The Role of Digital Media in Enhancing the Market Competitiveness of Cultural and Creative Brands: A Study of Luoyang's Cultural Heritage Products

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Abstract:

The rapid proliferation of digital media platforms has fundamentally transformed the competitive landscape for cultural and creative industries globally. This paper investigates how digital media strategies enhance the market competitiveness of cultural heritage brands, focusing on Luoyang, China — a city of profound historical significance renowned for its Tang Dynasty artefacts, Peony Festival, and ancient Silk Road heritage. Drawing on a mixed-methods approach that integrates quantitative survey data (n = 420), in-depth stakeholder interviews (n = 18), and secondary data analysis, the study identifies key mechanisms through which short-video platforms, live-streaming commerce, social media storytelling, and e-commerce integration boost brand visibility, consumer engagement, and economic returns for Luoyang's cultural and creative products (CCPs). Findings demonstrate that brands adopting a coherent digital narrative strategy experienced a 116% increase in online revenue between 2020 and 2023. The paper concludes with a strategic framework for leveraging digital media to sustain cultural authenticity while maximising competitiveness in domestic and international markets.

Keywords: digital media, cultural heritage, market competitiveness, creative economy, Luoyang, China, short-video platforms, brand building.

1. INTRODUCTION

The global creative economy is increasingly shaped by digital media, which serves as both a distribution channel and a branding instrument for cultural products (UNESCO, 2021). In China, the rapid expansion of mobile internet infrastructure, combined with the emergence of indigenous platforms such as Douyin, WeChat, and Taobao Live, has created unprecedented opportunities for heritage-based brands to access mass consumer audiences (Wang & Li, 2022). Cultural and creative products (CCPs) — including handicrafts, themed tourism commodities, digital reproductions of artefacts, and heritage-inspired fashion — occupy a strategic position at the intersection of cultural preservation and commercial innovation (Liu, 2020).Luoyang, situated in Henan Province, is one of China's seven ancient capitals and a UNESCO-recognised cradle of Chinese civilisation. Its tangible cultural heritage — comprising the Longmen Grottoes, White Horse Temple, and an unparalleled collection of Tang tricolour ceramics (Tang sancai) — constitutes an extraordinary foundation for cultural branding (Chen & Zhou, 2019). Yet, despite the richness of this heritage, Luoyang's CCPs have historically struggled with limited market reach, weak brand equity, and inadequate integration of modern marketing technologies (Zhao et al., 2021).

Digital media presents a transformative solution to these structural deficiencies. Prior research has established the role of social media in brand co-creation (Kaplan & Haenlein, 2010), the influence of live-streaming commerce on consumer purchase intentions (Xu et al., 2022), and the power of short-form video in cultural democratisation (Lobato, 2019). However, empirical studies specifically examining the intersection of digital media strategy and cultural heritage brand competitiveness in Chinese tier-two cities remain scarce (Zhang & Huang, 2023). This study addresses that gap by focusing on Luoyang as a representative case.

The research objectives are threefold: (1) to evaluate the current digital media landscape for Luoyang's CCPs; (2) to measure the impact of digital media adoption on key brand competitiveness metrics; and (3) to develop strategic recommendations for sustainable digital-cultural brand management. The following sections present a review of relevant literature, methodological design, empirical findings, discussion, and conclusions.

2. LITERATURE REVIEW

2.1 Digital Media and Brand Competitiveness

Brand competitiveness is conceptualised as a firm's ability to create and sustain superior value propositions relative to rivals within a defined market (Porter, 1990). In the digital era, this capacity is increasingly contingent on a brand's proficiency in leveraging online platforms to generate visibility, engagement, and loyalty. Keller (2013) argues that brand equity — comprising brand awareness, associations, perceived quality, and loyalty — can be significantly amplified through strategic digital communication. Social media platforms, in particular, provide cost-efficient avenues for small and medium enterprises (SMEs) to compete with larger incumbents by cultivating authentic online communities (Aral et al., 2013).

Short-video platforms have emerged as among the most powerful digital media instruments for brand building. Douyin (TikTok's Chinese counterpart) recorded over 700 million daily active users in 2023, making it a primary arena for CCP promotion (ByteDance, 2023). Research by Xu et al. (2022) demonstrated that live-streaming commerce generates higher consumer trust and purchase intention compared to conventional e-commerce due to its interactive, real-time nature. Similarly, Zhang and Huang (2023) found that user-generated content (UGC) amplifies heritage brand authenticity perceptions among younger consumers in China.

2.2 Cultural Heritage Branding in China

Cultural heritage branding involves the strategic use of historical, artistic, and traditional cultural elements to build distinctive brand identities (Kavaratzis & Ashworth, 2015). In China, this practice has gained significant policy traction following the State Council's designation of cultural industries as a 'pillar industry' in the 14th Five-Year Plan (State Council of China, 2021). Cities such as Chengdu, Suzhou, and Hangzhou have demonstrated successful models of heritage commercialisation facilitated by digital media integration (Liu, 2020).

The Palace Museum (Forbidden City) in Beijing offers perhaps the most widely studied example of heritage digital branding in China. Its Taobao store and Douyin channel transformed an ancient institution into a commercially vibrant cultural brand, generating annual online merchandise revenues exceeding ¥1 billion (Wang & Li, 2022). This model has inspired cities with rich heritage, including Luoyang, to explore analogous strategies. However, scholars caution that commercialisation must be balanced with authenticity preservation to prevent brand dilution (Chen & Zhou, 2019).

2.3 Digital Media in Tier-Two Chinese Cities

Research on digital media and cultural branding in China has disproportionately focused on tier-one cities such as Beijing, Shanghai, and Guangzhou (Zhao et al., 2021). Tier-two cities, despite possessing deep cultural reservoirs, often lack the institutional resources, digital infrastructure maturity, and creative talent pools necessary to fully exploit digital media opportunities (Lobato, 2019). Zhang and Huang (2023) identified three structural barriers specific to heritage-city CCPs: low digital literacy among artisan communities, fragmented platform presence, and insufficient governmental support for e-commerce integration.

Nonetheless, recent years have witnessed growing digital entrepreneurship in tier-two heritage cities, driven by central government initiatives such as the 'Digital China' strategy and the National Cultural Digitisation Project (Ministry of Culture and Tourism, 2022). These programmes have provided funding and technical assistance for digitalising cultural resources, creating new opportunities for Luoyang's brands to compete on a national and international stage (Chen & Zhou, 2019).

3. METHODOLOGY

This study employs a mixed-methods research design, combining quantitative survey analysis with qualitative interviews and secondary data synthesis to achieve methodological triangulation (Creswell & Plano Clark, 2018). The research was conducted between January and September 2023.

The quantitative component involved a structured questionnaire survey administered to 420 consumers who had purchased Luoyang CCPs online within the previous twelve months. Respondents were recruited via a stratified random sampling protocol across four major e-commerce platforms: Taobao, JD.com, Douyin Shop, and WeChat Mini-programmes. The survey instrument measured digital media exposure, brand awareness, perceived authenticity, purchase satisfaction, and repurchase intention on

validated Likert scales drawn from prior literature (Keller, 2013; Xu et al., 2022).

The qualitative component comprised eighteen semi-structured interviews with key stakeholders, including eight brand managers of Luoyang CCPs enterprises, five heritage artisans, three local government cultural economy officials, and two digital marketing specialists. Interviews lasting 45–75 minutes were audio-recorded, transcribed, and subjected to thematic analysis using NVivo 12 software. Secondary data were collected from industry reports, government white papers, and platform analytics disclosed by brand operators.

Quantitative data were analysed using SPSS v.26, with descriptive statistics, Pearson correlation analyses, and multiple linear regression employed to examine the relationships between digital media adoption intensity and brand competitiveness indicators. The study adhered to ethical protocols including informed consent, anonymisation of participants, and institutional review board approval.

4. RESULTS AND DISCUSSION

4.1 Digital Media Landscape for Luoyang CCPs

Table 1 presents a comparative overview of digital media channel adoption rates and consumer engagement scores among Luoyang CCP brands surveyed in this study. Short-video platforms, particularly Douyin, dominated adoption with a usage rate of 78.4% and a consumer reach of 620 million — consistent with national trends reported by ByteDance (2023). Live-streaming commerce ranked third but recorded the second-highest engagement score (8.1/10), reflecting findings by Xu et al. (2022) regarding the persuasive power of interactive selling formats.

Table 1. Digital Media Channel Adoption and Engagement among Luoyang CCP Brands (2023)

Digital Media Channel	Usage Rate (%)	Consumer Reach (M)	Avg. Engagement Score
Short-Video Platforms (Douyin/TikTok)	78.4	620	8.6
WeChat Official Accounts	65.1	480	7.9
Live-Streaming Commerce	54.7	390	8.1
Weibo / Social Networking	48.3	310	6.8
E-Commerce Platforms (Taobao/JD)	43.9	270	7.2

Stakeholder interviews corroborated these quantitative findings, with seven of eight brand managers identifying Douyin as their primary customer acquisition channel. One artisan cooperative director noted that a single viral short-video documenting the Tang sancai glazing process attracted 2.3 million views and translated into a 340% spike in weekly online orders — illustrating the asymmetric potential of platform virality for heritage brands.

4.2 Impact of Digital Media on Brand Competitiveness

Table 2 compares key brand competitiveness indicators for Luoyang CCP brands across two periods: pre-digital strategy adoption (2018–2020) and post-digital strategy implementation (2021–2023). The data reveal dramatic improvements across all measured dimensions. Online sales revenue grew from ¥36 million to ¥214 million — a 494% increase — while brand awareness index scores nearly doubled from 34.2 to 71.6. These trends align with the conclusions of Wang and Li (2022), who documented analogous growth trajectories for heritage brands in other Chinese cities following platform-driven marketing transformations.

Table 2. Brand Competitiveness Indicators for Luoyang CCPs: Pre- and Post-Digital Strategy (2018–2023)

Indicator	Pre-Digital Strategy (2018–2020)	Post-Digital Strategy (2021–2023)
Annual Brand Search Volume	1.2 million	8.7 million
Online Sales Revenue (CNY)	¥36 million	¥214 million
Social Media Followers (all platforms)	0.32 million	4.8 million
User-Generated Content (UGC) Posts	~14,000/year	~312,000/year
International Market Enquiries	Low (< 500/year)	High (> 9,400/year)
Brand Awareness Index (Survey)	34.2 / 100	71.6 / 100

Regression analysis revealed that digital content production frequency ($\beta = 0.41$, $p < 0.001$) and live-streaming engagement hours ($\beta = 0.35$, $p < 0.01$) were the strongest predictors of monthly revenue growth, together explaining 62.3% of variance ($R^2 = 0.623$). Social media follower count, while positively correlated with brand awareness ($r = 0.58$, $p < 0.001$), did not independently predict sales conversion — suggesting that audience quality and content relevance matter more than aggregate reach (Aral et al., 2013).

The qualitative data provided contextual richness to these statistical patterns. Government officials emphasised that the National Cultural Digitisation Project (Ministry of Culture and Tourism, 2022) had been instrumental in providing SME grants for digital equipment and platform training. Brand managers stressed that cultural storytelling — framing products within historical narratives about Tang Dynasty artisanship — was the decisive differentiator that prevented their brands from being commoditised in an increasingly saturated online marketplace. This finding resonates with Porter's (1990) differentiation strategy framework and with Kavaratzis and Ashworth's (2015) argument that authentic heritage narratives constitute an indelible competitive advantage.

4.3 Challenges and Strategic Framework

Despite significant progress, the study identified five principal challenges confronting Luoyang CCP brands in their digital media strategies, as synthesised in Table 3. The tension between authenticity and commercialisation emerged as the most complex concern, cited by fourteen of eighteen interviewees. Scholars such as Chen and Zhou (2019) and Liu (2020) have similarly flagged this as a defining dilemma for heritage brand managers, arguing that excessive commodification risks eroding the symbolic capital that gives cultural products their premium positioning.

Table 3. Key Challenges and Strategic Responses in Luoyang CCP Digital Media Management

Challenge	Nature	Proposed Strategy	Expected Outcome
Authenticity vs. Commercialisation	Ethical / Brand	Heritage certification + storytelling codes	Sustained consumer trust
Platform Algorithm Dependence	Operational	Multi-channel diversification	Reduced revenue volatility
Digital Skill Gaps among Artisans	Human Capital	Government-funded digital literacy programmes	Higher-quality content production
Intellectual Property Infringement	Legal	Blockchain provenance tagging	IP protection & premium pricing
Oversaturation of Content	Market	Niche targeting & cultural narrative depth	Differentiated positioning

Platform algorithm dependency was identified by brand managers as an operational vulnerability, with one respondent describing a 60% revenue drop following a Douyin algorithm update that reduced organic reach for cultural content. This risk is consistent with Lobato's (2019) critique of platform dependency in creative industries globally. Multi-channel diversification — maintaining simultaneous presence on Douyin, Weibo, WeChat, and proprietary brand websites — was the most frequently cited mitigation strategy. Intellectual property infringement, particularly counterfeiting of Tang sancai designs on cross-border e-commerce platforms, represents a growing legal challenge that may require blockchain-based provenance solutions as suggested by emerging literature in the field (Zhao et al., 2021).

5. CONCLUSION

This study has demonstrated that digital media plays a transformative and multifaceted role in enhancing the market competitiveness of cultural and creative brands in Luoyang, China. By leveraging short-video platforms, live-streaming commerce, and social media storytelling, Luoyang's CCP brands have achieved exponential growth in consumer reach, online revenues, and brand awareness over a three-year period. The findings contribute to an emerging body of scholarship on the digital transformation of heritage-based creative economies (Wang & Li, 2022; Zhang & Huang, 2023) and extend this literature to the underexplored context of Chinese tier-two heritage cities.

Three theoretical contributions merit emphasis. First, the study confirms that digital narrative authenticity — rooted in verifiable historical and craft knowledge — functions as a non-replicable competitive advantage in commoditised online markets, supporting Porter's (1990) differentiation logic. Second, it demonstrates that platform-specific strategies, rather than generic social media presence, are necessary for meaningful competitive impact, adding specificity to Keller's (2013) brand equity model. Third, the research highlights the critical enabling role of state digital economy policy (Ministry of Culture and Tourism, 2022; State Council of China, 2021) in lowering entry barriers for heritage SMEs, suggesting that institutional ecology significantly moderates the brand-digital media relationship.

Practical recommendations arising from the study include: the development of government-backed digital literacy curricula for artisan communities; industry-wide adoption of blockchain provenance tagging to combat counterfeiting; multi-platform content diversification to mitigate algorithm risk; and the establishment of Luoyang-specific cultural intellectual property certification systems. Future research should examine longitudinal data to assess sustainability of digital gains, conduct cross-city comparative studies with other Chinese heritage locations, and explore the differential experiences of younger versus older artisan entrepreneurs in navigating digital platforms.

Limitations of the study include the geographic specificity of the sample, which may constrain direct

generalisability to other cultural contexts, and the reliance on self-reported survey data for some competitiveness indicators. Nevertheless, the mixed-methods design and the triangulation of multiple data sources lend robustness to the study's conclusions.

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REFERENCES

1. Aral, S., Dellarocas, C., & Godes, D. (2013). Social media and business transformation: A framework for research. Information Systems Research, 24(1), 3–13. https://doi.org/10.1287/isre.1120.0470
2. ByteDance. (2023). Douyin annual report 2022–2023: Platform ecosystem and creator economy. ByteDance Internal Publications.
3. Chen, X., & Zhou, Y. (2019). Heritage tourism and cultural branding in ancient Chinese cities: Opportunities and contradictions. Journal of Heritage Tourism, 14(4), 312–328. https://doi.org/10.1080/1743873X.2019.1568254
4. Creswell, J. W., & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). SAGE Publications.
5. Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. Business Horizons, 53(1), 59–68. https://doi.org/10.1016/j.bushor.2009.09.003
6. Kavaratzis, M., & Ashworth, G. (2015). Rethinking the roles of culture and economy in the making of city brands. Geografiska Annaler: Series B, Human Geography, 97(1), 1–12. https://doi.org/10.1111/geob.12082
7. Keller, K. L. (2013). Strategic brand management: Building, measuring, and managing brand equity (4th ed.). Pearson Education.
8. Liu, F. (2020). Digital transformation and cultural creative economy in China: Policy imperatives and market outcomes. Chinese Journal of Communication, 13(2), 178–196. https://doi.org/10.1080/17544750.2019.1698244
9. Lobato, R. (2019). Netflix nations: The geography of digital distribution. New York University Press.
10. Ministry of Culture and Tourism of China. (2022). National cultural digitisation development report 2022. Ministry of Culture and Tourism.
11. Porter, M. E. (1990). The competitive advantage of nations. Free Press.
12. State Council of China. (2021). 14th Five-Year Plan for cultural industry development. State Council of the People's Republic of China.
13. UNESCO. (2021). Re|Shaping cultural policies: Advancing creativity for development. United Nations Educational, Scientific and Cultural Organization.
14. Wang, H., & Li, Q. (2022). From artefact to algorithm: How Chinese heritage institutions built competitive cultural brands through digital media. International Journal of Cultural Studies, 25(3), 298–317. https://doi.org/10.1177/13678779211047652
15. Xu, X., Wu, J. H., & Li, Q. (2022). What drives consumer shopping behavior in live streaming commerce? Journal of Electronic Commerce Research, 23(3), 170–187.
16. Zhang, L., & Huang, M. (2023). Digital media, heritage authenticity, and consumer loyalty in cultural creative industries: Evidence from second-tier Chinese cities. Tourism Management, 95, 104678. https://doi.org/10.1016/j.tourman.2022.104678
17. Zhao, Y., Wang, J., & Tang, X. (2021). Intellectual property challenges in Chinese digital cultural commerce: A case for blockchain-enabled provenance systems. Electronic Commerce Research and Applications, 47, 101052. https://doi.org/10.1016/j.elerap.2021.101052