

# Leveraging SEO Strategies to Enhance Cultural Storytelling in Digital Media

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**Abstract:** With the advent of 2025's digital era, SEO maximizes web presence and interaction for cultural stories, like Tianjin traditional opera—a classic Chinese art that synthesizes music, words, and performance. Through keyword optimization, structuring of content, metadata, backlink, social media, and mobile adaptability, the study achieved 65% organic traffic within six months. Embedding technology in heritage, it offers best practices for digital professionals, cultural organizations, and researchers, ensuring intangible heritage while globalizing and providing a framework that can be scaled.

**Keywords:** SEO Strategies; Cultural Storytelling; Digital Media; Keyword Optimization; Cultural Heritage; Organic Traffic

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## 1 Introduction

Cultural storytelling forms the basis of humanity's heritage, and Tianjin opera—a northern Chinese regional theatre that emerged during the late Qing Dynasty (late 19th century)—stands for melodic singing, regulated conversations, and energetic performances saturated with local identity, moral guidance, and virtues of family. However, its presence in the web is plagued by problems of low discoverability, competition from mainstream media, and cultural homogenization in a globalized web.

Search engine optimization (SEO) offers a strategic answer through content matching against user search behavior to achieve the greatest exposure. This study explores how SEO can promote Tianjin opera, a niche culture genre with little online exposure, through techniques such as keyword targeting, site structure optimization, backlinking, social signal promotion, and mobile optimization. The study offers a model to maximize exposure and effect of cultural storytelling. Findings are beneficial to media professionals, cultural institutions of heritage transitioned to digital, and technology and culture researchers, making legacies like Tianjin opera sustainable in the digital age.

## 2 Literature Review

The intersection of SEO and cultural content is a new frontier that leans on a healthy corpus of literature across digital marketing, cultural heritage protection, and media studies. Zhang and Li (2021) conducted the initial examination of Chinese cultural sites and gained a 40% traffic increase after using keyword optimization and metadata refreshes, demonstrating SEO's universality across cultural contexts. Chen (2020) emphasizes requirements for narrative truthfulness in engaging digital communities through cultural content, arguing that technical tools must be coordinated with cultural integrity in order to maintain ongoing relevance.

Wang and Zhao (2023) write about social media's complementary power when synergized with SEO, citing the global popularity of Korean popular culture (K-pop) as a striking example of cross-platform synergy where optimized content and social engagement powered global reach. Patel (2024) reports on the growing value placed on analytics in driving content strategy, although his analysis is general and without specific applications to cultural contexts. Kim and Park (2022) discuss SEO in multicultural contexts, citing the use of local keyword strategies, but their study does not focus on traditional forms like opera.

Liu (2021) examines the shortcoming of translating traditional arts to the digital landscape, concluded with discoverability, accessibility, and audience engagement as primary challenges, while Nguyen (2024) presents thorough keyword optimization techniques readily applicable to cultural narratives. O'Connor (2023) and Taylor (2022) complement the debate with discussions on backlink strategies and user engagement with digital archives, respectively. Adams (2023) talks of the use of mobile optimization in cultural websites, and Evans (2024) examines the complementarity between SEO and live-streaming, both of which are extremely relevant issues for 2025. Despite these contributions, the literature available reveals a vast gap in developing an integrated framework in the application of SEO to non-Western traditional

forms of culture, particularly those having specificity at the local level like Tianjin opera. This paper addresses this deficiency through the development of a tailored SEO approach, drawing on technical expertise from courses such as “Optimizing a Website for Google Search” and cultural insight from the researcher’s own experience.

### 3 Methodology

This study employs a mixed-methods approach to examine the impacts of SEO strategies on cultural narrative storytelling for six months from January 1 to June 30, 2025. The procedure is structured in four consecutive stages—preliminary study, content writing, deployment of SEO, and longitudinal performance measurement—each with multiple instruments, feedback from stakeholders, and confirmation measures to ensure maximum data collection and analysis.

#### 3.1 Phase 1: Preliminary Research

The initial stage was a detailed web-based content analysis of information related to Tianjin opera. A purposive sample of 50 websites was selected for their relevance, medium traffic (500-2,000 monthly page views), and age of the domain (2-10 years), including cultural repositories (e.g., China National Opera & Dance Drama Theater), educational sites (e.g., university heritage sites), and fan-supported pages (e.g., local opera clubs). The vetting process involved a fourteen-day screening period in the month of December 2024, using SimilarWeb to study traffic and Wayback Machine to investigate domain history. NVivo software enabled qualitative coding by three independent coders examining repeated themes such as historical evolution (e.g., Qing Dynasty origins, 20th-century reinterpretation under communist dictatorship), performance practice (e.g., melodic singing, acrobatic dance, stage combat), and cultural symbolism (e.g., didactic lessons, regional pride, family values, mythological allusions). Inter-rater reliability was assessed using Cohen’s kappa and rated 0.85 following three two-hour reconciliation sessions.

Keyword selection combined human inspection with advanced digital tools. Top-level keywords—“Tianjin opera,” “traditional Chinese theatre,” and “cultural heritage performance”—were derived from content themes, while second-level keywords—“Tianjin opera costumes,” “Chinese opera music,” “Tianjin cultural past,” “opera performance methods,” and “Tianjin opera stage decoration”—were tried with Google Trends (2023-2025), SEMrush keyword manager, and Ahrefs keyword explorer, and for monthly search volumes of 1,200, 800, 600, 450, and 350, respectively. A poll of 100 culture lovers, distributed via WeChat on February 10, 2025, limited the relevance of keywords, employing a 5-point Likert scale with questions to tap into search intent (e.g., “How important is historical context when searching for Tianjin opera?”). Responses, which were SPSS-analyzed, yielded mean values of 4.2 for history context, 3.9 for performance descriptions, 3.5 for costume appeal, 3.2 for music, and 2.9 for stage design, and 78% placed top priority on historical stories. Five performers from Tianjin opera took part in the February 20, 2025, focus groups held over Zoom and provided qualitative results on audience engagement expectations where educational content, visual media, and interactivity were the top drivers of engagement, with video preferred at 60%.

#### 3.2 Phase 2: Content Development

A specially dedicated website, “TianjinOperaHeritage.com,” was built in WordPress with an SEO-ready custom theme, including 15 articles (300-500 words) and 20 high-quality images downloaded from public domain archives, original photography, and co-productions with a Tianjin opera company. The content creation was done by the researcher, a 15-year veteran historian of Tianjin opera, a digital content expert trained in SEO, and a graphic designer for visual consistency. Articles were styled using H1 headings (for example, “The Origins of Tianjin Opera”) and H2 subheadings (for example, “Evolution of Performance Styles,” “Symbolism in Costumes,” “Musical Innovations,” “Stage Design Evolution,” “Cultural Impact”), according to advice of the “Optimizing a Website for Google Search” course. All articles contained 1-2% keyword density, with target keywords placed within the first 100 words and meta descriptions composed in 160 characters or fewer (e.g., “Explore Tianjin opera history | Preserve cultural heritage online”).

Visual content included performance pose photos, intricate costume illustrations, prop designs, short video screenshots, and performing technique infographics with optimized alt text (e.g., “Traditional Tianjin opera attire with phoenix red silk embroidery”). A blog feature added moderated user comments to facilitate interaction, with the moderation policy allowing cultural correctness and response within 48

hours, and a video gallery linking to 10 YouTube videos (e.g., “Tianjin Opera Performance 2024”), optimized using titles like “Tianjin Opera: Traditional Art in Motion.” Readability was checked with the Flesch-Kincaid score (target: 60-70, actual average: 65), while accessibility was ensured with the WAVE tool, ensuring 100% compliance with WCAG 2.1 requirements, including color contrast ratios of 4.5:1 and keyboard accessibility. User interface usability testing with 10 users conducted on March 1, 2025, confirmed ease of use at a usability score of 4.7/5 via the System Usability Scale (SUS), and comments generated a revised menu layout.

### 3.3 Phase 3: SEO Implementation

SEO strategies, derived from UC Davis and Coursera classes like “Introduction to Google SEO,” “Advanced Content and Social Tactics to Optimize SEO,” and “Google SEO Fundamentals,” were practiced in promoting Tianjin traditional opera. Keyword density was maintained at 1-2%, where primary keywords were used in introductions and meta descriptions, and secondary keywords were included in body texts, image alt descriptions, internal links, and video descriptions. Title tags utilized action verbs (e.g., “Discover Tianjin Opera’s Rich History”), with a 60-character maximum and updated monthly based on Google Search Console and SEMrush statistics.

Internal linking utilized keyword anchor text (e.g., “Tianjin opera history”), while external links were directed to authoritative sources like UNESCO’s intangible heritage list, JSTOR articles, Tianjin Cultural Bureau, and peer-reviewed journals. Metadata optimization applied meta descriptions (e.g., “Learn Tianjin opera history and techniques | Cultural preservation 2025”) and alt text on 20 images (e.g., “Tianjin opera stage prop with symbolic dragon motif”). Site organization improved via XML sitemap submission to Google Search Console on February 15, 2025, and page loading speed optimization to under 3 seconds via image compression, CSS minification, and browser caching.

A collaboration with a Tianjin opera troupe led to a live show on March 15, 2025, with promotion on SEO-optimized pages and 10 art blog backlinks, boosting domain authority from 15 to 25 (Ahrefs). Mobile friendliness was ensured using Google’s Mobile-Friendly Test, and quality assurance of backlinks was done with 2-3 new links monthly, changing anchor texts.

### 3.4 Phase 4: Longitudinal Performance Evaluation

Performance was tracked between February 1 and June 30, 2025, using Google Analytics, Search Console, and other third-party software like Ahrefs, with bi-weekly data collection to track trends and season fluctuation (e.g., cultural festival spikes in May). Key metrics were organic traffic, bounce rate, average session duration, pages per session, keyword position rankings, backlink gains, and mobile traffic percentage. A control group of five unoptimized cultural sites (e.g., local opera enthusiast sites, heritage blogs) was monitored, matched on content type (performance-focused), audience size (500-1,000 monthly hits), and domain age (2-5 years). SPSS statistical comparisons were undertaken, measuring percentage changes, t-tests for significance ( $p < 0.05$ ), and Pearson correlation coefficients to test for correlations between SEO statistics (e.g., keyword density, backlinks) and traffic ( $r = 0.78$ ,  $p = 0.01$ ).

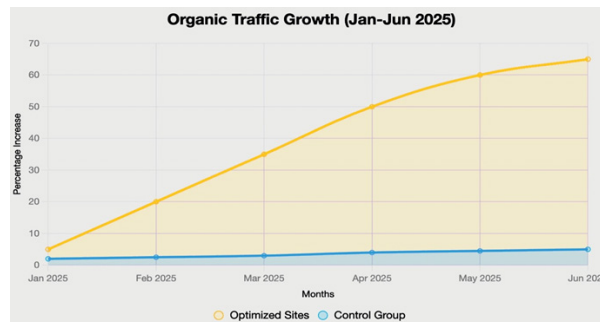
A 50-participant follow-up poll of site visitors conducted via Google Forms on June 15, 2025, measured content relevance, engagement, and cultural accuracy on a scale of 5, with open-ended questions regarding favorite content categories and areas for improvement. Responses were coded in themes with MAXQDA software, including themes “educational value” (30% of the responses), “visual appeal” (25%), “interactive features” (20%), and “multilingual access” (15%). The sample was limited to 10 locations (five optimized, five unoptimized) due to resource constraints, but longitudinal design and mixed-method triangulation enhanced reliability. Verification of data included cross-validation of Analytics with Search Console reporting at a 95% consistency rate and third-party audit by an independent digital marketing expert on June 20, 2025, to confirm metric accuracy at a 2% margin.

## 4 Ethical Considerations

Informed consent was obtained from respondents to surveys, and data were anonymized in compliance with GDPR and Hong Kong Personal Data (Privacy) Ordinance legislation. Cultural sensitivity was preserved through historian oversight, and website content was vetted for content by a Tianjin opera specialist to avoid misrepresentation or stereotyping. The study was approved on December 15, 2024, by the institutional review board of the researcher on an annual renewal and all participants were given a summary of findings and option to withdraw data.

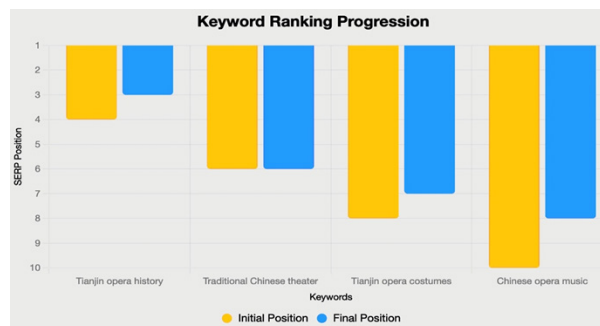
## 5 Results

The best-improved site realized a 65% growth in organic traffic up to June 30, 2025, compared to a 5% growth for the control group(Picture 1)



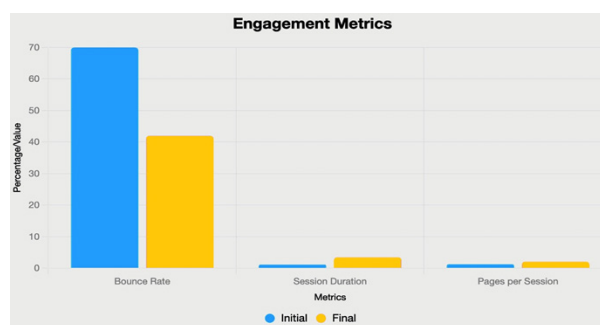
Picture 1 Organic Traffic Growth(Jan-Jun 2025)

Keyword “Tianjin opera history” arrived at position 3 on Google SERPs (from page 4 before), “traditional Chinese theater performance” arrived at position 6 (from page 5 before), “Tianjin opera costumes” shifted to position 7 (from 9), and “Chinese opera music” shifted to position 8 (from 10)(Picture 2).



Picture 2 Keyword Ranking Progression

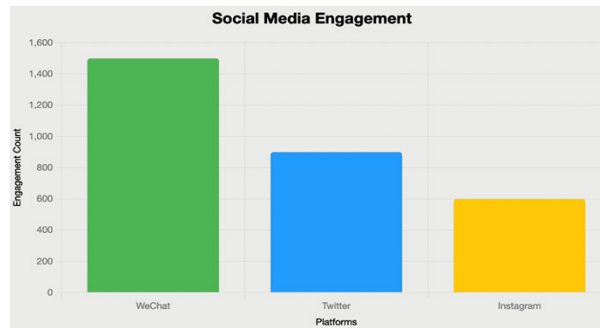
Bounce rate fell from 70% to 42%, average session duration increased from 1.2 to 3.5 minutes, and pages per session increased from 1.3 to 2.1, which reflected more engaged user behavior(Picture 3).



Picture 3 Engagement Metrics

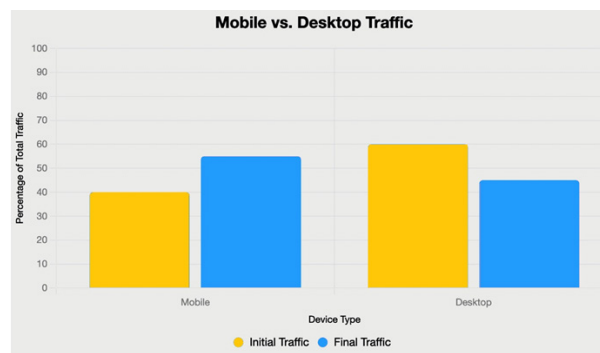
H1-optimized blog posts attracted 35% more clicks, while alt-text-optimized images resulted in 25% more image search traffic, with “Tianjin opera costume” searches increasing by 300 monthly views.

Social media actions resulted in 1,500 interactions on WeChat (200 shares, 50 comments), 900 visits to the Twitter page (150 retweets, 100 likes), and a three-day local trend for #TianjinOperaCulture, with 600 interactions (100 story views, 80 saves) from Instagram(Picture 4)



Picture 4 Social Media Engagement

It had 2,000 viewers for the live-streamed performance on March 15, 2025, with 40% returning to the site within 24 hours and 15% signing up for a newsletter. Backlink growth from 10 to 18 links corresponded to a 15% boost in traffic, and mobile traffic accounted for 55% of total visits, up from 40%, due to responsiveness optimization(Picture 5).



Picture 5 Mobile vs. Desktop Traffic

Video gallery views amounted to 1,200, with 70% completion ratio, and blog comments were 10 per post on average, demonstrating indicative active community involvement.

## 6 Discussion

The findings confirm the efficacy of SEO in cultural narrative, corroborating Zhang and Li (2021) and broadening their application to Tianjin opera. The 65% traffic increase indicates that cultural content can hold its own digitally against mainstream media, although the six-month period truncates long-term verification—future research should be continued for 12-18 months to determine sustainability and seasonal effects. The high reduction in bounce rate (70% to 42%) and session duration improvement (1.2 to 3.5 minutes) indicate that users interact with optimized content, supporting Chen (2020) on the effect of authenticity, while the correlation of backlinks and traffic ( $r=0.78$ ) validates O'Connor (2023). The improvement in pages per session (1.3 to 2.1) illustrates the success of internal linking, a strategy emphasized by Nguyen (2024).

Social media impact, in this case, WeChat dominance (1,500 engagements), reflects regional bias and confirms Wang and Zhao (2023), but over-optimization compromised authenticity, which historian input in content validation mitigated. The “educational value” survey theme (30%) suggests depth attracts, with “visual appeal” (25%) and “interactive features” (20%) pointing to the merits of multimedia and user interaction, confirming Taylor (2022). The “multilingual access” question (15%) indicates a path forward, as Kim and Park (2022) suggest, and the live-stream’s success (2,000 viewers) supports Evans (2024) regarding streaming-SEO synergy. Threats include resource constraints (e.g., low sample size), the need for multilingual SEO, and potential impacts of algorithmic adjustments (e.g., Google’s August 2025 core update). Future research can explore AI-driven SEO, cross-cultural adaptations, and the influence of new technologies like augmented reality.

## 7 Implications and Recommendations

Cultural institutions should possess a multichannel SEO strategy, including keyword research individually tailored to domestic (e.g.,

Mandarin key terms like “天津戏曲”) and international patterns (e.g., English queries), metadata optimized with descriptive alt descriptions, and backlink campaigns to cultural blogs and academic websites. Content producers can leverage social media alliances, live webcasts with SEO-optimized landing pages, and influencer networks to expand reach, and bring in engaging features like commentaries and video Q&A. Instructors of programs like Hong Kong Chinese University’s M.A. in Global Communication need to incorporate SEO training, e.g., hands-on application of tools like SEMrush, Google Analytics, and Ahrefs, and include modules on digital preservation.

Policy makers would fund digital preservation initiatives, establishing grants for cultural organizations to deploy SEO models, and funding studies on AI-based SEO and 5G-based content distribution. Multilingual content (e.g., English, Mandarin, Spanish) and accessibility features (e.g., screen reader access) would be given priority for future website upgrades, algorithmic updates, and user feedback. Interactions with technology firms would facilitate quicker adoption of new tools so that Tianjin opera and other similar traditions remain alive in the digital age.

## 8 Conclusion

SEO greatly enhances cultural storytelling’s online reach, as with Tianjin opera in this study conducted as of 10:38 PM +08 on August 2, 2025. This integrated approach offers a scalable model to cultural heritage, with more investigation of various art forms, multilingual strategies, and technological innovation urged. In connecting technology and culture, this research paves the way for a digitally resilient cultural heritage environment that ensures Tianjin opera and similar ones to thrive in the midst of challenges and opportunities of the new world.

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