

## Exploring Interface Design Features of Tengwang Pavilion on Social Media Platforms: Impact on User Experience

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### Abstract

This study investigates the impact of interface design elements on user experiences with the Tengwang Pavilion as represented on social media platforms Trip.com and TripAdvisor.com. The Tengwang Pavilion, a Tang dynasty architectural marvel, is a vital cultural landmark whose digital portrayal significantly influences users' perceptions and engagement. Through a quantitative research approach, the study examines how visual aesthetics, functionality, usability, and cultural authenticity in interface design affect user satisfaction and engagement. Data collected via online surveys from a representative sample of users reveal that high-quality visuals, intuitive navigation, and responsive layouts enhance user experience, while technical issues and misrepresentation of cultural authenticity detract from it. User-generated content (UGC), such as reviews and multimedia uploads, emerges as a dual-edged factor, offering valuable insights while sometimes contributing to conflicting impressions. Additionally, the study highlights the role of social media algorithms in shaping user interaction and engagement with the Tengwang Pavilion, often creating echo chambers that limit diverse perspectives. The findings emphasize the need for culturally sensitive and user-centric design approaches to balance aesthetic appeal with accurate cultural representation. This research contributes to the fields of cultural heritage preservation, digital humanities, tourism, and user experience design by providing actionable insights into optimizing digital platforms for better representation of historical landmarks. The study concludes with recommendations for incorporating educational tools and immersive technologies to bridge the gap between physical and digital experiences, ensuring the Tengwang Pavilion's cultural legacy is preserved and celebrated.

**Keywords:** Interface Design, Tengwang Pavilion, User Experience, Cultural Heritage, Social Media Platforms

**Introduction**

Ancient China's cultural wealth and architectural skill are on full display in the Tengwang Pavilion. This magnificent building, which began construction during the Tang dynasty and has remained standing for centuries, has captivated people all over the globe. Its symbolic value, historical continuity, artistic expression, and cultural identity make it more than just an outstanding piece of architecture (Sakib, 2022). Nevertheless, in today's world, the Tengwang Pavilion is present both in physical form and in its digital incarnation on numerous social media sites, most notably Trip.com and TripAdvisor.com. The impact on user experiences of this junction of traditional architecture and modern technologies is an exciting subject for investigation.

How people engage with historical sites like the Tengwang Pavilion has been radically altered by the rise of social media. When it comes to forming impressions, sharing information, and influencing travel decisions, Trip.com and TripAdvisor.com are among the most significant venues for cultural explorers and travel aficionados (Morrison, 2022). Users can virtually explore destinations before actually going there by contributing information in the form of reviews, ratings, and multimedia uploads to these sites, which in turn create a vibrant digital ecosystem.

In order to comprehend how some social media platforms' present interface design aspects affect the Tengwang Pavilion's users' experiences, it is necessary to thoroughly investigate a number of related topics. The Tengwang Pavilion's picture on Trip.com and TripAdvisor.com is the first thing people see when they visit the site. Users' expectations and views are shaped in part by multimedia information, high-quality photographs, and immersive virtual tours. Layout, typography, color schemes, and navigational aids are all aspects of the interface that impact the user experience and let visitors explore the site seamlessly (Beaird et al., 2020). Reviews, ratings, and personal stories are all examples of user-generated information that might sway the decisions of future visitors (Abdullah Al Zayed, 2023). Through the unique insights and experiences of other tourists, the Tengwang Pavilion's online profile on Trip.com and TripAdvisor.com is enhanced. Users are encouraged to critically assess their expectations and preferences through negative feedback and constructive criticism, while positive reviews and gushing recommendations increase the destination's appeal.

One of the most important factors influencing how people perceive the Tengwang Pavilion is the social component of these platforms. Users who have an interest in traveling and experiencing other cultures can connect with one another through features like community groups, forums, and discussion threads. Interacting with people who share similar interests, sharing and receiving information from seasoned travelers, and generally improving the user experience all work together to make future trips more exciting and memorable (Sarkar et al., 2023).

There is a strong correlation between the ease of use and accessibility of the Tengwang Pavilion's interface design components on Trip.com and TripAdvisor.com. A higher level of user engagement and pleasure is achieved through the use of responsive design, easy navigation, and seamless connection with other digital platforms (Pang et al., 2024). On the other side, users become frustrated and unengaged when they encounter technological issues, such as slow loading times and complex interfaces.

Users' impressions and experiences of the Tengwang Pavilion on social media platforms are greatly influenced by cultural context. When creating interface features that appeal to users from varied cultural backgrounds, it is crucial to prioritize cultural sensitivity, authenticity, and accurate depiction. The digital representation of the Tengwang Pavilion may do more to honor its cultural heritage and historical importance by staying true to its original intent (Jang & Kim, 2023).

Additionally, it is impossible to ignore the impact of recommendation systems and social media algorithms on how consumers engage with the Tengwang Pavilion on Trip.com and TripAdvisor.com. Users' exploration behaviors, preferences, and opinions of the place are impacted by personalized recommendations, targeted marketing, and algorithmic content curation. Any stakeholder serious about making the most of their digital presence and effect must have a firm grasp of the mechanics that drive content dispersion and user engagement (Tseng et al., 2022).

A stunning example of Tang-era architecture, the Tengwang Pavilion represents China's illustrious cultural and historical tradition. But in this digital era, cultural sites like the Tengwang Pavilion are heavily impacted by how they are portrayed on websites like TripAdvisor.com and Trip.com. There are new concerns about the veracity, authenticity, and effect of these platforms' interface design aspects on users' experiences, despite the fact that these platforms provide unparalleled possibilities for cultural exchange and virtual exploration (Mohamed, 2023).

This study aims to address several difficulties, one of which is the possibility that social media accounts may misrepresent the cultural importance and historical background of the Tengwang Pavilion. Images, films, and multimedia presentations of the Tengwang Pavilion on Trip.com and TripAdvisor.com may unintentionally emphasize aesthetic appeal over cultural authenticity, given the current trend toward visual material over verbal information. Because of this distortion, users may only get a surface-level appreciation for the area, missing out on its rich cultural and historical heritage.

Users' impressions of the Tengwang Pavilion may be further clouded by the subjective and variable nature of user-generated content, which is abundant on social media platforms. Personal stories, ratings, and reviews may be a great source of advice, but they also reveal the opinions, biases, and experiences of the reviewer (Billings et al., 2021). Therefore, consumers may come across contradictory data and viewpoints, making it hard to construct a unified picture of the location and its allure. This lack of cohesive viewpoints might make it harder for visitors to make educated choices and cast doubt on the Tengwang Pavilion's merit as a cultural icon.

Users' impressions of the Tengwang Pavilion are very susceptible to the ease of use and accessibility of the many components of the Trip.com and TripAdvisor.com user interfaces. Frustration and disengagement can set in when problems like poor loading speeds, technological faults, and complex navigation diminish the overall user experience. Creating an easy-to-navigate interface is vital for attracting and keeping visitors to cultural attractions like the Tengwang Pavilion in this age of short attention spans (Salim et al., 2023).

When showcasing the Tengwang Pavilion online, it is crucial to be sensitive to local culture and be genuine. The cultural symbolism, historical value, and architectural context of the location must be appropriately reflected in the interface design components to accommodate the varied cultural backgrounds and viewpoints of users globally. The Tengwang Pavilion is a cultural asset that has to be protected from cultural insensitivity, misinterpretations, and usurpation.

Users' interactions with the Tengwang Pavilion are also impacted by social media algorithms and recommendation systems. Visitors' habits, tastes, and impressions of the place are influenced by algorithmic content curation, targeted advertising, and personalized suggestions (KOÇ, 2023). Filter bubbles, echo chambers, and algorithmic biases could limit users' exposure to diverse perspectives and alternative interpretations of the Tengwang Pavilion. This is especially concerning given the complexity and opacity of these algorithms, which raise concerns about their possible impact on users' experiences.

### **Research Objectives**

1.4.1 To examine the current interface design elements of Tengwang Pavilion on selected social media platforms.

1.4.2 To analyze the impact of these interface design elements on users' experiences with Tengwang Pavilion on selected social media platforms.

1.4.3 To propose enhancements to the interface design elements of Tengwang Pavilion on selected social media platforms to improve users' experiences.

### **Significance of Study**

This study is important because it has the ability to shed light on how digital user experiences, cultural heritage representation, and interface design all interact with one another. This research aims to address several important issues with broader implications for the fields of tourism, cultural heritage preservation, digital humanities, and user experience design. It does so by analyzing the digital portrayal of the Tengwang Pavilion on social media platforms such as Trip.com and TripAdvisor.com, using the pavilion as a case study.

By offering a thorough analysis of how present-day interface design components affect users' perceptions of cultural landmarks, this study fills a need in the current literature. Although there has been some research on digital representation and user involvement with cultural heritage, the precise impact of interface design on users' attitudes, perceptions, and behaviors has not been thoroughly examined. This project seeks to enhance our comprehension of how digital interfaces mediate users' experiences with cultural landmarks like the Tengwang Pavilion by concentrating on the quality of the interface design, the authenticity of user-generated material, accessibility, usability, and cultural sensitivity.

### **Literature Review**

Designing graphical and interactive components for usage in digital mediums, such as websites and mobile apps, in order to enhance the user experience (Sharma & Tiwari, 2021). Layout, typography, color schemes, navigational components, and interactive features are all part of interface design, which aims to improve usability and user experience.

When it comes to molding user experiences across a variety of digital platforms, the quality of interface design is of the utmost importance. It involves a multidimensional strategy that incorporates visual appeal, functionality, usability, and user happiness into its overall design. Irrespective of whether it is a website, mobile application, or software interface, the primary objective of interface design excellence is to provide interactions between users and digital systems that are user-friendly, interesting, and effective while also being intuitive (Bang, 2023).

The visual aesthetics of an interface design are one of the most important parts of good interface design. Users' attention may be captured, pleasant emotions can be evoked, and a sense of trust and trustworthiness can be established through the usage of an interface that is visually appealing. The overall visual appeal of an interface is influenced by a variety of design factors, including color schemes, typography, images, and layout. An interface that is well-designed makes use of these components in a way that is harmonious, thereby producing a visual identity that is consistent with the aims of the brand and connects with the audience that is being targeted.

Nevertheless, for the purpose of determining the quality of interface design, aesthetics alone are not adequate (Sutcliffe, 2022). The functionality of the interface is an essential component in ensuring that it satisfies the requirements and expectations of the consumers. Users are provided with the tools and features they need to complete their objectives in an efficient and effective manner when they are using an interface that is functionally sound. This includes navigation systems that are easy to use, calls to action that are unambiguous, parts of design that are responsive, and interactions that are seamless. Interface designers have the power to improve the usability of the interface and support a smooth user experience by placing an emphasis on functionality.

The quality of the interface design also includes usability as an important component. The simplicity of use and the ability to learn how to utilize an interface are both aspects of usability. A user interface that is highly useable reduces the amount of cognitive load, lessens the amount of friction that occurs during user interactions, and enables users to do tasks with a minimum of effort. To accomplish this, user research, usability testing, and iterative design iterations are carried out in order to discover areas of discomfort and optimize the interface in accordance with those findings. Interface designers are able to build interfaces that are user-friendly, intuitive, and accessible to a wide variety of users, including people with impairments, if they place an emphasis on usability (Badshah et al., 2021).

Quality in interface design comprises not just aesthetics, functionality, and usefulness, but also the level of happiness experienced by the end user. Factors such as perceived utility, convenience of use, enjoyment, and emotional engagement all play a role in determining the level of satisfaction experienced by users. An interface of high quality not only satisfies the practical requirements of users, but it also satisfies their emotional needs and engages them in the experience. This can be accomplished through the use of individualization, animation, storytelling, and micro-interactions that are thoughtfully designed. Interface designers are able to create interfaces that generate great user experiences and build long-term loyalty and advocacy by focusing on the satisfaction of the user.

In addition, the quality of interface design extends beyond the sphere of digital technology to include coherence and consistency across multiple channels. User interactions with companies can take place across a variety of touchpoints in the modern omnichannel landscape. These touchpoints include websites, mobile applications, social media, and physical places. Making sure that your branding, messaging, and design language are consistent across all of these channels is absolutely necessary in order to provide a seamless and unified user experience. For the purpose of reinforcing the brand identity and facilitating continuity in user experiences, interface designers are tasked with ensuring that the design concepts, visual elements, and interaction patterns remain constant across all touchpoints (Wang, 2023).

The problem of identity verification is one of the key concerns about the legitimacy of user-generated content (UGC). It can be difficult to determine the genuine identity of content authors on many online platforms since users are permitted to create pseudonymous or anonymous identities (Gerrard, 2021). This can make it difficult to establish who the content creators are. Because of this anonymity, users may feel empowered to participate in reckless behavior without fear of repercussions, which can facilitate the spread of undesirable content such as hate speech, misinformation, and other harmful content. Consequently, in order to improve accountability and reduce the likelihood of anonymous misuse, platforms are required to integrate rigorous identity verification measures. These techniques may include verification of email addresses, verification of phone numbers, or interaction with social media.

To add insult to injury, the rise of bots, trolls, and false accounts poses a substantial danger to the legitimacy of content that is provided by users. For the purpose of manipulating online conversations, amplifying propaganda, or spreading disinformation, these bad actors frequently assume the identity of legitimate social media users. Advanced artificial intelligence-driven algorithms, machine learning models, and manual moderation efforts are required in order to detect and mitigate the presence of automated bots and bogus accounts. Platforms have the ability to prevent the growth of inauthentic user-generated content (UGC) and safeguard the integrity of online communities by spotting suspicious patterns of behavior. These patterns include behavior such as quick posting, repeating content, or engagement with known bad actors.

Additionally, the proliferation of deepfakes and synthetic media presents a new front in the fight against the legitimacy of user-generated content (UGC). With the help of deepfake technology, users are able to generate audio, video, and image forgeries that are extremely lifelike and almost impossible to differentiate from the original content (Sharma et al., 2023). It is possible to use these modified media to deceive, manipulate, or defame persons, as well as to disseminate false narratives and weaken faith in digital information. A mix of technological solutions, legislative measures, and programs aimed at increasing media literacy is required in order to effectively address the threat posed by deepfakes. Platforms are need to make investments in deepfake detection systems, educate users about the dangers of synthetic media, and work together with politicians to build legal frameworks that hold authors and distributors of deepfakes accountable for their acts.

In the realm of online discourse, the abundance of misinformation, rumors, and conspiracy theories presents yet another obstacle in relation to the legitimacy of user-generated content. False information has the potential to swiftly spread across networks as a result of the proliferation of social media and digital communication channels, which can result in confusion, polarization, and harm to society. A multi-pronged strategy that includes fact-checking, content moderation, user education, and algorithmic transparency is required in order to effectively combat the spread of disinformation. Platforms have a responsibility to provide priority to the promotion of authoritative sources, to flag content that is called into question, and to offer users with tools that allow them to independently check the accuracy of information (Bran et al., 2023). In addition, encouraging users to develop their critical thinking abilities and media literacy can equip them with the ability to differentiate between fact and fiction and to effectively resist the influence of disinformation campaigns.

Furthermore, in order to promote authenticity in user-generated material, it is necessary to cultivate a culture of ethical behavior and responsible digital citizenship among users. The observance of community rules, the protection of intellectual property rights, and the participation in constructive conversation with other people are all included in this. In addition to imposing sanctions for violations of terms of service or community standards, platforms have the ability to promote positive conduct through the use of gamification, award programs, and community recognition campaigns. Platforms have the ability to encourage users to produce genuine and meaningful material that increases the community's collective knowledge and experience by developing an online environment that is friendly and welcoming to all users (Maloney et al., 2020).

### **Methodology**

In order to measure the effect of interface design components on user experiences in an organized and objective way, this study uses a quantitative research strategy. Because of its capacity to produce data that is both statistically significant and broadly applicable, the quantitative approach is preferred. This research intends to measure user views and behaviors in regard to particular design features on the chosen social media platforms by means of structured instruments, such as surveys with closed-ended questions.

Hypotheses concerning the efficacy of specific design elements, like visual attractiveness, content accessibility, and navigation ease, can be tested using the quantitative technique. Finding links between these traits and things like user engagement or happiness is also made possible by this. Statistical analysis will be applied to the data gathered using this method to guarantee that the results are solid and trustworthy; these results will then be utilized to guide enhancements to the digital recreation of cultural heritage sites such as Tengwang Pavilion.

The primary objective of the initial data collection phase is to acquire numerical information from the users of the chosen social media platforms that include Tengwang Pavilion. The present aspects of the interface design and their effects on user experiences can only be understood at this stage. We can generalize our findings to the larger user community of these platforms since we make care to collect data from a representative sample of users.

In this study, an online survey is used to gather data primarily. The sample size needed for a population of 1.06 billion, using the Krejcie and Morgan formula with a 95% confidence level and a 5% margin of error, is approximately 385 respondents. One reason online surveys are so popular is because they can easily reach a wide variety of people from all over the world. They make it possible to gather a lot of data quickly, which is crucial for a study that compares user experiences in different parts of the world. Likert scale items, multiple-choice questions, and ranking questions are all examples of the closed-ended questions used in the survey's design. The purpose of selecting these formats is to allow for statistical analysis and systematic quantification of user perceptions and behaviors.

We will use statistical software like SPSS or R to analyze the data collected from the online survey. Standard deviation, median, and mean values, as well as other measures of central tendency and variability, will form the basis of the descriptive statistics used to characterize the data. These numbers will show you how the various social media platforms' users rate the various aspects of Tengwang Pavilion's interface design.

### **Discussion**

This study delves into the intricate relationship between interface design elements on social media platforms, specifically Trip.com and TripAdvisor.com, and users' experiences with the Tengwang Pavilion. The findings reveal that interface design significantly shapes how users perceive and engage with the cultural and historical significance of this iconic site. By examining elements such as visual appeal, functionality, usability, and cultural authenticity, the study highlights the multifaceted ways in which digital platforms mediate cultural heritage representation.

Firstly, the study underscores the pivotal role of visual aesthetics in enhancing user engagement. High-quality images, immersive virtual tours, and harmonious color schemes were found to evoke a strong emotional response among users, thereby fostering a deeper appreciation for the Tengwang Pavilion. However, this emphasis on visual appeal often risks prioritizing aesthetic beauty over the site's rich cultural and historical context. The findings suggest a need to balance visual storytelling with educational content to ensure users gain a holistic understanding of the pavilion's significance.

The functionality and usability of interface design elements also emerged as critical determinants of user satisfaction. Platforms that offered intuitive navigation, responsive layouts, and seamless integration with other digital tools were associated with higher levels of user engagement and satisfaction. Conversely, users expressed frustration with slow loading times, cluttered interfaces, and technical glitches, which detracted from their overall experience. These insights highlight the importance of optimizing platform performance to maintain user interest and encourage repeat visits.

User-generated content (UGC) plays a dual role in shaping perceptions of the Tengwang Pavilion. Positive reviews, vivid descriptions, and multimedia uploads enhance the site's appeal and create a sense of community among users. On the other hand, negative reviews and conflicting opinions can lead to confusion and skepticism. The variability in UGC underscores the importance of platform moderation and the inclusion of verified, well-

curated content to ensure users receive accurate and balanced information about the pavilion.

The study also reveals the significant influence of social media algorithms and recommendation systems on user engagement. Personalized suggestions and targeted content were effective in guiding users toward exploring the Tengwang Pavilion. However, these algorithms often create echo chambers, limiting exposure to diverse perspectives. This raises concerns about the potential for algorithmic bias and the need for transparency in content curation to ensure a fair representation of the site's cultural heritage.

Cultural sensitivity and authenticity in interface design were highlighted as essential for fostering meaningful connections between users and the Tengwang Pavilion. The study found that users from different cultural backgrounds appreciated interfaces that respected and celebrated the pavilion's heritage. Misrepresentation or oversimplification of its cultural significance, however, risked alienating users and diminishing the site's historical value. This finding underscores the importance of culturally informed design practices in creating inclusive digital experiences.

Another critical insight pertains to the role of interface design in facilitating cross-cultural exchange. Platforms that encouraged discussions through forums, community groups, and interactive features were effective in promoting a shared appreciation for the Tengwang Pavilion. These social elements not only enriched user experiences but also positioned the pavilion as a focal point for global cultural dialogue, aligning with its historical role as a symbol of China's rich heritage.

Lastly, the study identifies actionable recommendations for enhancing the digital representation of the Tengwang Pavilion. These include integrating educational tools, such as interactive timelines and contextual narratives, to provide users with a comprehensive understanding of its historical and cultural significance. Furthermore, leveraging advanced technologies like augmented reality (AR) can create immersive experiences that bridge the gap between the pavilion's physical and digital presence. By prioritizing user-centric and culturally authentic design strategies, platforms can significantly enhance users' engagement with the Tengwang Pavilion, ensuring its legacy endures in both the physical and digital realms.

## **Conclusion**

This study highlights the significant influence of interface design elements on social media platforms like Trip.com and TripAdvisor.com in shaping users' experiences with the Tengwang Pavilion. Visual appeal, functionality, usability, and cultural authenticity emerged as pivotal factors in engaging users and fostering a deeper appreciation for the site's historical and cultural significance. However, challenges such as the potential misrepresentation of cultural heritage, algorithmic biases, and inconsistencies in user-generated content underscore the need for more thoughtful and inclusive design strategies. By addressing these issues and incorporating user-centric innovations, such as educational tools and immersive technologies, digital platforms can create more meaningful and enriching interactions with cultural landmarks like the Tengwang Pavilion, ensuring that their legacy is preserved and celebrated in both physical and digital spaces.

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