## The Transformation of Intelligent Tourism Planning through the "Zibo Barbecue" Craze

## Guo Yu, Jing Qin<sup>\*</sup>, Ziqian Cheng, Zihao Li, Saiyu Quan

School of Accountancy, Shandong Youth University of Political Science, Jinan, Shandong, China \*Corresponding Author.

Abstract: This article discusses the application and development of intelligent tourism planning in the barbecue frenzy in Zibo. Intelligent tourism planning offers advantages such as personalized customization, real-time accuracy, recommendation suggestions, and provides tourists with a more convenient and efficient travel experience. In the context of the barbecue frenzy in Zibo, intelligent guided services, recommendation systems, and booking services have become essential components, offering tourists a more intelligent and personalized tourism experience. In this background, intelligent tourism planning continues to evolve, precise utilizing recommendations, interactive experiences, and intelligent marketing promotion to further enhance the travel experience and meet the needs of tourists. In conclusion, intelligent tourism planning demonstrates immense potential and development opportunities within the barbecue frenzy in Zibo, injecting new vitality and possibilities into the tourism industry. With the continuous progress and application of intelligent technologies, it is believed that intelligent tourism planning will become an important trend in the travel industry, providing tourists with a richer and more convenient travel experience.

Keywords: Zibo Barbecue Frenzy; Intelligent; Tourism Planning; Tourist Experiences; Sustainable Tourism; Destination Development

## 1. Introduction

In recent years, with the rapid development of the tourism industry, tourism planning has been continuously evolving and upgrading. Taking the "Zibo barbecue frenzy" as an example, this phenomenon reflects the transition of tourism planning towards

intelligence. The application of intelligent brought unprecedented technology has convenience and personalized experiences to tourism planning. Through big data analysis, intelligent systems can deeply understand the preferences and needs of tourists, tailor travel routes. and recommend destinations accordingly. Moreover, by combining artificial intelligence and virtual reality technology, tourists can experience the local customs and culture of the destination in a virtual environment, enabling them to anticipate the joy of travel in advance. This intelligent transformation not only enhances the efficiency and accuracy of tourism planning but also provides tourists with a more personalized and diverse travel experience.

## 2. Advantages of Intelligent Tourism Planning

## 2.1 Personalized Customization

In the current digital era, intelligent tourism offers significant advantages, planning particularly terms of personalized in customization.<sup>[1]</sup> As people's desire for unique experiences continues travel to grow, traditional methods of tourism planning are no longer able to meet the increasingly diverse Intelligent demands. tourism planning integrates cutting-edge technologies such as big data analysis, artificial intelligence, and personalized recommendation algorithms to provide travelers with more attentive and accurate travel advice and planning solutions. One of the key advantages of personalized customization is the ability to create tailormade travel routes for each individual based on their preferences, interests, budget, and various other factors. Through the analysis of intelligent systems, travelers can obtain itinerary arrangements that are highly targeted and meet their specific needs, avoiding the homogeneity and rigidity of standardized

group tours offered by traditional travel agencies. Whether it's young adventurers, business travelers seeking luxurious experiences, or artistic individuals looking to deeply immerse themselves in local culture, intelligent tourism planning can provide them with the most suitable itinerary tailored to their preferences, offering a more personalized travel experience.

Furthermore, personalized services provide travelers with a wider range of choices and flexibility. With the help of intelligent systems' recommendation and filtering capabilities, tourists can select destinations, attractions, and other activities based on their personal interests, allowing them to plan their itineraries according to their own preferences and create a unique travel experience. Moreover, during the journey, intelligent systems can dynamically adjust and optimize the itinerary in real-time to ensure a more convenient and comfortable travel experience for the travelers.

## 2.2 Real-time Accuracy

Another significant advantage of intelligent tourism planning is its real-time accuracy.<sup>[2]</sup> In traditional travel planning, tourists often rely on static information and pre-planned itineraries. However, with the development of intelligent technology, modern travel planning systems can provide travelers with timely and accurate travel advice and information through real-time data updates and intelligent algorithm analysis, making their travel experience smoother and more efficient.

Real-time responsiveness is an important characteristic of intelligent tourism planning. <sup>[2]</sup>By integrating various data sources such as weather information, traffic conditions, and tourist traffic at attractions, intelligent systems can promptly update and adjust travelers' itineraries to help them cope with unexpected situations or changes, ensuring a seamless travel process. For example, if a certain attraction suddenly closes or there is heavy traffic, the intelligent system can promptly alert travelers and provide alternative plans, avoiding unnecessary inconvenience and delays, thereby safeguarding the quality of their travel experience.

Another significant advantage of intelligent tourism planning is its accuracy. With the help of big data analysis and intelligent algorithms, these systems can better understand tourists' preferences and needs, thereby recommending the most suitable travel options for them. By considering factors such as tourists' past behaviors, ratings, and feedback, the system can predict their preferences and customize personalized itineraries for them. Additionally, intelligent systems analyze real-time data about the destination to provide accurate information and recommendations to travelers, helping them make informed choices and improve the efficiency and quality of their travel experience.

## 2.3 Recommendation and Advice Provision

Intelligent tourism planning has significant advantages in providing recommendations and advice, which primarily include personalized customization, real-time updates, diverse choices, and enhanced user experience.

Firstly, intelligent tourism planning can personalized customization by achieve conducting intelligent analysis and recommendations based on users' preferences, needs, and historical data. Through big data and machine learning technologies, the system can gain in-depth understanding of users' preferences, including travel preferences, requirements, accommodation activity preferences, and more, in order to provide personalized travel advice. This personalized customization not only enhances user satisfaction but also helps users save time and effort, avoiding information overload and decision-making difficulties.

Secondly, intelligent tourism planning features real-time updates, allowing timely adjustments to recommendations and advice based on realtime data and user feedback. During the journey, due to various unpredictable factors, the original plan may need to be adjusted. Intelligent systems can provide appropriate suggestions based on users' real-time location, weather conditions, traffic situations, and other dynamic information, helping users adapt to changes flexibly and improve travel efficiency and convenience.<sup>[3]</sup>

Moreover, intelligent tourism planning offers choices. diverse providing users with comprehensive and rich travel recommendations. By integrating various resources and information, the system can offer multiple options to users, including different attraction recommendations, dining suggestions, transportation options, and more, helping users make the best decisions according to their preferences and needs. This diversity of choices not only enriches users' travel experiences but also caters to the needs of different user groups, enhancing the flexibility and adaptability of travel planning. intelligent tourism Lastly, planning significantly enhances the user experience, making travel more convenient, comfortable, and enjoyable. Through the recommendations and advice provided by intelligent systems, users can better plan their itineraries, avoid detours and time wastage, and improve the quality and efficiency of their travel. Additionally, intelligent tourism planning can inspire users with more travel ideas and helping them discover surprises. more interesting destinations and activities. enriching their travel experiences, and enhancing the joy and significance of travel.

# **3.**The Combination of the Zibo barbecue Craze and Intelligent Tourism Planning.

## **3.1 Intelligent Guided Tour Services**

In the combination of the Zibo barbecue craze and intelligent tourism planning, intelligent guided tour services play a crucial role.<sup>[4]</sup> Zibo's barbecue craze, as a unique local culinary culture phenomenon, attracts a large number of tourists who come to taste and experience it. However, with the development of the tourism industry and the continuous advancement of intelligent technology, intelligent tourism planning has become an important means to enhance the tourist experience and optimize tourism services. In the integration of the Zibo barbecue craze and intelligent tourism planning, intelligent guided tour services will play a vital role.

Intelligent guided tour services utilize advanced technologies such as mobile applications, virtual reality, augmented reality, etc., to provide tourists with more convenient and personalized guided tour experiences. In the context of the Zibo barbecue craze, tourists can access detailed information about major barbecue restaurants through a mobile application, including restaurant introductions, recommended dishes, pricing information, etc., helping them make better choices and plan their dining itineraries. Furthermore, intelligent guided tour services can also combine virtual reality technology to present holographic

displays of the barbecue cooking process, allowing visitors to taste delicious food while learning more about the history and traditions of barbecue culture.

In addition to providing information and displays, intelligent guided tour services can intelligent recommendation also use algorithms to tailor unique barbecue experiences based on tourists' personal preferences and needs.<sup>[5]</sup> For example, the system can recommend the most suitable barbecue restaurants and dishes based on preferences tourists' taste and dietary restrictions, helping them find food choices that satisfy their cravings quickly and effortlessly. This personalized service not only enhances tourists' satisfaction but also brings more business opportunities and exposure to local barbecue restaurants.

## 3.2 Intelligent Recommendation System

As a local specialty culinary culture, the Zibo barbecue craze attracts numerous tourists who come to taste and experience it.<sup>[6]</sup> With the development of the tourism industry and advancements in technology, intelligent tourism planning has become an important way to enhance the tourist experience and optimize tourism services. In the combination of the Zibo barbecue craze and intelligent tourism planning, the intelligent recommendation system plays a key role.

The intelligent recommendation system utilizes advanced algorithms and data analysis techniques to provide personalized and accurate barbecue restaurant recommendations based on tourists' personal preferences, historical consumption records, social interactions, and other information. This system not only helps tourists find barbecue restaurants that match their taste preferences more quickly but also enhances their dining experience and increases their awareness and understanding of the Zibo barbecue culture.

In the intelligent recommendation system, tourists can input their taste preferences, dietary habits, budget, and other information through a mobile application or website platform. The system will then recommend the most suitable barbecue restaurants and dishes based on this data. For example, for tourists who enjoy spicy flavors, the system can recommend barbecue restaurants with moderate spiciness. For vegetarians, the system can provide recommendations for vegetarian barbecue restaurants. This personalized recommendation not only satisfies tourists' taste preferences but also allows them to better experience the unique local barbecue culture.

#### **3.3 Intelligent Reservation Service**

The Zibo barbecue craze, as a unique local culinary culture, attracts an increasing number of tourists, and intelligent tourism planning provides tourists with a more convenient and personalized experience. In the combination of the Zibo barbecue craze and intelligent tourism planning, intelligent reservation services play an important role in providing tourists with a more convenient dining experience.

Intelligent reservation services utilize advanced technologies such as mobile applications, online platforms, etc., allowing tourists to make advance reservations for seats or dishes at barbecue restaurants, avoiding waiting in lines and wasting time. Through this service, tourists can arrange their dining plans before departure, ensuring a comfortable dining environment awaits them in busy barbecue restaurants.

Intelligent reservation services not only provide convenience but can also utilize data analysis and intelligent recommendation algorithms to recommend barbecue restaurants and dishes that best suit tourists' taste preferences and budgets. Tourists can receive personalized recommendations based on their preferences and needs during the reservation process, allowing them to better enjoy the essence of the Zibo barbecue culture.

## 4. Development of Intelligent Tourism Planning in the Context of the Barbecue Craze in Zibo

#### 4.1 Precision Recommendation

With the booming barbecue trend in Zibo, intelligent tourism planning has gradually become a new trend in the tourism industry. As the demand for travel continues to grow, traditional planning methods no longer meet the personalized and diversified needs of tourists. Intelligent tourism planning utilizes advanced technologies such as artificial intelligence and big data analysis to provide tourists with more considerate and accurate travel suggestions, tailor their itineraries, enhance the overall travel experience, and drive the progress of the tourism industry.

In the context of the barbecue craze in Zibo. development of intelligent tourism the planning holds significant importance. Through the intelligent system, tourists can obtain barbecue food recommendations that best suit their preferences, taste preferences, and health needs, thus avoiding decisionmaking difficulties among numerous choices. The intelligent tourism planning system can recommend the most distinctive and highly acclaimed barbecue restaurants based on users' historical behavior, preference data, and other information, helping tourists quickly find their desired culinary destinations, saving time and energy, and enhancing the travel experience.

The development of intelligent tourism planning can also promote the transformation and upgrading of the barbecue industry in Zibo.<sup>[7]</sup> Through data analysis and exploration by the intelligent system, barbecue restaurants can better understand consumer needs and preferences, adjust their management strategies, and introduce more attractive products and competitiveness. services to enhance Additionally, the intelligent tourism planning system can assist barbecue restaurants in realtime monitoring of market trends and competitor information, allowing them to promptly adjust their business strategies, seize market opportunities, and achieve better operational efficiency.

#### 4.2 Interactive Experience

In the context of the thriving barbecue craze in Zibo, the development of intelligent tourism planning is gradually incorporating more interactive experience elements, providing tourists with richer and personalized travel experiences. With the continuous advancement of technology, intelligent tourism planning systems are no longer limited to providing static information and recommendations but are beginning to incorporate highly interactive and engaging elements, allowing tourists to enjoy the fun of interaction during their travels. In the barbecue craze in Zibo, the interactive experience of intelligent tourism planning exhibits diverse characteristics. Through the intelligent system, tourists can participate in the process of barbecue food preparation, gaining knowledge about the history and culture of barbecue personally and

experiencing the joy of barbecue. The intelligent system can provide virtual reality (VR) or augmented reality (AR) technologies, allowing tourists to virtually visit barbecue scenes, feel the charm of barbecue, and enhance the immersion and authenticity of the interactive experience.<sup>[8]</sup>

Furthermore, the intelligent tourism planning system can increase tourists' sense of participation and enjoyment during their travels through gamification elements. For example, the system can design interactive games such as barbecue food exploration tasks and checkpoint challenges, allowing tourists to experience the joy of adventure while searching for culinary delights, thereby adding fun and interactivity to their journey. Tourists can participate in interactive lucky draw activities through the system, earning rewards such as discounts and gifts, stimulating their engagement and enhancing the interactivity and amusement of their travel experience.

## 4.3 Intelligent Marketing and Promotion

In the context of the thriving barbecue craze in Zibo, the development of intelligent tourism planning is emerging as a new trend. Intelligent marketing and promotion, as a crucial component of intelligent tourism planning, provide robust support for the continued prosperity of the barbecue craze in Zibo. With the rapid development of information technology and the widespread adoption of intelligent applications, traditional marketing and promotion methods are no longer sufficient to meet the growing tourism demand and personalized needs of consumers. Therefore, intelligent marketing and promotion play a vital role in intelligent tourism planning under the barbecue craze in Zibo.

Firstly, intelligent marketing and promotion utilize big data analysis and artificial intelligence technologies to deeply explore user behavior data and preferences, providing personalized and accurate promotional services to the target users of the barbecue craze in Zibo. Through the analysis of user data, intelligent marketing and promotion can better users' consumption understand habits. geographical locations, taste preferences, and other information, enabling them to tailor personalized barbecue recommendations and promotional activities, thereby enhancing user

experience, satisfaction, and ultimately driving consumption conversion and brand loyalty<sup>[9]</sup> Secondly, intelligent marketing and promotion can achieve multi-channel and all-round marketing coverage through intelligent promotion channels and tools, increasing the exposure and awareness of the barbecue craze in Zibo. By utilizing intelligent marketing and promotion methods, various channels such as social media, mobile applications, and email marketing can be employed to promote Zibo's barbecue culture and specialties to a wider audience, attracting more tourists to experience it and driving rapid growth in the local tourism economy.

Moreover, intelligent marketing and promotion can provide users with immersive barbecue experiences through emerging technologies such as virtual reality (VR) and augmented reality (AR), enhancing user engagement and interactivity. By leveraging virtual reality technology, users can experience the process and flavors of Zibo's barbecue in different scenarios. increasing their sense of participation and curiosity, stimulating their interest and desire to purchase Zibo's barbecue, thereby enhancing the visibility and reputation of the barbecue business in Zibo.

## 5. Conclusion

In the integration of the barbecue craze in Zibo with intelligent tourism planning, smart technologies have brought unprecedented convenience and experiences to tourists. Through intelligent guided tour services, visitors can easily understand the history and characteristics of barbecue culture. The intelligent recommendation system can accurately recommend food and attractions based on individual preferences, enhancing the quality of travel. Moreover, the intelligent booking service makes itinerary arrangements more efficient and convenient. Driven by this trend, intelligent tourism planning has not only achieved personalized customization and realtime accuracy but also provided visitors with a more diverse and interactive experience. With the continuous development of intelligent technologies, the combination of the barbecue craze in Zibo and intelligent tourism planning will open up a more intelligent, convenient, and enriching journey for travelers, allowing them to explore culinary culture while

Journal of Big Data and Computing (ISSN: 2959-0590) Vol. 2 No. 1, 2024

enjoying the limitless possibilities brought by technology.

## References

- Jiao, W., Li, Q., & Yang, J. (2022). Implicit Knowledge of Tourism Planning and Its Transmission Strategies. Journal of Leshan Normal University, 37 (06), 65-70+124.
- [2] Yu, Q., Hu, B., & E, X. (2020). Application of Intelligent Route Planning Algorithm in Tourism Products. China Press, (19), 22-23.
- [3] Wang, J. (2020). Application of Artificial Intelligence Technology in Smart Tourism.
  SME Management and Technology (First Issue), (09), 173-174+177.
- [4] Jiang, Z., & Lai, H. (2019). Research on AI Deep Learning-based Tourism Route Planning. E-commerce, (08), 12-14.
- [5] Zhong, L., Zhang, T., Zhang, J., & Li, S. (2019). Multi-agent-based Model of Tourism Cloud Service Composition.

Practice and Understanding of Mathematics, 49 (11), 59-67.

- [6] Huang, Y., Pan, J., Chen, D., & Li, W. (2019). Exploration and Research on Intelligent Itinerary Planning System for Independent Travel from the Perspective of Smart Tourism. Journal of Taiyuan Urban Vocational College, (02), 35-37.
- [7] Guo, Y., Li, Z., Zheng, S., & Dong, K. (2017). Research on the Model Mechanism of the Influence Path of Technical Acceptance on Satisfaction of Intelligent Tourism Itinerary Planning Software under the Background of Smart Tourism. Journal of Taishan University, 39 (06), 1-11.
- [8] Ye Tiewei. Smarter tourism: Tourism industry second revolution (part 1). China Tourism News, 2011: 05: 25 (11).
- [9] Wu Xuean. "Smarter tourism" makes travel into "touch time". People's Daily Overseas Edition, 2011: 06: 09 (08).