Research on the Development Status and Optimization Strategies of Poetry Immersion Experience

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ABSTRACT

In the strategic layout of "creative transformation and innovative development of excellent traditional culture" at the cultural level, the Chinese Poetry Conference broadcast on CCTV, and the 2024 Spring Festival Gala Poetry Chang'an, all of which can be seen that Chinese poetry has shown a vigorous development trend, and the intermingling of poetry dissemination and science and technology has become increasingly close, and the "The Longest Day In Chang'an Theme Block" located in Xi'an is even more typical. The "The Longest Day In Chang'an Theme Block" in Xi'an is more typical. This paper researches the development status of a poetry immersion experience and proposes optimization strategies through field research, questionnaire survey, and SPSS analysis, and then combines the theory of five senses marketing and industrial integration.

KEYWORDS

Poetry; Immersive Experience; Cultural Inheritance and Innovation; The Longest Day In Chang'an Theme Block

1. INTRODUCTION

President Xi Jinping emphasized at a symposium on the development of cultural heritage the need for "creative transformation and innovative development" of outstanding traditional culture. In recent years, traditional elements such as Chinese dress and poetry have been revitalized, and the Xi'an branch of the Spring Festival Gala has sparked a boom in Tang culture by incorporating the image of the poet Li Bai in an immersive perspective. Traditional attractions are unable to meet the needs of tourists, so incorporating poetry has become a new pursuit. The immersive experience provides a new way of perception, combines with poetry to make people understand Tang culture more deeply, and also brings new opportunities for traditional cultural inheritance and innovation. Based on the literature review, combined with the theory of five senses marketing and industrial integration, this paper takes Theme block of The Longest Day In Chang'an as a case study, analyzes the evaluation of tourists’ perceptions, identifies development constraints, and proposes optimization strategies through field research and questionnaire survey.
2. THEORETICAL FOUNDATIONS AND LITERATURE REVIEW

2.1. Theoretical Foundation

Five senses marketing mobilizes the human body's sight, hearing, touch, taste, smell and other senses to carry out experiential marketing activities, create perceptual experience feeling, stimulate consumption desire[1], which can be empowered by the sense of authenticity and interactivity of the poetic immersion experience; industrial integration refers to the economic phenomenon of mutual crossover, infiltration, fusion, and blurring of the industrial boundaries among different industries or between different trades within the same industry[2]. The traditional culture and tourism industry has the problems of a single product, insufficient attraction, and weak market competitiveness. The combination of modern technology and traditional culture and tourism, the use of five senses marketing and industrial integration theory, provide tourists with a more interactive, personalized, and prominent tourism experience, from the technical empowerment, culture, and tourism to create a poetry culture led immersive culture and tourism experience.

2.2. Literature Review

With the rise of the national tide in recent years, poetry has shown a vigorous development trend, for the development and utilization of poetry tourism provides strong publicity and support, while the use of immersive experiences is to help poetry tourism sustainable development means and power. For example, Theme block of The Longest Day In Chang'an is a successful case of combining poetry culture with tourism development.

Combined with existing research, there is theoretical support for the combination of poetry and immersion. For example, Wang Xianfeng believes that immersive technology can produce an immersive artistic view than simply interpreting poems[3]. The domestic and international literature on the use of immersion for tourism is even richer. Zou Dongmei believes that VR technology to help red travel has the advantages of obvious policy orientation, and there are related successful pilots [4]. Tian Yajuan,etc. introduced the "meta-universe" into cultural heritage protection to solve the problem of limited space, enhance interactivity, and understand history more thoroughly[5]. Jing Ye,etc. proposed to use the concept of "Internet +" to study tourism product innovation[6]. Buhalis,etc. proposed that the "metaverse" integrates the physical and digital worlds to support users in experiencing virtual encounters in ancient times and space exploration[7]. Eleftherios Anastasovitis,etc. present VR devices that ultimately provide users with immersive museums[8]. With the development of 3D audio technology, somatosensory control devices, and other cutting-edge technologies, immersive has stronger technical support, and its unique charm makes it quickly become a new hot topic for the integration of technology and creativity. In the field of entertainment, virtual reality games such as Oculus Rift and PlayStation VR have become mainstream; the field of culture and tourism also adopts VR technology in large quantities, realizing the digital display of cultural relics[9,10], and using "immersive drama"[11] and so on. According to some data, in recent years, the typical representative industry of immersive "escape rooms" and "script killing" has maintained an increase of about 20% [12].

To summarize the above, this paper believes that under the role of emerging communication media to help immersive experience, the dissemination of poetry itself and its derivatives of poetry tourism has great prospects for development. The immersive experience program, especially for the improvement of poetry learning mode, integration of poetry resources reference value; comprehensive modern technology for poetry immersive experience has an important role to play, to promote science and technology and culture and tourism to reach the depth of the integration; immersive experience at the macro level of the concept can also be excellent to promote the dissemination of poetry culture. As Prof. Mengman said, "The organic integration of the most important spirit in the spiritual spectrum of the Chinese nation and the present technology is an
important path for the development of cultural creation and cultural tourism, and even the whole technological revolution[13] ".

3. ANALYSIS OF THE CURRENT STATUS OF THE DEVELOPMENT OF POETRY IMMERSION EXPERIENCES

3.1. Overview of Theme block of The Longest Day In Chang'an

Theme block of The Longest Day In Chang'an is located in the Qujiang New District of Xi’an, Shaanxi Province, adjacent to the Tang dynasty Hibiscus Garden Scenic Area as well as the Tang dynasty Nocturnal City Commercial Pedestrian Street, with convenient transportation. The scenic area is generally divided into three floors, with six immersion fields as the core, providing a series of in-depth Tang Dynasty cultural experiences, mainly including themed cultural creations, immersive games, scene experiences, and so on. Relying on the culture of poetry, Theme block of The Longest Day In Chang'an Scenic Area extends many wonderful performances with poetry as the mother version, such as "Pipa Xing", name of a poem and "Chang Xiang Si", etc, which restore the story and mood of the poems for visitors. The scenic spot's unique and charming Tang-style architecture and elaborate space furnishings make Tang culture immersive, touchable, and perceptible. The selection of Theme block of The Longest Day In Chang'an as a case study site can not only summarize the successful experience of cultural and tourism integration but also provide a useful reference for the future development of poetry tourism.

3.2. Twelve Hours of Chang’an Cultural and Tourism Resource Analysis

3.2.1. Poetry and Cultural Activities Experience

Theme block of The Longest Day In Chang’an project brings visitors an immersive experience of Tang Dynasty culture with its unique creativity, integrating poetic elements into various cultural activities and neighborhood performances. Visitors can deeply experience Tang Dynasty culture by enjoying poetry-named performances, interacting with poet NPCs, and tasting delicacies from poems. In programs such as "Pipa Xing", name of a poem and "Chang Xiang Si" the poet NPC guides visitors, delving into the stories behind the poems and feeling the poet's state of mind and feelings.

3.2.2. The State of the Art in Immersive Experiences

Theme block of The Longest Day In Chang’an integrates an immersive experience with poetic culture and entertainment. In the scenic area, elegant and chic lanterns of Tang poetry, landscape architecture of Tang poetry, as well as store nominations and play props that can fully display the imagery of poetry and even indoor games created based on the background of poetry, such as "script killing", attracted a large number of tourists to come. At present, Theme block of The Longest Day In Chang’an is promoting the application of new technologies such as VR experience, Internet of Things, and water mist projection in the cultural tourism scene, combining the values embedded in culture with new technologies, new forms, and new elements, realizing creative transformation and innovative development, and continuously empowering the cultural tourism industry.

4. QUESTIONNAIRE ANALYSIS

4.1. Indicator Construction and Questionnaire Design

On October 3, 2023, we went to the scenic spot for research and invited tour guides, ticket sellers, cleaners, and other staff to conduct interviews. Through the interviews, we learned that: the scenic area design is fully integrated into the Tang style culture, and poetry is inseparable, many performances are derived from Tang Dynasty poetry, and tourists are interested in poetry elements.
Therefore, we choose to take Theme block of The Longest Day In Chang'an Theme Block as a case study to understand the shortcomings of the development of poetry-based immersive tourism through a questionnaire survey, the purpose of the survey is to analyze what indicators are the differences of expectations and satisfaction between tourists' before they experience and after they experience. Secondly, analyzing what are the influencing factors of tourists' satisfaction.

4.1. Indicator Construction

Based on reviewing relevant literature, referring to the results of Wang Yue[14] and Zhou Biqiang[15], we constructed the evaluation index system of tourists' perception, the importance of which is consistent with the satisfaction evaluation index. Finally, "unique poetic cultural resources", "the degree of integration of poetic cultural resources and tourism", "the diversity and innovation of cultural experience programs", "the integration of poetic cultural resources with science and technology", "the degree of integration of poetic cultural resources with tourism", "the diversity and innovation of cultural experience programs", "the diversity and innovation of cultural experience programs", "the diversity and innovation of cultural experience programs", "the diversity and innovation of cultural experience programs", "the integration of poetic cultural resources with science and technology". "Integration of poetry and cultural resources with science and technology", "Scenario-based exhibition", "Immersive experience products", "Fun participation products", "Intelligent tourism", "Intelligent tourism", "Intelligent tourism", "Intelligent tourism", "Intelligent tourism" and "Intelligent tourism". "16 evaluation indicators, including expectations and satisfaction of "intelligent tourism facilities".

4.1.2. Questionnaire Design

The questionnaire is divided into two parts: the first part is mainly about the basic information and the perception of the immersive experience. The second part of the questionnaire adopts Richter's 5-level scale to investigate the questionnaire from the pre- and post-experience aspects, and sets five answers: "very unimportant", "unimportant", "not necessarily", "important", "very important", "important" and "very important". Visitors' satisfaction with the scenic spot after the experience was also set up with five levels of satisfaction. The questionnaire produced in this study was able to screen out the questionnaire with real and reliable information from the selection of questions.

4.2. Questionnaire Data Collection and Sample Analysis

4.2.1. Questionnaire Data Collection

After the previous marketing research to verify that the indicators were well designed, the official questionnaire was started. The data and information of the survey come from the online questionnaire and offline questionnaire. The questionnaire was issued in October 2023, and a total of 143 people participated in filling out the online questionnaire, among which 23 people had never heard of or been to Theme block of The Longest Day In Chang'an, and 120 valid questionnaires were obtained, and the total number of samples obtained was 120 copies.

4.2.2. Questionnaire Sample Analysis

The survey found that: the consumer group of poetry culture immersion experience is young, and young tourists have a strong willingness to demand immersion experience; the majority of tourists visiting Theme block of The Longest Day In Chang'an are from Xi'an, and the source market is concentrated in the city of Xi'an; the composition of tourists is mostly from students, teachers, and company staff, which reflects the traditional cultural education function of Theme block of The Longest Day In Chang'an; among the ways for tourists to learn about Shijinli or Theme block of The Longest Day In Chang'an, online media publicity, We Chat circle of friends and family and friends recommended accounted for more.
4.3. Reliability Analysis and Research Hypotheses

4.3.1. Reliability Analysis

As can be seen from Table 1, the Cronbach reliability coefficients of each variable of expectation value, each variable of satisfaction, and comprehensive satisfaction of tourists are all greater than 0.7, indicating that the variables in the questionnaire, have good reliability, which means that the data collected by the questionnaire are reliable and stable.

<table>
<thead>
<tr>
<th>Evaluation indicators</th>
<th>Kronbach reliability coefficient</th>
<th>subject</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>expected value</td>
<td>job satisfaction</td>
</tr>
<tr>
<td>Unique Poetry Cultural Resources</td>
<td>0.790</td>
<td>0.790</td>
</tr>
<tr>
<td>Degree of integration of poetic cultural resources and tourism</td>
<td>0.795</td>
<td>0.794</td>
</tr>
<tr>
<td>Degree of integration of poetic cultural resources with science and technology</td>
<td>0.795</td>
<td>0.793</td>
</tr>
<tr>
<td>Diversity and innovation in cultural experience programs</td>
<td>0.795</td>
<td>0.793</td>
</tr>
<tr>
<td>Scenario-based exhibition</td>
<td>0.793</td>
<td>0.794</td>
</tr>
<tr>
<td>Immersive Experience Products</td>
<td>0.793</td>
<td>0.794</td>
</tr>
<tr>
<td>Fun Engagement Products</td>
<td>0.794</td>
<td>0.794</td>
</tr>
<tr>
<td>Intelligent Tourism Facilities</td>
<td>0.795</td>
<td>0.796</td>
</tr>
<tr>
<td>Comprehensive passenger satisfaction</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

4.3.2. Research Hypothesis

To determine which factors affect the comprehensive satisfaction of tourists, according to the satisfaction "influencing factors" and tourists’ dissatisfaction factors, point out the shortcomings of the development of poetry cultural immersion experience and put forward the feasible path of the development of poetry immersion experience. To prove that the relevant indicators have an impact on the comprehensive satisfaction of tourists, and to further study the degree of impact on the comprehensive satisfaction of tourists, the following assumptions are made:

Hypothesis 1: It is hypothesized that unique poetic cultural resources have a significant positive effect on the overall satisfaction of tourists;

Hypothesis 2: It is hypothesized that the degree of integration of poetic cultural resources and tourism has a significant positive effect on the overall satisfaction of tourists;

Hypothesis 3: It is hypothesized that the degree of integration of poetic cultural resources and technology has a significant positive effect on the overall satisfaction of tourists;

Hypothesis 4: It is hypothesized that the diversity and innovation of cultural experience programs will have a significant positive effect on overall visitor satisfaction;
Hypothesis 5: It is hypothesized that scenario-based exhibitions have a significant positive effect on overall tourist satisfaction;
Hypothesis 6: It is hypothesized that immersive experience offerings have a significant positive impact on overall visitor satisfaction;
Hypothesis 7: It is hypothesized that fun engagement products have a significant positive effect on overall tourist satisfaction;
Hypothesis 8: It is hypothesized that smart tourism facilities have a significant positive impact on overall tourist satisfaction.

4.4. Description of Statistical Analysis

4.4.1. Importance Indicators
In this paper, we will use the expectation value to describe the importance, from the questionnaire results show that the mean value of the scores of unique poetic cultural resources, the diversity and innovation of cultural experience programs, and scenario-based exhibitions are between 3.7 and 4.2, which indicates that these three variables are important factors for the tourism development of the Twelve Hours of Chang'an. The mean value of the five indicators, namely, the degree of integration of poetic cultural resources and tourism, the degree of integration of poetic cultural resources and technology, immersive experiential products, interesting participatory products, and intelligent tourism facilities, is below 3.7, indicating that these five variables are the second most important factors for the tourism development of the Twelve Hours of Chang'an.

4.4.2. Satisfaction Indicators
From the data analysis, it is learned that tourists' satisfaction with the scenic spots is evaluated differently. The scores of unique poetic cultural resources, the degree of integration of poetic cultural resources with science and technology, the diversity and innovation of cultural experience programs, and intelligent tourism facilities are all between 3.6 and 3.7, indicating that tourists are slightly dissatisfied with these indicators. The scores of the degree of integration of poetry and cultural resources with tourism, scenario-based exhibitions, immersive experience products, and fun participation products are all below 3.6, indicating that tourists are dissatisfied with these indicators.

4.5. Paired T-test
To know the difference between tourists' expectations and perceptions of the poetry culture immersion experience, a paired t-test was utilized (Table 2). According to the results, the significance of "unique poetic cultural resources" and "scenario-based exhibition" is less than 0.05, and the significance of satisfaction is higher than the importance. For "the degree of integration of poetry and cultural resources with tourism" and "interesting participatory products", the significance is greater than 0.05, indicating that there is no significant difference between satisfaction and importance. For the other items, the significance of importance is higher than satisfaction, indicating that tourists consider these indicators important but express dissatisfaction with them, suggesting that the development of poetry culture and immersive experience is deficient in these indicators.
### Table 2. Paired t-test for each indicator

<table>
<thead>
<tr>
<th>subject</th>
<th>Paired (mean ± standard deviation)</th>
<th>Difference (importance - satisfaction)</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique Poetry Cultural Resources</td>
<td>3.74±1.26</td>
<td>3.65±1.27</td>
<td>0.09</td>
<td>2.149</td>
</tr>
<tr>
<td>Degree of integration of poetic cultural resources and tourism</td>
<td>3.54±1.18</td>
<td>3.57±1.19</td>
<td>-0.03</td>
<td>-0.219</td>
</tr>
<tr>
<td>Degree of integration of poetic cultural resources with science and technology</td>
<td>3.60±1.14</td>
<td>3.62±1.25</td>
<td>-0.02</td>
<td>-0.156</td>
</tr>
<tr>
<td>Diversity and innovation in cultural experience programs</td>
<td>3.70±1.13</td>
<td>3.60±1.20</td>
<td>0.10</td>
<td>0.980</td>
</tr>
<tr>
<td>Scenario-based exhibition</td>
<td>3.74±1.16</td>
<td>3.56±1.16</td>
<td>0.18</td>
<td>2.089</td>
</tr>
<tr>
<td>Immersive Experience Products</td>
<td>3.60±1.24</td>
<td>3.58±1.17</td>
<td>0.02</td>
<td>0.156</td>
</tr>
<tr>
<td>Fun Engagement Products</td>
<td>3.63±1.22</td>
<td>3.54±1.13</td>
<td>0.08</td>
<td>0.832</td>
</tr>
<tr>
<td>Intelligent Tourism Facilities</td>
<td>3.68±1.18</td>
<td>3.65±1.06</td>
<td>0.03</td>
<td>0.238</td>
</tr>
</tbody>
</table>

Note: * p<0.05  ** p<0.01

### 4.6. Comprehensive Satisfaction Analysis of Poetry Culture Immersion Experience

The previous research hypotheses on the evaluation of comprehensive satisfaction of tourists, the importance and satisfaction of the variables, and indicators of the reliability test, so what variables affect the comprehensive satisfaction of tourists? Are the previous research hypotheses valid? The influencing factors of tourists' comprehensive satisfaction evaluation of Shijingli Theme Scenic Spot Theme scenic spot or Theme block of The Longest Day In Chang'an can be analyzed in SPSS 23.0 using a regression equation model.

#### 4.6.1. Relevant Analysis

From Table 3 below, we can see that the correlation coefficients of the eight indicators and the comprehensive satisfaction of tourists are 0.874, 0.806, 0.801, 0.800, 0.807, 0.796, 0.831, 0.810, respectively, and p<0.05 for each indicator, which means that there is a significant positive correlation between each indicator and the comprehensive satisfaction of tourists.
Table 3. Table of results of correlation analysis

<table>
<thead>
<tr>
<th></th>
<th>Unique Poetry Cultural Resources</th>
<th>Degree of integration of poetic cultural resources and tourism</th>
<th>Degree of integration of poetic cultural resources with science and technology</th>
<th>Diversity and innovation in cultural experience programs</th>
<th>Scenario-based exhibition</th>
<th>Immersive Experience Products</th>
<th>Fun Engagement Products</th>
<th>Intelligent Tourism Facilities</th>
<th>Comprehensives passenger satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique Poetry Cultural Resources</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of integration of poetic cultural resources and tourism</td>
<td>.675*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of integration of poetic cultural resources with science and technology</td>
<td>.670*</td>
<td>.541**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversity and innovation in cultural experience programs</td>
<td>.654*</td>
<td>.569**</td>
<td>.556**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario-based exhibition</td>
<td>.632*</td>
<td>.612**</td>
<td>.622**</td>
<td>.665**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immersive Experience Products</td>
<td>.665*</td>
<td>.553**</td>
<td>.610**</td>
<td>.611**</td>
<td>.539 **</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fun Engagement Products</td>
<td>.703*</td>
<td>.678**</td>
<td>.633**</td>
<td>.547**</td>
<td>.596 **</td>
<td>.636 **</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent Tourism Facilities</td>
<td>.684*</td>
<td>.634**</td>
<td>.567**</td>
<td>.611**</td>
<td>.606 **</td>
<td>.580 **</td>
<td>.645 **</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Comprehensives passenger satisfaction</td>
<td>.874*</td>
<td>.806**</td>
<td>.801**</td>
<td>.800**</td>
<td>.807 **</td>
<td>.796 **</td>
<td>.831 **</td>
<td>.810 **</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: *, p<0.05; **, p<0.01
4.6.2. Regression Analysis

Multiple linear regression analysis was carried out with each indicator (X1 to X8) as the independent variable and comprehensive satisfaction of tourists (Y) as the dependent variable. Table 4 shows that the R² is 0.81, which indicates that the model fits well and the variables can explain the comprehensive satisfaction of tourists well, and the VIF value is less than 5, which indicates that there is no multicollinearity between the variables, and the eight indicators have a significant positive effect on the comprehensive satisfaction of tourists, and the previous hypotheses are valid.

Table 4. Table of results of regression analysis

<table>
<thead>
<tr>
<th>mould</th>
<th>Nonstandardized coefficients</th>
<th>standardized factor Beta</th>
<th>T</th>
<th>P</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.764</td>
<td>0.013</td>
<td>15.64</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Unique Poetry Cultural Resources (X1)</td>
<td>1.000</td>
<td>0.000</td>
<td>0.165</td>
<td>2.149</td>
<td>0.000</td>
</tr>
<tr>
<td>Degree of integration of poetic cultural resources and tourism (X2)</td>
<td>1.000</td>
<td>0.000</td>
<td>0.154</td>
<td>6.875</td>
<td>0.000</td>
</tr>
<tr>
<td>Degree of integration of poetic and cultural resources with science and technology (X3)</td>
<td>1.000</td>
<td>0.000</td>
<td>0.162</td>
<td>7.155</td>
<td>0.000</td>
</tr>
<tr>
<td>Diversity and innovation in cultural experience programs (X5)</td>
<td>0.277</td>
<td>0.056</td>
<td>0.278</td>
<td>4.943</td>
<td>0.009</td>
</tr>
<tr>
<td>Scenario-based exhibition (X6)</td>
<td>0.307</td>
<td>0.036</td>
<td>0.379</td>
<td>8.575</td>
<td>0.003</td>
</tr>
<tr>
<td>Immersive experience products (X5)</td>
<td>1.000</td>
<td>0.000</td>
<td>0.152</td>
<td>6.632</td>
<td>0.000</td>
</tr>
<tr>
<td>Fun engagement products (X7)</td>
<td>1.000</td>
<td>0.000</td>
<td>0.147</td>
<td>5.832</td>
<td>0.000</td>
</tr>
<tr>
<td>Intelligent tourism facilities (X8)</td>
<td>0.378</td>
<td>0.059</td>
<td>0.377</td>
<td>6.454</td>
<td>0.010</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td></td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td>186.583</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P</td>
<td></td>
<td></td>
<td>&lt;0.001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: satisfaction scale

From the above table the regression equation is obtained as:

\[ Y = 1.764 + X1 \times 1.000 + X2 \times 1.000 + X3 \times 0.277 + X4 \times 0.307 + X5 \times 1.000 + X6 \times 1.000 + X7 \times 1.000 + X8 \times 0.378. \]  
(1)
From the regression equation, it can be seen that all eight indicators affect the comprehensive satisfaction evaluation of tourists, among which the unique poetry and cultural resources, the degree of integration of poetry and cultural resources with tourism, the degree of integration of poetry and cultural resources with science and technology have the greatest impact, immersive experience products, and fun participation products, followed by intelligent tourism facilities, scenario-based exhibitions and the diversity and innovativeness of cultural experience programs.

4.7. IPA Analysis

In this section, IPA analysis is used to divide the space into 4 quadrants by taking the satisfaction level of travelers with each module of the scenic immersive experience as the vertical axis and its importance as the horizontal axis, and using the total average of the importance and satisfaction levels as the intersection of the X and Y axes, respectively (Figure 1).

![Figure 1. Schematic diagram of IPA analysis](image)

As can be seen from Figure 1: the indicators in the first quadrant are areas of strength and need to be maintained; the indicators in the second quadrant basically meet the needs and the status quo can be maintained; for the indicators in the third quadrant, the travelers don't care too much about these three areas and aren't very satisfied with them, so they need to be upgraded and improved to some extent; leaving the fourth quadrant as an area of focus for improvement.

4.8. Comparison Of Differences In Demographic Variables

4.8.1. Independent Samples T-test

The t-test of independent samples showed that there was no significant difference between tourists of different genders for the variables in the questionnaire (P>0.05), so gender did not affect the expectations and satisfaction of the poetry culture immersion experience, and the scenic spot did not need to develop strategies based on gender.

4.8.2. One-way Test

The one-way test shows that there is a difference P=0.042 (P<0.05) in the satisfaction of tourists of different ages for the diversity and innovativeness of the cultural experience program, and the rest of the indicators of satisfaction and expectation are not significantly different (P>0.05). Therefore, age affects the satisfaction with the poetry culture immersion experience, and scenic spots need to formulate strategies according to age respectively.

The one-way test shows that there are differences in the expectations of tourists of different occupations for the degree of integration of poetic cultural resources with science and technology,
the diversity and innovativeness of cultural experience programs, respectively P=0.043, P=0.036 (P<0.05), and the rest of the expectations and satisfaction indexes do not have significant differences (P>0.05). So occupation affects the expectation value of poetry culture immersion experience, and scenic spots need to formulate strategies according to occupation respectively.

After the one-way test, there is a significant difference between the expectation value of tourists from different regions for the diversity and innovation of cultural experience programs and the satisfaction of immersive experience products, respectively P=0.008, P=0.047 (P<0.05), and the rest of the expectation value and satisfaction indicators are not significantly different (P>0.05). Therefore, different regions affect the expected value of the poetry culture immersion experience, and scenic spots need to formulate strategies according to different regions respectively.

5. PROBLEMS WITH THE DEVELOPMENT OF POETRY IMMERSION EXPERIENCES

5.1. The degree of integration of poetic and cultural resources with science and technology needs to be upgraded urgently

Poetry immersion experience faces challenges in technology integration. Although technologies such as AR and VR are widely used, their popularity and maturity in poetry experience need to be improved, and stability and compatibility problems also affect the experience effect. At the same time, the integration of poetry and technology also needs to balance the sense of technology and cultural depth, meet the individual needs of different visitors, and maintain artistic orientation.

5.2. Single product for poetry experience

The poetry experience program still needs to increase diversity and innovation, the existing immersion experience exists in a single way of experience, lack of content innovation, lack of emotional resonance, insufficient interactivity, and other problems.

Specifically manifested in the experience is relatively single, lack of diversified forms of presentation; the degree of innovation of the content is insufficient, still stuck in the simple presentation and interpretation of the poems, lack of in-depth excavation and novel ways of presentation; lack of sufficient interactivity, the user can only be passive to watch and listen to, unable to take the initiative to participate in the experience.

5.3. Failure to give full play to intelligent tourism facilities

Intelligent tourism facilities are underutilized in the Theme block of The Longest Day In Chang'an Scenic Area. Some products over-emphasize the technical effects and neglect the connotation and beauty of the poems themselves, resulting in a user experience design that is not humanized enough. Some products are lagging in updating, lack continuous optimization, and equipment compatibility and stability problems still exist. Poor compatibility between different devices is prone to problems such as lagging and flashing back, affecting the effect of user experience.

5.4. Inadequate market positioning

According to the aforementioned statistical analysis, tourists' age, occupation, and place of origin affect their expectations of the poetry immersion experience. At present, the poetry immersion experience scenic spots mainly based on Theme block of The Longest Day In Chang'an lack of market segmentation of tourists, provide different services for different groups of people, and the target group positioning is not precise.
Existing problems: tourists of different ages have different needs and acceptance of cultural experience; tourists of different occupations also have differentiated needs for the product; the source of visitors to Theme block of The Longest Day In Chang’an Scenic Area covers local, national, and overseas tourists, and tourists from different sources have different cultural backgrounds and habits.

6. RESPONSE TO THE DEVELOPMENT OF POETRY IMMERSION EXPERIENCES

6.1. Technology enabled poetry immersion experience development

First, focus on technology optimization and innovation to improve the maturity of technology. Optimize the stability and compatibility of technologies such as AR and VR, and explore the application of new technologies such as Mixed Reality (MR) and Artificial Intelligence in the poetry experience to improve the quality of user experience. Secondly, to improve the quality of the content of the experience, to give tourists a "time-travel" experience, virtual reality technology (VR) and augmented reality technology (AR) applied to the poetry experience, for tourists, the twelve hours in Chang’ an to experience the charm of poetry is to be in the city of Chang’an in the Tang Dynasty, to experience the poets do things behind the scenes. The state of mind behind the poet's work. At the same time, it reduces the technical threshold, optimizes the operation process, and improves the satisfaction of user experience.

6.2. Enhancing product innovation

To solve the problem of homogenization of poetry experience products, diversified experience methods can be explored, using holographic projection, interactive multimedia, and other forms of technological presentation, and continuously focusing on the development of emerging technologies. At the same time, strengthens content innovation, digs deep into the cultural connotation of poetry, designs emotional experience methods, and enhances the emotional resonance between users and poetry. In addition, design more interactive experience links, so that users can participate in them and feel the beauty of poetry.

6.3. Investing in smart tourism facilities

In terms of smart tourism facilities, the integration of technology and content should be strengthened to showcase the uniqueness of poetry. Optimize the design of user experience, simplify the operation process, provide personalized services, and continuously update and optimize the content. Cooperate with poetry researchers and artists to introduce more high-quality works. Collect user feedback and continuously improve, establish user feedback mechanism, evaluate and optimize product performance, ensure device compatibility and stability. Continuously improve the product to enhance user experience and product quality.

6.4. Focus on market positioning and marketing optimization

Poetry immersion experiences only rely on a single cultural experience product is difficult to meet the needs of different types of tourists, the need to further refine the market positioning, carry out a differentiated marketing strategy, in-depth understanding of the needs of different types of tourists, customized exclusive experience services, to enhance the scenic area's market competitiveness and attractiveness. For example, for the young market, you can use virtual reality, augmented reality, and other modern technology, adding modern elements to meet the curiosity of the young market.
7. CONCLUSION

This paper takes "theory-survey-issue-strategy" as the idea takes the theory of five senses marketing and industry integration as the theoretical guidance, and finds out the constraints of the development of poetry immersive experience scenic spot through the fieldwork and statistical analysis of questionnaire on The Longest Day In Chang'an Theme Block. At the same time, it proposes optimization measures such as technology-enabled poetry immersion experience development, strengthening product innovation, investing in intelligent tourism facilities, etc. It is expected that the immersive experience technology will enable the scenic spot to obtain greater economic and social benefits.

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