

Retraction

Retracted: The Integrated Development of Tourism and Cultural and Creative Industries Based on Smart City Cloud Service Information System

Mobile Information Systems

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

- [1] J. Yan and Z. Li, "The Integrated Development of Tourism and Cultural and Creative Industries Based on Smart City Cloud Service Information System," *Mobile Information Systems*, vol. 2022, Article ID 4064821, 10 pages, 2022.

Research Article

The Integrated Development of Tourism and Cultural and Creative Industries Based on Smart City Cloud Service Information System

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In response to the integration of tourism and media, this paper proposes research on the integration of tourism and its practice, leadership, and creative business based on smart city weather information. Based on this research, a systematic investigation and evaluation of smart city tourism competition models are conducted to accurately measure and influence the growth and competitiveness of smart cities, build smart tourism cities, and bring health benefits. Build China's smart tourism city and enhance the international competitiveness of China's tourism industry. Second, develop a measurement process. As for the evaluation criteria of tourism competitiveness of smart tourism cities, this paper mainly adopts the methods of single index evaluation and expert experience scoring. Select single indicators, especially quantitative indicators, and evaluate about relevant national, local, and industrial standard values. For qualitative indicators, based on the determination of relevant weights, five grades I, II, III, IV, and V are adopted, with a total score of 100, and the corresponding scores of the five grades are ≤ 50 , 50–59, 60–69, 70–89, and ≥ 90 , so as to determine the evaluation standard of smart Tourism city. The research shows that the research on the integration of tourism industry and cultural and creative industry based on smart city weather data is effective.

1. Introduction

With the improvement of national material living standards and the enhancement of consumption awareness, the scale of the current tourism industry is becoming larger and larger, and new changes have gradually appeared in the tourism market. Tourists have gradually changed from group tourism to self-help tourism and individual tourism. Nowadays, the trend of free travel and individual tourists in the tourism market has become more and more obvious. The absolute number of individual tourists and their proportion in the total source of tourists are increasing year by year. The trend of popularization, family, quality, and diversification of tourism is increasing. It can be predicted that individual tourism will gradually surpass group tourism and become the main trend in the tourism market. Different from the nanny group tour, individual tourists have more obvious personalized needs in booking tourism products, planning tourism routes, and choosing tourism services. The

diversified demand for tourism services is increasing, and the demand for tourism information services is also greatly improved. Traditional tourism services can no longer meet the growing personalized needs of tourists. In the future development of tourism, it will become an urgent problem to meet the growing personalized tourism needs of tourists and break through the limitations of traditional tourism. Smart tourism provides a new idea for breaking through the traditional tourism service mode, well-integrated services such as food, accommodation, transportation, tourism, shopping, entertainment, etc., in local tourist destinations and can provide the best possible service and availability, thereby improving the best benefits of tourism.

2. Literature Review

Mao and others say that the concept of “smart world” or “intelligent world” was first introduced by IBM in 2008 [1]. Thus, the concept of “smart city” as the concept of “smart

world” was born. The wave of “smart cities” is sweeping the world. As this wave has taken root in the hearts of the people, the new concept of “smart tourism” has been introduced. Smart marketing is not only the blind leading of China’s tourism industry but also the new rules of tourism modernization. Gan et al. stated that the National Tourism Administration designated 2014 as the “China Smart Tourism Year.” Smart tourism pilot projects such as smart city tourism, smart tourism scenic spots, and smart tourism industries are gradually being carried out across the country. Smart business is the fusion of management research in the field of aesthetics and modern information and communication technology [2]. Yang et al. and others said that it takes cloud computing, Internet of things, mobile communication, intelligent terminal, etc., as the technical basis and computers, tablets and smart phones as the information terminals. By including all aspects of clothing, food, accommodation and transportation of the tourism destination in the tourism service system, smart Tourism hopes to build a modern tourism all-round service system to provide various tourism services for tourists more conveniently, so as to improve the ability of the tourism industry to meet the needs of tourists [3]. Yacheng et al. and others said that the smart tourism model integrates the network with tourism products, services, management and marketing. With the network as the link, smart tourism makes the needs of tourists and scenic spot services more closely integrated [4]. Bondur et al. and others said that tourists can query and browse scenic spot information, purchase scenic spot tickets, search for traffic conditions, and share their experience with you after playing, which makes people’s travel more and more convenient and greatly changes people’s travel mode [5]. Moreover, scenic spots can obtain some important information through Internet data analysis, such as tourist sources, tourism motivation, consumption preferences and user evaluation, so as to provide better services and data support for tourists. Smart tourism plays a key role in the sustainable development of the whole tourism industry. Musah et al. and others said that in the actual operation, with the continuous progress of science and technology as the main support for the development of the whole tourism industry, we should create an intelligent tourism service system throughout the whole tourism process before, during and after tourism [6]. Wu and Lin stated that due to the late start and short development cycle of smart tourism scenic spots in my country, the smart building industry in many scenic spots is still in the first stage of development and is still growing. Development and research. The National Tourism Administration has not yet announced the research standards and procedures for the development of scenic spots, and there is no mature standard for use and development [7]. Usman and Hammer said that the intelligent construction of tourism in a scenic spot is currently one of the best developed scenic spots in Sanya. Since the second half of 2013, a scenic spot has invested more than 10 million yuan in the first phase to comprehensively promote the construction of smart tourism scenic spots in Hainan Province. The online smart projects are divided into five aspects: comprehensive ticket management platform, smart security

platform, smart tourism experience, scenic spot publicity and promotion, and comprehensive administrative management. At present, more than 20 intelligent construction projects have been developed and completed, which can basically realize some basic functions of intelligent scenic spot construction, such as online ticket purchase, offline code scanning, free WiFi coverage, multi-channel ticket purchase, official account micro website operation, and real-time monitoring of visitor volume [8]. Khan et al. and others said that due to the rapid development of information technology, the technology of tourism intelligent construction in scenic spots continues to push through the old and bring forth the new. Although a tourism intelligent construction is at the forefront, there are also some problems, such as holiday tourist congestion, asymmetric information between tourists and scenic spots, nonstandard ticketing and admission methods [9]. Most projects are developed and constructed from the perspective of scenic spot management, often focusing on the hardware construction of intelligent system. Some intelligent projects have invested a lot of human and material resources, but they have not achieved the expected results. This top-down smart system construction starting from scenic spot managers pays attention to the integrity of resources, but often lacks a keen response to changes in market demand, which is contrary to the “tourist oriented” concept of smart tourism. Based on the theoretical analysis and summary of a large number of research literature on smart tourism and smart scenic spot construction, this paper aims to turn its attention to tourists and take tourists’ tourism experience as the final foothold of smart scenic spot construction. Hager Kopp and Palka said that as the basis for the implementation of smart tourism, smart scenic spots integrate all smart tourism services and provide them to tourists. Starting from the perspective of tourist experience, the research on smart scenic spots can enrich the theory of smart scenic spots and broaden the research scope, promote the multi angle Research of smart tourism and obtain the actual situation of tourist experience in smart scenic spots [10]. Help the scenic spot managers further understand and find out the reasons affecting the tourist experience, provide reference and guidance for optimizing the tourist experience management of the scenic spot, provide more convenient services for tourists by improving the intelligent construction of scenic spot tourism, and provide reference cases and models for the construction of other intelligent scenic spots. This is very important for the development of scenic spots in the context of teaching. Research on improving the integration of tourism and cultural and creative industries based on urban smart meteorological information is shown in Figure 1.

3. Methods

Firstly, the index system must be based on a scientific basis to truly and objectively reflect the essential characteristics, theoretical framework, and construction level of smart tourism city. The choice of the instrument requires some research. On the other hand, avoid judgment, design, and generalization. On the other hand, avoid confusion,

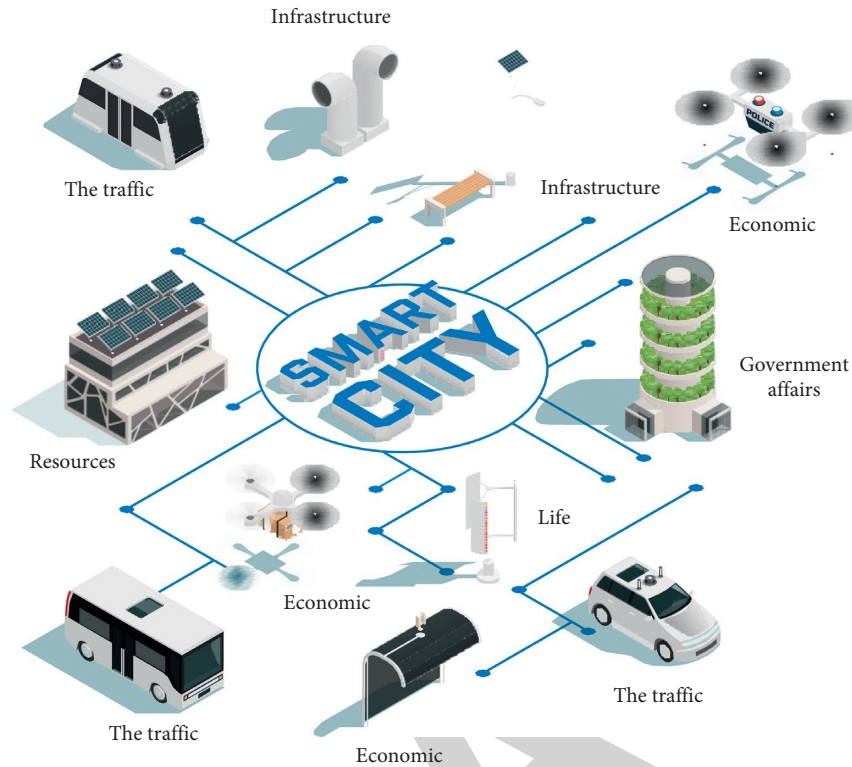


FIGURE 1: Research on the integrated development of tourism and cultural and creative industries based on a smart city cloud service information system.

confusion, etc., errors in the selected indicators. Under the guidance of scientific theory, indicators should be collectable. The collection of historical data and updated data is reliable, convenient, and scientific, and can truly reflect the competitiveness level of smart tourism cities [11]. Both the supplier and the demander continuously improve the level of information demand. With the deeper understanding and more requirements of tourists on tourism, the demand side of tourism information in the network era, that is, the demand of tourists for tourism information, has changed greatly, mainly in the following three points. First, the comprehensiveness of information needs. The tourism industry is a comprehensive industry. The information required by tourists has developed from basic “food, housing, transportation, tourism, entertainment and purchase” to more comprehensive “food, housing, transportation, tourism, entertainment, purchase, consultation, litigation, reservation and sharing”; second, the dynamic of information demand. Tourists are required to dynamically receive information, obtain the latest tourism information, change tourism plans in time, and obtain tour guide services at any time, so as to reduce the uncertainty and unknowness of the tourism process; third, the personalization of information needs [12]. Many tourists pay more attention to the arrival of self-help travel experiences, and many tourists pay more attention to the arrival of self-help travel. Different individuals have different tourism preferences, resulting in different tourists’ demand preferences for tourism information [13]. At the same time, the supplier of tourism information, namely the government and tourism enterprises,

must provide tourism information with the characteristics of perfection, authenticity, and timeliness to meet the needs of tourists. This requires the tourism information supplier to be more mature in the technology of information collection, screening, and processing. It can be seen that in the process of modern tourism development, both the demander and the supplier of information have deeper requirements for tourism information, and these requirements need to be realized by smart tourism. The online tourism market has expanded rapidly. According to data released by the China Internet Network Information Center, China’s online business potential is shown in Table 1.

With the new changes in tourism patterns, independent travel has gradually become a popular way of tourism. It is the general trend to build an effective network marketing system for tourism merchants and tourists. The tourism e-commerce platform can be used for all tourist attractions, and tourist hotels.

Travel agencies and other enterprises provide tourism consulting and publicity services such as data collection, scenic spot positioning, information, and analysis. The construction and application of an enterprise e-commerce platform can help tourism merchants improve their marketing ability, improve their sales channels and promote the integrated development of the tourism industry. It can be divided into five levels according to its establishment level [14, 15], as shown in Table 2:

The platforms of new social media usually include search engines, Weibo, SNS, blogs, podcasts, BBS, mobile phones, mobile devices, APPs, etc., New media is an all-around

TABLE 1: Relevant data of online tourism market.

Project	As of December 2014	As of December 2013	As of December 2012	As of December 2011	As of December 2010
Internet users (100 million)	6.49	6.18	5.64	5.13	4.57
Internet penetration (%)	47.9	45.8	42.1	38.3	34.3
Online shopping users (100 million)	3.61	3.02	2.42	1.94	1.61
Online payment users (100 million)	3.04	2.60	2.21	1.67	1.37
Year on year growth rate of internet users booking air tickets, hotels, train tickets and travel itineraries (100 million people)	2.22	1.81	1.12	0.42	0.36
Scale of mobile internet users (100 million people)	22.7	61.9	166.7	16.6	19.5
Scale of mobile internet users (100 million people)	5.57	5.00	4.20	3.56	3.03
Proportion of mobile internet users (%)	85.8	81.0	74.5	69.3	66.2

TABLE 2: Evaluation criteria for the level of smart tourism marketing e-commerce platform.

Evaluation basis	Grade	Natural endowments
No e-commerce platform for smart tourism marketing has been established	I	≤50
Low, only basic information browsing and query functions	II	50–59
Normal, in addition to the basic functions, it also has the functions of scenic spot information query, tourism commodity sales, and traffic navigation	III	60–69
High efficiency, complete functions, and strong interaction, realizing online ordering, order management, information docking, network security, online payment, financial settlement management, and user information management	IV	70–89
Very high, good user experience, mining and analyzing customer consumption records, strengthening functions such as customer source, customer, group purchase, sales, and product analysis, so as to realize the interconnection of procurement and supply information between upstream and downstream enterprises.		
No e-commerce platform for smart tourism marketing has been established	V	≥90
Low, only basic information browsing and query functions		

industry jointly created by many industry leaders; it mainly includes digital interactive marketing system, mobile terminal app, new media marketing mode, information retrieval, and two-way push system. According to their use level and innovation mode, they can be divided into the following five levels, as shown in Table 3:

The Internet of Things is becoming a new bright spot for information and business in China and the world. Through the Internet of Things system, various types of tourism information can be discovered, collected, and released on time. Tourists can understand the information at any time through the platform, enhance their autonomy and interaction, and bring more than expected tourism experiences to tourists. The construction level of Tourism Internet of things can be divided into the following five levels, as shown in Table 4:

Smart tourism management system refers to whether to establish a big data smart tourism master dashboard, collect the environmental and ecological monitoring, tourism reception video monitoring, and other data into the system, visualize and visualize the data, and realize the integrated management of big data and diversified data. The construction of a smart tourism management system mainly includes a tourism monitoring platform, safety and emergency management platform, tourism industry integrity management system, tourism enterprise rating system, tourism quality supervision system, and tourism project library management system. The evaluation criteria can be divided into the following five levels [16], as shown in Table 5:

In the practical research of competitiveness evaluation and evaluation, although the research angles are different and the evaluation methods are different, the appropriate evaluation methods should be selected according to different industries and different objects. A smart tourism city itself is a complex and changeable system with many influencing factors, and the relationship between various factors is complex and nonlinear. Therefore, using principal component analysis, network analytic hierarchy process (ANP > AHP), fuzzy comprehensive evaluation method. Factor analysis and other methods to evaluate urban competitiveness have some defects of subjectivity and difficult to define the boundary [17, 18]. Artificial neural network is an effective method to solve complex nonlinear systems. Because of its nonlinear mapping ability, self-learning and adaptive ability, generalization ability and fault tolerance ability. At the same time, it has the advantages of strong input and output nonlinear mapping ability, front and rear guidance and so on. It does all the constant work with all the facts. It is widely used in research fields such as competitive industries, competitive brands, and urban competition. However, tourism experts are few and far between. Therefore, this paper chooses BP neural network to develop a comprehensive evaluation model of smart city tourism industry, and uses MATLAB 7.0 software to realize comprehensive tourism industry simulation. Can. More, goals indicate the level and level of competition in each city. BP neural network is developed through a reproduction

TABLE 3: Evaluation criteria for innovative means of new media marketing.

Evaluation basis	Grade	Natural endowments
0, there is no innovative means of new media marketing, and only on-site sales are supported	I	≤50
1, only on-site sales and website marketing	II	50–59
2–3, normal, in addition to website marketing, it supports various online marketing methods such as e-coupons, point cashback, search marketing, website alliance blog, microblog, WeChat, forum, e-mail and social network	III	60–69
3–5, there are many marketing means, including official microblog and links, scenic spot official website, QR code, WeChat direct sales, tmall, qunar, Ctrip and other major tourism e-commerce distribution	IV	70–89
≥5, diversified marketing means, such as portal, search engine, SNS, blog, BBS, Wiki, mobile phone	V	≥90

TABLE 4: Evaluation criteria for Tourism Internet of things construction.

Evaluation basis	Grade	Natural endowments
Low, only complete the infrastructure construction of tourism informatization	I	≤50
Normal, the cooperation among star hotels, scenic spots, travel agencies, and tourism departments shall be completed, and a reasonably structured network system shall be established.	II	50–59
High, the development of tourism information and services is intelligent, providing comprehensive and detailed information on tourism facilities, tourism routes, tourist attractions, weather conditions, and so on	III	60–69
Very high, distinctive tourism information services to meet the personalized and all-round needs of tourists. Realize paperless tourism, green operation, and low-carbon services	IV	70–89

TABLE 5: Evaluation criteria for smart tourism management system construction.

Evaluation basis	Grade	Natural endowments
No smart tourism management system has been established	I	≤50
The above systems support one	II	50–59
The above systems support two	III	60–69
The above systems support three to four items	IV	70–89
The above systems support more than four	V	≥90

algorithm. It is an error-reproducing multi-level feedback network [19]. The topology model of BP neural network structure includes entry, exit and release process. The learning process in the network has forward and backward representations. In the forward propagation process, the input pattern is realized by the input process through the hidden process and reaches the output layer. The nodes of the same layer do not match, and the nodes of different layers are connected to the front. If the desired output is not received during the output process, the error is propagated and returned in the same way, and the weights of several neurons are adjusted until the decision authorizes the error.

This form selects a three-layer BP neural network. $X_1, X_2, X_3, \dots, X_n$ are the core of the BP neural network. The entry system consists of n neural units, and the encryption system consists of P neural units. Weighted connection between input layer and hidden layer $W_{ih} = (i = 1, 2, \dots, n, h = 1, 2, \dots, p)$ Initial value $b_n (h = 1, 2, \dots, p)$ Hidden layer node, the initial value of the output layer node is $b_o (o = 1, 2, \dots, q)$, the relative weights of the hidden layer and the release process are exactly where $(h = 1, 2, \dots, p, l = 0 = 1, 2, \dots, q)$, the number of neurons in the output layer is 1. Its structure is shown in Figure 2.

Each layer of a given neural network is connected by weights of random numbers $(-1, 1)$ in blocks, set the error

function e , and give the calculation accuracy value ε and the maximum training times M .

Step 1. Input the feature vector of the training sample from the neural network input layer node, as shown in formula (1):

$$\begin{aligned} x(k) &= (x_1(k), x_2(k), \dots, x_n(k)); \\ d_0(k) &= (d_1(k), d_2(k), \dots, d_q(k)). \end{aligned} \quad (1)$$

Step 2. The output calculation of each neuron vector in the hidden layer and output layer of neural network is shown in formulas (2), (3):

$$\begin{aligned} h_h^i(k) &= \sum_{i=1}^n w_{ih} x_i(k) - b_h; \text{ho}_h(k) \\ &= f(\text{hi}_h(k)) (h = 1, 2, \dots, p), \end{aligned} \quad (2)$$

$$\begin{aligned} y_o^i(k) &= \sum_{h=1}^p w_{ho} \text{ho}_h(k) - b_o; \text{yo}_o(k) \\ &= f(\text{yi}_o(k)) (o = 1, 2, \dots, p). \end{aligned} \quad (3)$$

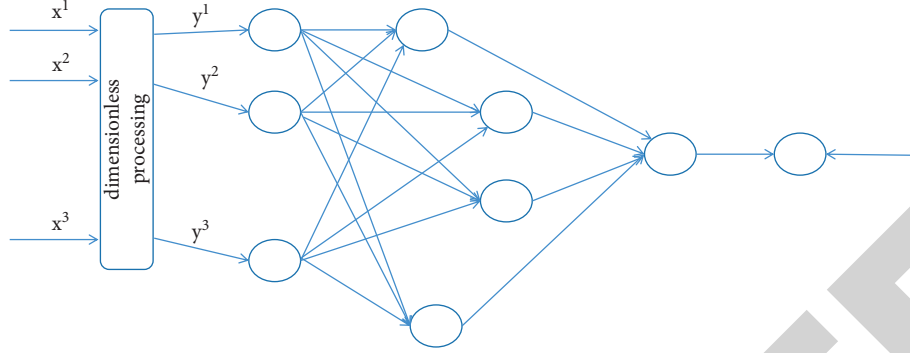


FIGURE 2: BP neural network topology.

Step 3. Calculate the partial derivative $\delta_o(k)$ use the expected output rate and actual output value of the network to calculate the error function of each neuron in the output layer, as shown in the formula (4).

$$\begin{aligned} \frac{\partial e}{\partial w_{ho}} &= \frac{\partial e}{\partial y_{i_o}} \frac{\partial y_{i_o}}{\partial w_{ho}}, \\ \frac{\partial e}{\partial y_{i_o}} &= \frac{\partial(1/2 \sum_{o=1}^q (d_o(k) - y_{o_o}(k))^2)}{\partial y_{i_o}} \\ &= (d_o(k) - y_{o_o}(k)) y_{o_o}'(k) \\ &= -(d_o(k) - y_{o_o}(k)) f'(y_{i_o}(k)) = -\delta_o(k). \end{aligned} \quad (4)$$

Step 4. Use the partial derivative of the output layer and the output of the hidden layer to calculate the error function and the connection weights from the hidden layer to the output layer to calculate the derivative part $\delta_o(k)$ of each neuron in the hidden layer, as shown in formulas (5), (6).

$$\begin{aligned} \frac{\partial e}{\partial w_{ho}} &= \frac{\partial e}{\partial y_{i_o}} \frac{\partial y_{i_o}}{\partial w_{ho}}, \\ &= -\delta_o(k) h_{o_h}(k) \\ \frac{\partial e}{\partial h_{i_h}(k)} &= \frac{\partial(1/2 \sum_{o=1}^q (d_o(k) - y_{o_o}(k))^2)}{\partial y_{i_o}} \frac{\partial h_{i_h}(k)}{\partial h_{i_h}(k)}, \\ &= \frac{\partial(1/2 \sum_{o=1}^q d_o(k) - f(y_{i_o}(k))^2)}{\partial h_{i_h}(k)} \frac{\partial h_{i_h}(k)}{\partial h_{i_h}(k)} \\ &= -\left(\left(\sum_{o=1}^q \delta_o(k) w_{ho} \right) f'(h_{i_h}(k)) \right) = -\delta_h(k). \end{aligned} \quad (6)$$

Step 5. Modify the connection weight $w_{ho}(k)$ by using the output $\delta_o(k)$ of the neural network output layer neuron and the output of the hidden layer node. As shown in formulas (7), (8).

$$\begin{aligned} \Delta w_{ho}(k) &= -\mu \frac{\partial e}{\partial w_{ho}}, \\ &= \mu \delta_o(k) h_{o_h}(k), \end{aligned} \quad (7)$$

$$w_{ho}^{N+1} = w_{ho}^N + \eta \delta_o(k) h_{o_h}(k). \quad (8)$$

Step 6. Use the $\delta_h(k)$ of each neuron in the hidden layer of the neural network and the input of each neuron in the input layer to correct the connection weight, as shown in formulas (9), (10).

$$\begin{aligned} \Delta w_{ih}(k) &= -\mu \frac{\partial e}{\partial w_{ih}} \\ &= -\mu \frac{\partial e}{\partial h_{i_h}(k)} \frac{\partial h_{i_h}(k)}{\partial w_{ih}} \\ &= \delta_h(k) x_i(k), \end{aligned} \quad (9)$$

$$w_{ih}^{N+1} = w_{ih}^N + \eta \delta_h(k) x_i(k). \quad (10)$$

The evaluation process of the BP neural network model includes the determination of the impact index, the collection of the data model and the refinement of the data, the training process of the BP neural network model and the simulation work 45 s. BP neural network algorithm flow framework is shown in Figure 3:

Developed by BP neural network, 43 neurons in the access process, 17 neurons in the secretary layer and 1 neuron in the output layer are set with the help of the neural network toolbox of the American commercial mathematical software MATLAB (version R2011b). Receive professional training trainlm, training 0.05, the default effective strength is 0.9, the training accuracy is $1e-4$, and the maximum training time is 10,000 times. Target Error The training target is 0.0001. The key data models of 12 tourist cities were incorporated into the BP neural network model for training. Because trainlm was approved, the integration was accelerated, and the wrong plan was completed after 3 training sessions. After completing the network structure training, and the training path diagram is shown in Figure 4.

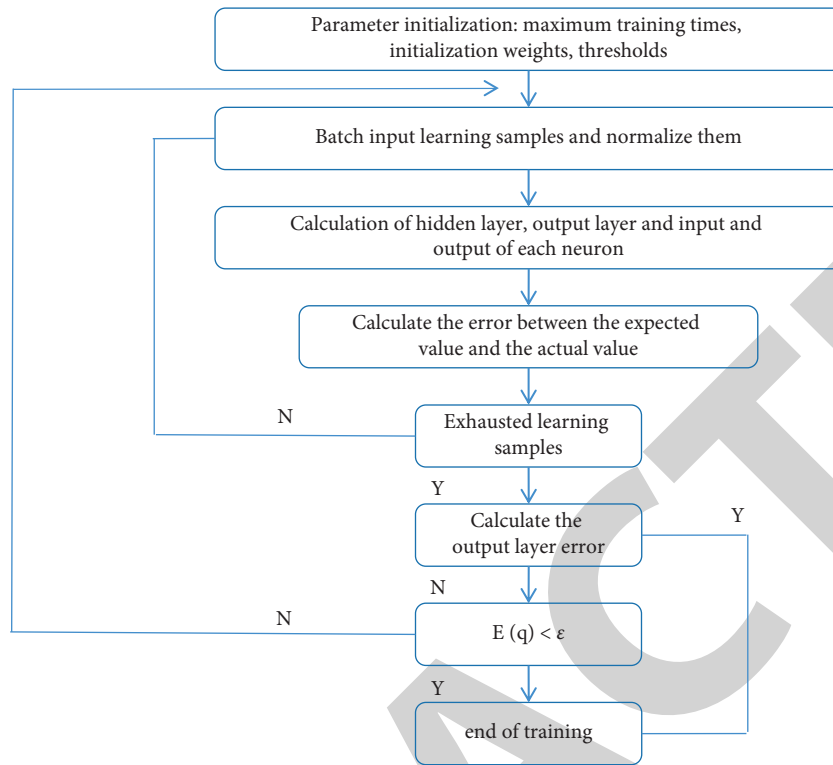


FIGURE 3: BP neural network operation flow frame diagram.

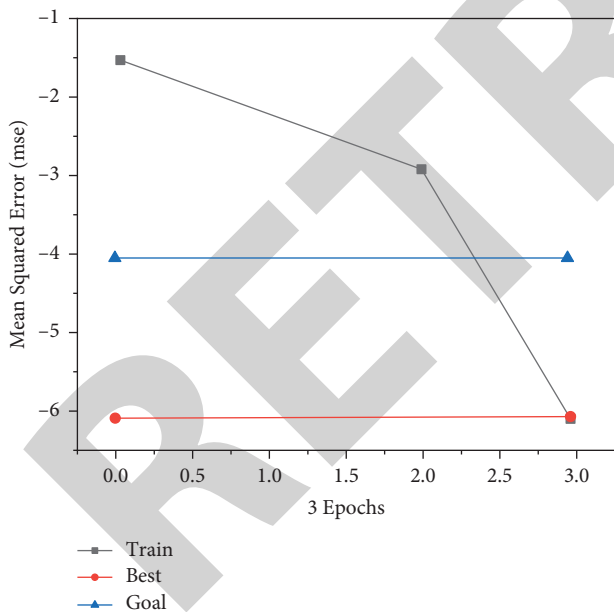


FIGURE 4: BP network training path diagram.

4. Experiment and Analysis

At present, the information technology department is mainly responsible for the intelligent construction of a scenic spot. The organizational structure of the information technology department is shown in Figure 5:

At present, a video monitoring center has been built in a scenic spot, which is equipped with monitoring equipment

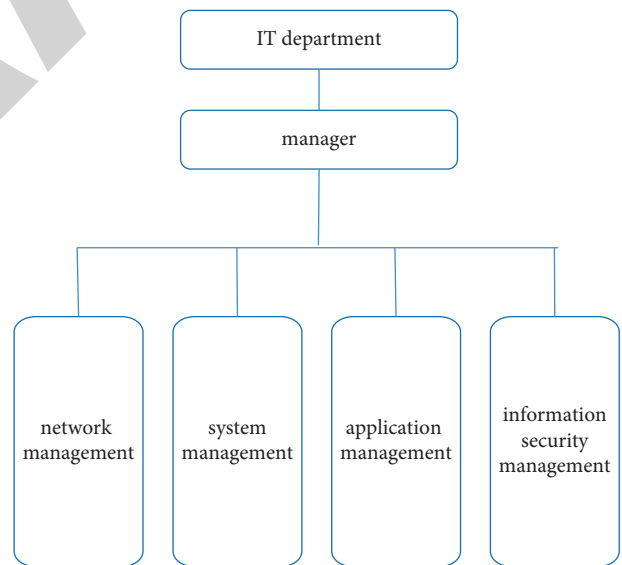


FIGURE 5: Organizational structure of Information Technology Department.

such as TV wall, LCD monitor and console. At the same time, a number of camera monitoring equipment terminals are installed in areas where tourists are concentrated, such as cliff stone carvings, tourist service center, historical celebrity Sculpture Park, Li style park, Haitian nature scenic spot, “Tianya road”, fence Ningxia scenic spot and the entrance and parking of vehicles in the scenic spot, so as to connect the video monitoring center with the camera equipment terminal through the network. Managers can view the

passenger flow in the scenic spot in real time through the TV wall or computer indoors and monitor the picture. During the labor day, the National Day golden week, and the Spring Festival, when the scenic spot is full of tourists. In case of emergency, it can accurately locate and timely arrange staff to the site for coordination and treatment, so as to create a comfortable and safe sightseeing environment for tourists. A scenic spot should focus more on improving the construction of intelligent scenic spot management supporting system. First, deeply optimize the electronic ticket system. Truly realize the cooperation and docking of local tickets with Ctrip, tuniu, and other large-scale tourists; second, continuously improve the intelligent monitoring and positioning system of smart tourism. With the substantial increase in the number of tourists, the safety pressure of the scenic spot has doubled. To better serve tourists, based on the principle of "safety first", intelligent monitoring and positioning system has become particularly important. Based on the existing monitoring and positioning, a scenic spot should realize the upgrading of equipment and strive to achieve full coverage of the scenic spot. Add cameras with the functions of omni-directional video monitoring and collecting tourist flow at a reasonable location, which can timely count the number of tourists and facilitate unified management; third, enhance the security and confidentiality of information technology in scenic spots [20]. To realize the free, safe and efficient use of the Internet by tourists in the scenic spot, the Internet equipment needs to be transformed and upgraded, and the safe and free Internet access is realized by scanning QR code and other forms; fourth, continuously improve the intelligent navigation system in the scenic spot. The original traditional guide signs can be replaced by a smart led guide system with digital and content display to realize the full coverage of the intelligent guide system in the scenic spot; fifth, establish and improve the tourist evaluation and feedback system. On the one hand, strengthen the construction of tourist sharing evaluation system, explore and build the management decision-making mechanism of scenic spots by using big data technology, and improve the tourist evaluation feedback system. Recently, the self media platform of the scenic spot has been continuously improved to allow tourists to share their tourism experience, upload pictures and carry out activities online through portal websites, WeChat, microblog, today's headlines, forums and other channels under high-quality network signals, so as to meet the personalized needs of tourists. In the long term, the scenic spot should build a new media matrix, rely on the traditional publicity and feedback channels, integrate the latest 5g information technology, and build a tourist evaluation and feedback system suitable for the development of the scenic spot and meeting the needs of tourists. On the other hand, strengthen the interaction and participation of tourists. Strengthening tourist participation is an important way to improve tourist experience. Based on the tourist experience center, a scenic spot continues to innovate forms with the help of intelligent terminal equipment and VR virtual technology to realize virtual tourism. Interesting questions such as cultural and historical stories can be set during the tour, and prize answers can be

set to realize the close combination of virtual and reality, knowledge and tourism. With the help of the scenic spot QR code set in the early stage of the scenic spot, digital treasure hunt games can be set to guide tourists to actively participate in it. Intelligent robots can also be set in tourist service centers and important scenic spots, which can not only publicize the ancient city culture and introduce scenic spots, but also answer tourists' questions and provide intelligent services for tourists. At the same time, through the continuous introduction and innovation of tourists to participate in the project, strengthen the interaction with tourists, and realize the continuous improvement of tourists' experience [21].

The development of smart tourism is to bring great convenience to tourism management departments, tourism enterprises, tourists, and other relevant subjects. The purpose of its construction is to improve the efficiency of tourism management and service, as well as the efficiency of tourists' perception and experience. Through the establishment of smart tourism, improve the management efficiency of tourism management departments in their government affairs, tourism enterprises, and related industries; improve the efficiency of public services provided by tourism management departments, professional customized services provided by tourism enterprises, and sharing and marketing services provided by tourists; strengthen the perception and experience efficiency of tourists and local residents on tourism.

The rapid development of information technology has promoted the growth of the community economy, which has had a profound impact on all aspects of the community, and the impact on tourism has gradually emerged. The development of smart commerce is inseparable from the support of new information such as cloud computing, big data, smart intelligence, and mobile Internet. Its construction and application are completed through advanced technologies and equipment. With the application of advanced technology, the government and other tourism-related management departments can analyze data, deal with problems and make decisions more quickly and effectively, and provide tourism public services more comprehensively [22, 23]. With the application of advanced technology, scenic spots, and related tourism enterprises can carry out multi-channel and diversified tourism marketing, and also provide tourists with more convenient, fast, and comfortable tourism services. Through advanced technology, tourists can formulate more perfect tourism plans and carry out tourism activities at will [24]. The platform is the basic environment for smart tourism to show its characteristics and value to relevant subjects. Only through the application of relevant platforms can users realize smart tourism. Therefore, smart tourism should pay attention to the construction of the platform and take it as an important starting point to realize the value of smart tourism [25, 26].

The construction of a smart tourism platform should include three parts: management platform, which mainly carries out the formulation and implementation of relevant policies and norms, supervision and management, law enforcement, emergency safety, and other aspects; information

platform, which collects, arranges, analyzes, releases and feeds back information, so as to provide comprehensive and accurate information services for smart tourism and improve the experience of tourists; application service platform is the core part of smart tourism. It mainly provides e-commerce services, such as the construction of specific application systems that provide functions such as reservation, payment and express delivery. The development of smart tourism needs the joint promotion of multiple subjects [27]. Government advice and support for smart marketing is the driving force for its growth, as is tourist demand for information services and skills. Develop smart tourism. The development of smart business requires the government to lead, strengthen the development of related processes, and strengthen the publicity and support for smart business. By tracking and analyzing the behavior of tourists, tourism enterprises grasp the change law of market demand and then carry out upgrading construction according to their characteristics. Take the government, tourism enterprises and market as multiple driving forces to jointly drive the construction of smart tourism. Smart tourism is a huge system. To ensure its smooth development, it needs to be integrated and promoted in many aspects [28]. First of all, tourism involves a large amount of information, a wide range and disorder. Smart tourism should classify, screen, and integrate information at a high speed and effectively; second, Wuhan is rich in tourism resources and diversified tourism service providers. Smart tourism should fully integrate relevant tourism resources and form a complete tourism chain; finally, we need to combine tourists' perception and experience, intelligent service, and management for common development, so as to fully realize the functional value of intelligent tourism. Therefore, the construction of smart tourism should be promoted through the integration of information and resources, linkage perception and experience, service, and management.

5. Conclusion

- (1) Based on the research on the relevant literature and practical construction status of smart tourism, combined with its understanding of smart tourism, this paper puts forward the basic cognition of the concept, application subject, and application value of smart tourism, and constructs the framework of smart tourism construction. The framework includes the perception layer, data layer, transmission layer, application service layer, support system, and evaluation system;
- (2) By analyzing the conditions and significance of smart tourism, as well as the situation and existing problems of developing smart tourism in Wuhan, it is considered that it is necessary and conditional for Wuhan to improve the construction of smart tourism. The main problems are incomplete laws and policies, imperfect supervision mechanism, insufficient connection between smart Wuhan and smart tourism, the smart tourism experience center has not been completed, the construction of Wuhan tourism information portal needs to be strengthened and the construction of smart scenic spots needs to be deepened.
- (3) According to the smart tourism construction framework constructed above and combined with the characteristics of tourism, the goal of exploring the smart tourism construction is to complete the intellectualization of tourism management, tourism service, and tourism perception and experience. This paper then puts forward the specific ideas and Implementation Paths of Wuhan smart tourism construction, designs the overall framework of Wuhan smart tourism based on stakeholders and led by tourism management departments such as the government, and establishes the operation system of smart tourism.
- (4) Based on the above research, the smart tourism information website and experience center are selected for the design. Wuhan smart tourism information network has a clear page design; simple operation process; more detailed, authentic, and organized information; more comprehensive and perfect functions; and effectively cooperates with the government and tourism enterprises to build smart tourism by providing pre/unsubscribe and payment services. Wuhan smart tourism experience center provides self-service tour guide experience, virtual tour experience, and interactive tourism experience; provides more intelligent experience services for tourists and citizens; and improves the participation of tourists and citizens.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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