset-based communication?

2.The Current Status and Issues of Digital Communication of Intangible Cultural Heritage in Shenyang

2.1 Characteristics of Shenyang's intangible cultural heritage resources and their constraints on digital dissemination

Shenyang's intangible cultural heritage presents a composite structure in terms of type composition, encompassing performing arts, folk literature, social practices and folklore, traditional skills, traditional sports, and medicine. Among them, traditional skills projects account for a prominent proportion, including Laolongkou

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Baijiu brewing, Liaoning cuisine cooking, Hu Kuizhang's pen making, Li's sugar figurine, Manchu embroidery, etc. From the perspective of spatial distribution, there are roughly three types of logic: first, historical districts - core business district agglomeration (such as Zhongjie and Fangcheng), second, specific areas - relying on traditional fields where ethnic groups live together (such as the Dongling Manchu and Xibe ethnic groups' settlements), and third, workshops - industries —Workshop network distribution (decentralized production space for craft-related projects).

This resource characteristic imposes three constraints on digital dissemination. Firstly, knowledge in craft-based projects is highly dependent on physical experience and apprenticeship, with tacit knowledge playing a dominant role. Digital dissemination cannot merely showcase finished products; it must also present the process and techniques involved Process and judgment criteria impose high demands on the explanatory power of the abstraction layer. Secondly, spatial dispersion leads to diverse collection subjects and inconsistent equipment conditions. Without unified standards, resource integration will face structural obstacles, which is the core issue that the coding layer needs to address. Thirdly, some projects exhibit characteristics of fiefdoms or clans (family secrets, internal knowledge of ethnic groups), and their knowledge boundaries are inherently closed. Digitalization and openness require careful handling of ownership and boundaries, which necessitates the establishment of a hierarchical openness mechanism by the coding layer.

2.2 The chain imbalance in the digital dissemination of Shenyang's intangible cultural heritage

Based on the three-dimensional framework of information space theory, a layered diagnosis of the digital dissemination of Shenyang's intangible cultural heritage reveals the following core issues:

2.2.1 At the coding level: inconsistent collection standards and insufficient resource integration

Shenyang's digital content related to intangible cultural heritage is not scarce, with continuous information increment generated through government platform releases, venue promotions, event reports, as well as We-Media and short video clips by inheritors. However, the problem lies in the lack of unified standards for the collection methods, file formats, naming conventions, field descriptions, and copyright annotations of these contents. The names, classifications, and descriptions of the same project presented on different platforms are inconsistent; a large amount of material generated during festival activities is mostly released in a short-term information flow manner, lacking archiving entries and metadata planning. After the event ends, the content quickly sinks to the botto making it difficult to retrieve, call, and reuse.

From the perspective of information space theory, insufficient encoding means that information cannot be structured and governed, making it difficult to proceed to subsequent abstraction and diffusion stages. Deficiencies in the encoding layer directly lead to three consequences: firstly, resources are difficult toaccumulate into city-level digital assets of intangible cultural heritage, resulting in almost starting from scratch for each event promotion; secondly, it is difficult to share and cross-reference between platforms, affecting cross-platform collaboration and long-term entry construction; thirdly, the lack of ownership and authorization annotations poses risks to content reuse, and social forces' participation in secondary development lacks institu-

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tional prerequisites.

The deeper reason lies in the mismatch of governance models.The bureaucratic logic emphasizes top-down standardization and the presentation of phased achievements, with insufficient investment in procedural collection norms and long-term archiving mechanisms across subjects and platforms. On the other hand, projects in the fiefdom and clan areas are cautious about detailed recording and open sharing, considering the confidentiality of skills and the protection ofownership. These two governance logics create tension at the coding end: on the one hand, the bureaucratic logic's demand for uniformity makes it difficult to penetrate the core knowledge of fiefdom projects; on the other hand, the demand for boundary protection reinforces low-intensity coding that is "releasablebut not easily archivable". The issue at the coding layer can be summarized ascontent being present but difficult to precipitate into retrievable, reusable, andgovernable resource assets.

2.2.2 At the abstract level: narrative fragmentation and absence of an explanatory system

Taking the craftsmanship of Li's sugar figurine in Shenyang as an example, the most popular videos on short video platforms about this project are all 15-second quick clips of sugar figurines being blown into three-dimensional shapes. The high-frequency words in the comment section are "amazing" and "want to eat", but none of the videos explain: what is the key to the sugar ratio?How to control the temperature and airflow during blowing? What are the auspicious meanings behind different shapes? Similar situations are prevalent in the dissemination of intangible cultural heritage in Shenyang

Taking the craftsmanship of Kuizhang writing brushes as an example, relevant short videos often showcase the exquisite appearance of finished brushes or distant shots of craftsmen in the process of making brushes. However, the implicit knowledge that determines the core of the craftsmanship, such as how to judge the standard of uniformity during the trimming process and how water temperature and time in the basin process affect the quality of the brush tuft, has never been visually presented.

From a broader narrative perspective, the dissemination of Shenyang's intangible cultural heritage lacks a core narrative framework capable of integrating fragmented information. Content production across different channels operates independently, lacking cross-media collaborative narrative design. The underlying reason lies in the fact that content production is driven by specific tasks such as short-term activities and project applications, rather than based on a long-term narrative strategy for urban cultural branding. The abstract dimension of information space theory provides a diagnostic tool here: the task of the abstract layer is precisely to organize encoded data into an understandable knowledge structure, but current dissemination is severely lacking in this aspect. The issue with the abstract layer can be summarized as follows: dissemination can beseen, but it is difficult to understand.

2.2.3.Diffusion level: Weak platform collaboration and inadequate participation mechanism

At the diffusion level, the channels for the digital dissemination of Shenyang's intangible cultural heritage are not singular. Government new media, public cultural venue accounts, short video platforms, and the online promotion of offline activities can all provide a certain degree of reach. However, the structural issue of diffusion lies in insufficient platform collaboration and weak participation mechanisms.

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Firstly, there is a lack of clear division of labor and stable feedback mechanisms among multiple platforms, leading to a phenomenon where each platform develops its own content without linking to each other, resulting in dissemination that reaches the target audience but fails to form long-term entry points and content accumulation. Secondly, dissemination is primarily dominated by official releases, with social creators, vertical communities, and local interest groups not effectively incorporated into the dissemination chain. Interaction mostly remains at the level of likes and reposts, lacking sustainable co-creation and community retention mechanisms. Thirdly, there is insufficient connection between online dissemination and offline experiences, lacking an institutionalized path to convert online attention into offline visits, course participation, and continuous subscriptions, resulting in a low conversion rate from popularity to participation.

From the perspective of the diffusion dimension in information space theory, effective diffusion is not the result of one-way dissemination, but relies on the formation of a closed loop of reach-interaction-settlement within social networks. The current diffusion dilemma in Shenyang lies in the lack of a receiver: there is neither a backflow and archiving mechanism centered around a fixed entry point, nor an institutional design that transforms the public into participants. The problem with the diffusion layer can be summarized as the ability for communication to occur, but the difficulty in settling into stable relationships and long-term participation.

2.2.4 Transmission mechanism of chain-like imbalances

The issues at the aforementioned three levels do not exist in isolation but are interconnected and mutually exacerbating. The insufficient accumulation of resources at the encoding level leads to a lack of material foundation for deep interpretation at the abstraction level, which can only rely on scattered activity fragments for superficial display. The absence of an interpretation system at the abstraction level results in content reaching the diffusion level lacking cognitive depth, with audiences remaining at the level of admiration rather than understanding, making it difficult to form stable revisits and participation.The lack of a backflow mechanism at the diffusion level further prevents the material collected at the encoding level and the interpretations constructed at the abstraction level from obtaining social validation and iterative momentum, resulting in a long-term state of low-level repetition. The fracture between these three links forms a vicious cycle, which is precisely the core dilemma of digital communication of intangible cultural heritage in Shenyang, namely, a chain imbalance.

3. Strategic Construction of Digital Communication of Intangible Cultural Heritage in Shenyang

Based on the aforementioned diagnosis, addressing the imbalance in the chain requires layered governance, and must follow the logical sequence of encoding first, then abstraction, and finally diffusion. The encoding layer addresses the issue of resource retention, serving as the foundational project for stopping the bleeding; the abstraction layer addresses the issue of audience comprehension, representing the transformation project for generating blood; and the diffusion layer addresses the issue of inconsistent dissemination, constituting the ecological project for activation. These three layers of strategies are interdependent and cannot be reversed.

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3.1 Encoding level: strengthening the foundation of digital resources

The core task of the coding layer is to facilitate the transformation from "scattered materials" to "governable assets", while simultaneously considering the knowledge boundaries and ownership demands of different regional types.

3.1.1.Establish a minimum metadata field system

It is recommended to develop the "Shenyang Intangible Cultural Heritage Digital Resource Metadata Specification", which covers the following core fields: project name and alias, category attribution, district and county where located, site, inheritor/protection unit, keyword tags, content resource index (video/image/audio), ownership and authorization status, collection time and location. Once this set of fields is established, digital content from different sources and formats will have a unified description framework, making cross-platform aggregation and retrieval possible. For projects with strong bureaucratic attributes, metadata can be more detailed; for projects in the fiefdom, necessary ambiguity can be retained in the public fields.

3.1.2 Establish an archiving mechanism for event content

For node-based communication activities such as municipal intangible cultural heritage expositions, heritage days, neighborhood events, and campus and community visits, the digital content produced, including videos, graphics, and reports, should be organized into a long-term accessible collection page and stable links within a unified portal (such as the "Easy Travel Shenyang" mini-program), and relevant project information and location information should be stored and linked. The purpose of this mechanism is to transform node-based, one-time communication outputs into sustainable resources, fundamentally addressing the issue of content disappearing after the event ends.

3.1.3 Introducing a hierarchical opening and ownership governance mechanism

For projects of different regional types, differentiated open strategies should be established. For family-secret-passed-down projects with distinct characteristics of the fiefdom, restricted access and authorized use should be implemented. The public content should be limited to basic information and representative achievement displays, and the core process flow should only be open within the scope authorized by the inheritor. For ethnic group projects with distinct characteristics of the clan area, digital resources can be open to the community, and a review and update mechanism for community participation should be established. For directory systems and research results with strong bureaucratic attributes, standardized openness should be adopted. For projects with strong market attributes and a foundation for industrial transformation, a higher degree of open sharing should be adopted under the premise of clarifying ownership and licensing agreements, in order to promote cultural and creative development and secondary creation.

At the same time, a comprehensive digital archive space should be established for each representative inheritor, incorporating their biographical information, representative works, records of craft processes, teaching scenes, social activities, media reports, and manuscript materials into a unified system, forming a traceable personal digital biography. This approach not only respects the dependent characteristics of intangible cultural heritage subjects but also provides a rich material foundation for subsequent abstract explanations.

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3.2 Abstract level: Enhancing knowledge representation and meaning construction

The core task of the abstraction layer is to achieve the transformation from observable to comprehensible, organizing the data produced by the encoding layer into an intelligible knowledge structure. The key lies in establishing a systematic explanatory framework, rather than relying on fragmented narrative packaging.

3.2.1 Constructing a unified interpretation framework at the project level

It is recommended to adopt a five-tier structure on the project page with a unified entry: overview , process, standards, context, and participation. The overview tier provides a basic cognitive entry, including project positioning, historical evolution, lineage, and basic characteristics Gather basic information to enable the audience to establish an overall understanding of the project within 30 seconds.

Process layer : Presenting the key steps of skills or the core elements of rituals in a node-based manner, accompanied by short videos or animated demonstrations, enables the audience to "see" the process rather than merely observing the outcome.

Standard layer : Presenting the evaluation dimensions and judgment difficulties within the industry, addressing the core question of "how to judge good or bad". For example, for pen making craftsmanship, presenting the judgment criteria for the trimming process; for brewing skills, explaining empirical thresholds of temperature and time. This marks a crucial transition from appreciation to understanding.

Contextual layer : Embedding the project into the historical space, industr ecology, or festival customs of Shenyang, addressing questions such as "Why did it emerge here?" and "What is its connection to local life?" to anchor the cultural significance of intangible cultural heritage.

Participation layer : Provides functional entries such as offline experience,route navigation, course reservation, and interaction with inheritors, integrating on-line viewing is transformed into offline action, leading to sustained participatio after comprehension.

The key to this hierarchical design lies in the fact that audiences with different knowledge backgrounds can choose the depth of browsing according to their own needs, serving both the lightweight requirements of mass communication and the needs of professional research and in-depth learning.

3.2.2 Promote cross-project thematic organization

A mere in-depth explanation of individual projects is insufficient to address the issue of fragmentation. It is necessary to establish a thematic organizational logic across projects. Taking neighborhoods (such as Fangcheng and Zhongjie), industries (time-honored brands and workshops), festivals and customs (temple fairs and rituals), and ethnic groups (Manchu and Xibe) as clues, scattered projects can be connected into thematic pages or digital exhibitions. For example, under the theme of "Fangcheng Memory", traditional folk arts, time-honored skills, festival temple fairs, etc. within the Fangcheng area can be presented in a connected manner, illustrating how these intangible cultural heritage projects coexist and evolve within the same urban space. The essence of this strategy lies in the structural restoration of fragmented dissemination. Through thematic organization, scattered projects are translated into a continuous narrative and meaning network, so

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that what the audience remembers is no longer isolated project names, but a logically connected knowledge system.

3.2.3 Technology empowers contextualized presentation

Under the premise of complete coding layer materials, appropriate technical means can be introduced to enhance the effect of abstract expression. For traditional craft projects, develop AR process visualization functions, allowing audiences to see how threads are embroidered layer by layer, dynamic demonstrations of key stitches, or the impact of temperature changes on material states by scanning works with a mobile phone. For folk ritual projects, design VR historical scene reconstructions to establish connections between intangible cultural heritage projects and urban daily life, as well as industry organizations. For oral knowledge and community memory projects, use knowledge graph technology to establish a network connecting inheritors, locations, events, and skills, transforming narrative materials into a searchable and explorable knowledge structure.

It should be emphasized that the value of technology application does not lie in the degree of immersion or visual impact, but rather in whether it can translate intangible cultural heritage knowledge into an interpretive "situation-process-meaning" structure. Technology is a tool, and interpretation is the purpose; one should not confuse the means with the end.

3.3 Diffusion level: Optimizing the communication ecosystem and participation mechanism

The core task of the diffusion layer is to achieve the transition from instantaneous exposure to sustainable accumulation, effectively reaching the public with the assets accumulated in the encoding layer and the interpretation system constructed in the abstraction layer, and forming a stable mechanism for participation and feedback.

3.3.1 Establish a "unified feedback loop" mechanism

All communication channels, including government new media, short video platforms, public cultural venue accounts, and event promotional materials, should include links to a unified entry point (such as the "Easy Travel Shenyang" mini-program) project page, special topic page, or collection page when publishing content. The function of this mechanism is to connect information streams scattered across different platforms and guide them back to a unified accumulation entry, transforming diffusion from instantaneous exposure into revisitable public resources. Without this loop, any dissemination on any platform is merely a passing glance in the information stream, making it difficult to form a cumulative effect.

3.3.2 Construct a differentiated platform matrix

Different platforms exhibit significant differences in user structure, content preferences, and distribution mechanisms. The diffusion strategy should reflect the principle of collaborative division of labor with the same theme but multiple expressions. Short video platforms (Tiktok, Kwai) achieve breakthrough reach through strong-paced content (highlights of craftsmanship, key nodes, before-and-after comparisons, story segments) lasting 15-30 seconds, serving as a traffic-generating function, with the core being "making peo-

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ple see". Community platforms (Xiaohongshu, Bilibili) carry serialized content (step-by-step breakdowns, workshop documentaries, explanation of evaluation criteria, interactive Q&A) lasting 3-10 minutes, hosting an explanatory system and forming content assets that can be collected, repeatedly viewed, and discussed, with the core being to make people understand. Government affairs platforms and official media undertake authoritative information dissemination functions such as policy interpretation, project publicity, and reports on cultural inheritors, providing a credible knowledge base. The WeChat ecosystem (official accounts, communities, mini-programs) undertakes community retention and offline conversion functions such as event registration, route guidance, and course reservations, with the core being to make people participate. These four types of platforms each have their own division of labor and mutual traffic diversion, forming a complete chain of reach → understanding → participation.

3.3.3 Design lightweight participation pathways and feedback loops

To transform audiences from passive information receivers into active participants and practitioners, a lightweight task-based mechanism needs to be established at a unified entry point. To transform audiences from passive information receivers into active participants and practitioners, a lightweight task-based mechanism needs to be established at a unified entry point. To transform audiences from passive information receivers into active participants and practitioners, a lightweight task-based mechanism needs to be established at a unified entry point.

Simultaneously, it is imperative to establish a communication effect evaluation system and a content correction mechanism. Evaluation indicators should not be limited to viewership and likes, but should also incorporate deeper metrics such as the collection rate, revisit rate, proportion of explanatory comments (e.g., whether there are comprehensible phrases like "So that's how it is" or "The criterion is"), offline conversion rate, community retention, and revisitation rate. A correction channel should be established, where users can submit errors they find in the content, and inheritors or researchers can verify and correct them within a specified timeframe, ensuring the authority and iterability of the content. The existence of this feedback loop transforms communication from a one-time project into an iterative governance process.

3.3.4 Establish a mechanism for copyright and revenue distribution

The sustainable operation of the diffusion layer cannot be achieved without the protection of the rights and interests of inheritors.Without clear copyright authorization, it is difficult for inheritors to comfortably open up their skills; without reasonable income distribution, inheritors lack the motivation to continue participating. It is recommended to establish a hierarchical authorization system: public communication level (free use for public welfare promotion), educational research level (lower authorization fees for school teaching and research activities), and commercial development level (higher authorization fees for cultural and creative products, paid courses, and commercial advertisements). A standardized contract template should be provided to reduce negotiation costs. A standardized contract template should be provided to reduce negotiation costs. Each digital resource should be clearly labeled with ownership information (who filmed, who performed, who authorized), and a call record should be formed for infringement tracing.

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4. Conclusion and Outlook

Using information space theory as an analytical tool, this article conducts a systematic stratified diagnosis and strategy construction for the digital dissemination of intangible cultural heritage in Shenyang, and draws the following main conclusions.

Firstly, the core dilemma of digital dissemination of intangible cultural heritage in Shenyang is not a single technical shortcoming, but rather a chain imbalance——The weak resource accumulation capability in the encoding layer, the absence of a knowledge interpretation system in the abstraction layer, and the insufficient platform collaboration and feedback mechanism in the diffusion layer are three interconnected yet mutually exacerbating issues. This discovery has shifted the research focus from a single technical aspect or platform application to an examination of the systematic mechanisms across the entire communication chain.

Secondly, the three-dimensional framework of "encoding-abstraction-diffusion" in information space theory exhibits good adaptability to the digital dissemination of intangible cultural heritage. This framework not only clearly illustrates the logic of problem transmission but also provides four typical regional types (fiefdom, clan, bureaucracy, and market) as institutional analysis tools for understanding the governance differences of various intangible cultural heritage projects and designing differentiated open strategies. This verifies the cross-scenario applicability of the theory in the field of public cultural dissemination.

Thirdly, addressing the imbalance in the chain requires layered governance and follows a logical sequence. The strategy system proposed in this paper, which involves encoding first, then abstraction, and finally diffusion, clarifies the priority and implementation path of each link: the encoding layer prioritizes the unification of metadata standards and activity archiving, establishes a hierarchical openness and ownership governance mechanism, and addresses the issue of "resources not being retained"; on this basis, the abstraction layer construct a five-layer explanatory framework and thematic organizational logic of "overview-process-standard-context-participation", coupled with technology-enabled contextualized presentation, to solve the problem of audience comprehension; the diffusion layer, supported by the former two layers, establishes a unified loop mechanism, platform matrix division of labor, lightweight participation pathways, and a feedback loop, to address the issue of dissemination it is not sustainable.The three-tier strategy forms a complete closed loop of resource-meaning-reach, driving the digital dissemination of Shenyang's intangible cultural heritage from an event-based and node-oriented model to a mechanism-based and sustainable governance model.

This study has several limitations. There is a relative lack of quantitative data support, and a systematic quantitative examination of audience behavior data and communication effectiveness is absent. There is also a lack of more detailed comparisons regarding the differences in coding, abstraction, and diffusion mechanisms among different categories of intangible cultural heritage (suchastraditional skills and folk rituals). The proposed graded opening and revenue distribution mechanism remains at the conceptual level, and its feasibility and fairness need to be verified through pilot projects. Future research should incorporate user behavior data for quantitative evaluation, conduct comparative studiesacross different categories, and advance mechanism pilot projects to test theeffectiveness of strategies. With the development of artificial intelligence and metaverse technology, the coding methods, abstract logic, and diffusion paths of digital communication of intangible cultural heritage may undergo new structural changes. How to strike a balance between efficiency

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improvement and meaning fidelity is a core issue that subsequent research needs to continuously focus on.

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