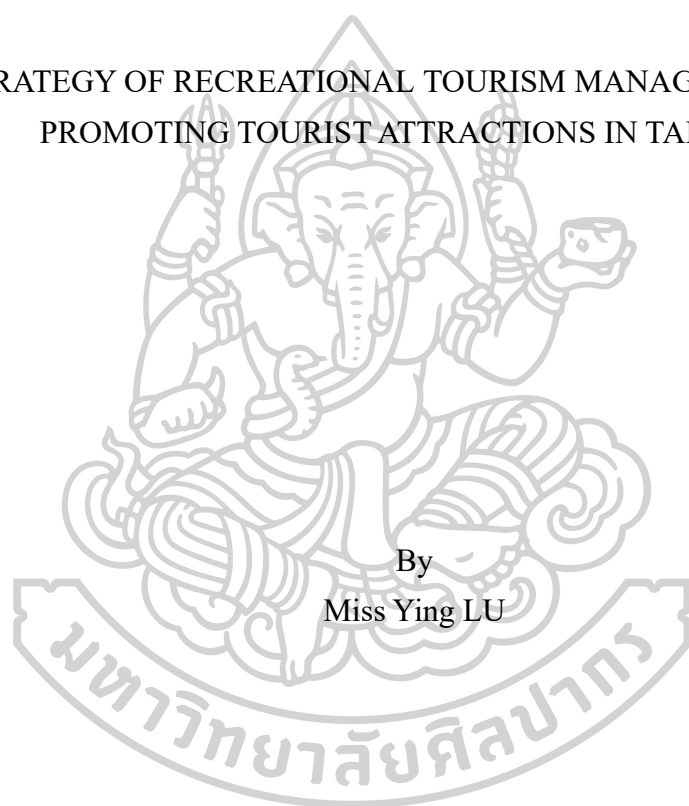




STRATEGY OF RECREATIONAL TOURISM MANAGEMENT FOR
PROMOTING TOURIST ATTRACTIONS IN TAIYUAN



By
Miss Ying LU

A Thesis Submitted in Partial Fulfillment of the Requirements
for Doctor of Philosophy RECREATION TOURISM AND SPORT MANAGEMENT

Department of Education Foundations

Silpakorn University

Academic Year 2025

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Strategy of Recreational Tourism Management for Promoting Tourist
Attractions in Taiyuan



โดย
MissYing LU

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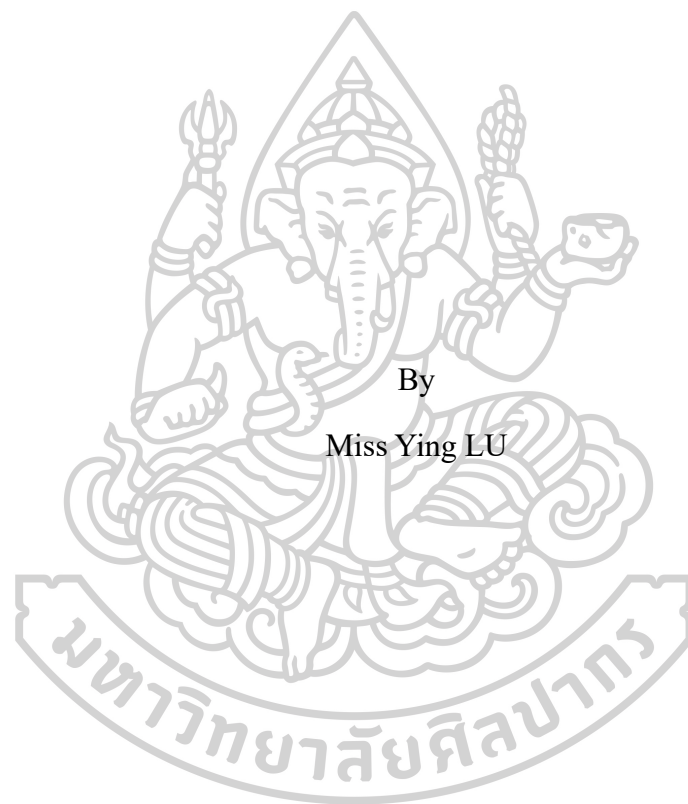
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Title Strategy of Recreational Tourism Management for Promoting
Tourist Attractions in Taiyuan

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Miss Ying LU : Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan Thesis advisor : Professor Kanit Kheovichai, Ph.D.

With China's economic growth, rising national income, and upgrading tourism demands, recreation tourism has become the mainstream consumption trend. Tourism destinations aim to provide tourists with a holistic experience—a synthesis of travel products and services that offer integrated experiential offerings. Despite possessing over a hundred renowned, pristine attractions, Taiyuan has failed to effectively integrate its fragmented resources across "eating, lodging, transportation, sightseeing, shopping, and entertainment," resulting in significantly lagging development and utilization. Therefore, through the rational development and full exploitation of Taiyuan's abundant tourism resources, transforming resource advantages into economic strengths will not only meet the recreation travel needs of urban residents but also drive the structural upgrade of Taiyuan's recreation tourism industry, thereby boosting local economic growth.

This study adopts the R&D research method, and the author used both quantitative and qualitative data that were collected through questionnaires and interviews, and SWOT and TOWS analyses were applied to formulate strategic recommendations. The study identified Taiyuan's strengths in cultural and natural resources, weaknesses in infrastructure and service quality, and opportunities through digital innovation and policy support. In general, Taiyuan City has an abundance of tourism resources and significant potential for recreational tourism development. However, these resources have not yet been fully developed or utilized effectively. If the development strategies proposed in this study are implemented, the tourist attractions in Taiyuan City are expected to become more attractive, and the regional tourism industry is expected to become more sustainable.

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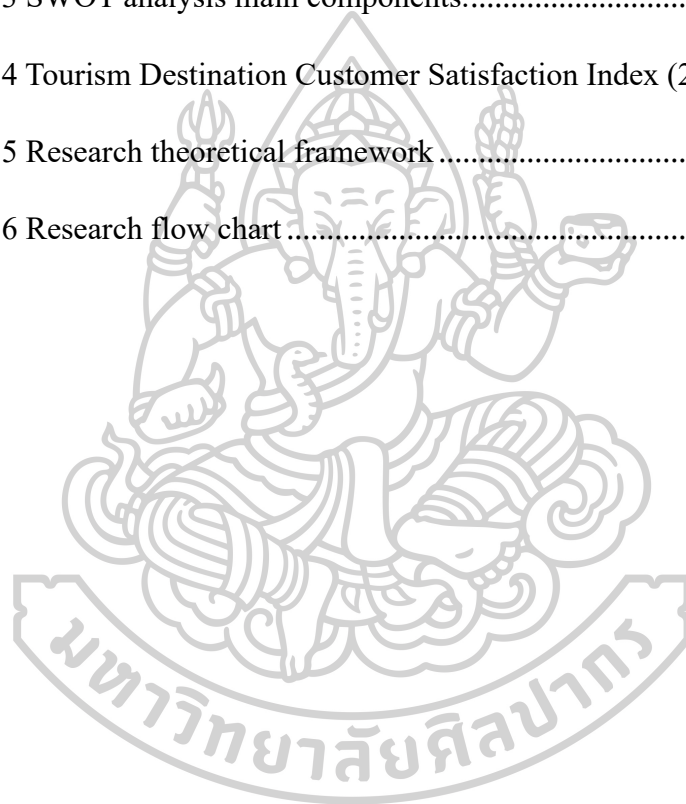
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Chapter1

Introduction

1.1 Background to the study

With the sustained and rapid development of China's economy, the continuous growth of national income and the increase in leisure time, people's demand for tourism continued to grow, and more and more people have joined the tourism tide. The reform of China's vacation system has led to the "blowout" of tourism and the rapid development of tourism around the city. In the late 1980s, large-scale recreational activities around cities began to emerge in China. The implementation of the double weekend holiday system in 1995 and the subsequent implementation of the Golden Week holiday system have greatly promoted the development of the recreational industry around the city. With the continuous improvement of the vacation system, people's attitudes toward tourism and their concepts of leisure have changed. In recent years, Chinese tourists have increasingly preferred short-distance trips (usually one- or two-day tours) to the outskirts of the city and neighboring areas around the city as tourist destinations. People have begun to re-examine and rediscover the resources of the countryside around where they live, enjoying their leisure life in the leisure activities around the city (Liming, 2006).

In 2023, the domestic tourism market in China started strongly and accelerated its recovery. The supply chain of inbound and outbound tourism gradually improved, and the tourism economy maintained the expected growth in quantity and effective improvement in quality. The willingness to travel accumulated over the past three years was quickly released, which strongly promoted the rapid recovery of the tourism economy from the demand side. Residents' willingness to travel in all quarters of 2023 remained above 90%, with an annual average of 91.86%, which is a new record high since the monitoring records were kept, and 4.52 percentage points higher than in 2019. As measured by the China Tourism Research Institute (Data centre of the Ministry of Culture and Tourism), the Composite Index of National Tourism

Economic Operation (CTA-TEP) remained in the boom range throughout 2023, with an average value of 109.95, nearly reaching the level of the same period in 2019. The number of domestic outbound trips was 4.891 billion in 2023, representing a year-on-year increase of 93.3%; the total expenditure of domestic tourists was RMB 4.91 trillion, up 140.3% from the previous year; and domestic trips and tourism revenue recovered to 81.38% and 85.69% of 2019 levels, respectively. In terms of inbound and outbound tourism, the China Tourism Research Institute reported that the number of inbound and outbound travelers in China exceeded 190 million in 2023, an increase of more than 2.8 times compared to the previous year. Although tourism has become a mainstream form of recreation in China, the concept of recreational tourism has not yet been widely accepted (Ministry of Culture and Tourism in China, 2024).

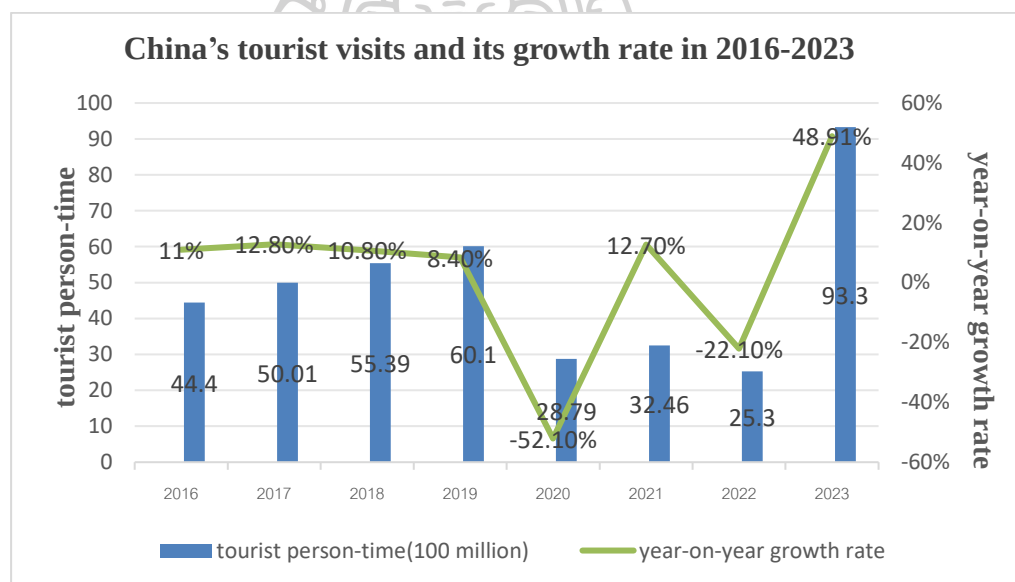


Figure 1 China's tourist visits and its growth rate in 2019-2023
(Data Source: Ministry of Culture and Tourism in China, 2024)

At present, tourism planning, development, construction, operation and management tend to focus more on the needs of out-of-town tourists, often neglecting the recreational needs of local community residents. They overemphasize the economic functions of tourism and neglect the functions of recreation such as outdoor education, restoring people's own physical strength and energy (human resource reproduction), which leads to problems such as similarity in proximity, uniformity of recreational products and homogenization of activities in the development of recreation (tourism) in the ring city, affecting the healthy development of urban

recreation system. With people's pursuit of a healthy life and leisure will be increasingly strong. Tourist destinations must satisfy not only the needs of out-of-town visitors but also the expanding recreational needs of local residents. How to transform tourist sites from serving only tourists to serving both tourists and local residents, how to make tourist sites an open space shared by local and foreign tourists, and how to fully leverage their potential to improve the quality of the human environment and enhance people's quality of life are critical issues. Quality of life will be an important issue affecting the sustainable development of the urban recreation system, especially the recreation industry around the city.

Taiyuan is the capital of Shanxi Province, and it has a history of more than 2,500 years, with a mixture of natural scenery and historical relics. There are more than 80 human tourism resources such as temples and shrines, ancient ruins, caves and statues, the former homes and residences of famous people and the tombs of famous people; more than 40 natural tourism resources such as historic mountains, rivers and lakes, springs, caves, forests and summer resorts; and over 100 social tourism resources such as tourism expo and conference facilities, public leisure and garden facilities, memorial facilities, tourism shopping facilities, tourism entertainment and fitness facilities and art performance facilities. However, recreational tourism in Taiyuan is still in its early stages, its construction is still in a spontaneous state, most of the potential of attractions have not yet been explored. The integration of key tourism elements food, accommodation, transportation, sightseeing, shopping, and entertainment remains uncoordinated; tourist numbers have not yet reached an economically significant scale, and many sites continue to exist as landscapes without proper tourism planning. In the context of rapid urban expansion caused by urbanization, the landscape resources around cities are particularly valuable. How these resources are developed and utilized affects not only environmental protection but also the sustainable development of urban peripheries and the ecological stability of cities. With the general trend shifting from sightseeing tourism toward recreation, holidays, and other comprehensive leisure activities, suburban recreational tourism has developed rapidly in various areas, characterized by frequent development activities and numerous open spaces. However, due to the lack of guidance on the

theory of recreation tourism development, many areas have experienced unsustainable development phenomena, such as developmental destruction of landscape resources, degradation of environmental quality, and loss of local traditional culture. Therefore, it is essential to summarize the theory and methodology of recreation tourism development to promote sustainable growth and the healthy development of urban recreation systems.

According to the latest survey (Taiyuan Daliy News, 2024), Taiyuan City is currently known more than a hundred tourism resources in the original area points, formal development or preliminary into the state of operation in about 25, the initial development or is ready to implement the project development planning in about 35, and failed to attract attention and still in the state of undeveloped or unimplemented project planning in about 40, accounting for 40% of the total number of original area points; In addition, Jingyuan District, Jiancaoping District and Yingze District, which are closer to the city centre and have convenient transportation, have obvious advantages in terms of resource inventory, and their development and utilization of tourism resources are stronger and more dynamic, while the development and utilization of tourism resources in the three suburban counties and one city (Yangqu County, Loufan County, Qingxu County and Gujiao City) are obviously lagging behind. Therefore, the reasonable development and full utilization of Taiyuan's rich tourism resources can transform these resource advantages into economic benefits. This approach not only addresses the recreational needs of urban residents but also promotes the restructuring of Taiyuan's recreational tourism industry and contributes to local economic development.

This study focuses on recreational tourism in Taiyuan, considering both the city's economic development and environmental protection, and aims to propose strategies for recreational tourism management to enhance the performance and sustainability of tourist attractions in Taiyuan.

1.2 Purpose of the study and research questions

1.2.1 Purpose of the study

- (1) To study and analyze the current situation of recreational tourism in Taiyuan.

(2) To develop the strategy of recreational tourism management for promoting tourist attractions in Taiyuan.

(3) To validate the feasibility of the strategy of recreational tourism management for promoting tourist attractions in Taiyuan.

1.2.2 Research questions

(1)What are the current situations of recreational tourism in Taiyuan?

(2)What strategies can be implemented to develop recreational tourism management for promoting tourist attractions in Taiyuan?

(3)Is the strategy of recreational tourism management for promoting tourist attractions in Taiyuan feasible?

1.3 Research Scope

1.3.1 Population

The population of this thesis is residents and tourists in Taiyuan.

(1) The resident population of Taiyuan were 5,444,700 people (Taiyuan Bureau of Statistics, 2022).

(2) The 2023 annual tourism statistics for 8,766,300 people in Taiyuan (Taiyuan Bureau of Statistics, 2022).

1.3.2 Sample

(1) For tourists in Taiyuan City, according to Krejcie and Morgan Table (1970), the author will use the convenience sampling method to select 400 people as questionnaire samples for this study.

(2) For Key Informants, the author will select 15 key informants as interview samples for this study, including 3 residents of Taiyuan, 3 staff of the Taiyuan City Tourism Bureau, 6 staff of the major tourist attractions, and 3 staff of Taiyuan tourism companies.

1.3.3 Research Area

Taiyuan, the capital of Shanxi Province, is a city with a long history and a deep cultural heritage. It is located in the central part of Shanxi Province, in the northern part of Jinzhong Basin, surrounded by mountains in the north, east, and west, and connected to the Jinzhong Plain in the south, with the Fen River running through the whole area from north to south. Taiyuan is not only strategically located, but also the political, economic, cultural, transport, and international exchange center of Shanxi Province.

The administrative division of Taiyuan City includes six districts, three counties, and one city. The study area of this thesis consists of the six districts in the urban area of Taiyuan City, which are Xiao Dian District, Yingze District, Wanbailin District, Xinghualing District, Jiancaoping District, and Jinyuan District. The main tourist attractions in Taiyuan with large crowds include Jinci Park, Taiyuan Ancient County, Mengshan Buddha, Shuangta Temple, Yingze Park, Shanxi Museum, Taiyuan Botanical Garden, etc.

This study examines the major tourist attractions in Taiyuan City and aims to identify their challenges and shortcomings of tourist attractions to develop a strategy of recreational tourism management.



Figure 2 Administrative division of Taiyuan city
(Data Source: Baidu Website, 2024)

1.4 Definition of terms

(1) Strategy

Strategy refers to a set of planned action programmes or plans formulated to achieve a specific purpose or goal that has a long-term impact on recreational tourism management for promoting tourist attractions in Taiyuan.

(2) Recreational tourism

Recreational tourism is a tourism consumption activity in which tourists, with the help of certain recreational resources or facilities, visit, stay, study, experience and entertain in a place other than the place where they have settled in order to realize the purpose of recreation.

(3) Recreational tourism management

Recreational tourism management is a set of management activities for recreational resources, the recreation environment, visitors and recreation services. Specific content includes aspects of recreational tourism resource management, recreational tourism environment management, visitor behavior management and recreational tourism service management.

(4) Tourist attractions

A tourist attraction is defined as any place that can be visited or where leisure and recreational activities can be undertaken. And it usually refer to independently managed areas with clear boundaries, fixed entrances and exits, and controlled forms of access for visiting tourists. In this study tourist attractions in Taiyuan with large crowds include Jinci Park, Taiyuan Ancient County, Mengshan Buddha, Shuangta Temple, Yingze Park, Shanxi Museum, Taiyuan Botanical Garden, etc.

1.5 Benefits of the research

(1) It can provide a reference for the Taiyuan government to formulate a strategy for promoting recreational tourism management in Taiyuan's tourist attractions.

(2) The strategy of recreational tourism management for promoting tourist attractions in Taiyuan can provide a reference for the development of tourism projects in Taiyuan and improve the quality of recreational tourism development in Taiyuan.

(3) By analyzing the current situation of recreational tourism in Taiyuan, a clear understanding of Taiyuan's strengths and weaknesses will be provided, and a more targeted improvement strategy will be proposed.



Chapter2

Literature Review

To develop strategies of recreational tourism management and promote Taiyuan 's tourist attractions, this study draws on previous research and theories, including theory of recreational tourism, theory of recreational tourism management, theory of strategy, theory of tourist attractions and theory of SWOT analysis and TOWS matrix to establish the strategy of recreational tourism management for promoting tourist attractions in Taiyuan. The main areas of research are as follows:

- 2.1 Theory of recreational tourism
- 2.2 Theory of recreational tourism management
- 2.3 Theory of strategy
- 2.4 Theory of tourist attractions
- 2.5 Theory of SWOT analysis and TOWS matrix
- 2.6 Customer satisfaction strategy
- 2.7 4M theory
- 2.8 The context of Taiyuan City
- 2.9 Previous studies
- 2.10 Taiyuan Recreational Tourism Policies
- 2.11 Research theoretical framework

2.1 Theory of recreational tourism

In international research, recreational tourism and general tourism are often not distinguished. Numerous scholars have studied recreational tourism and tourism as one phenomenon. However, with the gradual increase in the influence of the recreational industry and the continued prosperity of the tourism industry, which is

closely related to the recreational industry, scholars have become aroused that recreational tourism related tourism continues to flourish, it has aroused scholars' awareness of recreational tourism. Although current research in this field remains limited within the broader disciplines of recreation and tourism, recreational tourism, as a convergence of two rapidly developing global industries, is expected to experience accelerated growth, and scholarly inquiry into this area will continue to deepen.

Recreational tourism, in its modern sense, originated in Europe in the mid-19th century. Williams (2003) recorded in 'Tourism and recreation'. In the early 1970s, tourism and recreation research theories were still in their infancy. In North America, an organization called the Outdoor Recreation Resource Rating Council (ORRRC) had already done some important preliminary research. Later developments favored the idea that tourism and recreation shared the same concepts, but there was little cross-examination of the nature of tourism and recreation. Despite the widely recognized interrelation between tourism and recreation, this traditional research model has persisted in many areas, including education, research, and the organization of conferences.

In foreign studies, research on recreational tourism is mostly integrated with vacation tourism, tourist attractions, urban planning, rural construction, and resource development. Many of these studies focus on the protection and development of specific regions, types, or categories of tourism resources.

Reeder and Brown (2005) used regression analysis to assess the impact of recreation and tourism development on socio-economic conditions in rural recreation counties. Their findings suggest that recreation and tourism development contribute to rural well-being by increasing local employment, wage levels, and incomes, reducing poverty, and improving education and health. However, recreation and tourism development is not without drawbacks, such as higher housing costs. The local impacts vary greatly depending on the type of recreation area.

Bell SimonTyrväinen (2007) focused on the situation in Europe but did not ignore major trends and issues arising elsewhere. Much of the research can be traced

back to ideas and methods developed in other regions, such as the United States. To set the scene, the main social and environmental trends are presented, showing how the changing nature of society influences expectations and demands for recreation and nature tourism. Chinese scholars began researching recreational tourism relatively late; however, the direction of their research has been more diverse.

Chinese scholars began researching recreational tourism relatively late; however, the direction of their research has been more diverse.

In contrast to sightseeing tourism, specialized tourism, and special-interest tourism in the general sense, recreational tourism requires higher standards for the overall environment of tourist destinations. The primary requirement concerns the natural ecological environment. Since recreation serves as an essential means of maintaining health, the natural environment must therefore meet more stringent standards. In his book, Luzhi (2005) pointed that, from the perspective of life sciences, leisure is an indispensable form of material activity within the life cycle. In order to produce and reproduce, to develop as well as physical and intellectual strength, human beings must rest and recuperate. As human civilization has advanced to the present day, and as future developments are anticipated, human beings will inevitably require higher-quality, higher-grade, and more effective forms of leisure. This is not only essential for restoring vitality and enhancing both intelligence and energy levels, but also crucial for the overall development and progress of humankind and the creation of a better future.

Qunhong (2000) points out that recreational tourism refers to excursions, entertainment, sightseeing, and rest activities that involve leaving one's place of residence and staying in another location for a certain period of time. It is based on tourism resources, with leisure as the main purpose, tourism facilities as the essential conditions, and specific cultural landscapes and service programs as the core content. This definition illustrates both the process and purposeful nature of leisure tourism from the perspective of tourism services as well as from the perspective of human development.

However, Huidi (2002) Recreational tourism pays greater attention to the spiritual enjoyment of tourists, placing more emphasis on individuals' engagement in cultural creation, appreciation, and construction during a certain period of time. Through shared human behaviors, thoughts, and emotions, it creates a cultural atmosphere, conveys cultural information, and cultivates a cultural ambiance, thereby achieving the comprehensive development of the body, mind, and will. Leisure tourism also places special emphasis on harmonizing the relationship between humans and nature and enhancing awareness of environmental care and protection.

The purpose of recreational tourism is distinct the realization of recreational functions, yet the means of achieving this goal are diverse, and it can be classified in various ways depending on different perspectives.

Zou (2008) believed that it can be broadly classified into three types, namely, popular recreation, high-end recreation and special recreation.

Table 1 Comparison of the forms and characteristics of recreation tourism products.
(Data Source: Zou, 2008)

product	customer characteristics	trip mode	entertainment	consumption characteristics	residence requirements
popular recreation	Ordinary citizens in large, medium-sized cities; Consumption is high in quantity and low in level	Self-driving travel, train to meet with friends and relatives, unit organization, family travel	Rural holiday tourism; forest bathing; mountaineering projects, etc.	The tendency to return to nature is evident; Focus on cultivation; Increased awareness of active participation; Mutual mobility between large, medium and small towns. The rise of the phenomenon of cross-location consumption	Two or three-star holiday Hotels; Agro-hotels; Camping tents, etc.
high-end recreation	Mainly for those with high spending power and a strong	Self-driving travel and aircraft are	Outdoor tourism; hot springs and swimming;	High requirements for supporting accommodation and	High-star resort hotels; holiday villas;

	sense of leisure in small, medium and large cities.	mainly leisure tourism, conferences, exhibitions, corporate activities and incentive tourism	entertainment and leisure shopping, etc.	catering; High consumption level is mainly for rewarding tourism and conferences	multi-village clubs, clubhouses, holiday flats, etc.
special recreation	Mainly for the elderly, teenagers and some special groups	Train, plane, bus, mostly to group travel and self-funded collection travel	Retirement and recreation; education and sports recreation bases; fitness-specific recreation sites, etc.	Pay attention to service facilities, regional environmental traffic, safety, comfort, pay attention to special body leisure consumption, strong repetition	Recreation and health nursing home Pension villa, apartment Vacation apartment

Jinxia. (2008) discussed the development of leisure tourism in the western region and Xiang-E-Shaanxi-Chongqing border area, proposed the following classification of leisure tourism products according to the actual situation of local development: including ornamental leisure products, water-friendly leisure products, rural sports and leisure products, leisure and recreation products, wilderness leisure and recreation products, and country parks.

It is evident that in China, with the advancement of the tourism industry and the evolution of tourists' consumption patterns, the academic community has increasingly recognized the significance and theoretical implications of recreational tourism research and has endeavored to explore the theory of leisure tourism from diverse perspectives.

In summary, recreational tourism, with its rich cultural connotation, remarkable leisure and profound experience, has gradually become popular and represents the new trend of tourism development in the era of experience economy. The emphasis on "ecological environment standards" in recreational tourism theory provides a direct basis for Taiyuan to balance the protection and development of its historical and natural resources (such as Jinci and Tianlongshan Grottoes) in formulating recreational tourism strategies.

2.2 Theory of recreational tourism management

John Jenkins (2005) viewed the role of open space management as integrating resource management, which considers the reciprocal relationship between open space resources and visitors; visitor management, which strengthens the social environment and enhances the satisfaction of the recreational experience; and service management, which integrates needed and quality services into the natural and social resource environments of the open space for the enjoyment of visitors.

Torkildsen (2012) defined it with managers as the main body, and he believes that recreation management is the process of managers' rational use of resources, especially the use of human resources, to achieve the organizational goals of sustainable development of open spaces, in which the interaction between the recreation management organization and the users of recreation services, and the participation of recreation managers in recreation environmental protection and use of recreation. The interaction between recreation management organizations and recreation service users, and the participation of recreation managers in the conservation and use of recreation areas are two core elements.

Jia Qian (2017) mentioned the significance of open space management is to coordinate the dynamic balance between natural resource protection and public recreational demand, to maintain the originality and biodiversity of the open space environment, and to meet the national recreational demand without hindering the protection of the open space ecosystem, minimizing the impacts of recreation and maximizing the satisfaction of tourists are the two major goals of open space management.

Plummer (2009) pointed recreational management mainly includes demand analysis, behavioral monitoring and feedback of visitors' problems, etc. Recreation service management involves the two subjects of visitors and the recreation environment itself, and recreation service management involves the management of facilities and services, activities, and explanatory education for visitors, as well as the management and operation of the recreation environment in relation to its own development.

Some scholars also interpret the subdivision field of leisure tourism management from the aspects of tourism carrying capacity and tourism resources.

Clark and Stankey (1979) detailed the four core functions of ROS in recreational tourism resource management, namely, inventorying recreational tourism opportunities, rationalizing the allocation of recreation resources, predicting the potential impacts of management activities, and matching recreation experience opportunities.

Chuanwei Wang (2008) sorted out the development history of outdoor recreational tourism in the U.S., as well as research findings on carrying capacity, environmental impact assessment, and scenic resource management in recreation resource management, in order to provide a reference for the effective management of recreation resources in China.

In this study, recreation management is defined as the practice of minimizing the ecological impact of recreational activities while protecting the ecological environment and natural resources of the recreation area and rationally utilizing recreation resources to better achieve the recreational functions of the area and satisfy the recreational experiences of its users.

2.3 Theory of strategy

The use of strategy has existed for many centuries, although its use in management has a more recent history, dating back about sixty years. Strategy was born out of military conflicts, and the use of a superior strategy enabled one warring party to defeat another. Von Clausewitz (1950) had written in the nineteenth century, it states that the decision to wage war ought to be rational—that is, based on estimates of what can be gained and the costs incurred by the war. War should also be instrumental—that is, waged to achieve a specific goal, never for its own sake—and strategy should be directed toward a single objective: victory. While policymakers may be uncertain about what they expect from modern military engagements, military personnel, from commanders down to foot soldiers, have only one question: What is our objective in committing to a particular course of action? If the objective is

unclear, the formulation of the strategy is likely to be confused, and its implementation is unsuccessful.

Davies (2000) argued that strategy is driven by its purpose, and its purpose is to achieve policy objectives. Strategy must incorporate a plurality of inputs, a multiplicity of options, and the capacity to accommodate more than one possible outcome. However, when policy is ignored or when there is no end-means linkage between policy and strategy, strategy lacks a true means-end object. In such situations, strategy risks becoming a means without an end, an end in itself, or merely a method for achieving an operational objective, rather than serving as a coherent design or plan for accomplishing the company's policy goals and objectives.

Henry (2021) defined strategy in his book as the process of making decisions that allow an organization to achieve a sustainable competitive advantage over the long term. The "making of decisions" implies an intent, a desire to undertake purposeful actions in order to achieve a stated objective. In this case, the objective is to meet customer needs better than competitors, that is, to achieve a competitive advantage. Unlike managerial or operational decisions, which focus on short-term horizons, strategy is concerned with the long term. Of course, "long term" is relative to the industry: for the fashion industry, it may be three to six months, whereas for the oil industry, it may exceed ten years. Finally, for a strategy to have value to the company, the customer benefits must exist over time and not be easily imitated by competitors, hence the term "sustainable."

Freedman (2015) also mentioned that there is no agreed-upon definition of strategy that describes the field and limits its boundaries. One common contemporary definition describes it as being about maintaining a balance between ends, ways, and means; about identifying objectives, and about the resources and methods available for meeting such objectives. This balance requires not only finding out how to achieve desired ends but also adjusting ends so that realistic ways can be found to meet them by available means. This process can describe the simplest tasks, but when the ends are easily reached, when inanimate objects rather than other people are involved, and when very little is at stake, this barely counts as strategy. By and large, strategy comes

into play where there is actual or potential conflict, when interests collide and forms of resolution are required. This is why a strategy is much more than a plan.

Neugebauer.F (2015) discuss the debate between planned and emergent strategy formulation and suggest that the nature of the problems addressed can be considered as a new variable in explaining strategy formulation for sustainable development. Strategy formulation is understood as a continuum between planned and emergent approaches, and most strategies contain elements of both approaches. The nature of the problem to be solved (salience, intractability or otherwise) helps to explain whether a sustainable development strategy is more likely to use a plan approach or a contingency approach.

In summary, this thesis defines strategy as the long-term direction of an organization. A strategy enables an organization to align its resources and capabilities with environmental demands in order to achieve a competitive advantage. The process of implementing a strategy is called strategic management, and all organizations set goals or objectives that they aim to achieve.

2.4 Theory of tourist attractions

The tourism industry has been able to flourish, and the tourism industry has contributed to the development of tourist attractions.

Navarro (2015) based on analysis of diverse definitions of tourist resource and tourist attraction in works from Hispanic America, we identified two cross-cutting conceptual elements: both attractions and resources are natural or cultural goods (in the formal sense) and have the capacity to inspire visits (in the functional sense). A review of existing classification schemes revealed a widespread focus on the formal aspect. Moreover, there is a broad exclusion of intangible goods, moveable goods, people, and human groups. Hence, we propose a classification of tourist resources, which utilizes the theoretical basis of UNESCO's heritage classification and that of a previous essay of ours on tourist systems. This new formulation takes into account the following criteria: origin (natural, cultural, or human), materiality (tangible or intangible), and movability (moveable or unmovable). It is actually possible, and in fact common, to find resources with diverse combinations criteria.

However, in China, Shan (2020) edited the national planning textbook of tourism service and management ‘Introduction to Tourism (2nd edition)’ published by Higher Education Press in 2008, which was revised based on the old edition in 2002. According to the classification categories in the book, and taking into account the tourism brands and regional characteristics of Shanghai, the tourist attractions under study were classified into six categories: garden ornamental, history and culture, art appreciation, science and technology culture, leisure and shopping, and haitian culture, to make comparative analyses of different categories of tourist attractions.

After clarifying the definition of tourist attractions, many scholars have constructed different systems in order to analyze the current situation of tourist attractions.

Leiper (1990), this research showed that Tourist Attraction System is defined as an empirical combination of tourist, nucleus and marker. Tourists are travelers or visitors seeking recreational experiences that include nucleus and marker elements. Nuclei are discussed in terms of a hierarchy, clusters and their inviolable zones. Markers are analyzed with reference to an earlier model of tourism systems, and nine roles or functions of markers in attraction systems are identified. An explanation of how places "attract" tourists is proposed.

Although Lew (1987) examined the research methods used in the study of tourist attractions and the tourist attractiveness of places, most studies can be classified into one or more of three general perspectives: the ideographic listing, the organization, and the tourist cognition of attractions. Each of these perspectives has in common a set of questions about the nature of the attractions, as expressed in the typologies used to evaluate them. At the same time, all three perspectives make comparisons based on the historical, local, and various valuation aspects of the attractions. This framework can be used to compare and evaluate research on tourist attractions.

Richards (2002) presented an empirical investigation of the Attractions Systems Model based on a survey of over 6,000 visitors to cultural attractions. The results strongly support the general structure of the model and the idea that tourists are

'pushed' to attractions by their motivations. The results suggest that tourist arrivals are closely related to motivations, attraction signifiers, media use, and tourist characteristics. Potential areas for development of the model are suggested, including greater consideration of the relationship between agency and structure.

In the past, most of the studies on the spatial distribution characteristics of tourist attractions were focused on single-category attractions such as A-class attractions, provincial tourist attractions, and rural tourist attractions, and few of them were divided into categories and explored the internal differences between different categories of attractions as well as their own rules. In this paper, to explore the internal rules and characteristics of tourist attractions in a more comprehensive and detailed way, we carry out a more detailed category division based on popular tourist attractions, and then conduct a comparative study after the attractions have been divided into categories, to compare the development status of different categories of tourist attractions within the administrative boundaries of Taiyuan, and to explore the characteristics of the development of regional tourist attractions in a more in-depth manner.

2.5 Theory of the SWOT analysis and the TOWS matrix

The SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis is fundamentally a decision-making process and was first introduced in the early 1980s by Heinz Wyrick, a professor of management at the University of San Francisco.

Andrews and David (1987) mentioned in their book. In 1971, Andrews systematized the SWOT analysis method in his book *Strategy and Organizational Policy*, which has been widely used in management practice. The model provides a framework for making strategic decisions by analyzing internal strengths and weaknesses and external opportunities and threats. With the continuous development of management, the SWOT analysis is gradually being integrated with other strategic tools (such as PEST analysis, Boston matrix) and extended to tourism, education and other fields.

Liberatore (1982) reviewed the improvement of the SWOT method. Saaty combined hierarchical analysis (AHP) with SWOT to quantify prioritization and improve the reliability of decisions. In recent years, the SWOT method has been widely used in recreational tourism planning and management to analyze the resource conditions, market environment and sustainable development path of tourism destinations.

Rasoolimanesh et al. (2017) used the SWOT analysis to assess the sustainability of ecotourism resources and found that the advantage is the diversity of natural resources, while the disadvantage is the imperfect infrastructure.

Li. (2008) mentioned the SWOT analysis in his essay, which SWOT also known as situational analysis. SWOT analysis is often used in strategy formulation, competitor analysis, and can also be used to conduct a comprehensive comparative analysis of the competitive situation on the basis of extensive investigations and it is a commonly used method in competitive intelligence activities.

Yu (2009) indicated that the so-called SWOT analysis is to synthesize and summarize the internal and external environmental conditions of the research object, and analyze the internal strengths, weaknesses, opportunities, and threats of the external environment. Through a clear analysis, the problems are prioritized, and obstacles to strategic goals and tactical problems are distinguished. And on this basis, using the idea of system analysis, the opportunities and risks caused by internal and external factors are reasonably and effectively matched, and based on the corresponding conclusions, more correct decision-making and planning are made.

Professor Andrews of Harvard Business School proposed the TOWS matrix in The Concept of Corporate Strategy. Armstrong et al. (2014) mentioned that the TOWS matrix method provides a framework for SWOT analysis and three elements such as objectives, external environment and internal conditions, by comparing the external environment and internal conditions, to determine what kind of strategy to implement in the organization, which is a very simple and clear method; SWOT analysis is divided into three major steps: analyzing internal and external environmental factors, constructing a matrix, and developing an action plan .

Sammur - Bonnici and Galea (2015) mentioned that SWOT analysis evaluates the internal strengths and weaknesses, and the external opportunities and threats in an organization's environment. The internal analysis is used to identify resources, capabilities, core competencies, and competitive advantages inherent to the organization. The external analysis identifies market opportunities and threats by looking at competitors' resources, the industry environment, and the general environment. The objective of a SWOT analysis is to use the knowledge an organization has about its internal and external environments and to formulate its strategy accordingly. The article provides a toolkit of templates to conduct a SWOT analysis and discusses practical insights on how to formulate strategic decisions.

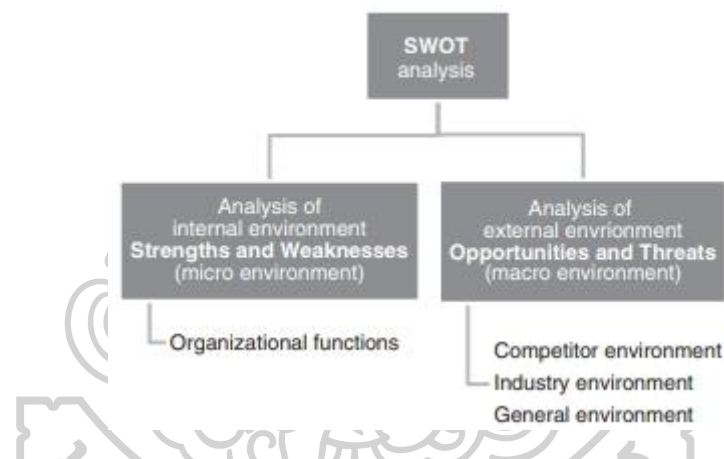


Figure 3 SWOT analysis main components.
(Data Source: Sammut - Bonnici and Galea, 2015)

Haile and Krupka (2016) suggested that to develop a strategy for an organization, it is important to understand the organization and its surroundings. Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis is a well-known tool that accurately accomplishes this task by showing an organization's strengths, weaknesses, and external factors, opportunities, and threats that affect its success. Businesses usually use the SWOT analysis, but non-profit organizations also use SWOT analysis for decision-making and strategic assessment. The limitation of SWOT analysis is that it does not give the weights of the factors and there is no quantitative result of the analysis.

The significant advantage of the SWOT analysis is that it provides a clear, comprehensive and intuitive picture of the multiple factors, comprehensive and intuitive picture of the multiple factors related to the development of the research object, taking into account both the conditions of the research object itself and the multiple factors related to the development of the research object, taking into account both the conditions of the research object itself and the influence of the external environment. The influence of the external environment. The various factors obtained in the survey were categorized according to priority or degree of influence and a TOWS Matrix was constructed. Using the TOWS Matrix, both favorable and unfavorable factors can be clearly presented, leading managers to a series of conclusions and matching appropriate strategies.

Through the literature review, we can see that the current SWOT analysis is based on qualitative analysis of decision-making goals, so it is difficult to avoid the subjectivity of some decisions. Therefore, this paper uses some quantitative methods in combination with the SWOT analysis to alleviate the non-objectivity of SWOT analysis only to a certain extent, so that its conclusions will be more scientific and objective. The SWOT method has been widely used in the market positioning of tourism destinations to differentiate marketing strategies from competitors.

2.6 Customer satisfaction strategy

Since its introduction by Fornell (1992), Customer satisfaction theory has provided an important theoretical foundation for tourism research. This theory constructs a comprehensive American Customer Satisfaction Index (ACSI) model through the six variables of customer expectation, perceived quality, perceived value, customer satisfaction, customer complaint and customer loyalty. Fornell et al. (1996) proposed the ACSI based on the Swedish Customer Satisfaction Model (SCSB), which is a macroeconomic quality measurement tool based on the consumption of products and services. Its multi-level structure includes four levels: country, sector, industry and firm.

With the introduction of experience economy theory, Pine and Gilmore (1999) research on Customer satisfaction also began to focus on high-level needs such as self-actualization and personal growth satisfaction. These theories emphasize that the attractiveness and market competitiveness of the destination can be significantly enhanced by improving the overall experience of 'food, accommodation, travel, shopping, and entertainment'.

In addition, Abukhalifeh and Som (2015) further expanded the scope of satisfaction research by using the service quality measurement method proposed by the SERVQUAL model to quantitatively analyze the gap between expected and actual perceived service, providing an operational theoretical tool to improve tourist experience.

In the field of tourism, Xin (2021) examined the current state of Taiyuan's tourism image through an analysis of four key issues identified in a survey. Recommendations for the sustainable development of Taiyuan's tourism image include building a distinctive cultural brand for Taiyuan tourism, intensifying promotional efforts for the city's tourism image, ensuring the tourism image remains contemporary and relevant, establishing Taiyuan as a model city for all-for-one tourism, and hosting large-scale festival events.

Morrison (2022) have widely used this model to assess tourists' overall satisfaction with itinerary, accommodation, food, shopping, and services to guide destination management and marketing.

Customer satisfaction strategy is a new marketing strategy popular in Europe, America and other developed countries. Its guiding principle is to establish a customer-first service, so that customers get 100 percent satisfaction, thus multiplying the benefits of enterprises. Following the establishment of Sweden in 1989, the world's first national customer satisfaction index measurement system, the world's developed countries have also established their own customer satisfaction system, while China has only part of the region and industry to establish a satisfaction assessment.

Lian Yi (2004) based on the characteristics of the six elements of tourism: food, accommodation, travel, tourism, entertainment and shopping, use the theory of customer satisfaction index of Professor Fomell of the Quality Research Centre of the University of Michigan to construct the causal model of Tourism Destination Customer Satisfaction Index and the indicator system of Tourism Destination Customer Satisfaction Index, and test it empirically. Tourism Destination Customer Satisfaction Index, referred to as TDCSI, and tourism customer satisfaction assessment index system, and its empirical test, prove that the model and index system are more scientific, reasonable, and feasible.

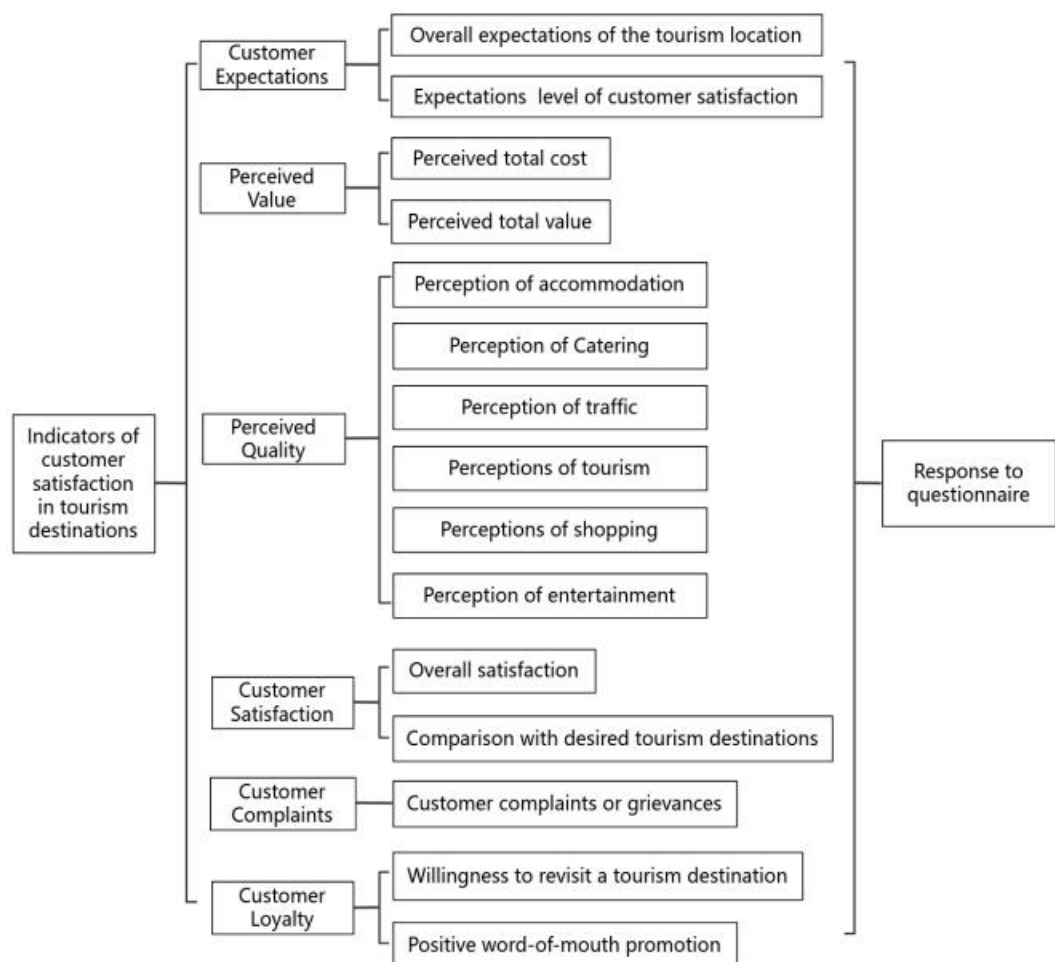


Figure 4 Tourism Destination Customer Satisfaction Index (2004).
(Data Source: Lian Yi and Wang Xia, 2004)

Most enterprises use the weighted summation method to measure customer satisfaction, but the customer satisfaction amount is a kind of ex-post evaluation, which cannot be directly measured, but only indirectly inferred, and the data collected by the questionnaire as well as our analyses and processing of the data have a fuzzy nature, so Lei Wanjun (2005) applied fuzzy comprehensive judgement to the customer satisfaction measurement system after repeated researches and initially established a structural model that meets the consumption concepts of Chinese people. The fuzzy comprehensive judgement method is a new method for customer satisfaction assessment, and the examples show that the method is quite feasible in satisfaction assessment, and the evaluation matrix in the model can be obtained by a questionnaire survey, which is low-cost and highly reliable.

To understand the concept of customer satisfaction, we must first clarify the connotation of the customer; the customer includes two parts: one is the internal staff, and the other is the external customers. Li Lili (2005) is mainly for the external customer satisfaction measurement. Outside the enterprise, all units or individuals who buy or may buy the products of the enterprise are regarded as customers of the enterprise. 'The so-called Customer Satisfaction, abbreviated as CS, as a means of modern business, is often called CS strategy or customer satisfaction strategy. They use a combination of hierarchical analysis and fuzzy comprehensive judgement. An evaluation model for customer satisfaction measurement is given.

In summary, the theory of Customer satisfaction has not only laid a solid foundation for measuring tourists' perceptions and expectations but has also been widely applied and developed in the fields of service quality management, destination marketing, and experience economy, providing comprehensive theoretical support and practical guidance for tourism management. Based on their TDCSI theory as a framework, this paper designs a questionnaire for leisure tourism in Taiyuan to understand tourists' sense of experience and satisfaction in the tourism process.

2.7 4M theory

The 4M management theory, serving as a fundamental tool for on-site management in manufacturing, did not originate from a single scholar or theorist. Instead, it emerged from the systematic summarization and categorization of production instability factors within 20th-century manufacturing quality management practices. The formation of its theoretical prototype is closely tied to two core concepts: Firstly, the foundation of statistical quality control thinking. In the 1920s, Walter A. Shewhart (1932) introduced the concept of “quality control during the manufacturing phase,” emphasizing the prevention of quality fluctuations through process management. The Statistical Process Control (SPC) methodology he pioneered provided early theoretical grounding for the core principle of “stabilizing production conditions” within 4M theory. Secondly, the advancement of standardized management in manufacturing. Modern enterprises integrated Shewhart's theory with industrial field management experience, gradually categorizing key elements subject to frequent changes in production as systematic management objects. This culminated in the analytical framework centered on the four core elements: personnel, machinery, materials, and methods.

In the mid-20th century, the implementation of the Toyota Production System (TPS) in Japan provided crucial support for the maturation and dissemination of the 4M theory. Toyota pioneered the concept of “4M Change Management,” integrating variations in manpower, machinery, materials, and methods into standardized management. By pre-planning and confirming change points, it effectively prevented quality issues and boosted production efficiency, transforming the 4M theory from an abstract framework into a practical management tool. During this phase, the 4M theory evolved from empirical summaries into standardized tools, becoming an integral part of the lean production system.

Chaisanit et al. (2021) mentioned that Somboon pointed out that in order to achieve the goals of the organization, management needs to manage people, finance, materials, equipment, and management in an appropriate proportion to achieve

efficiency and effectiveness. The concept of resource management includes man, money, materials and management, known as 4M theory. The 4M management principles of each organization include (1) Man. People are the most important, because good people management will make work and various activities move forward. Workforce management is the organization and effectiveness of motivating employees to work for efficiently. (2) Money. The procurement and distribution of money must be managed efficiently. (3) Materials. Manage the use of materials, equipment and information technology; (4) Management. Management is the use of methods to manage various departments. Able to operate continuous planning in organizations. Ampouw et al. (2021) thought that although 4M is a management theory, it can be applied to planning, production, and business management.

Recreational tourism management in this paper needs to coordinate the four aspects of resource management 4M theory, including man, money, materials, and management, so as to manage recreational tourism in Taiyuan more effectively.

2.8 The context of Taiyuan City

2.8.1 Overall of Taiyuan City

Taiyuan, as the capital of Shanxi Province, is a city with a long history and deep cultural heritage. It is located in the central part of Shanxi Province, in the northern part of Jinzhong Basin, surrounded by mountains in the north, east and west, and connected to the Jinzhong Plain in the south, with the Fen River running through the whole area from north to south. Taiyuan is not only strategically located, but also the political, economic, cultural, transport and international exchange center of Shanxi Province.

The administrative division of Taiyuan City includes six districts, three counties and one city. The study area of this thesis consists of the six districts in the urban area of Taiyuan City, which are Xiao dian District, Yingze District, Wanbailin District, Xinghualing District, Jiancaoping District and Jinyuan District. The main tourist attractions in Taiyuan with large crowds include Jinci Park, Taiyuan Ancient County,

Mengshan Buddha, Shuangta Temple, Yingze Park, Shanxi Museum, Taiyuan Botanical Garden, etc.

2.8.2 Natural Environment

(1) Topography

Taiyuan is surrounded by mountains in the east, west and north, with the Fen River Valley Plain in the south-central part, and the whole terrain is high in the north and low in the south. The land forms can be divided into five types: mountains, hills, plains, basins and valleys. The mountains are 4528 square kilometers, accounting for 64.79% of the total area; the hills are 904 square kilometers, accounting for 12.94%; the plains are 1093 square kilometers, accounting for 15.64%; the basins are 279 square kilometers, accounting for 3.99%; and the valleys are 184 square kilometers, accounting for 2.63%. The terrain within the greater ups and downs, high and low, located in the realm of northwest Louxiao County, the main peak of the Heheyuan Mountain, elevation 2708 meters, the city's highest peak; located in Qingxu County, West Qingdui of the Fenhe River flooding, elevation of 760 meters, for the city's lowest, the difference in height of 1,948 meters. (Taiyuan Local Records Compilation Committee, 1999)

(2) Climate

Taiyuan is located in the interior of the continent and has a warm temperate continental monsoon climate, with cold winters and hot summers, short springs and autumns, large temperature differences between day and night, and low and concentrated precipitation. It is controlled by the Siberian cold air mass in winter and the hot and humid air mass of the southeastern ocean in summer. As the seasons go by, the two air masses in Taiyuan interact in and out, this and that, occurring a regular cycle of turnover, the formation of a long, dry and cold winter, hot and humid summer, and rainy, spring warming rapidly, autumn cooling rapidly, spring and autumn short windy, wet and dry seasons distinctive climate characteristics. (Taiyuan Government, 2021)

(3) Natural resources

Taiyuan's total water resources include 309 million cubic meters of river runoff and 566 million cubic meters of underground water resources, less 215 million cubic meters of double-counting of water from the inter conversion of surface water and groundwater, for a total of 660 million cubic meters of water resources per year.

As of 2021, the total area of land use in Taiyuan is 691,246 hectares. Among them, 116,598 hectares are arable land, accounting for 16.90 percent of the total area of land use; 18,101 hectares are garden land, accounting for 2.60 per cent; 278,073 hectares are forest land, accounting for 40.20 percent; 168,062 hectares are grassland, accounting for 24.30 per cent; 64,659 hectares are urban, village, industrial and mining land, accounting for 9.40 percent; 13,779 hectares are land used for transport, accounting for 2 percent; 16,467 hectares are land used for watershed and water conservancy facilities, accounting for 2.40 percent; 15,507 hectares are other land, accounting for 2.20 percent. 16,467 hectares, or 2.40 per cent; other land 15,507 hectares, or 2.20 percent.

Taiyuan is rich in mineral resources, mainly iron, manganese, copper, aluminium, lead, zinc, other metal ores and non-metallic ores such as coal, sulphur, gypsum, vanadium, saltpeter, refractory clay, quartz, limestone, dolomite, shimei sand, and so on. Among the mineral resources, coal is the most abundant, followed by iron ore and gypsum. Shanxi is known as the 'Sea of Coal' for its abundance of coal. Taiyuan is in the middle of the 'Sea of Coal', and geologically speaking, the coal deposits in Taiyuan are called 'Taiyuan Coal', which ranks fourth in the province in terms of basic reserves, and is the main component of Shanxi's coal resources. Taiyuan coal is not only rich in reserves, but also has a complete range of coal, coking coal, fat coal, lean coal, poor coal, gas coal, anthracite, and everything. The coal-bearing area of the city is 1,368 square kilometers, accounting for 19.58% of the city's total land area. The proven reserves are mainly distributed in the east and west mountains of Taiyuan City and the territory of Gujiao City, Yangqu County, Qingxu County and Louxiao County. (Taiyuan Government, 2021)

2.8.3 Historical and Cultural Environment

Taiyuan is a famous national historical and cultural city with 5000 years of civilization and 2500 years of city-building history. Taiyuan was once the hometown of Tang Yao, a famous city of the Warring States, the capital of the Northern Dynasties, the northern capital of the Tang Dynasty, the town of the Nine Borders, and the capital of the Jin merchants. It was once one of the political, economic and cultural centre in the north, and has nurtured many historical and cultural celebrities.

Taiyuan is rich in historical relics and has many tourist attractions and monuments, with 2,237 cultural relics and monuments on the ground and 541 cultural relics protection units at all levels. These include tourist attractions such as the Tianlong Mountain of Jinci, Mengshan Mountain, Taishan Mountain, Longshan Mountain, the ancient county town of Taiyuan and the Twin Pagodas Temple, as well as more than a hundred museums such as the ruins of the ancient city of Jinyang and the Museum of Beiqi Mural Painting. These attractions not only showcase Taiyuan's rich history and culture but also provide visitors with a rich travelling experience.

Taiyuan is a city of many ethnic groups living in scattered communities. According to the 2010 census, there are 46 ethnic groups in the city, including 45 ethnic minorities and 24,000 people, accounting for 0.57 per cent of the city's total population. Among the ethnic minorities, the Hui are the most numerous (11,725), followed by the Manchu (5,685) and the Mongols (1,660). And Taiyuan has a long history of religions, including Buddhism, Taoism, Islam, Catholicism, and Christianity.

At the same time, Taiyuan has a rich folk culture, such as traditional opera performances like Jin Opera and Lotus Flower Drops, as well as earth-shattering gongs and drums, rack fires, and other folk activities. These cultural activities not only enrich the spiritual life of the people of Taiyuan but also attract many tourists to come and watch. These include many of Taiyuan's intangible cultural heritages, including national intangible cultural heritage items such as gold enamel painting, Taiyuan paper-cutting, and glaze-firing techniques. These intangible cultural heritage projects not only reflect the wisdom and creativity of the people of Taiyuan but are also an important part of Taiyuan's culture. Taiyuan's food culture is also unique, such as Taiyuan vinegar and Taiyuan noodles.

2.9 Previous studies

2.9.1 Previous studies overseas

Jansen-Verbeke and Dietvorst (1987) focused on the process of integration of leisure, recreation, and tourism (LRT) in the Netherlands from several geographical perspectives. They argue that research into the spatial impacts and conditions of leisure experiences, recreational activities, and tourist behavior is confronted with major social and planning changes, and in their study, they find that the Dutch planning system is characterized by a sectoral structure. The growing political interest in leisure means that there is a need to revise the sectoral structure, to develop a theoretical framework for LRT that captures the interactive processes between people and the environment, to assess spatial-temporal concepts that can be used in supply and demand studies, and to question the ideas of structuration theory. Thus, concluding that LRT integration as a social process and planning problem is a major challenge for geographic research.

Needham and Szuster (2011) conducted a survey of 1,399 visitors and residents of Hawaii's coastal attractions, consisting of eight hypothetical scenarios describing impacts on four factors: level/intensity of use, presence of litter, damage to coral reefs, and condition of facilities. Respondents rated the acceptability of raising awareness/education, limiting use, increasing facilities, and improving maintenance for each scenario. Factors affecting the acceptance of these actions varied. Damage to coral reefs was the most important factor influencing acceptance of awareness raising. The level of use was the most important factor in rating acceptance of limiting use by personnel, while the condition of facilities was the most important factor in rating acceptance of increased maintenance and facilities.

Navarro (2015) based on an analysis of the different definitions of tourism resources and tourist attractions in Hispanic American works, they identified two cross-cutting conceptual elements: both attractions and resources are natural or cultural products (in the formal sense) and have the capacity to stimulate excursions (in the functional sense). In addition, intangible products, moveable products, people and human groups were excluded. Thus, they propose a taxonomy of tourism

resources that utilizes the theoretical foundations of the UNESCO Heritage Classification and of one of our previous papers on tourism systems. This new formulation considers the following criteria: origin (natural, cultural, or human), materiality, physicality (tangible or intangible), and movability (movable or immovable).

Kailu and Yiwei (2016) propose the following solutions to address the developmental challenges of Taiyuan's Changfeng Business District, Improve internal and external transportation access; Strengthen infrastructure development and expand dining and shopping options; Leverage digital media to enhance promotional efforts and advance digitalization; Elevate the cultural atmosphere by creating educational and entertaining venues suitable for all ages; Optimize resource utilization to establish Taiyuan as a vibrant “city that never sleeps”; Emphasize multifunctional design to build a comprehensive public activity center conducive to both commerce and tourism.

Suna (2018) found that the tourism potential of Turkey has been evaluated through a SWOT analysis. The purpose of the study is to determine the current status of Api tourism in Turkey within the scope of health tourism. After the SWOT analysis, the strengths, weaknesses, opportunities, and threats of Api tourism in Turkey were identified. According to the findings, Turkey has the third-largest beehive reserve in the world, is one of the twelve most important gene centers globally in terms of flora, and applies Api therapy methods, considered part of traditional and complementary medicine, in accommodation centers, which are already legalized by the Ministry of Health.

Pınar et al. (2019) applied SWOT analysis to Urla's alternative tourism, and the results were included in the final section, where appropriate strategies and suggestions were developed to optimize strengths and opportunities, address weaknesses, and manage threats. The recommendations are provided based on the analysis results and include grouping alternative tourism types to create synergy and selecting one or two groups according to the SWOT analysis findings.

The aim of the study by Melikh et al. (2019) was to analyze specific aspects of aquaculture in Ukraine and in the world, to explore the role and importance of the introduction of recreational tourism in aquaculture; to analyze the current state of tourism in the world and its economic indicators; to identify the problems of intensification of aquaculture. To analyze the current state of world tourism and its economic indicators; to identify the problems of intensification of leisure tourism in the world's coastal zones to intensify leisure tourism in the world's coastal zones; and to give its own view on the prospects of integrating aquaculture into leisure tourism.

Kuznetsova et al. (2021) analyzed the recreational areas of Nizhnevartovsk and described the leisure activities of the local population. The city of Nizhnevartovsk is situated in low-comfort climatic conditions, the local environment is heavily influenced by human activity, and technological landscapes prevail. Therefore, there is a need to analyze the local recreational potential for the planned design of recreational areas and protection of outdoor recreational resources. Their paper used Geographic Information System (GIS) techniques to monitor the arrangement of the infrastructure of the recreational area of Nizhnevartovsk is considered satisfactory, but there are some shortcomings in the quality of the road network and street lighting. In addition, the organization of leisure activities and services does not fully meet the needs of the city's population. Due to the underdevelopment of recreational areas, several measures are needed to increase the number of recreational areas, diversify the types of recreation, improve the infrastructure of recreational areas, improve hydrological resources and clean water bodies, as well as to increase the number of historical and natural monuments, memorials, cultural and historical attractions, and sports and recreational centre.

Horal et al. (2021) explored the determinants of the concept of forest recreation management. On the basis of a critical analysis of scientific works, they developed and formed a system of quantitative and qualitative indicators and used categorical analysis methods and fuzzy set theory to determine the level of utilization of the potential for recreational use of forests by comparing the value of the composite indicator with its normative (critical) value. Thereby, it is proposed that in order to protect the recreational and other useful attributes of forests that promote recreational

activities, to fully utilize their potential and ensure their sustainable development without posing a threat to environmental safety, it is necessary to limit the harvesting of recreational forests; to increase the proportion of recreational forests through the construction of roads, trails, and other infrastructures and their protection; to allocate the new object of the Fund of Natural Reserves in the forests and to achieve its optimal use for recreation; balanced distribution of recreational loads in the Carpathian forest ecosystems and prevention of recreational deviation; appropriate educational work among tourists and holidaymakers to ensure the protection of unique recreational nature complexes; and setting of tariffs for recreational use of forests and use of these funds for restoration of recreational attributes of forests.

2.9.2 Previous studies in China

Busheng (2003), through document analysis, integration of expert discussions from Guangzhou, Beijing, Chongqing, and within the province, and research on the current state of Taiyuan's tourism industry, reached the following core conclusions. Taiyuan possesses abundant tourism resources, including 5 national key cultural relics protection sites and 17 provincial-level key cultural relics protection sites. However, its annual tourism revenue of approximately 3.077 billion yuan falls far below that of neighboring cities like Shenzhen, Tianjin, and Jinan, failing to match its status as a major tourism resource city. Development efforts must focus on five key areas: enhancing awareness, clarifying positioning, reshaping image, improving facilities, and strengthening promotion to unlock the tourism industry's potential.

Xin (2012) employed literature review, statistical analysis, and field research to conclude that Taiyuan possesses extensive transportation infrastructure and robust integrated transport capacity. In 2011, its total highway mileage reached 6,748 kilometers, railways connected dozens of large and medium-sized cities, and air passenger throughput reached 5.876 million. Additionally, high-speed rail and urban rail transit technologies have advanced. However, challenges persist, including low spatial coupling between transportation and tourism, inadequate attraction signage, and insufficient public transit operations. Optimization requires planning bus terminals with smart features, launching two dedicated tourist routes, adding

international flights, and improving attraction bilingual (Chinese-English) signage and safety alert systems.

Li Hongyi (2020) systematically summarized and sorted out the current situation and achievements of national park recreation research at home and abroad between 2000 and 2019, and found that: (1) National park recreation research at home and abroad has received extensive attention, and the relevant research results mainly focus on the seven aspects of national park recreation, such as functional zoning, industry development, facility construction, evaluation, main body, environmental impacts and management, and formed a research content framework of 'one foundation, four themes and two means'. aspects, forming a 'foundation, four themes, two means' of the research content framework. (2) National Park recreation research method is mainly quantitative research, supplemented by qualitative research, based on national parks big data and GIS spatial analysis technology, qualitative and quantitative research needs to be focused on in the future. (3) European and American scholars started their research early, and constructed a relatively perfect theoretical system and management framework of recreation in national parks; based on the literature review and combing, it is proposed that the future research on recreation in Chinese national parks needs to be further deepened in the following directions: to strengthen the basic theoretical research, to improve the technical methods of recreation evaluation, to carry out the research on recreation subjects with multidisciplinary perspectives and to deepen the research on recreation management in hope of shedding light on the relevant research on national parks in China and on the construction of pilot programs and institutions. We hope to shed light on the research and institutional construction of Chinese national parks.

Wang Mengqiao (2021) analyzed the successful practice of VERP theory in the Arches National Park of the United States and put forward effective suggestions for China's national parks to improve the level of recreation management in four aspects, namely, management objectives, environmental monitoring, strengthened management, and scientific research cooperation.

Xingxing (2021) constructed a grading index system of recreational opportunities with the natural environment, social environment and management environment as

the criterion levels by combing the related literature, relying on the ROS theory, and taking the Tianzhu area of Qilian Mountain National Park as the research object. Firstly, he obtained the research data through questionnaire survey, summarized the six environmental factors affecting the recreational experience of the recreationists using factor analysis, and determined the weights of the indicators using principal component analysis, which showed that the recreationists paid more attention to the factors of landscape resources. Subsequently, the fuzzy comprehensive judgement model was used to calculate the comprehensive score of recreational opportunities in different recreational areas, and combined with the actual situation of the case, the spectrum of recreational opportunities in Tianzhu area of Qilian Mountain National Park was constructed. Finally, based on the results of the above analyses and combined with the field research, he analyzed the characteristics of recreational behaviors and types of recreational activities in Tianzhu Area of Qilian Mountain National Park, and summarized the problems of recreational management in Tianzhu Area of Qilian Mountain National Park.

Liu Nan (2022) discussed how Denali National Park in the United States uses ORMM theory to carry out recreation management and provided suggestions for China's national parks in terms of coordinating the protection of resources and the supply of recreation services, optimizing the function of visitor centers, and adapting to the management of recreation management.

Wang Fan (2023) analyzed the strengths and characteristics of the rural creative recreation tourism industry, exploring development strategies and pathways. The paper thoroughly examines the challenges facing this sector, such as insufficient tourism resource development, a lack of comprehensive planning, ineffective mechanisms for cultural-tourism integration, and talent shortages. To address these issues, the paper proposes a series of development strategies, including improving service quality and strengthening tourism branding and promotion, as well as exploring sustainable development approaches. These strategies provide the rural creative recreation tourism industry with theoretical guidance and practical references to help it elevate quality, expand markets, and improve efficiency.

Gao Yun (2023) analyzed the successful experience of barrier-free recreation management in U.S. national parks from five dimensions: legal standards, management mechanism, service capacity, spatial planning, and cultural atmosphere, and proposed that China should actively learn from the advanced experience and continue to improve the recreation management system.

Hou Yuxia (2023) proposed that tourism attractiveness evaluation is of great significance in enhancing the image of tourist destinations and promoting the sustainable development of tourist accommodation. They used the rooting theory and data mining method to construct a tourism attractiveness evaluation model to qualitatively investigate the tourism attractiveness of the top ten quality B&Bs in Yangshuo. The results showed that among the three main elements of tourism attractiveness evaluation of Yangshuo tourist lodges, the core attractiveness element is hospitality service, and the auxiliary attractiveness elements are location environment and physical space.

Jiawang (2023) selected Liupan Mountain Area in Gansu Province as the research area, through the application of Python software and Gaode map positioning system, climbed the tourist attractions in Liupan Mountain Area in Gansu Province, summarized and organized the tourist resources in Liupan Mountain Area in Gansu Province, Evaluated and analyzed the characteristics of their spatial distribution and their influencing factors, and comprehensively and accurately described the distribution situation of tourist attractions in Liupan Mountain Area in Gansu Province, and accordingly put forward the strategies and proposals for the development of tourist resources and their development direction in Gansu Province. The development of tourism resources in Liupanshan area and the development direction of the strategy and recommendations are proposed accordingly.

Busheng (2003), through document analysis, integration of expert discussions from Guangzhou, Beijing, Chongqing, and within the province, and research on the current state of Taiyuan's tourism industry, he reached the following core conclusions. Taiyuan possesses abundant tourism resources, including 5 national key cultural relics protection sites and 17 provincial-level key cultural relics protection sites. However, its annual tourism revenue of approximately 3.077 billion yuan falls far below that of

neighboring cities like Shenzhen, Tianjin, and Jinan, failing to match its status as a major tourism resource city. Development efforts must focus on five key areas: enhancing awareness, clarifying positioning, reshaping image, improving facilities, and strengthening promotion to unlock the tourism industry's potential.

Lulu (2023) employed methods such as literature analysis, policy interpretation, case studies, and data analysis to conclude that Taiyuan has implemented cloud tourism practices, including VR tourism and attraction livestreaming. However, challenges persist, including inadequate supporting infrastructure, a lack of distinctive brand identity, and limited effectiveness in promoting industrial transformation. To advance cloud tourism development, efforts should focus on intensifying online promotion, integrating “online activities + offline experiences,” introducing VR/AI technologies to build a “one-device-tour” smart platform, and cultivating cross-disciplinary talent in cultural tourism.

Through current status surveys and comparative research, Xin (2024) concluded that Taiyuan possesses policy support, resource foundations, and transportation advantages for developing nighttime tourism, with high willingness among local and surrounding residents to engage in nighttime activities. However, certain nighttime tourism clusters suffer from limited reach, limited business formats, and inadequate infrastructure. Policies should be leveraged to create nighttime consumption hubs featuring diverse scenarios and rich business formats. Integrating local culture, improving facilities, and enhancing resident engagement will boost the appeal of nighttime tourism.

Based on POI data, Jian Yi (2024) conducted a study on tourist attractions in Xuzhou City. The study shows that the spatial distribution pattern of tourist attractions in Xuzhou City shows an overall agglomeration pattern, with a high distribution density in the central urban area; parks and squares have the highest degree of spatial agglomeration, and monument attractions have a random distribution pattern. The spatial distribution characteristics of tourist attractions in Xuzhou city centre show a double-core multi-ring pattern, and the rest of the county shows a single-core multi-scattered distribution pattern. The spatial correlation and convenient

accessibility of the three types of service facilities, namely transportation, accommodation, and catering, and various tourist attractions, have optimized space and prospects.

Wang Ying (2024) conducted a SWOT analysis of the development of Jielingkou cultural tourism. This clarified its positioning and formulated strategies for product development, pricing, distribution channels, advertising campaigns, and public relations. Inspired by the development model of Jielingkou Village, she proposed the scientific planning of multiple historic villages to breathe new life into cultural tourism.

Shen Yue (2025) examines Jiaozuo City in Henan Province as a case study to explore pathways and practices for resource-based cities transitioning into national-level tourism and recreation hubs. Through empirical analysis, the study summarizes its development achievements, systematically identifies existing challenges, and proposes targeted optimization strategies: First, establish a comprehensive tourism industry chain by integrating diverse models such as “tourism + 5G/industry/wellness.” Second, leverage distinctive cultural IPs like “Tai Chi culture” and “coal industrial heritage” to create differentiated cultural-tourism fusion products. Third, it enhances a multi-dimensional service matrix integrating “smart tourism platforms + standardized services + transportation networks.”

In summary, many scholars in China have conducted research on tourism strategy optimization from various disciplines and fields, such as tourism strategy, tourist attraction development, and tourism planning. The research methods are primarily a combination of quantitative and qualitative approaches. Research on tourism routes by foreign scholars developed earlier, and the construction of research models is more advanced, including models based on tourist attractions, tourism spatial models, and tourism strategy systems. By analyzing previous studies, the construction of the research questionnaire and the selection of indicators for leisure tourism in Taiyuan can be carried out more purposefully in this paper.

2.10 Taiyuan Recreational Tourism Policies

In recent years, Shanxi Province and Taiyuan City have introduced numerous strategies to promote recreational tourism development.

The following are relevant policies introduced by Shanxi Province:

1. Building Distinctive Recreational Tourism Spaces

On one hand, leverage the cultural tourism landmarks of the Yellow River, the Great Wall, and the Taihang Mountains, along with the “Three Number One” tourist highways, to develop distinctive recreational tourism such as self-driving tours. Advance the initiative to establish A-level scenic areas in counties and build a brand matrix for these attractions. On the other hand, accelerate the development of national-level tourist resorts and recreational districts, expand rural recreational tourism, and cultivate business formats like recreational farms and rural homestays. Simultaneously, establish distinctive rural rest stops along tourist highways.

2. Creating Differentiated Products for All Seasons and Ages

Develop seasonal tourism products for spring, summer, autumn, and winter, forming a tourism pattern of “spring excursions, summer wellness, autumn journeys, winter enjoyment.” Tailor tourism experiences to different age groups: youth-focused products emphasize intellectual development, young adults-focused products prioritize stress relief, and seniors-focused products highlight health preservation and mental well-being.

3. Deepen Integration Across Cultural and Tourism Sectors

Integrate distinctive cultural elements like the Yellow River and Shanxi merchants into recreational tourism, fostering synergies with wellness, educational tours, industrial tourism, and sports. Accelerate the application of internet and AI technologies to develop immersive performances and other products. Create culturally inspired “Shanxi Gifts” cultural and creative products, and organize events to facilitate the commercialization of cultural creations.

4. Innovate tourism promotion models

Continuously amplify the traffic effect of the “Follow Wukong to Explore Shanxi” campaign by launching a series of product routes; optimize the province-wide integrated marketing mechanism and strengthen regional tourism cooperation with key source markets like Beijing-Tianjin-Hebei and the Yangtze River Delta.

5. Refine Cultural Tourism Service and Regulatory Systems

Improve the “Satisfaction in Shanxi Tourism” construction standards, implement service quality enhancement initiatives for travel agencies and tour guides; strengthen the visitor feedback system, advance credit-based classification and tiered supervision in the cultural tourism market, and refine the comprehensive law enforcement exemption list for first-time violations in the cultural market.(China Tourism News Network, 2025)

The following are the relevant policies introduced by Taiyuan City:

1. Distribute consumer vouchers and enhance the consumer experience

Issue cultural tourism vouchers and public welfare coupons using an “apply and enjoy immediately” approach to ensure direct policy impact. Encourage A-rated scenic spots to offer ticket discounts or free admission. Extend operating hours for public libraries and cultural centers. Support the Shanxi Museum in establishing itself as a world-class museum with Chinese characteristics, building a “City of Museums.”

2. Strengthen distinctive cultural tourism offerings

Establish North China's premier performing arts hub and “City of Music Fans” by streamlining commercial performance approvals and relaxing ticket sales caps for large-scale concerts to boost concert economy. Launch themed itineraries featuring cultural relics and educational tours, develop hot spring and RV camping products, create intangible cultural heritage tourism bases, and host shopping festivals celebrating intangible cultural heritage.

3. Create high-quality cultural tourism consumption venues

Advance projects like Zhonglou Street and Jinyangli; facilitate the implementation of projects like the Xishan Guiyuan Rural Tourism Resort. Establish the “Millennium Capital City Reception Hall,” supporting commercial districts and scenic areas in creating creative markets with diverse business formats. Improve nighttime infrastructure in scenic areas, organize folk performances and light shows, and develop nighttime tourism services.

4. Enhance Travel Convenience for Diverse Visitors

Improve ticket booking and accommodation services for foreign tourists and Hong Kong, Macao, and Taiwan residents; develop premium itineraries tailored to the 240-hour visa-free transit policy for foreigners; increase the number of payment service demonstration zones.

5. Promote Cross-Sector Integration of Culture and Tourism

Integrate leisure agriculture and rural tourism into premium itineraries; create immersive digital experiences like smart cultural tourism sites and digital museums; Bring branded sporting events into scenic areas to elevate the quality of sports tourism bases.

6. Cultivate new formats and models for cultural and tourism consumption

Develop flagship store economies by supporting renowned retail and dining brands to open their first stores in the city; launch cultural tourism product packages like “Travel with the Performance”; and continue hosting the “Imprint of Taiyuan” cultural and creative competition to develop high-quality cultural and creative products.(Taiyuan Government, 2025)

2.11 Research theoretical framework

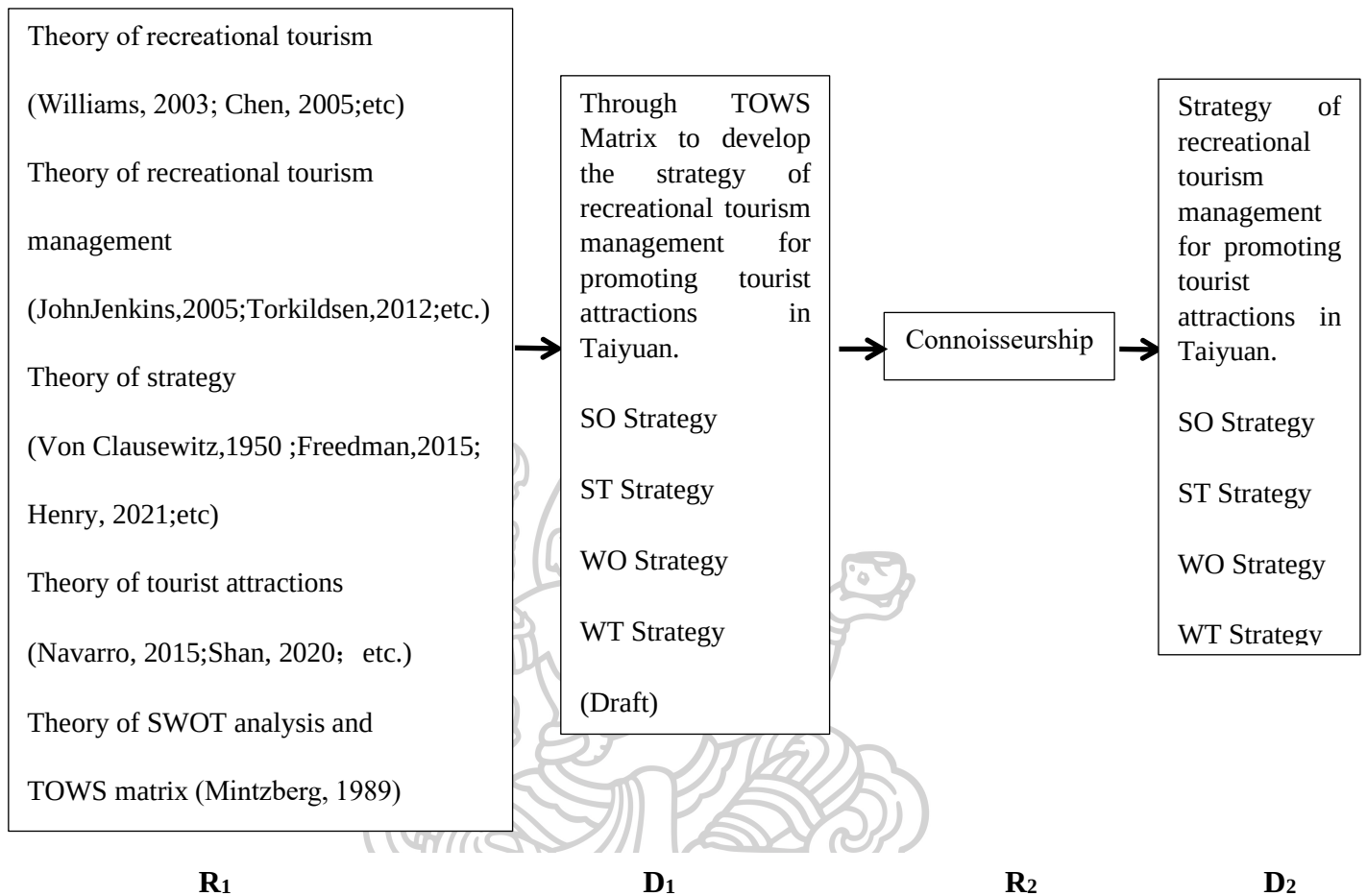


Figure 5 Research theoretical framework

Chapter3

Research Methodology

This study aims to study and analyze the strategy of recreational tourism management for promoting tourist attractions in Taiyuan, and to validate the feasibility of the strategy of recreational tourism management for promoting tourist attractions in Taiyuan. Based on the previous literature review and preliminary survey on the current situation of recreational tourism in Taiyuan City, and aligned with the research objectives and theoretical framework, this study adopts the Research and Development (R&D) methodology.

3.1 Type of research methods

This study used a research methodology of R&D; meanwhile, it will use qualitative and quantitative methods to collect data. The qualitative research includes interviews, Connoisseurship, while the quantitative research method includes a questionnaire.

1. Questionnaire survey method

Through a reasonably designed questionnaire, a stratified survey was conducted among tourists and residents in Taiyuan to understand their attitudes, needs and suggestions for the recreation and tourism industry in Taiyuan, and to provide data support to the strategies for recreational tourism management aimed at promoting Taiyuan's tourist attractions.

2. Interview method

An interview was conducted mainly with the staff from the Cultural and Tourism Bureau, major attractions, tourism companies, and local residents in Taiyuan City. To further understand the current situation of the development of recreational tourism in Taiyuan City.

3.2 Research area

Taiyuan City, ancient name Jinyang, is also known as Hezhou, Longcheng. It is a prefecture-level city and the capital of Shanxi Province, China. It is located in the centre of Shanxi Province, at the northern end of the Jinzhong Basin. The city is situated between longitude 111° 30 ' ~ 113° 09' E and latitude 37° 27 ' ~ 38° 25 ' N. It has a total area of 6,988 square kilometers, with a total area of 3,988 square kilometers. It has a total area of 6,988 square kilometers, about 4.5% of the total area of Shanxi Province. As of the end of 2022, the city had a resident population of 5,430,500 people (Taiyuan Bureau of Statistics, 2022).

The administrative division of Taiyuan City includes six districts, three counties, and one city. The study area of this thesis focuses on the six urban districts: Xiaodian, Yingze, Wanbailin, Xinghualing, Jiancaoping, and Jinyuan. The main tourist attractions in Taiyuan with large crowds include Jinci Park, Taiyuan Ancient County, Mengshan Buddha, Shuangta Temple, Yingze Park, Shanxi Museum, Taiyuan Botanical Garden, etc.

This study examines these key attractions to assess their current situation, identify problems and shortcomings, and develop strategies for recreational tourism management to promote Taiyuan's tourist sites.

3.3 Population and sample

3.3.1 Population

The population of this thesis is residents and visitors in Taiyuan. According to the bulletin of the Seventh National Population Census of Shanxi Province, the resident population of Taiyuan were 5,444,700 people. Taiyuan City Bureau of Culture and Tourism statistics show that Taiyuan City 2023 annual tourism statistics for 8,766,300 people received 8,766,300 tourists in 2023, 2024 only National Day holiday, Taiyuan's major tourist attraction, parks, museums, tourism and recreational neighborhood, night culture and tourism consumption agglomeration area received a total of 10,112,000 people and in 2024, during the National Day holiday, Taiyuan's major tourist attractions, including parks, museums, tourism and recreational

neighborhoods, and night culture and tourism consumption areas, received a total of 10,112,000 visitors.

3.3.2 Sample

(1) For tourists in Taiyuan City, according to Krejcie and Morgan Table (1970), the author will use the convenience sampling method to select 400 people as questionnaire samples for this study.

(2) For Key Informants, the author will select 15 key informants as interview samples for this study, including 3 residents of the area, 3 staff of the Taiyuan City Tourism Bureau, 6 staff of the major tourist attractions, and 3 staff of Taiyuan tourism companies.

3.4 Research process

This study used a research methodology of R&D. Meanwhile, it will use qualitative and quantitative methods to collect data. The qualitative research includes interviews, Connoisseurship, while the quantitative research method includes a questionnaire, and the research process is divided into the following 4 steps:

Step1: To study and analyze the current situation of recreational tourism in Taiyuan. (R1)

Firstly, the study uses documentary analysis, including relevant national policy studies, previous studies, and relevant theoretical studies, in order to provide a theoretical basis for the subsequent analysis.

Secondly, the author summarizes the previous experience and producing the questionnaire and interview through quantitative and qualitative tools is necessary in order to certify tourism resources, the current situation of tourism, tourist satisfaction, and tourist needs.

In this period, the researcher conducted a questionnaire survey on tourists at the major tourist attractions in Taiyuan City. Convenience sampling was employed to select 40 tourists from each attraction, resulting in a total sample group of 400

tourists. The objective was to ascertain tourists' satisfaction and their needs. Subsequently, the author conducted interviews through the staff of the Cultural and Tourism Bureau, the staff of the major attractions, the staff of tourism companies, and residents in Taiyuan City to further understand the current situation of the development of recreational tourism in Taiyuan City.

Step2: To develop the strategy of recreational tourism management for promoting tourist attractions in Taiyuan. (D_1)

The author employed SWOT analysis to examine the data gathered from questionnaires and interviews, intending to identify the strengths, weaknesses, opportunities, and threats inherent in the current situation of tourist attractions in Taiyuan City.

Subsequently, based on the strengths, weaknesses, opportunities, and threats in the current situation of tourist attractions in Taiyuan City, the author used TOWS Matrix to develop the strategy of recreational tourism management for promoting tourist attractions in Taiyuan.

Step3: To validate the feasibility of the strategy of recreational tourism management for promoting tourist attractions in Taiyuan through connoisseurship. (R_2)

To validate the feasibility of the strategy of recreational tourism management for promoting tourist attractions in Taiyuan, the author uses connoisseurship. The experts chosen to participate in the appraisal meeting in this paper included one leader of the Taiyuan City Culture and Tourism Bureau, one manager of the Taiyuan City Tourism Company, one manager of a tourist attraction, one community leader, and three recreational tourism experts, for a total of seven people. The purpose of this meeting is to validate the feasibility of the strategy of recreational tourism management for promoting tourist attractions in Taiyuan.

Step4: To improve the strategy of recreational tourism management to promote tourist attractions in Taiyuan according to the result of connoisseurship. (D_2)

Following the connoisseurship, the researcher conducted a content analysis of the results, which led to further improvements to the strategy of recreational tourism management for promoting tourist attractions in Taiyuan. The whole research flow chart is shown below:

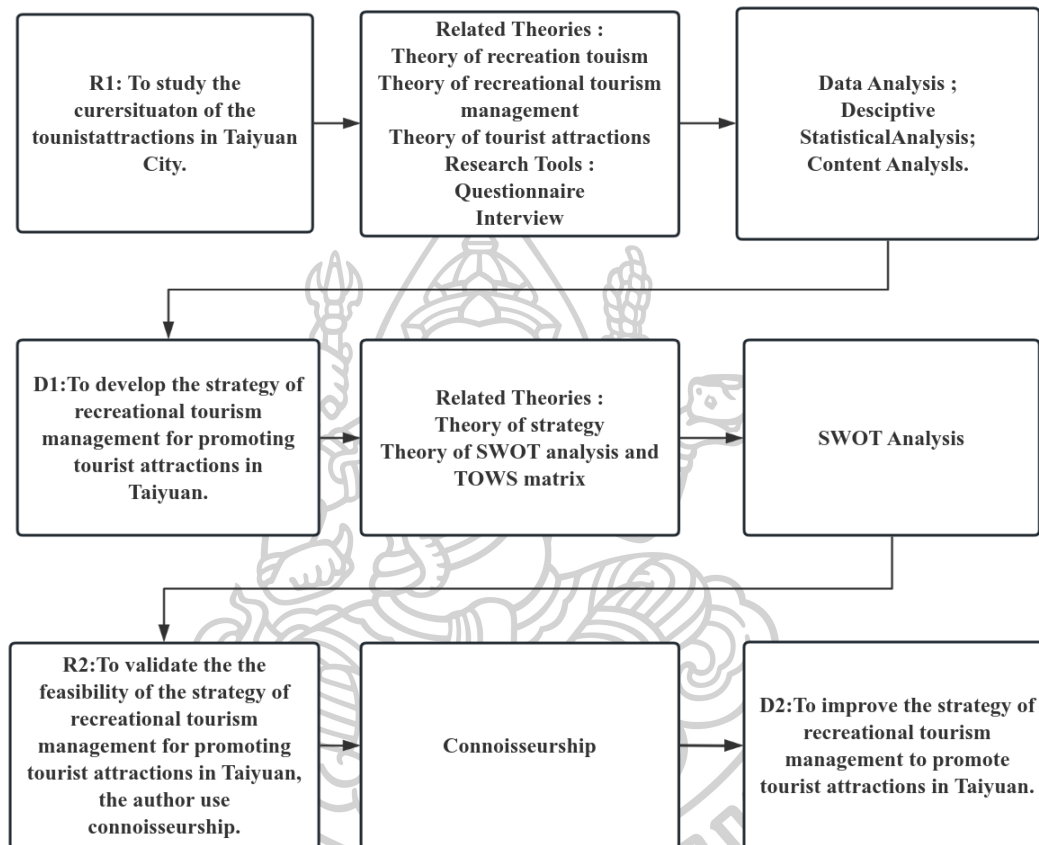


Figure 6 Research flow chart

3.5 Research tools

(1) Questionnaire: It will use to study the basic information of the tourists who come to visit the major attractions in Taiyuan City and the current situation of recreational tourism satisfaction.

The constructing process of questionnaire were as follows:

Step 1: According to the documents, concepts, and theories related to recreational tourism, construct the questionnaire about the current situation of recreational tourism in Taiyuan City.

Step 2: The Index of Item-Objective Congruence (IOC) of the questionnaire was examined by three experts. And test the validity of the questionnaire, with the IOC is greater than 0.66.

Step 3: Revise the questionnaire based on the experts' suggestions.

Step 4: The questionnaire was distributed to 40 tourists in Taiyuan City for a tryout, so that the reliability of the returned questionnaires is at the 95% confidence interval.

Step 5: The questionnaire was applied to 400 tourists in 10 main tourist attractions of Taiyuan City in June 2025.

(2) Interview form: It will be used to interview staff of the Cultural and Tourism Bureau, the managers of the major attractions in Taiyuan City, and professional scholars in related fields to study the current situation of recreational tourism in Taiyuan City.

The construction process of the interview form was as follows:

Step 1: Reviewing and analyzing documents, concepts, theories, and research related to recreational tourism and constructing the interview form about the current situation of recreational tourism in Taiyuan City.

Step 2: The Index of Item-Objective Congruence (IOC) of the questionnaire was examined by three experts. And test the validity of the questionnaire, with the IOC is greater than 0.66.

Step 3: Revise the interview form based on the experts' suggestions.

Step 4: The interview form was applied to 15 staff of the Cultural and Tourism Bureau, the managers of the major attractions in Taiyuan City and professional scholars in related fields.

3.6 Data collection

This study mainly collected data through documentary analysis, questionnaires, and interviews. All the macroscopic data in this thesis are from officially published

data. For example, the China Statistical Yearbook, China Statistical Yearbook of Cultural Relics and Tourism. Annual Report on Information Disclosure of the Department of Culture and Tourism of Shanxi Province, etc. For the qualitative data that cannot be reflected in the form of the data, which are collected from tourists, the staff of the Cultural and Tourism Bureau, the managers of the major attractions in Taiyuan City, and Professional scholars in related fields in Taiyuan City through questionnaire and interviews.

(1) Quantitative data were mainly collected through questionnaire surveys of tourists in Taiyuan City.

(2) Qualitative data were collected from the staff of the Cultural and Tourism Bureau, the managers of the major attractions in Taiyuan City, and Professional scholars in related fields. The interview records are the most important qualitative data in this study.

3.7 Data analysis

The study will employ descriptive statistics analysis, including mean, standard deviation, percentage, and frequency, to analyze the collected data. Additionally, content analysis will be utilized to gain further insights.

Following a preliminary analysis of the data collected from the questionnaires and interviews, the author will use the SWOT analysis and the TOWS matrix to analyze the results of these data to identify the strengths, weaknesses, opportunities, and threats in the current situation of the tourist attractions in Taiyuan City in order to improve the strategy of recreational tourism management for promoting tourist attractions in Taiyuan.

Chapter4

Data analysis and results

This chapter presents the comprehensive findings and strategic analysis derived from the collected data. The study's aim is to investigate the current state of recreational tourism in Taiyuan and to propose, validate, and refine management strategies to optimize the appeal of its tourist attractions. The analysis is initiated using descriptive statistics to quantitatively analyze the questionnaire data, followed by a content analysis for a qualitative study of the interview data. By integrating these quantitative and qualitative results, the study conducts a SWOT analysis to systematically identify the current Strengths, Weaknesses, Opportunities, and Challenges of recreational tourism in Taiyuan.

Subsequently, based on the TOWS matrix framework, the authors propose a series of coping strategies, including the SO, ST, WO, and WT strategies. Finally, the feasibility of the proposed recreational tourism management strategies will be validated through a connoisseurship process involving nine experts. The strategies will then be refined and improved based on the experts' feedback to ensure optimal effectiveness for promoting tourist attractions in Taiyuan.

1. Results of the current situation of recreational tourism.
2. Formulate strategies for organizing recreational tourism routes to create the attraction of tourist attractions in Taiyuan.
3. Evaluate the feasibility of strategies for organizing recreational tourism.

4.1 Results of the current situation of recreational tourism in Taiyuan City

To study the current situation of recreational tourism in Taiyuan, the author first conducted a questionnaire survey of 400 tourists who traveled to Taiyuan to collect relevant quantitative data. Subsequently, qualitative data were collected through interviews with 3 Taiyuan residents, 3 staff members from the City Tourism Bureau,

6 staff members from major tourist attractions, and 3 staff members from Taiyuan tourism companies.

4.1.1 The results of the questionnaire on the current situation of recreational tourism in Taiyuan City

To investigate the current situation of recreational tourism in Taiyuan City, the author conducted field visits to the top ten tourist attractions. During these visits, 426 valid questionnaires were distributed, yielding a validity rate of 93.8%. The analysis of these results will be presented in three parts: basic tourist information, the recreational tourism situation in Taiyuan City, and tourist satisfaction.

4.1.1.1 Basic Tourist Information

The section on basic tourist information focused on examining various demographic aspects, including tourists' gender, place of departure, age, occupation, education level, and monthly income. The details are as follows.

Table 2 Basic tourist information

(n=400)

Content	Choice	Frequency	Percentage
Gender	Male	202	50.50
	Female	198	49.50
Age	Under 18 years old	103	25.75
	19 - 40 years old	98	24.50
	41 - 60 years old	103	25.75
	61 years old or over	96	24.00
Tourist Origin	Taiyuan City	49	12
	Shanxi Province (except Taiyuan City)	59	14.7
	Outside Shanxi Province	292	73.6
Occupation	Student	109	27.25

	Government/business employee	104	26.00
	Freelance/Retired person	108	27.00
	Others	79	19.75
Education Level	High school and below	112	28.00
	Specialized education	104	26.00
	Bachelor's degree	74	18.50
	Master's degree or higher	110	27.50
Monthly Income	Less than 2000 RMB	111	27.75
	2001 - 5000 RMB	95	23.75
	5001 - 8000 RMB	90	22.50
	More than 8000 RMB	104	26.00

Table 2 clearly shows the characteristics of tourists visiting the ten major tourist attractions in Taiyuan City:

(1) The proportion of male and female was almost the same, with 50.5% of males slightly higher than 49.50% of females. The sample gender structure was balanced to avoid the bias of a single gender in the research results.

(2) The distribution across age groups is balanced. The tourists under 18 years old and 41 - 60 years old each account for 25.75%, while those aged 19 - 40 years old account for 24.5%, matching the 24% of tourists over 61 years old. This shows that Taiyuan tourism appeals to all age groups. However, it is important to address the travel needs of younger demographics and enhance leisure accessibility for middle-aged and senior travelers.

(3) Most of the tourists came from outside Shanxi Province, accounting for 73.6% of the total number; followed by tourists from Shanxi Province (excluding Taiyuan City), accounting for 14.7%, and tourists from Taiyuan City, accounting for 12%.

(4) The three core occupational groups are students for 27.25%, freelancers/retirees accounting for 27%, and government/public institution employees accounting for 26%, with other occupations accounting for 19.75%. The higher proportion of students is clearly related to the post-exam holidays following the high school and college entrance exams. Meanwhile, freelancers and retirees enjoy greater time flexibility and tend to prefer recreational travel.

(5) The proportion of high school education or below accounts for 28%, which is close to the proportion of master's degree or above education, which accounts for 27.5%. The proportion of college education accounts for 26%, followed by the proportion of undergraduate education, which accounts for 18.5%, reflecting the large span of educational levels of tourists. It is clear that highly educated groups (those with a master's degree or above) account for a significant proportion. They are likely to pay more attention to the cultural connotation of tourism and the depth of experience. This makes them the perfect target market for developing knowledge-based tourism products.

(6) Low-income groups with a monthly income of less than 2,000 yuan account for 27.75%, high-income groups with a monthly income of more than 8,000 yuan account for 26%, and middle-income groups with income between 2,001 and 8,000 yuan still occupy the main position. There are obvious differences in tourists' consumption ability. People with more money want high-quality services like personalized travel plans and unusual homestays, while people with less money want to spend as little as possible. To meet the needs of different types of customers, tourism companies should create a range of products that are suitable for various age groups and interests.

4.1.1.2 Recreational tourism situation in Taiyuan City

For the section of recreational tourism in Taiyuan City, the author mainly investigated several aspects of the times you visited Taiyuan, the length of stay, who to travel with, tourist budget, purpose of tourism, tourist cost, and tourist attractions. The details are as follows.

Table 3 Recreational tourism situation in Taiyuan City

Content	Choice	Frequency	Percentage
Times You Visited Taiyuan	One time	94	23.50
	2 - 3 times	161	40.25
	More than 3 times	97	24.25
	Others	48	12.00
Length of Stay	Within 1 day	101	25.25
	1 - 2 Days	96	24.00
	3 - 5 Days	99	24.75
	More than 5 Days	104	26.00
Tourist Form	Travel alone	88	22.00
	Travel with family	174	43.50
	Travel with colleague or friends	92	23.00
	Others	46	11.50
Tourist Budget	Less than 1000 RMB	82	20.50
	1001 - 3000 RMB	131	32.75
	3001 - 5000 RMB	100	25.00
	More than 5000 RMB	87	21.75
Purpose of Tourism	Sightseeing	99	24.75
	Recreation	180	45.00
	Cultural experience	77	19.25
	Others	44	11.00
Tourism Information	Television and radio	75	18.75
	Social media	181	45.25
	Introduced by family and friends	132	33.00
	Others	12	3.00
Tourist Cost	Accommodation	279	69.75
	Food	235	58.75
	Shopping	214	53.50

	Others	53	13.25
Tourist Attractions	Jinci Park	87	21.75
	Taiyuan Ancient County Town	111	27.75
	Zhonglou Walking Street	176	44.00
	Others	26	6.50

Table 3 reveals that among the tourists who traveled to the top ten tourist attractions in Taiyuan City:

(1) Nearly half of the tourists 40.25% have visited Taiyuan 2-3 times, a high rate of repeat visits, indicating that Taiyuan tourism has a certain degree of attractiveness; first-time visitors accounted for 23.5%, and the other options accounted for 12%, of which a part of them often go to Taiyuan for shopping and business trips, and the other part are local residents.

(2) More tourists choose to travel within 1-2 days in Taiyuan, accounting for 49.25%. This part of the tourists may be short-distance sightseeing tourists, who choose Taiyuan core attractions for a quick tour or tend to experience 1-2 key tourist attractions in depth, such as the combination of Jinci Park, Tianlong Mountain and Taiyuan Ancient County. Tourists who choose to play for 3-5 days accounted for 24.75% of the total, while those who play for more than 5 days accounted for 26.00% of the total, which is in addition to the long-term residence of the local residents, and it is assumed that the tourists are mainly leisure vacationers, and they may extend to the surrounding counties and cities of Taiyuan (e.g., Pingyao and Qixian) to carry out linkage tourism.

(3) Playing with family and friends accounted for 66.50%, indicating that Taiyuan's tourism resources prefer leisure and entertainment activities, and tourist attractions need to focus on optimizing parent-child facilities and family-friendly services. Traveling alone accounted for 22.00%. Young backpackers or business travelers are the main ones. Others account for 11.50%. May include study groups, tour groups, and other special groups.

(4) The medium budget (1001 - 5000 RMB) accounted for 57.75% of the travel budget, which is the main consumption force, while the high budget (more than 5000 RMB) and low budget (<1000 RMB) groups accounted for 21.75% and 20.5% respectively, which needs to take into account the development of high-end services (e.g., customized trips) and economical products (e.g., youth hostels and attraction tickets).

(5) The majority of tourists' purpose of visit is leisure and vacation accounting for 45%, far more than sightseeing tour accounting for 24.75% and cultural experience accounting for 19.25% of tourists, indicating that tourists are more inclined to relaxation of slow tourism. Taiyuan needs to strengthen the positioning of a recreation destination. Other purposes accounted for 11%, including business, visiting relatives, and attending concerts.

(6) The percentage of tourists who came to Taiyuan after learning about it through social media is 45.25%. This reflects the importance of digital marketing to Taiyuan tourism and the need to strengthen the content operation of social media, tourism APPs, and other online platforms. 33.00% were introduced by relatives and friends. The effect of word-of-mouth communication is remarkable, indicating the key role of visitor satisfaction in market expansion. 18.75% of tourists came to Taiyuan through TV and radio. Traditional media still has a certain influence, and the audience may be mainly middle-aged and older people. Others account for 3.00%. It may include travel agency recommendations, outdoor advertising, etc.

(7) Tourists spend the most on accommodation in Taiyuan's tourism costs, which may be related to the supply or price positioning of accommodation around tourist attractions. The next highest spending is on food and shopping. Shanxi noodle dishes and other specialties have a strong attraction, and the industrialization potential of local cuisine needs to be further explored. Tourists' willingness to spend on Taiyuan's specialty products (e.g., aged vinegar, paper cuttings, etc.) is high, but product diversity needs to be enriched.

(8) Among the top ten tourist attractions in Taiyuan, Zhonglou Pedestrian Street is the most popular attraction, accounting for 44% of the total, reflecting tourists'

preference for the city's commercial and recreation scene; tourists visiting Taiyuan Ancient County City accounted for 27.75% of the total with 21.75% of the tourists visiting Jinci Park, and the attraction of historical and cultural attractions is strong. Other attractions accounted for only 6.5%, indicating that tourists have a low awareness of niche attractions, which can strengthen the promotion of resources such as Taiyuan Botanical Garden and Fenhe River Park to disperse the pressure of popular attractions.

4.1.1.3 Tourist satisfaction

For the part of tourist satisfaction related to recreational tourism to Taiyuan City, the author mainly investigated tourists' understanding of tourist attraction, expectations for recreational tourism, whether tourists are meeting their expectations, rationality of total cost in Taiyuan, tourist attraction environment, reasonable price of tourist attraction, transparency of fees for tourist attraction, compulsory consumption in tourist attractions, recreation tourism resources in Taiyuan, possibility of revisiting Taiyuan City, possibility of recommend for Taiyuan City, attention to infrastructure of tourist attractions in Taiyuan, attention to quality of staff serving in Taiyuan's tourist attractions, tourist activities in Taiyuan, specialty of recreational tourism in Taiyuan. The details are as follows.

Table 4 Tourist satisfaction 1

Content	Mean	S.D.
How well do you know Taiyuan's tourist attractions?	2.50	0.902
What is your expectations for recreational tourism in Taiyuan?	2.91	0.587
Did the trip in Taiyuan meet your expectations?	2.75	0.639
Do you think your overall travel costs in Taiyuan were reasonable?	2.39	0.781
What do you think of the environment of tourism attractions in Taiyuan?	2.46	0.827
Do you think the prices of tourist attractions in Taiyuan are reasonable?	2.71	0.711

.Do you think Taiyuan's tourist attractions are transparent about their fees and concessions?	2.79	0.622
Do you think there is compulsory consumption in Taiyuan's tourist attractions?	2.87	0.669
What do you think about the recreational tourism resources in Taiyuan?	2.55	0.900
Would you choose Taiyuan as a recreational tourism destination again?	2.70	1.401
Would you recommend Taiyuan as a recreational tourism destination to friends or family?	2.78	1.150

As shown in Table 4, the satisfaction of tourists visiting Taiyuan City for recreational tourism is at a relatively high level. According to Krosnick (1999), Krosnick designed a clear four-point rating scale. For example, when measuring positive attitudes toward a particular item, a score of 1 represents not at all positive, 2 represents slightly positive, 3 represents quite positive, and 4 represents extremely positive. The median value range on a 4-point scale is limited to 2–3 points, necessitating the use of the mean to enhance interpretability. The satisfaction scores in this study fall between 2 and 3, with a mean of 2.67. Therefore, the author divides and weakness using an average value of 2.67 as the division criterion, classifying those with an average satisfaction value higher than 2.67 as strengths, and those with an average satisfaction value lower than 2.67 as weakness.

In terms of the mean and standard deviation of satisfaction in various aspects, expectations for recreational tourism (Mean = 2.91, S.D. = 0.587), whether tourists are meeting their expectations (Mean = 2.75, S.D. = 0.639), reasonable price of tourist attraction (Mean = 2.71, S.D. = 0.711), transparency of fees for tourist attraction (Mean = 2.79, S.D. = 0.622), compulsory consumption in tourist attractions (Mean = 2.87, S.D. = 0.669), possibility of revisiting Taiyuan City (Mean = 2.7, S.D. = 1.401), possibility of recommend for Taiyuan City (Mean = 2.78, S.D. = 1.150). All have a mean higher than 2.50, so they can all be categorized as part of the current situation of recreational tourism in Taiyuan City's strengths of the part.

As for recreation tourism resources in Taiyuan (Mean = 2.55, S.D. = 0.90), tourists' understanding of attractions (Mean = 2.50, S.D. = 0.902), rationality of total

cost in Taiyuan (Mean = 2.39, S.D. = 0.781), tourist attraction environment (Mean = 2.46, S.D. = 0.827), are all below 2.67 on average, and therefore all can be classified as the weakness part of the current situation of recreational tourism in Taiyuan City.

After determining the strengths and weaknesses in the current situation of recreational tourism in Taiyuan City based on tourist satisfaction, the author will further subdivide these strengths and weaknesses based on the average ranking, as shown in table 5.

Table 5 Analysis of strengths and weaknesses of tourist satisfaction

Strength	Mean	Rank
Expectations for recreational tourism	2.91	1
Compulsory consumption in tourist attractions	2.87	2
Transparency of fees for tourist attraction	2.79	3
Possibility of recommending for Taiyuan City	2.78	4
Whether tourists are meeting their expectations	2.75	5
Reasonable price of tourist attraction	2.71	6
Possibility of revisiting Taiyuan City	2.70	7
Weakness	Mean	Rank
Recreation tourism resources in Taiyuan	2.55	1
Rationality of total cost in Taiyuan	2.39	2
Tourist attraction environment	2.46	3
Tourist's understanding of attraction	2.50	4

Based on the ranking questions in the questionnaire, the author identified the aspects of infrastructure and staff services at Taiyuan tourist attractions that tourists were most and least concerned about, as shown in Table 6.

Table 6 Tourist satisfaction 2

Content	Choice	Choice 1	Choice 2	Choice 3	Choice 4	Rank
Attention to infrastructure of tourist	Safety facilities (equipment maintenance and peripheral	250 (62.5%)	10 (2.5%)	10 (2.5%)	130 (32.5%)	1

attractions in Taiyuan	safety management)					
	Transportation facilities (transportation convenience within and around tourist attractions)	10 (2.5%)	220 (55%)	150 (37.5%)	20 (5%)	2
	Reception facilities (travel information and navigation)	10 (2.5%)	160 (40%)	230 (57.5%)	20 (5%)	3
	Entertainment facilities (supporting entertainment facilities for tourist attractions)	130 (32.5%)	10 (2.5%)	150 (37.5%)	220 (55%)	4
Attention to quality of staff serving in Taiyuan's tourist attractions	Service quality (popularity of Putonghua and foreign languages)	250 (62.5%)	10 (2.5%)	10 (2.5%)	130 (32.5%)	1
	Professional competence (having relevant qualifications)	10 (2.5%)	220 (55%)	150 (37.5%)	20 (5%)	2
	Service attitude (uniform dress code)	10 (2.5%)	160 (40%)	210 (52.5%)	20 (5%)	3
	Health condition	130 (32.5%)	10 (2.5%)	30 (7.5%)	230 (57.5%)	4

1. Tourists' concerns about the Infrastructure Development of Taiyuan Tourist Attractions

As shown in Table 5, tourists' attention to the infrastructure of tourist attractions in Taiyuan City reveals obvious hierarchical differences. From the mean and rank, the scores of safety facilities (Mean = 3.53, rank = 1) and transportation facilities (Mean = 3.23, rank = 2) are high, and the scores of reception facilities (Mean = 1.70, rank = 3) and entertainment facilities (Mean = 1.55, rank = 4) are low.

(1) Security facilities (equipment maintenance and perimeter security management) (Mean = 3.53, rank = 1). According to the results of the questionnaire survey, the results of the questionnaire survey show that more than 60% of tourists ranked safety facilities as their first choice, which indicates that the vast majority of tourists are more concerned about the maintenance of equipment and safety management at the attraction. Specifically, tourists' perception of the maintenance of equipment such as guardrails and emergency channels, as well as security patrols around the scenic area, is inadequate, posing obvious security risks. This may affect tourists' enjoyment and sense of security, reducing their willingness to revisit or recommend the site.

(2) Transportation facilities (the degree of transportation convenience within and around tourist attractions) (Mean = 3.23, Rank=2). (2) Transportation facilities (convenience of transport inside and outside the attraction) (average score = 3.23, rank = 2). The results of the questionnaire survey show that 55% of tourists chose transportation facilities as their second-most important infrastructure concern, reflecting their concern about transportation convenience around tourist attractions. Specific problems may include insufficient parking, unclear guidelines, and infrequent shuttle buses. These issues particularly affect middle-aged and elderly tourists, who are more sensitive to walking distances. Inadequate transport increases tourists' time costs and reduces their overall evaluation of the tourist attraction.

(3) Reception Facilities (tourist information and navigation) (Mean = 1.70, Rank = 3), from the analysis, tourists' demand for tourist information access and navigation convenience is still high, especially among the highly educated group, who rely more on systematic information services. Specifically, tourists hope that attractions can provide clear guide maps, convenient online explanation services, and multi-language signage. If these needs are not met, it may affect the tour efficiency and experience quality of tourists.

(4) Recreational facilities (supporting recreational facilities in tourist attractions) (Mean = 1.55, Rank = 4), ranked last among the four infrastructures. Recreational facilities play a very important role in the tourism experience of visitors, although they are of lower priority compared to basic needs such as safety and transportation.

Specifically, younger visitors may pay more attention to entertainment programmes at attractions, such as commercial activities and folk performances, which can make their visit more enjoyable.

2. Tourists' concerns about the quality of staff serving in Taiyuan's tourist attractions

As shown in Table 5, attention to the quality of staff serving in Taiyuan's tourist attractions also showed significant differences. From the mean and rank, the scores of service quality (Mean = 2.95, rank = 1) and professional competence (Mean=2.55,rank=2) are high, and the scores of service attitude (Mean = 2.40, rank = 3) and health condition (Mean = 2.10, S.D. = 0.45, rank = 4) are low.

(1) Service quality (popularity of Putonghua and foreign languages) (Mean=2.95,rank=1), has the highest level of attention among tourists to the services of tourist attraction staff. With the internationalization of the tourism market in Taiyuan, there is a large influx of foreign and foreign tourists, but the lack of Mandarin popularity and the foreign language service ability of the landscape staff seriously affects the communication with tourists. In some tourist attractions, foreign tourists are unable to accurately obtain information due to the lack of standardized Putonghua of the service personnel; foreign tourists find it even more difficult to communicate effectively with the service personnel, which greatly reduces the satisfaction of the tourists and restricts the further expansion of the tourism market in Taiyuan.

(2) Professional competence (having relevant qualifications) (Mean = 2.55, Rank = 2). This indicates that the professional competence of service personnel in relevant fields is widely recognized by tourists, and the evaluation differences between different tourists are small, and the service professionalism is more stable. For example, in the tour guide interpretation service, professional tour guides provide tourists with a high-quality cultural tourism experience with their rich historical and cultural knowledge and excellent interpretation skills, which enhances tourists' satisfaction with Taiyuan's professional tourism services.

(3) Service attitude (uniform dress code) (Mean = 2.40, Rank = 3). The survey results show that tourists are generally concerned about the service attitude, but the

service attitude affects the overall perception of tourists on the service quality to a certain extent. For example, the staff of some tourist attractions dress casually and lack a unified professional image, leaving tourists with a negative impression of unprofessionalism and lack of attention to service, which will reduce tourists' travel experience.

(4) Health condition (Mean = 2.10, rank = 4). It was ranked last among the four service employee quality indicators and was the aspect that caused the least concern. Nevertheless, due to public health incidents, tourists are still concerned about the health of service staff, particularly families, who are more sensitive to health risks. Publishing the health certificates and medical examination records of service staff could enhance tourists' trust and sense of security.

Table 7 Tourist satisfaction 3

Content	Choice	Frequency	Percentage
Tourist activities in Taiyuan	In-depth cultural heritage experience (e.g. archaeology, explanation of ancient buildings, etc.)	270	67.50
	Natural ecology tours (e.g. hiking, camping, etc.)	320	80.00
	Food tour (such as local special food tasting, food festival activities)	230	57.50
	Sports and outdoor activities (e.g. cycling race, concert, etc.)	200	50.00
Specialty of recreational tourism in Taiyuan	Historical monuments and natural scenery (e.g. Jinci Park, Twin Pagodas Temple and other tourist attractions with deep historical background or Fen River scenic area, mountains and forest resources around Taiyuan)	340	85.00
	Folk culture (e.g. Shanxi noodle culture , traditional festivals, local opera, paper-cutting,	280	70.00

	etc.)		
	Festivals and events (e.g. Taiyuan International Marathon, concerts, temple festivals, local folklore exhibitions, etc.)	210	52.50
	Others	29	7.25

As shown in Table 6, natural ecology tours and in-depth cultural heritage experience what tourists want to attend most in Taiyuan. Tourists characterized the speciality of recreational tourism in Taiyuan are more in line with the historical monuments and natural scenery, and folk culture. These two problems demonstrate that Taiyuan's recreational tourism offerings essentially align with the activities that tourists wish to participate in.

1. Tourist activities in Taiyuan

(1) In-depth cultural heritage experience

270 tourists choose an in-depth cultural heritage experience (e.g., archaeology, explanation of ancient buildings, etc.), accounting for 67.5%. This suggests that historical sites such as the Jinci Park and the Ancient County Castle have outstanding cultural significance, and that activities such as archaeological studies and restoration of ancient constructions could be added.

(2) Natural ecology tours

320 tourists choose natural ecology tours (e.g., hiking, camping, etc.), accounting for 80%. This reflects the huge potential of the natural resources around Taiyuan, such as the mountains and the Fen River, and suggests developing hiking routes, camping bases, and other such products.

(3) Food tours

230 tourists chose for food tour (such as local special food tasting, food festival activities);, accounting for 57.50%. There is strong demand for local catering, so we can plan food festivals, culinary experiences and other activities, and collaborate with catering enterprises to create special food neighborhoods.

(4) Sports and outdoor activities

200 tourists chose sports and outdoor activities (e.g. cycling race, concert, etc.), accounting for 50.00%. The Taiyuan International Marathon and other events are well established, and we can expand diversified sports tourism programmes such as cycling races and mountaineering festivals. Additionally, Taiyuan's vision of becoming a concert city is slowly beginning to bear fruit.

2. Specialty of recreational tourism in Taiyuan

(1) Historical monuments and natural scenery

340 tourists chose historical monuments and natural scenery as the features of Taiyuan's recreation tourism, accounting for 85.00%, which is the most core feature of Taiyuan in tourists' minds. The Jin Ancestral Temple and Fen River attractions are Taiyuan's iconic business cards, and their brand image needs to be continuously strengthened.

(2) Folk culture

280 tourists chose folklore as a feature of Taiyuan's recreation tourism, accounting for 70.00%. Folklore resources such as noodle culture and local opera are highly recognized, and it is recommended that they be revitalized and inherited through regular performances and interactive experiences.

(3) Festivals and events

210 tourists chose festivals and activities as features of Taiyuan's recreation tourism, accounting for 52.50%. Marathons, concerts, temple fairs, and other activities have a certain degree of attraction to tourists, but the influence still needs to be improved, and the frequency of activities and media exposure can be increased.

(4) Others

27 tourists chose festivals and events as a feature of Taiyuan's recreation tourism, accounting for 7.25%. Including modern entertainment, shopping experience, etc., reflecting the diversified potential of Taiyuan's tourism characteristics.

In summary, history and natural resources are the core competitiveness of Taiyuan's recreational tourism. The most popular activities for tourists in Taiyuan are natural ecology tours and cultural heritage experiences. The development of ecology and culture-integrated products should be emphasized, and the product system needs to be enriched through folklore revitalization and festival innovation to increase the rate of revisits by tourists.

4.1.1.4 Summary

Overall, the questionnaire survey indicates a positive development trend for recreational tourism in Taiyuan City, primarily manifested in the following areas:

(1) The subjective factors of tourists

The proportion of males and females was almost equal; the age distribution was balanced; most tourists came from outside Shanxi Province; the three core occupational groups were students, freelancers/retirees, and government/public institution employees; and the proportion of highly educated individuals (those with a master's degree or above) was significant. Middle-income groups with an income between 2,001 and 8,000 yuan still occupy the majority position. The medium budget (1,001 – 5,000 RMB) accounted for the majority, and most tourists visit for leisure and vacation. Most tourists came to Taiyuan after learning about it on social media, and tourists spent the most on accommodation.

(2) Purpose of tourism

The majority of tourists come to Taiyuan City for sightseeing and recreational activities.

(3) Form and duration of tourism

Nearly half of the tourists have visited Taiyuan two to three times, and most tourists choose to travel for one to two days to spend time with family and friends.

(4) Tourist attractions

Among the top ten tourist attractions in Taiyuan, Zhonglou Pedestrian Street was the most popular, reflecting tourists' preference for the city's commercial and recreation attractions.

(5) Tourist activities

More than 60% tourists chose a in-depth cultural heritage experience (e.g., archaeology, explanation of ancient buildings, etc.) and natural ecology tours (e.g., hiking, camping, etc.) in Taiyuan.

(6) SWOT analysis of recreational tourism in Taiyuan

Based on the 4M theory, the questionnaire content is summarized from four aspects: Man, Management, Material, and Money, as follows:

1) Man of recreational tourism in Taiyuan

Advantages: The staff of the attraction performs better in the control of compulsory consumption, and the overall standardization has a foundation; the structure of tourists is diversified, covering different groups and forming a stable customer base.

Weaknesses: The staff of the attraction has problems such as an irregular dress code and insufficient language service; the professional ability of the service staff is difficult to meet the needs of highly educated tourists.

Opportunities: Strengthening the training of service staff can improve service quality; publicizing the health status of service staff can enhance the trust of tourists.

Threats: Inadequate service quality may lead to the spread of negative word-of-mouth and reduce the rate of repeat visits and recommendations.

2) Management of recreational tourism in Taiyuan

Strengths: Better control of mandatory consumption and transparency of fees in attractions; tourists take recreation and vacation as the main purpose, with clear positioning.

Weaknesses: There are shortcomings in infrastructure management, with prominent problems in safety and transportation facilities; environmental management of attractions to be upgraded, with obvious problems such as garbage and overcrowding; and insufficient publicity and promotion of niche attractions.

Opportunities: Infrastructure can be optimized, resource protection and management can be strengthened, and the traffic control mechanism can be improved.

Threats: If the management problems remain unresolved for a long time, it may lead to negative evaluations and affect the brand image; improper handling of the contradiction between resource protection and development may damage the core resources.

3) Materials of recreational tourism in Taiyuan

Strengths: Historical monuments, natural scenery, and commercial recreation scenarios form complementary resources with high recognition; high potential for integration of natural and cultural resources.

Weaknesses: Insufficient scenic infrastructure, scattered attractions, and inconvenient transportation.

Opportunities: Infrastructure, garbage disposal, and greening can be improved; promotion of emerging attractions to disperse the flow of people.

Threats: similar resources in neighboring cities may divert tourists.

4) Money from recreational tourism in Taiyuan

Strengths: Tourist consumption is diversified; the medium budget group is the main consumer; the high-income group has high-end consumption potential.

Weaknesses: Low cost-performance ratio of tourism consumption, mismatch between price and experience; lack of economical products to satisfy low-income groups.

Opportunities: Developing diversified products to attract consumption from different income groups; seeking policy and financial support.

Threats: Uneven distribution of funds for attractions may reduce consumption or lead to loss of tourists; changes in market demand may reduce the inflow of funds.

4.1.2 Analysis of the results of the interviews on recreational tourism in Taiyuan City

The author conducted interviews with 15 individuals, including the staff of the Taiyuan City Tourism Bureau (2 people), local residents (3 people), managers and staff of tourist attractions (6 people), and managers of travel companies (3 people), to obtain a comprehensive understanding of the recreational tourism situation in Taiyuan City.

The analysis of the results based on the 4M theory, and the author divided them into four different aspects. These aspects include the man of recreational tourism in Taiyuan, the management of recreational tourism in Taiyuan, the material of recreational tourism in Taiyuan, and the Money of recreational tourism in Taiyuan.

4.1.2.1 Man of recreational tourism in Taiyuan

(1) Strengths

1) Higher quality of attraction service team, better stability of core staff, through strict training, assessment and internal incentives to protect the quality of service (e.g., management to frontline staff receive regular training)

(Interviewee 2, Interviewee 3, Interviewee 5, Interviewee 8, Interviewee 9, Interviewee 13).

2) The comprehensive ability of travel agency personnel to improve, due to market competition, presents “one person, multiple jobs” features, both product design, sales, and tour leading skills (Interviewee 4).

3) Some attractions have introduced high-level professionals, such as Taiyuan Botanical Garden, which has introduced a doctorate degree in botany to improve the level of scientific research and service (Interviewee 7, Interviewee 14).

4) Attractions emphasize training, carry out many types of training such as history and culture, etiquette, first aid, etc., and the overall service ability is in progress (Interviewee 5, Interviewee 15).

(2) Weaknesses

1) Serious brain drain, especially in the tour guide group. Low retention rate of tourism graduates from local colleges and universities tends to flow to big cities; mature tour guides due to low salary, lack of professional identity loss, and the annual turnover rate of more than 35% (Interviewee 1, Interviewee 3, Interviewee 6, Interviewee 10, Interviewee 11, Interviewee 14).

2) High mobility and insufficient professional ability of temporary staff. The stability of temporary contractual tour guides and peak-season support staff (interns, volunteers, etc.) is poor, and their professional knowledge and adaptability are weak (Interviewee 2, Interviewee 8, Interviewee 10, Interviewee 11).

3) Grass-roots service personnel are lacking in professional ability. Some personnel have limited knowledge of attractions, and their explanations are superficial. There is a shortage of foreign-language talents, and the proportion of small-language tour guides is less than 3%, making it difficult to meet the demand for inbound tours (Interviewee 7, Interviewee 8, Interviewee 14, Interviewee 15).

(3) Opportunities

1) Cultivate talent through cooperation between the government and schools, and with local tourism colleges and universities. Identify skilled talent through vocational competitions (e.g., service skills competitions) and develop intermediate and senior tour guides. (Interviewee 14, Interviewee 15).

2) Strengthen training and incentives. Conduct regular, targeted training sessions (e.g., on etiquette and emergency response) and offer more competitive salaries and career development opportunities to attract and retain talent. (Interviewee 3, Interviewee 5, Interviewee 15).

(4) Threats:

1) Competition from foreign cities diverts talent. High salaries and opportunities in big cities continue to attract high-quality tourism talent from local areas, resulting in an insufficient talent reserve (Interviewee 1, Interviewee 10, Interviewee 11, Interviewee 14).

2) The off-peak season obviously affects talent stability. Some personnel shift to other jobs during the off-peak season, leading to a shortage of service personnel during the peak season and affecting service continuity. (Interviewee 7, Interviewee 14).

4.1.2.2 Management of recreational tourism in Taiyuan

(1) Strengths

1) Effective publicity and promotion: promoting tourism routes through new media such as Jitterbug and the 'event + concert + tourism' fusion model (e.g., the WTT event and the Zhou Shen concert) to boost consumption and attract traffic (Interviewee 1, Interviewee 2, Interviewee 14, Interviewee 15).

2) Optimization of service details and experience. Some attractions have eliminated irregularities, maintained a clean environment, provided affordable food and drink, reduced parking fees, and enhanced emergency medical facilities, as well as regulating 'private tour guides' to standardize tour guide services (Interviewee 2, Interviewee 3, Interviewee 4, Interviewee 5, Interviewee 9, Interviewee 11).

3) Innovative service models: recruiting volunteer interpreters and launching performing arts and study activities to enhance tourist participation, as well as introducing AR technology, online booking and intelligent security tools (Interviewee 5, Interviewee 7, Interviewee 8, Interviewee 13 and Interviewee 14).

4) Improvement of market order: carrying out service quality improvement actions; cracking down on low-priced tours, forced shopping, and other such behaviors; and establishing a feedback mechanism for tourists' evaluations (Interviewee 15).

(2) Weaknesses

1) Inadequate reservation system: the real-name ticket reservation system does not take into account special groups, such as the elderly and overseas tourists. This leads to inconvenience when entering the park and can even result in people missing their trip (Interviewee 1, Interviewee 4).

2) Inefficient operational capacity. Some attractions struggle to cope with unexpected passenger flow, resulting in long queues and a decline in visitor experience once the attraction becomes popular. The night-time economy is insufficient, with short opening hours and a lack of variety. (Interviewee 1, Interviewee 3, Interviewee 6).

3) Lack of continuity of management measures: The issues easily rebound after rectification activities end (e.g., hygiene around tourist attractions and hawker chaos); service laxity after some attractions receive excellent ratings (Interviewees 10, Interviewee 11).

4) Slow adaptation of enterprise policies. The small and medium-sized tourism enterprises do not properly implement new policies and have low operational efficiency (Interviewee 15).

(3) Opportunities

1) Deepen the integration of 'event + tourism' by extending the stay of tourists through events and concerts featuring special activities (e.g., non-heritage experiences and night-time light and shadow shows) (Interviewee 14, Interviewee 15).

2) Integrate resources to improve efficiency by forming the cultural tourism group and establishing the 'government + attractions + market' operating system to optimize resource allocation (Interviewee 15).

3) Improve intelligent management. Expand online service coverage (e.g. app promotion) and repair VR equipment and other facilities to improve convenience (Interviewee 10, Interviewee 13).

(4) Threats:

1) The contradiction between cultural relic protection and visitor experience. Ancient buildings and colorful sculptures cannot be cleaned due to protection measures, which can lead to misunderstandings among tourists, who rely on scientific and technological explanations (Interviewees 2, Interviewee 8).

2) Some attractions focus on revenue and light service, aiming to reduce costs and increase profits, but this results in inadequate staffing and poor service quality (Interviewee 3).

3) Inadequate management implementation affects the reputation. Unstable service quality and frequent detail problems reduce the attractiveness of tourism (Interviewees 10, Interviewee 11).

4.1.2.3 Material of recreational tourism in Taiyuan

(1) Strengths

1) Rich and unique historical and cultural resources: The city's most notable sites include the Jin Temple, the Tianlongshan Grottoes, the Twin Pagodas Temple, and other ancient sites of high historical value and exquisite architecture (e.g., the Hall of the Holy Mother of God at the Jin Temple is the earliest surviving wooden building from the Northern Song dynasty). (Interviewee 1, Interviewee 2, Interviewee 6, Interviewee 8, Interviewee 14, Interviewee 15)

2) Superior natural landscape and ecological resources: The Fen River landscape belt and the East and West Mountain scenery belt provide sufficient recreational space. (Interviewee 7, Interviewee 11, Interviewee 14, Interviewee 15).

3) Specialty businesses and IP are uniquely attractive. The night-time economy of Zhonglou Street, the 'Black Goku' IP, and Zhonglou Street's cultural and creative products (e.g. Baishou Tu) are popular with tourists. (Interviewees 2, Interviewee 9, Interviewee 13).

(2) Weaknesses

1) Some attractions have rigid operating procedures. Reconstruction projects such as Taiyuan Ancient County City lack life and flavor. They are similar to static museums and tourists tend to stay for a short time (Interviewee 1, Interviewee 6).

2) There is a 'cultural threshold' for resources. Ancient buildings and cultural relics require a certain level of cultural knowledge to be understood, and they do not attract young people, who find the tours boring. (Interviewee 2, Interviewee 4, Interviewee 6).

3) Insufficient publicity and promotion. Tourists know little about the attractions, which lack storytelling and systematic marketing. Some niche attractions are not popular due to insufficient publicity. (Interviewee 3, Interviewee 10, Interviewee 11, Interviewee 15).

4) The problem of homogenization is serious. The project development is limited to farmhouses, which lack characteristics, and ancient city projects are highly similar. (Interviewees 4, Interviewee 10, Interviewee 15).

(3) Opportunities

1) Taiyuan City is actively promoting urban environmental improvement and ecological construction. For instance, the Fen River management project has yielded positive results, establishing a solid environmental foundation for tourism development. As Interviewee 14 mentioned, 'Through ecological restoration in recent years, the Fen River tourist attraction has formed a 32-kilometre green waterfront corridor which also incorporates traditional customs such as dragon boat racing.' (Interviewee 4; Interviewee 10; Interviewee 14)

2) Tourist attractions are strengthening their integration with local communities by adopting good suggestions from local residents and allowing them to participate in decision-making regarding tourist attraction operations. This enhances the attractions' liveliness. (Interviewee 3; Interviewee 5; Interviewee 11)

(4) Threats

1) There is a risk of overdevelopment. Some attractions destroy the ecological and cultural atmosphere in order to attract tourists (e.g., ancient villages losing their original appearance) (Interviewee 11, Interviewee 15).

2) Some cultural heritage protection measures are imperfect and affect historical features. Too many tourists in the peak season put pressure on cultural relics and the ecology. (Interviewee 7, Interviewee 8, Interviewee 15).

3) Some non-heritage programmes have not received sufficient attention, resulting in inadequate inheritance and development, and they are at risk of being lost (Interviewee 11).

4.1.2.4 Money of recreational tourism in Taiyuan.

(1) Strengths

1) Some of the capital investment is clearly and effectively directed. For example, investment in infrastructure (e.g., scenic roads, parking lots, and 5G coverage) and special projects (e.g., the renovation of Bell Street and the Taishan Scenic Area) enhances tourist convenience, while events such as concerts and marathons attract short-term visitors and boost consumption. (Interviewee 1, Interviewee 4, Interviewee 7, Interviewee 9, Interviewee 10, Interviewee 14, Interviewee 15).

2) The use of funds significantly increases visitor numbers. Marketing promotion enhances the attraction's popularity; for example, 70% of Zhou Shen's concert attendees are from outside the area, and Zhonglou Street becomes a popular place to visit (Interviewee 1, Interviewee 9, Interviewee 14).

3) Funding plays a significant role in heritage conservation. Funding for heritage maintenance and environmental improvement guarantees the preservation of resources and is highly valued by tourists (Interviewees 5, Interviewee 8).

(2) Weaknesses

1) There are still problems with the efficiency and distribution of funds. Part of the project "high input, low operation" (such as the ancient county town of

Taiyuan, large input but low weekday traffic); remote attractions' infrastructure funding is insufficient, slow progress (Interviewee 1, Interviewee 4, Interviewee 6, Interviewee 15).

2) County undertaking capacity is weak. Due to a lack of talent, Loubao and other counties have a provincial culture and tourism special debt utilization rate of only 38% (Interviewee 14).

3) Publicity funds are insufficiently precise. The coverage of publicity funds is limited and insufficient for niche attractions (Interviewee 9, Interviewee 10, Interviewee 11).

(3) Opportunities

1) Optimize the allocation of funds to niche attractions with potential and rural tourism to balance regional development (Interviewee 11, Interviewee 15).

2) Enhance capital efficiency, strengthen supervision, and shorten the capital recovery cycle through the 'tournament + tourism' model (e.g., Zhou Shen's concert recovered funds in 11 months) (Interviewee 14, Interviewee 15).

3) Strengthen publicity investment. Increase publicity through social media and linkages with neighboring attractions to increase visitor numbers (Interviewee 9, Interviewee 10).

(4) Threats

1) Long capital recovery cycle. Some projects (e.g., Taiyuan Ancient County City) require significant investment but have a short operating period, resulting in disproportionate input and output (Interviewee 6, Interviewee 14).

2) The uneven effect of inputs leads to waste, with some activities only being lively for a while and receiving no subsequent updates, and the capital investment in homogenized projects being low efficiency (Interviewee 4, Interviewee 10, Interviewee 14).

4.1.3 Summary of the situation of recreational tourism in Taiyuan City

(1) Strengths of recreational tourism

1) The service personnel are highly professional and have a good attitude, and the tour guide team has in-depth knowledge of the area's history and culture, which can significantly enhance tourists' cultural experience. The tourism service centre and consultants provide efficient and convenient services. (Man)

2) The major attractions have established perfect safety monitoring systems and emergency response mechanisms and are equipped with professional medical teams that can handle emergencies on time. (Management)

3) Taiyuan is a popular destination for the 'New Year Gourmet Tour' thanks to its rich intangible cultural heritage and diverse folk activities. It has comprehensive 5G and Wi-Fi coverage, as well as perfect basic services and infrastructure. The leisure facilities around the tourist attractions can meet a variety of leisure needs, and the specialty businesses and IPs are appealing. The recreational facilities around the tourist attractions can satisfy all kinds of recreational needs, and the specialty businesses and characteristic IPs are attractive. (Material)

(2) Weaknesses of recreational tourism

1) Serious loss of professional talent, particularly among tour guides; high staff turnover and insufficient professional ability among temporary staff; and a lack of foreign language service staff at attractions. (Man)

2) Serious homogenization of tourism products, with few types of cultural and creative products and a limited design level. Shortcomings in infrastructure include lagging in the construction of facilities in some remote attractions, a shortage of night-time facilities in newly built attractions, and insufficient maintenance of safety facilities. (Material)

3) Tourist attraction fees are unreasonable; ticket, catering, and shopping prices are high; prices are not transparent; prices do not match goods; cost-effectiveness is low; and the tourist attraction marketing system is unclear. There is insufficient publicity of activities in attractions and a low level of awareness, as well as

insufficient collaboration between attractions and a lack of unified planning.
(Management)

4) Large investment in tourism infrastructure with a long return cycle and insufficient allocation of funds to remote tourist attractions. County funds have weak undertaking capacity and insufficient precision in the allocation of publicity funds.
(Money)

(3) Opportunities of recreational tourism

1) With an improvement in the living standards of residents and a change in consumption concepts, there is an expanding domestic market demand for recreation and tourism, providing ample opportunity for the development of recreational tourism in Taiyuan. (Man)

2) The state has introduced a series of preferential policies and support measures to encourage the development of recreational tourism and create a favourable policy environment. According to the policy planning of Shanxi Province, Taiyuan will develop low-altitude and water tourism, adding new highlights to recreation tourism.
(Management)

3) Improved transport links have reduced the time and distance between Taiyuan and other cities, making the area more accessible for tourists. Meanwhile, the government has strengthened transport links between attractions and introduced special tourist buses to facilitate the efficient movement of tourists. The rise of online tourism platforms and the gradual application of big data and artificial intelligence in the tourism sector are providing new means for Taiyuan's tourism marketing and service innovation. The traffic economy creates opportunities, and Taiyuan has already become a popular tourist destination thanks to its concerts, marathons and rich cultural resources. (Material)

(4) Threats of recreational tourism

1) Tourists' demands are becoming increasingly diverse and personalized. The tourism market is changing rapidly and Taiyuan's tourism products need to be updated more quickly to adapt to these changes. (Man)

2) Neighboring provinces and cities, as well as southern tourist destinations, are highly competitive in terms of service quality, innovation, and the overall experience they offer, which puts pressure on Taiyuan. Some of Taiyuan's tourist attractions are becoming increasingly similar and lack distinctive competitive strategies, making it difficult to establish unique brands and attractions. The production of low-quality imitation products may damage the overall image and reputation of Taiyuan's tourism products. (Management)

3) Conflicts between resource protection and development. Cultural heritage is sensitive to the environment, and overdevelopment or improper management may exacerbate damage and affect the sustainability of core resources. Tourism is seasonal: affected by climate and other factors, off-peak seasons vary greatly, putting pressure on tourist reception facilities during peak seasons and leaving resources idle during off-peak seasons. (Materials)

4.2 Development strategies for tourist attractions in Taiyuan City

During the examination of the state of recreational tourism in Taiyuan City, it becomes evident that the city possesses abundant tourism resources and significant growth potential. However, these resources remain underutilized, necessitating enhancements to make Taiyuan City's tourist attractions more appealing. At this stage, the researcher will summarize and generalize the survey data and conduct a SWOT analysis. Based on the SWOT analysis and TOWS matrix, the researcher will suggest strategies to improve the appeal of tourist attractions in Taiyuan City.

4.2.1 SWOT analysis of the current situation of recreational tourism in Taiyuan City

The author compiled data from questionnaires, interviews, and relevant government department policy documents. Based on these findings, they will compile a list of the 3 strengths, 4 weaknesses, 3 opportunities, and 3 threats to recreational tourism in Taiyuan City.

Table 8 SWOT analysis of recreational tourism in Taiyuan City

Strengths	Weaknesses
S1: The service personnel are highly professional and have a good attitude, and the tour guide team has in-depth knowledge of the area's history and culture, which can significantly enhance tourists' cultural experience. The tourism service centre and consultants provide efficient and convenient services. S2: The major attractions have established perfect safety monitoring systems and emergency response mechanisms, and are equipped with professional medical teams that can handle emergencies in a timely manner. S3: Taiyuan is a popular destination for the 'New Year Gourmet Tour' thanks to its rich intangible cultural heritage and diverse folk activities. It has comprehensive 5G and Wi-Fi coverage, as well as perfect basic services and infrastructure. The leisure facilities around the tourist attractions can meet a variety of leisure needs, and the specialty businesses and IPs are appealing. The recreational facilities around the tourist attractions can satisfy all kinds of recreational needs, and the specialty businesses and characteristic IPs are	W1: Serious loss of professional talent, particularly among tour guides; high staff turnover and insufficient professional ability among temporary staff; and a lack of foreign language service staff at attractions. W2: Tourist attraction fees are unreasonable; ticket, catering and shopping prices are high; prices are not transparent; prices do not match goods; cost-effectiveness is low; and the tourist attraction marking system is unclear. There is insufficient publicity of activities in attractions and a low level of awareness, as well as insufficient collaboration between attractions and a lack of unified planning. W3: Serious homogenization of tourism products, with few types of cultural and creative products and a limited design level. Shortcomings in infrastructure include lagging behind in the construction of facilities in some remote attractions, a shortage of night-time facilities in newly built attractions and insufficient maintenance of safety facilities. W4: Large investment in tourism infrastructure with a long return cycle and

attractive.	insufficient allocation of funds to remote tourist attractions. County funds have weak undertaking capacity and insufficient precision in the allocation of publicity funds.
Opportunities	Threats
O1: With an improvement in the living standards of residents and a change in consumption concepts, there is an expanding domestic market demand for recreation and tourism, providing ample opportunity for the development of leisure tourism in Taiyuan. O2: The state has introduced a series of preferential policies and support measures to encourage the development of recreational tourism and create a favourable policy environment. According to the policy planning of Shanxi Province, Taiyuan will develop low-altitude and water tourism, adding new highlights to recreation tourism. O3: Improved transport links have reduced the time and distance between Taiyuan and other cities, making the area more accessible for tourists. Meanwhile, the government has strengthened transport links between attractions and introduced special tourist buses to	T1: Tourists' demands are becoming increasingly diverse and personalized. The tourism market is changing rapidly, and Taiyuan's tourism products need to be updated more quickly to adapt to these changes. T2: Neighboring provinces and cities, as well as southern tourist destinations, are highly competitive in terms of service quality, innovation and the overall experience they offer, which puts pressure on Taiyuan. Some of Taiyuan's tourist attractions are becoming increasingly similar and lack distinctive competitive strategies, making it difficult to establish unique brands and attractions. The production of low-quality imitation products may damage the overall image and reputation of Taiyuan's tourism products. T3: Conflicts between resource protection and development. Cultural heritage is sensitive to the environment, and

facilitate the efficient movement of tourists. The rise of online tourism platforms and the gradual application of big data and artificial intelligence in the tourism sector are providing new means for Taiyuan's tourism marketing and service innovation. The traffic economy creates opportunities, and Taiyuan has already become a popular tourist destination thanks to its concerts, marathons and rich cultural resources.	overdevelopment or improper management may exacerbate damage and affect the sustainability of core resources. Tourism is seasonal: affected by climate and other factors, off-peak seasons vary greatly, putting pressure on tourist reception facilities during peak seasons and leaving resources idle during off-peak seasons.
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4.2.2 TOWS Matrix of the current situation of recreational tourism in Taiyuan City

Based on the SWOT analysis of recreational tourism in Taiyuan City, the researcher will use the TOWS matrix to propose strategies. The researcher will use the TOWS matrix to propose strategies to improve the attractiveness of the tourist attractions in Taiyuan.

Table 9 TOWS Matrix of recreational tourism in Taiyuan City.

	Strengths (S)	Weaknesses(W)
	S1: The service personnel are highly professional and have a good attitude, and the tour guide team has in-depth knowledge of the area's history and culture, which can significantly enhance tourists' cultural experience. The tourism service centre and consultants provide efficient and	W1: Serious loss of professional talent, particularly among tour guides; high staff turnover and insufficient professional ability among temporary staff; and a lack of foreign language service staff at attractions. W2: Tourist attraction fees are unreasonable; ticket, catering and

	convenient services. S2: The major attractions have established perfect safety monitoring systems and emergency response mechanisms and are equipped with professional medical teams that can handle emergencies in a timely manner. S3: Taiyuan is a popular destination for the 'New Year Gourmet Tour' thanks to its rich intangible cultural heritage and diverse folk activities. It has comprehensive 5G and Wi-Fi coverage, as well as perfect basic services and infrastructure. The leisure facilities around the tourist attractions can meet a variety of leisure needs, and the specialty businesses and IPs are appealing. The recreational facilities around the tourist attractions can satisfy all kinds of recreational needs, and the specialty businesses and characteristic IPs are attractive.	shopping prices are high; prices are not transparent; prices do not match goods; cost-effectiveness is low; and the tourist attraction marking system is unclear. There is insufficient publicity of activities in attractions and a low level of awareness, as well as insufficient collaboration between attractions and a lack of unified planning. W3: Serious homogenization of tourism products, with few types of cultural and creative products and a limited design level. Shortcomings in infrastructure include lagging behind in the construction of facilities in some remote attractions, a shortage of night-time facilities in newly built attractions and insufficient maintenance of safety facilities. W4: Large investment in tourism infrastructure with a long return cycle and insufficient allocation of funds to remote tourist attractions. County funds have weak undertaking capacity and insufficient precision in the allocation of publicity funds.
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Opportunities (O)	SO Strategies	WO Strategies
O1: With an improvement in the living standards of residents and a change in consumption concepts, there is an expanding domestic market demand for recreation and tourism, providing ample opportunity for the development of recreational tourism in Taiyuan. O2: The state has introduced a series of preferential policies and support measures to encourage the development of recreational tourism and create a favourable policy environment. According to the policy planning of Shanxi Province, Taiyuan will develop low-altitude and water tourism, adding new highlights to recreation tourism. O3: Improved transport links have reduced the	1. S1+S3+O1+O3: Relying on the tour guides' ability to give cultural presentations (S1) and unique historical sites (S3) and seizing the opportunities of growing domestic demand for tourism (O1) and the traffic economy (concerts, marathons) (O3), to improve the efficiency of traffic conversion through brand integration and upgrade of ancillary services. Linking with traffic events to create "cultural tourism + traffic" integrated products and build a closed loop of "themed routes + ancillary services" to extend the length of stay of tourists. During the concert/marathon period, we can launch the "3-hour cultural tour + peripheral support" package - " Highlights of Jinci Tour " (combined with the gap between the events) led by a gold-medal tour guide, and synchronized the linkage of Catering and lodging around the attraction will offer " traffic exclusive discount " ; "traffic exclusive non-heritage gift	1. W1+O1+O3: In response to shortcomings in foreign language services (W1), take advantage of the expansion of the domestic tourism market (O1) and online platform technology (O3) to improve the experience of international tourists by upgrading intelligent equipment and infrastructure. Build an 'online + offline' foreign language service network and promote the standardization of multilingual infrastructure to bridge the talent gap. The 'Global Taiyuan Pass' programme has introduced a new 'multilingual intelligent guide screen + unified logo for the whole region'. The attraction guide screen supports 'attractions' and 'story animation' (combined with large-scale animation) in ten languages. Story animations (using big data to suggest frequently asked questions) will be installed at transportation hubs and attraction entrances alongside multilingual barrier-free signs (including Braille). This will complement the online

time and distance between Taiyuan and other cities, making the area more accessible for tourists. Meanwhile, the government has strengthened transport links between attractions and introduced special tourist buses to facilitate the efficient movement of tourists. The rise of online tourism platforms and the gradual application of big data and artificial intelligence in the tourism sector are providing new means for Taiyuan's tourism marketing and service innovation. The traffic economy creates opportunities and Taiyuan has already become a popular tourist destination thanks to its concerts, marathons and rich cultural resources.	box" will increase "Jin culture IP periphery" (e.g. miniature dolls of the maiden statue of the Temple of the Holy Mother of God at the Jin Temple) to strengthen brand memory. 2. S3+O2+O3: Utilizing the advantages of 5G infrastructure (S3), leveraging low-altitude tourism policy (O2) and online platform technology (O3), expanding the market coverage through the digital dissemination of intangible cultural heritage and full-time operation. Develop low-altitude tourism products combining "reality and reality", build a digital experience platform for intangible cultural heritage, realize "intelligent guide + online reservation + personalized recommendation" through the platform, and push the information of folklore activities synchronously, and adopt the mode of "cultural narrative + digital dissemination." The platform realizes "intelligent guide + online reservation + personalized	'cloud-based foreign language guide' and enhance the convenience for international tourists. 2. W2+ O3: In response to price problems and shortcomings in publicity (W2), we leverage online platforms and traffic events (O3), and build a system of "omni-directional marketing matrix + transparent pricing" to enhance exposure and cost-effectiveness. Launched the "Traffic Linkage Discount Package" to expand publicity through UGC activities, while strengthening the perception of cost-effectiveness through standardized pricing. During the concert/marathon period, in addition to the "1+N" joint ticket, as well as launching the "Taiyuan Hidden Play" challenge on the online platform (Winners will receive a set of tickets to tourist attractions). On the online platform, the "Price Transparency Feature" (including the cost components of attractions, food and beverage, and cultural and
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	recommendation," synchronously pushes the information of folklore activities, and adopts the mode of " cultural narrative + digital communication. " Forming a closed loop of " online dissemination and offline experience. " Developed the " Cloud View of Taiyuan " program, in which helicopter guides introduce Taiyuan's tourist attractions and non-heritage projects one-on-one. The online platform launched the "Jinyang Story" animated short video (embedded with links to low-altitude sightseeing spots), through which tourists can make reservations for offline " non-heritage experience workshops" (e.g., learning how to make grotto pattern clay sculptures after the inheritor), thus realizing the transformation of " cloud planting-offline consumption".The tourists can realize the transformation of "cloud planting-offline consumption" through short videos.	creative industries) was launched, and "Personalized Preferential Combination" was pushed through big data analysis. (e.g. family visitors are automatically matched with "admission ticket + children's experience" discount).
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Threats(T)	ST Strategies	WT Strategies
T1: Tourists' demands are becoming increasingly diverse and personalized. The tourism market is changing rapidly, and Taiyuan's tourism products need to be updated more quickly to adapt to these changes. T2: Neighboring provinces and cities, as well as southern tourist destinations, are highly competitive in terms of service quality, innovation and the overall experience they offer, which puts pressure on Taiyuan. Some of Taiyuan's tourist attractions are becoming increasingly similar and lack distinctive competitive strategies, making it difficult to establish unique brands and attractions. The production of low-quality imitation products may damage the overall image	1. S1+ S3 + T1: Relying on tour guides' ability to explain history and culture (S1) , and the richness of non-heritage and folklore resources (S3) , to cope with the threat of individualization and diversification of tourists' demand (T1) , while balancing the contradiction between resource protection and development. Delineate cultural heritage core protection zones and adopt " limited reservation + digital display " (e.g., 3D scanning) to reduce human intervention and realize sustainable development. Develop " Customized Cultural Exploration + Conservation Experience " service, which integrates the concept of resource conservation into personalized experience, and reduces the pressure of conservation through digital technology. Developing the "Taiyuan Culture Decoder" program, adding "interactive sessions on cultural relics protection" (e.g., using 3D	1. W3+T2:In response to the homogenisation of tourism products (W3) and competition from neighbouring cities (T2) , differentiated products are created through industry chain integration and cultural and creative experiential innovation. This involves tapping into the county's cold non-heritage resources, developing " theme packages+ cultural and creative DIY " products and forming a "experience + consumption" closed loop. The 'Taiyuan County Non-legacy Revitalization Plan' has been upgraded to a 'Non-legacy + B&B + Food' themed package (e.g., Qingxu's ' back-stick Show + Vinegar Culture B&B + Vinegar Banquet'), and 'Cultural Creation DIY' products have been introduced at attractions. A "DIY workshop " where tourists can make miniature XuGou backsticks and carve exclusive numbers on them has been set up in the scenic spot. This enhances the

and reputation of Taiyuan's tourism products. T3: Conflicts between resource protection and development. Cultural heritage is sensitive to the environment, and overdevelopment or improper management may exacerbate damage and affect the sustainability of core resources. Tourism is seasonal: affected by climate and other factors, off-peak seasons vary greatly, putting pressure on tourist reception facilities during peak seasons and leaving resources idle during off-peak seasons. T3: Conflicts between resource protection and development. Cultural heritage is sensitive to the environment, and overdevelopment or improper management may exacerbate damage	scanning technology to reproduce the inscriptions of the Jinci Temple, and allowing tourists to participate in the digital modeling experience); and adding the “ Non-Genetic Inheritance and Protection” sharing session. "The tour guide will explain the current situation of the survival of the skills and guide tourists to cherish the opportunity to experience them. 2. S2+S3+ T3: Utilizing the ability of security guarantee (S2) and high-quality natural landscape (S3) to alleviate the difference between off-peak and on-peak seasons, and at the same time to deal with the threat of imitation products to the brand (T3). Create a “four-season safety experience tour + genuine product guarantee” system to strengthen brand trust while balancing off-peak season traffic. Develop spring trekking, summer vacation , fall non-heritage exhibition and winter folk festival, adopt “staggered peak discount + theme activities” and “secondary consumption discount” to guide	uniqueness of the products through “value-added experience + limited sale” and reduces the scope for imitation. 2. W4+ T3: In response to the lack of funds for certain attractions (W4) and the contradiction between resource protection and development (T3), the cost of tourist attractions will be reduced through community co-construction and a talent pool. The development of night-time programmes will be synchronized to extend the consumption period and activate night-time and off-season consumption. Introduce the “community co-construction+ emergency talent pool” model to increase talent reserves. The “ Taiyuan Culture Guardian ” programme will be carried out, whereby local residents will be recruited to participate in the protection of attractions (e.g. maintenance of ancient trees at the Jin Temple). Basic tour guide training will be carried out at the same time to alleviate the shortage of talent, and “protection points”
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and affect the sustainability of core resources. Tourism is seasonal: affected by climate and other factors, off-peak seasons vary greatly, putting pressure on tourist reception facilities during peak seasons and leaving resources idle during off-peak seasons.	the distribution of passenger flow and improve the utilization rate of resources throughout the year. Equipped with medical and emergency response teams in the activities, the “Safe Taiyuan” brand, set up “Genuine Non-legacy Supply Station” (providing officially certified old Chen vinegar, paper cuttings, etc., and realizing traceability through blockchain technology), such as linking with neighboring merchants to set up the “Genuine Products Alliance”. For example, the “Genuine Products Alliance” has been set up by the neighboring merchants, and the official purchasing channels are announced by the broadcasting cycle in the attraction, so as to enhance the trust of the tourists through the double guarantee of safety and genuine products. 3. S1+ S3+ T2:Relying on professional services (S1) and scarce resources such as Jinci Temple and Tianlongshan Mountain (S3), it responds to the pressure of homogenized competition from neighboring	can be exchanged for night-time programmes. 'Protection points' can be exchanged for tickets to night-time programmes. The 'Night Shadow of Jin Temple' light show will be developed using low-cost projection technology and 'conservation crowdfunding'. Donors can sponsor the introduction of cultural relics on the projection screen, supplementing the protection funds and activating night-time consumption.
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	cities (T2) and builds barriers of differentiated experience. Upgrade the entertainment facilities into a cultural experience carrier, while joining hands with neighboring provinces to form complementary resources and avoid direct competition. Launched the “Jin merchant story immersive theater” (tour guides incarnate Jin merchant characters, interpretation of historical stories in the scenic area), and neighboring cities to form the experience of difference; joint Shaan Yu and other scenic areas to launch the “Yellow River culture tour line,” clear Taiyuan The Yellow River Culture Tour Line was launched in conjunction with scenic spots in Shaanxi and Henan to define Taiyuan's position of “in-depth experience of Jin culture,” and to share the sources of customers through the complementary resources (e.g., Xi'an Terra Cotta Warriors and Horses tickets can enjoy discounts on Jin Temple explanation).	
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4.2.3 Strategies to improve the attractiveness of tourist attractions in Taiyuan City

Using SWOT analysis and the TOWS Matrix technique, the researcher proposes strategies to improve the attractiveness of the tourist attractions in Taiyuan City. These strategies include 2 SO strategies, 3 ST strategies, 2 WO strategies, and 2 WT strategies. The details are as follows:

(1)SO Strategies

SO1:Relying on the tour guides' ability to give cultural presentations (S1) and unique historical sites (S3) and seizing the opportunities of growing domestic demand for tourism (O1) and the traffic economy (concerts, marathons) (O3), to improve the efficiency of traffic conversion through brand integration and upgrade of ancillary services. Linking with traffic events to create "cultural tourism+traffic" integrated products and build a closed loop of "themed routes+ancillary services" to extend the length of stay of tourists. During the concert/marathon period, we can launch the "3-hour cultural tour + peripheral support" package - "Highlights of Jinci Tour" (combined with the gap between the events) led by a gold-medal tour guide, and synchronized the linkage of Catering and lodging around the attraction will offer "traffic exclusive discount"; "traffic exclusive non-heritage gift box" will increase "Jin culture IP periphery" (e.g. miniature dolls of the maiden statue of the Temple of the Holy Mother of God at the Jin Temple) to strengthen brand memory.

SO2:Utilizing the advantages of 5G infrastructure (S3), leveraging low-altitude tourism policy (O2) and online platform technology (O3), expanding the market coverage through the digital dissemination of intangible cultural heritage and full-time operation. Develop low-altitude tourism products combining "reality and reality", build a digital experience platform for intangible cultural heritage, realize "intelligent guide + online reservation+ personalized recommendation" through the platform, and push the information of folklore activities synchronously, and adopt the mode of "cultural narrative + digital dissemination." The platform realizes "intelligent guide + online reservation + personalized recommendation", synchronously pushes the information of folklore activities, and adopts the mode of "cultural narrative + digital

communication.” Forming a closed loop of “online dissemination and offline experience.” Developed the “Cloud View of Taiyuan” program, in which helicopter guides introduce Taiyuan's tourist attractions and non-heritage projects one-on-one. The online platform launched the “Jinyang Story” animated short video (embedded with links to low-altitude sightseeing spots), through which tourists can make reservations for offline “non-heritage experience workshops” (e.g., learning how to make grotto pattern clay sculptures after the inheritor), thus realizing the transformation of “cloud planting-offline consumption.” The tourists can realize the transformation of “cloud planting-offline consumption” through short videos.

(2) ST Strategies

ST1: Relying on tour guides' ability to explain history and culture (S1) , and the richness of non-heritage and folklore resources (S3) , to cope with the threat of individualization and diversification of tourists' demand (T1) , while balancing the contradiction between resource protection and development. Delineate cultural heritage core protection zones and adopt “limited reservation + digital display” (e.g., 3D scanning) to reduce human intervention and realize sustainable development. Develop a “Customized Cultural Exploration + Conservation Experience” service, which integrates the concept of resource conservation into a personalized experience, and reduces the pressure of conservation through digital technology. Developing the “Taiyuan Culture Decoder” program, adding “interactive sessions on cultural relics protection” (e.g., using 3D scanning technology to reproduce the inscriptions of the Jinci Temple, and allowing tourists to participate in the digital modeling experience); and adding the “Non-Genetic Inheritance and Protection” sharing session. “The tour guide will explain the current situation of the survival of the skills and guide tourists to cherish the opportunity to experience them.

ST2: Utilizing the ability of security guarantee (S2) and high-quality natural landscape (S3) to alleviate the difference between off-peak and on-peak seasons, and at the same time to deal with the threat of imitation products to the brand (T3). Create a “four-season safety experience tour + genuine product guarantee” system to

strengthen brand trust while balancing off-peak season traffic. Develop spring trekking, summer vacation, fall non-heritage exhibition, and winter folk festival, adopt “staggered peak discount + theme activities” and “secondary consumption discount” to guide the distribution of passenger flow and improve the utilization rate of resources throughout the year. Equipped with medical and emergency response teams in the activities, the “Safe Taiyuan” brand set up “Genuine Non-legacy Supply Station” (providing officially certified old Chen vinegar, paper cuttings, etc., and realizing traceability through blockchain technology), such as linking with neighboring merchants to set up the “Genuine Products Alliance”. For example, the “Genuine Products Alliance” has been set up by the neighboring merchants, and the official purchasing channels are announced by the broadcasting cycle in the attraction, so as to enhance the trust of the tourists through the double guarantee of safety and genuine products.

ST3: Relying on professional services (S1) and scarce resources such as Jinci Temple and Tianlongshan Mountain (S3), it responds to the pressure of homogenized competition from neighboring cities (T2) and builds barriers of differentiated experience. Upgrade the entertainment facilities into a cultural experience carrier, while joining hands with neighboring provinces to form complementary resources and avoid direct competition. Launched the “Jin merchant story immersive theater” (tour guides incarnate Jin merchant characters, interpretation of historical stories in the scenic area), and neighboring cities to form the experience of difference; joint Shaan Yu and other scenic areas to launch the “Yellow River culture tour line”, clear Taiyuan The Yellow River Culture Tour Line was launched in conjunction with scenic spots in Shaanxi and Henan to define Taiyuan's position of “in-depth experience of Jin culture,” and to share the sources of customers through the complementary resources (e.g., Xi'an Terra Cotta Warriors and Horses tickets can enjoy discounts on Jin Temple explanation).

(3) WO Strategies

WO1: In response to shortcomings in foreign language services (W1), take advantage of the expansion of the domestic tourism market (O1) and online platform technology (O3) to improve the experience of international tourists by upgrading intelligent equipment and infrastructure. Build an 'online + offline' foreign language service network and promote the standardization of multilingual infrastructure to bridge the talent gap. The 'Global Taiyuan Pass' programme has introduced a new 'multilingual intelligent guide screen + unified logo for the whole region'. The attraction guide screen supports 'attractions' and 'story animation' (combined with large-scale animation) in ten languages. Story animations (using big data to suggest frequently asked questions) will be installed at transportation hubs and attraction entrances alongside multilingual barrier-free signs (including Braille). This will complement the online 'cloud-based foreign language guide' and enhance the convenience for international tourists.

WO2: In response to price problems and shortcomings in publicity (W2), we leverage online platforms and traffic events (O3), and build a system of "omnidirectional marketing matrix + transparent pricing" to enhance exposure and cost-effectiveness. Launched the "Traffic Linkage Discount Package" to expand publicity through UGC activities, while strengthening the perception of cost-effectiveness through standardized pricing. During the concert/marathon period, in addition to the "1+N" joint ticket, as well as launching the "Taiyuan Hidden Play" challenge on the online platform (Winners will receive a set of tickets to tourist attractions). On the online platform, the "Price Transparency Feature" (including the cost components of attractions, food and beverage, and cultural and creative industries) was launched, and "Personalized Preferential Combination" was pushed through big data analysis (e.g., family visitors are automatically matched with "admission ticket + children's experience" discount).

(4) WT Strategies

WT1: In response to the homogenization of tourism products (W3) and competition from neighboring cities (T2), differentiated products are created through

industry chain integration and cultural and creative experiential innovation. This involves tapping into the county's cold non-heritage resources, developing “theme packages + cultural and creative DIY” products and forming a “experience + consumption” closed loop. The 'Taiyuan County Non-legacy Revitalization Plan' has been upgraded to a 'Non-legacy + B&B + Food' themed package (e.g., Qingxu's 'back-stick Show + Vinegar Culture B&B + Vinegar Banquet'), and 'Cultural Creation DIY' products have been introduced at attractions. A “DIY workshop” where tourists can make miniature XuGou backsticks and carve exclusive numbers on them has been set up in the scenic spot. This enhances the uniqueness of the products through “value-added experience + limited sale” and reduces the scope for imitation.

WT2: In response to the lack of funds for certain attractions (W4) and the contradiction between resource protection and development (T3), the cost of tourist attractions will be reduced through community co-construction and a talent pool. The development of night-time programmes will be synchronised to extend the consumption period and activate night-time and off-season consumption. Introduce the “community co-construction+ emergency talent pool” model to increase talent reserves. The “Taiyuan Culture Guardian” programme will be carried out, whereby local residents will be recruited to participate in the protection of attractions (e.g., maintenance of ancient trees at the Jin Temple). Basic tour guide training will be carried out at the same time to alleviate the shortage of talent, and “protection points” can be exchanged for night-time programmes. 'Protection points' can be exchanged for tickets to night-time programmes. The 'Night Shadow of Jin Temple' light show will be developed using low-cost projection technology and 'conservation crowdfunding'. Donors can sponsor the introduction of cultural relics on the projection screen, supplementing the protection funds and activating night-time consumption.

Table 10 Strategies and activities of recreational tourism in Taiyuan City

	Strategies	Activities
1	SO1: Relying on the tour guides' ability to give cultural presentations (S1) and unique historical sites (S3), and seizing the opportunities of growing domestic demand for tourism (O1) and the traffic economy (concerts, marathons) (O3), to improve the efficiency of traffic conversion through brand integration and upgrade of ancillary services. Linking with traffic events to create "cultural tourism + traffic" integrated products and build a closed loop of "themed routes + ancillary services" to extend the length of stay of tourists.	During the concert/marathon period, we can launch the "3-hour cultural tour + peripheral support" package - "Highlights of Jinci Tour" (combined with the gap between the events) led by a gold-medal tour guide, and synchronized the linkage of Catering and lodging around the attraction will offer "traffic exclusive discount"; "traffic exclusive non-heritage gift box" will increase "Jin culture IP periphery" (e.g., miniature dolls of the maiden statue of the Temple of the Holy Mother of God at the Jin Temple) to strengthen brand memory.
2	SO2: Utilizing the advantages of 5G infrastructure (S3), leveraging low-altitude tourism policy (O2) and online platform technology (O3), expanding the market coverage through the digital dissemination of intangible cultural heritage and full-time operation. Develop low-altitude tourism products combining "reality and reality", build a digital experience platform for intangible cultural heritage, realize "intelligent guide +online reservation+ personalized recommendation" through the platform,	Developed the "Cloud View of Taiyuan" program, in which helicopter guides introduce Taiyuan's tourist attractions and non-heritage projects one-on-one. The online platform launched the "Jinyang Story" animated short video (embedded with links to low-altitude sightseeing spots), through which tourists can make reservations for offline "non-heritage experience workshops" (e.g., learning how to make grotto pattern clay sculptures after the inheritor), thus realizing the

	and push the information of folklore activities synchronously, and adopt the mode of “cultural narrative + digital dissemination”. The platform realizes “intelligentguide + onlinereservation+ personalized recommendation”, synchronously pushes the information of folklore activities, and adopts the mode of “cultural narrative + digital communication.” Forming a closed loop of “online dissemination and offline experience.”	transformation of “cloud planting-offline consumption.” The tourists can realize the transformation of “cloud planting-offline consumption” through short videos.
3	ST1: Relying on tour guides' ability to explain history and culture (S1) , and the richness of non-heritage and folklore resources (S3) , to cope with the threat of individualization and diversification of tourists' demand (T1) , while balancing the contradiction between resource protection and development. Delineate cultural heritage core protection zones and adopt “limited reservation + digital display” (e.g., 3D scanning) to reduce human intervention and realize sustainable development. Develop “Customized Cultural Exploration + Conservation Experience” service, which integrates the concept of resource conservation into personalized experience, and reduces the pressure of	Developing the “Taiyuan Culture Decoder” program, adding “interactive sessions on cultural relics protection” (e.g., using 3D scanning technology to reproduce the inscriptions of the Jinci Temple, and allowing tourists to participate in the digital modeling experience);and adding the “Non-Genetic Inheritance and Protection” sharing session. "The tour guide will explain the current situation of the survival of the skills and guide tourists to cherish the opportunity to experience them.

	conservation through digital technology.	
4	ST2: Utilizing the ability of security guarantee (S2) and high-quality natural landscape (S3) to alleviate the difference between off-peak and on-peak seasons, and at the same time to deal with the threat of imitation products to the brand (T3),so as to enhance the trust of the tourists through the double guarantee of safety and genuine products.	Create a “four-season safety experience tour + genuine product guarantee” system to strengthen brand trust while balancing off-peak season traffic. Develop spring trekking, summer vacation , fall non-heritage exhibition and winter folk festival, adopt “staggered peak discount + theme activities” and “secondary consumption discount” to guide the distribution of passenger flow and improve the utilization rate of resources throughout the year. Equipped with medical and emergency response teams in the activities, the “Safe Taiyuan” brand, set up “Genuine Non-legacy Supply Station” (providing officially certified old Chen vinegar, paper cuttings, etc., and realizing traceability through blockchain technology), such as linking with neighboring merchants to set up the “Genuine Products Alliance.” For example, the “Genuine Products Alliance” has been set up by the neighboring merchants, and the official purchasing channels are announced by the broadcasting cycle in the attraction.
5	ST3: Relying on professional services	Launched the “Jin merchant story

	(S1) and scarce resources such as Jinci Temple and Tianlongshan Mountain (S3), it responds to the pressure of homogenized competition from neighboring cities (T2) and builds barriers of differentiated experience. Upgrade the entertainment facilities into a cultural experience carrier, while joining hands with neighboring provinces to form complementary resources and avoid direct competition.	immersive theater " (tour guides incarnate Jin merchant characters, interpretation of historical stories in the scenic area), and neighboring cities to form the experience of difference; joint Shaan Yu and other scenic areas to launch the "Yellow River culture tour line", clear Taiyuan The Yellow River Culture Tour Line was launched in conjunction with scenic spots in Shaanxi and Henan to define Taiyuan's position of "in-depth experience of Jin culture", and to share the sources of customers through the complementary resources (e.g., Xi'an Terra Cotta Warriors and Horses tickets can enjoy discounts on Jin Temple explanation).
6	WO1: In response to shortcomings in foreign language services (W1), take advantage of the expansion of the domestic tourism market (O1) and online platform technology (O3) to improve the experience of international tourists by upgrading intelligent equipment and infrastructure. Build an 'online + offline' foreign language service network and promote the standardization of multilingual infrastructure to bridge the talent gap.	The 'Global Taiyuan Pass' programme has introduced a new 'multilingual intelligent guide screen + unified logo for the whole region'. The attraction guide screen supports 'attractions' and 'story animation' (combined with large-scale animation) in ten languages. Story animations (using big data to suggest frequently asked questions) will be installed at transportation hubs and attraction entrances alongside multilingual barrier-free signs (including Braille). This will

		complement the online 'cloud-based foreign language guide' and enhance the convenience for international tourists.
7	WO2: In response to price problems and shortcomings in publicity (W2), we leverage online platforms and traffic events (O3), and build a system of “omni-directional marketing matrix + transparent pricing” to enhance exposure and cost-effectiveness. Launched the “Traffic Linkage Discount Package” to expand publicity through UGC activities, while strengthening the perception of cost-effectiveness through standardized pricing. During the concert/marathon period, in addition to the “1+N” joint ticket, as well as launching the “Taiyuan Hidden Play” challenge on the online platform(Winners will receive a set of tickets to tourist attractions).On the online platform, the “Price Transparency Feature” (including the cost components of attractions, food and beverage, and cultural and creative industries) was launched, and “Personalized Preferential Combination” was pushed through big data analysis (e.g. family visitors are automatically matched with “admission ticket + children's experience” discount).	During the concert/marathon period, in addition to the “1+N” joint ticket, as well as launching the “Taiyuan Hidden Play ” challenge on the online platform(Winners will receive a set of tickets to tourist attractions).On the online platform, the “ Price Transparency Feature” (including the cost components of attractions, food and beverage, and cultural and creative industries) was launched, and “Personalized Preferential Combination” was pushed through big data analysis (e.g. family visitors are automatically matched with “ admission ticket + children's experience” discount).

	ticket + children's experience" discount).	
8	WT1: In response to the homogenisation of tourism products (W3) and competition from neighbouring cities (T2) , differentiated products are created through industry chain integration and cultural and creative experiential innovation. This involves tapping into the county's cold non-heritage resources, developing "theme packages+ cultural and creative DIY" products and forming a "experience +consumption" closed loop.	The 'Taiyuan County Non-legacy Revitalisation Plan' has been upgraded to a 'Non-legacy+B&B+Food' themed package (e.g. Qingxu's ' back-stick Show + Vinegar Culture B&B + Vinegar Banquet'), and 'Cultural Creation DIY' products have been introduced at attractions. A " DIY workshop " where tourists can make miniature XuGou backsticks and carve exclusive numbers on them has been set up in the scenic spot. This enhances the uniqueness of the products through "value-added experience + limited sale" and reduces the scope for imitation.
9	WT2: In response to the lack of funds for certain attractions (W4)and the contradiction between resource protection and development (T3), the cost of tourist attractions will be reduced through community co-construction and a talent pool. The development of night-time programmes will be synchronised to extend the consumption period and activate night-time and off-season consumption. Introduce the " community co-construction + emergency talent pool " model to	To build "The Taiyuan Culture Guardian" programme, whereby local residents will be recruited to participate in the protection of attractions (e.g. maintenance of ancient trees at the Jin Temple). Basic tour guide training will be carried out at the same time to alleviate the shortage of talent, and "protection points" can be exchanged for night-time programmes. 'Protection points' can be exchanged for tickets to night-time programmes. The 'Night Shadow of Jin Temple' light show will

	increase talent reserves.	be developed using low-cost projection technology and 'conservation crowdfunding'. Donors can sponsor the introduction of cultural relics on the projection screen, supplementing the protection funds and activating night-time consumption.
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4.3 Evaluation of Strategies to Improve the Attractiveness of Tourist Attractions in Taiyuan City

4.3.1 Connoisseurship

To evaluate the feasibility of the strategy proposed by the researcher to organize recreational tourism routes to improve the attractiveness of tourist attractions in Taiyuan City, the researcher will use the technique of connoisseurship at this stage. The researcher invited three recreational tourism experts, a manager of Industry Research Department of Guotai Haitong Securities Co. Ltd., the director of the Taiyuan City Culture and Tourism Bureau, the director of the Shuangta Temple, the director of Wucheng community in Taiyuan, the executive director of Taiyuan Gangzhonglv International Tourism Co. Ltd., and a local tour guide of Taiyuan Zhida Tourism Co. Ltd., total of nine experts, to participate in this connoisseurship, to further adjust and refine the proposed strategy.

Table 12 The feasibility scores of 9 strategies

Expert Number	SO1	SO2	ST1	ST2	ST3	WO1	WO2	WT1	WT2	Overall
1	4	4	3	3	4	3	4	3	3	3
2	4	4	3	3	3	3	4	3	3	3
3	5	3	3	3	4	3	5	3	3	4
4	4	2	3	3	4	3	4	3	2	4
5	5	3	4	3	4	4	5	3	3	4

6	4	3	3	4	4	4	4	4	3	4
7	4	3	3	3	3	3	4	3	2	4
8	5	3	4	3	4	3	4	3	3	4
9	4	3	4	3	4	3	4	3	2	4
Mean	4.2	3.1	3.3	3.1	3.7	3.2	4.2	3.1	2.6	3.7

At the Connoisseurship, experts were invited to rate the overall feasibility and the feasibility of each strategy on a scale of 1 to 5, with 1 being the lowest and 5 the highest. The results are shown in the table above. Experts demonstrated a high level of confidence in the overall feasibility, assigning a score of 3.7. Among the nine strategies, SO1, ST3, and WO2 received higher scores, indicating relatively high feasibility for these three approaches. WT2 had the lowest feasibility score at 2.6. Specific expert opinions and improvement measures are as follows:

Table 11 The results of Connoisseurship

Strategies	Expert recommendations	Improvement
SO1: Seizing the opportunities of growing domestic demand for tourism and the traffic economy (concerts, marathons), to improve the efficiency of traffic conversion through brand integration and upgrade of ancillary services.	All nine experts agreed that the strategy holds high feasibility. By leveraging the buzz generated by high-traffic events like concerts and marathons, it can rapidly attract significant tourist attention. The approach of converting temporary visitor flows into cultural tourism consumers shows considerable potential. However, attention must be paid to sustaining this conversion rate. To avoid diminishing appeal due to overly uniform package offerings, continuous innovation in package content tailored to the characteristics of different types of high-traffic events will be more conducive to long-term development.	
SO2: Utilizing the advantages of 5G	All nine experts agreed that the strategy demonstrates a degree of innovation by combining	

infrastructure, leveraging low-altitude tourism policy and online platform technology, expanding the market coverage through the digital dissemination of intangible cultural heritage and full-time operation.	low-altitude tourism policies with digital technology to offer tourists novel experiences.	
ST1:Delineate cultural heritage core protection zones and adopt “limited reservation + digital display” to reduce human intervention and realize sustainable development.	Seven experts agreed that the strategy is highly feasible. It fully leverages Taiyuan's core strengths—professional tour guides, intangible cultural heritage and folk customs, and scarce historical resources—while precisely addressing the dual challenges of diversifying tourist demands and resource conservation. This approach aligns with sustainable development trends in cultural tourism. However, efforts should be made to lower the digital experience threshold and enrich customized scenarios to avoid limiting customer reach due to complex operations or monotonous experiences.	Centered on “low-threshold interaction + multi-scenario customization,” to deepen the integration of conservation principles into the visitor experience.
ST2: Create a “four-season safety experience tour + genuine product guarantee” system to strengthen brand trust	Seven experts agreed that the strategy is highly feasible. The dual approach of “security guarantees + authentic product traceability” can effectively enhance tourist trust, while seasonal themed activities can mitigate the disparity between peak and off-peak seasons. However,	Activate night-time and off-season consumption.

while balancing off-peak season traffic.	experts suggest that it could advance the development of night-time projects, extending the consumption cycle and stimulating night-time and off-season spending.	
ST3: Upgrade the entertainment facilities into a cultural experience carrier, while joining hands with neighboring provinces to form complementary resources and avoid direct competition.	All nine experts deemed the strategy highly feasible, noting that we should depth of local cultural integration within immersive content and the intensity of collaborative partnerships require further enhancement. This necessitates deeper exploration of Taiyuan's indigenous cultural essence and more substantial cross-regional cooperation initiatives.	Build competitive barriers through “deep cultural experiences + cross-regional resource complementarity.”
WO1: Build an 'online + offline' foreign language service network and promote the standardisation of multilingual infrastructure to bridge the talent gap.	All nine experts unanimously agreed that this strategy effectively addresses the shortage of foreign language talent and aligns with the opportunity presented by “growing market demand (increased international tourists).” However, it requires enhancing the interactivity of smart devices and supplementing with manual backup services to prevent language barriers from impacting the visitor experience.	
WO2:Leverage online platforms and traffic events, and build a system of “omni-directional marketing matrix +	Eight experts agreed that the strategy is highly feasible. Transparent pricing can enhance tourists' trust in Taiyuan tourism, while UGC marketing can effectively expand the reach of promotional efforts. However, it is crucial to strike a balance between pricing and service quality to avoid	Establish a system featuring “transparent pricing + diversified

transparent pricing " to enhance exposure and cost-effectiveness	over-reliance on low-cost tactics for attracting visitors. Additionally, diversifying the formats and channels of marketing content will improve the effectiveness of promotional campaigns	marketing + quality assurance."
WT1: Create differentiated products through industry chain integration and cultural and creative experiential innovation.	Six experts believe this strategy effectively addresses product homogenization. However, ICH remains relatively underdeveloped in the market, with cultural and creative products lacking practicality and appeal. Further efforts are needed to broaden market promotion channels for ICH and enhance the design and functionality of cultural and creative products.	
WT2: To reduce the cost of tourist attractions through community co-construction and a talent pool. Introduce the community co-construction+ emergency talent pool model to increase talent reserves.	All nine experts unanimously agreed that the strategy effectively addresses the "funding gap + conflict between resource conservation and development," but emphasized the need to refine community incentive mechanisms and avoid formalism. Six experts recommended merging the section on "enriching the cultural substance of nighttime programs" into ST2.	

In general, all 9 experts agreed that the strategies as a whole have high feasibility, which is in line with the current situation of the development of recreational tourism in Taiyuan City and can also meet the future development needs of Taiyuan City's recreational tourism, especially the SO strategy and WO strategy has the highest feasibility, but some of the strategies need to be slightly adjusted and improved. The final strategies after adjustment and modification according to the expert suggestions

in Connoisseurship are 2 SO strategies, 3 ST strategies, 2 WO strategies and 2WT strategies, as follows:

SO1: Seizing the opportunities of growing domestic demand for tourism and the traffic economy (concerts, marathons), to improve the efficiency of traffic conversion through brand integration and upgrade of ancillary services.

SO2: Taking advantage of the 5G infrastructure, low-altitude tourism policy, and online platform technology to expand market coverage through the digital dissemination of intangible cultural heritage and ensure full-time operation.

ST1: Delineate cultural heritage core protection zones and adopt “limited reservation + digital display” to reduce human intervention and realize sustainable development. Centered on “low-threshold interaction + multi-scenario customization,” to deepen the integration of conservation principles into the visitor experience.

ST2: Create a “night-time and off-season consumption + genuine product guarantee” system to strengthen brand trust while balancing off-peak season traffic.

ST3: Build competitive barriers through “deep cultural experiences + cross-regional resource complementarity. Upgrade entertainment facilities into cultural experience platforms while collaborating with neighboring provinces to achieve resource complementarity, thereby avoiding direct competition.

WO1: Build an 'online + offline' foreign language service network and promote the standardisation of multilingual infrastructure to bridge the talent gap.

WO2: Leverage online platforms and traffic events, and build a system of “omnidirectional marketing matrix + transparent pricing + quality assurance” to enhance exposure and cost-effectiveness.

WT1: Create differentiated products through industry chain integration and cultural and creative experiential innovation.

WT2: To reduce the cost of tourist attractions through community co-construction and a talent pool. Introduce the “community co-construction+ emergency talent pool” model to increase talent reserves.

Table 12 Optimized strategies and activities of recreational tourism in Taiyuan City

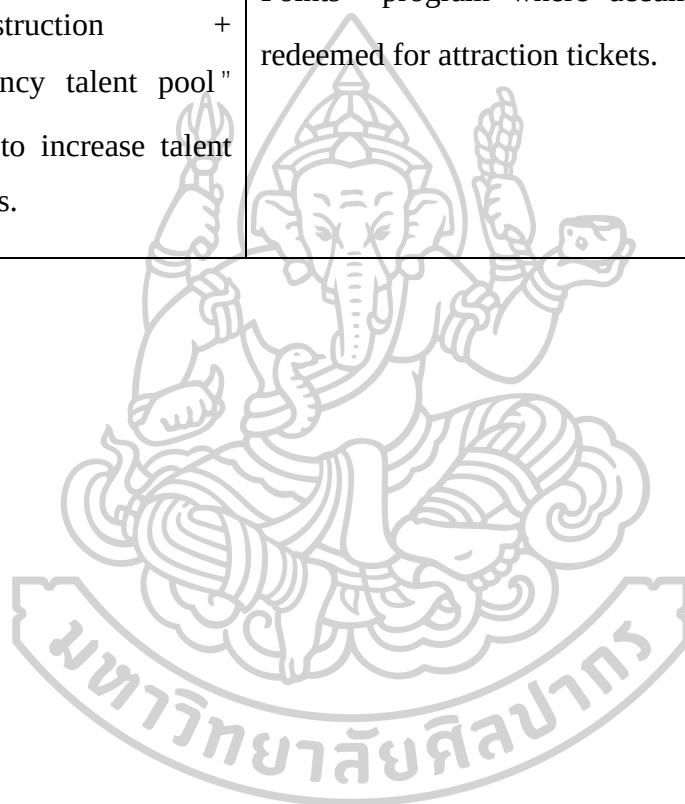
	Strategies	Activities
1	SO1: Seizing the opportunities of growing domestic demand for tourism and the traffic economy(concerts, marathons) , to improve the efficiency of traffic conversion through brand integration and upgrad of ancillary services.	During the concert/marathon period, we can launch the “3-hour cultural tour + peripheral support” package - “Highlights of Jinci Tour” (combined with the gap between the events) led by a gold-medal tour guide, and synchronized the linkage of Catering and lodging around the attraction will offer “traffic exclusive discount”; “traffic exclusive non-heritage gift box” will increase “Jin culture IP periphery” (e.g. miniature dolls of the maiden statue of the Temple of the Holy Mother of God at the Jin Temple) to strengthen brand memory.
2	SO2: Taking advantage of the 5G infrastructure, low-altitude tourism policy and online platform technology to expand market coverage through the digital dissemination of intangible cultural heritage and ensure full-time operation.	During the pre-trip phase, Tourists can preview detailed explanations of intangible cultural heritage sites along the low-altitude flight route (e.g., the connection between the Hall of the Holy Mother at Jinci Temple and Song Dynasty clay sculpture techniques) via online platforms. Through the trip,the animated short film “Stories of Jinyang” (embedding booking links for low-altitude sightseeing spots) enables tourists to directly reserve offline “Intangible Cultural Heritage Experience Workshops” through the video. These workshops offer hands-on experiences like grotto pattern clay sculpting and Jin embroidery, achieving seamless conversion from “online discovery to offline consumption.” Post-tour phase: The system automatically generates a “customized intangible cultural heritage digital souvenir album” based on the actual flight route. This album integrates the tourist's

		flight photos, introductions to the intangible cultural heritage sites encountered, and their personal digital creations. It supports online sharing to social platforms or permanent storage, further expanding the reach of cultural dissemination.
3	ST1: Delineate cultural heritage core protection zones and adopt “limited reservation + digital display” to reduce human intervention and realize sustainable development. Centered on low-threshold interaction + multi-scenario customization to deepen the integration of conservation principles into the visitor experience.	Develop “ Customized Cultural Exploration + Conservation Experience” service, which integrates the concept of resource conservation into personalized experience, and reduces the pressure of conservation through digital technology. Adding an element of fun, such as the “ Cultural Exploration Theme Week ” activities, each week focuses on a specific cultural theme (e.g., “Jinci Temple Architecture Theme Week,” “ Tianlongshan Grottoes Art Theme Week “), with customized tour packages featuring exclusive itineraries. Interactive games like the “ Jinci Architecture Puzzle Challenge “ and “Grotto Sculpture Sketching Contest” will be incorporated, with winners receiving themed cultural products (e.g., Jinci architectural pattern bookmarks, miniature grotto sculpture models).
4	ST2: Create a “night-time and off-season consumption + genuine product guarantee” system to strengthen brand trust while balancing off-peak season traffic.	Develop a full-time cultural tourism model featuring “daytime themed experiences + nighttime intangible cultural heritage immersion,” while strengthening authenticity guarantees to increase tourist dwell time and spending frequency. For example , In spring, combine “Fen River Spring Outing” with “Intangible Cultural Heritage Light Shows + Live Performances.” Project images of Jin Temple attendants and

		paper-cutting patterns onto the river surface using projection technology at the Fen River attraction. Pair these with performances of Jinyang drum music and back-pole dance by intangible cultural heritage inheritors. Each performance will be equipped with 2 safety guides and 1 emergency medical station.
5	ST3: Build competitive barriers through “deep cultural experiences + cross-regional resource complementarity.” Upgrade entertainment facilities into cultural experience platforms while collaborating with neighboring provinces to achieve resource complementarity, thereby avoiding direct competition.	Launched the “Jin merchant story immersive theater” (tour guides incarnate Jin merchant characters, interpretation of historical stories in the scenic area), and neighboring cities to form the experience of difference; joint Shaan Yu and other scenic areas to launch the “Yellow River culture tour line”, clear Taiyuan The Yellow River Culture Tour Line was launched in conjunction with scenic spots in Shaanxi and Henan to define Taiyuan's position of “in-depth experience of Jin culture”, and to share the sources of customers through the complementary resources (e.g., Xi'an Terra Cotta Warriors and Horses tickets can enjoy discounts on Jin Temple explanation).
6	WO1: Build an 'online + offline' foreign language service network and promote the standardisation of multilingual infrastructure to bridge the talent gap.	The 'Global Taiyuan Pass' programme has introduced a new 'multilingual intelligent guide screen + unified logo for the whole region'. The attraction guide screen supports 'attractions' and 'story animation' (combined with large-scale animation) in ten languages. Story animations (using big data to suggest frequently asked questions) will be installed at transportation hubs and attraction entrances alongside multilingual barrier-free signs (including Braille). This will complement the online 'cloud-based foreign language guide' and enhance

		the convenience for international tourists.
7	WO2: Leverage online platforms and traffic events, and build a system of “omni-directional marketing matrix + transparent pricing + quality assurance” to enhance exposure and cost-effectiveness.	During the concert/marathon period, in addition to the “1+N” joint ticket, as well as launching the “Taiyuan Hidden Play” challenge on the online platform(Winners will receive a set of tickets to tourist attractions).On the online platform, the “Price Transparency Feature” (including the cost components of attractions, food and beverage, and cultural and creative industries) was launched, and “Personalized Preferential Combination” was pushed through big data analysis (e.g. family visitors are automatically matched with “admission ticket + children's experience” discount).
8	WT1: Create differentiated products through industry chain integration and cultural and creative experiential innovation.	Developing “ theme packages+ cultural and creative DIY ” products and forming a “ experience +consumption” closed loop. The 'Taiyuan County Non-legacy Revitalisation Plan' has been upgraded to a 'Non-legacy + B&B + Food' themed package (e.g. Qingxu's back-stick Show + Vinegar Culture B&B + Vinegar Banquet'), and 'Cultural Creation DIY' products have been introduced at attractions. A “DIY workshop” where tourists can make miniature XuGou backsticks and carve exclusive numbers on them has been set up in the scenic spot. This enhances the uniqueness of the products through “ value-added experience+limited sale”and reduces the scope for imitationOn the another hand , Expand intangible cultural heritage (ICH) promotion and sales channels by launching offline

		“ICH in Commercial Districts” events.
9	WT2: To reduce the cost of tourist attractions through community co-construction and a talent pool. Introduce the community co-construction + emergency talent pool” model to increase talent reserves.	Launch the “Taiyuan Cultural Guardian” initiative to recruit local residents for scenic spot conservation efforts (e.g., preserving ancient trees at Jin Temple). Concurrently, provide foundational tour guide training to address staffing shortages and establish a “Guardian Points” program where accumulated points can be redeemed for attraction tickets.



Chapter 5

Conclusion Discussion and Recommendation

This study aims to examine the current situation of recreational tourism in Taiyuan City and develop strategies to improve the attractiveness of its tourist attractions, as well as evaluate the feasibility of these strategies. The author adopted the research method of Research and Development (R&D), based on domestic and international related studies, and collected quantitative data from 400 tourists at ten major tourist attractions in Taiyuan City through questionnaires and then collected qualitative data from 15 people, such as the leaders and relevant staff of the Taiyuan City Tourism Bureau, attraction managers, owners of tourism companies, residents, and tour guides, etc., through interviews with these stakeholders. The qualitative data were analyzed using quantitative data, and then the qualitative data were analyzed using content analysis. Then the SWOT analysis was carried out by integrating the quantitative data and qualitative data to study the strengths, weaknesses, opportunities, and threats in the situation of recreational tourism in Taiyuan City; Subsequently, the TOWS matrix was used to propose the relevant strategies for organizing tourism routes in Taiyuan City, which included 2 SO strategies, 3 ST strategies, 2 WO strategies, and 2 WT strategies; and subsequently evaluated and refined by nine experts to maximize the attractiveness of Taiyuan's tourist attractions to evaluate and improve a series of strategies with a view to maximizing the attractiveness of the tourist attractions in Taiyuan City. This chapter comprises the following three main sections:

1. Research Conclusions
2. Research Discussion
3. Research Recommendations

5.1 Research Conclusions

5.1.1 The current situation of recreational tourist's attractions in Taiyuan

In general, Taiyuan City has abundant tourism resources and great potential for recreational tourism development. However, these resources are not currently being fully utilized, and the tourist attractions in Taiyuan City need to be made more attractive.

Table 13 Current situation of recreational tourist's attractions in Taiyuan

Strengths	S1: The service personnel are highly professional and have a good attitude, and the tour guide team has in-depth knowledge of the area's history and culture, which can significantly enhance tourists' cultural experience. The tourism service centre and consultants provide efficient and convenient services. S2: The major attractions have established perfect safety monitoring systems and emergency response mechanisms and are equipped with professional medical teams that can handle emergencies promptly. S3: Taiyuan is a popular destination for the 'New Year Gourmet Tour' thanks to its rich intangible cultural heritage and diverse folk activities. It has comprehensive 5G and Wi-Fi coverage, as well as perfect basic services and infrastructure. The leisure facilities around the tourist attractions can meet a variety of leisure needs, and the specialty businesses and IPs are appealing. The recreational facilities around the tourist attractions can satisfy all kinds of recreational needs, and the specialty businesses and characteristic IPs are attractive.
Weaknesses	W1: Serious loss of professional talent, particularly among tour guides; high staff turnover and insufficient professional ability among temporary staff; and a lack of foreign language service staff at attractions. W2: tourist attraction fees are unreasonable, such as ticket, catering, and shopping prices that are high; prices are not transparent;

	prices do not match goods; cost-effectiveness is low; and the tourist attraction marketing system is unclear. There is insufficient publicity of activities in attractions and a low level of awareness, as well as insufficient collaboration between attractions and a lack of unified planning. W3: Serious homogenization of tourism products, with few types of cultural and creative products and a limited design level. Shortcomings in infrastructure include lagging in the construction of facilities in some remote attractions, a shortage of night-time facilities in newly built attractions, and insufficient maintenance of safety facilities. W4: Large investment in tourism infrastructure with a long return cycle and insufficient allocation of funds to remote tourist attractions. County funds have weak undertaking capacity and insufficient precision in the allocation of publicity funds.
Opportunities	O1: With an improvement in the living standards of residents and a change in consumption concepts, there is an expanding domestic market demand for recreation and tourism, providing ample opportunity for the development of leisure tourism in Taiyuan. O2: The state has introduced a series of preferential policies and support measures to encourage the development of recreational tourism and create a favorable policy environment. According to the policy planning of Shanxi Province, Taiyuan will develop low-altitude and water tourism, adding new highlights to recreation tourism. O3: Improved transport links have reduced the time and distance between Taiyuan and other cities, making the area more accessible for tourists. Meanwhile, the government has strengthened transport links between attractions and introduced special tourist buses to facilitate

	the efficient movement of tourists. The rise of online tourism platforms and the gradual application of big data and artificial intelligence in the tourism sector are providing new means for Taiyuan's tourism marketing and service innovation. The traffic economy creates opportunities, and Taiyuan has already become a popular tourist destination thanks to its concerts, marathons and rich cultural resources.
Threats	T1: Tourists' demands are becoming increasingly diverse and personalized. The tourism market is changing rapidly, and Taiyuan's tourism products need to be updated more quickly to adapt to these changes. T2: Neighboring provinces and cities, as well as southern tourist destinations, are highly competitive in terms of service quality, innovation, and the overall experience they offer, which puts pressure on Taiyuan. Some of Taiyuan's tourist attractions are becoming increasingly similar and lack distinctive competitive strategies, making it difficult to establish unique brands and attractions. The production of low-quality imitation products may damage the overall image and reputation of Taiyuan's tourism products. T3: Conflicts between resource protection and development. Cultural heritage is sensitive to the environment, and overdevelopment or improper management may exacerbate damage and affect the sustainability of core resources. Tourism is seasonal: affected by climate and other factors, off-peak seasons vary greatly, putting pressure on tourist reception facilities during peak seasons and leaving resources idle during off-peak seasons.

5.1.2 Conclusion of Strategies to Improve the Attractiveness of Tourist Attractions in Taiyuan City

Through SWOT analysis and TOWS Matrix technique, the researcher proposed the organization strategies to improve the attractiveness of tourist attractions in Taiyuan City, of which there are 2 SO strategies, 3 ST strategies, 2 WO strategies and 2 WT strategies. The details are as follows:

Table 14 Strategies of recreational tourism in Taiyuan City

SO Strategies	SO1: To improve the efficiency of traffic conversion through brand integration and upgrad of ancillary services. Linking with traffic events to create “cultural tourism + traffic” integrated products and build a closed loop of “themed routes + ancillary services” to extend the length of stay of tourists. SO2: Expanding the market coverage through the digital dissemination of intangible cultural heritage and full-time operation. Develop low-altitude tourism products combining “reality and reality,” build a digital experience platform for intangible cultural heritage, realize “intelligent guide + online reservation + personalized recommendation” through the platform, and push the information of folklore activities synchronously, and adopt the mode of “cultural narrative + digital dissemination.”
ST Strategies	ST1: Balancing the contradiction between resource protection and development. Delineate cultural heritage core protection zones and adopt “limited reservation + digital display” to reduce human intervention and realize sustainable development ST2: Create a “four-season safety experience tour + genuine product guarantee” system to strengthen brand trust while balancing off-peak season traffic. Develop spring

	trekking, summer vacation, fall non-heritage exhibition, and winter folk festival, adopt “staggered peak discount + theme activities” and “secondary consumption discount” to guide the distribution of passenger flow and improve the utilization rate of resources throughout the year. ST3: To build barriers of differentiated experience. Upgrade the entertainment facilities into a cultural experience carrier, while joining hands with neighboring provinces to form complementary resources and avoid direct competition.
WO Strategies	WO1: To improve the experience of international tourists by upgrading intelligent equipment and infrastructure. Build an 'online + offline' foreign language service network and promote the standardization of multilingual infrastructure to bridge the talent gap. WO2: To build a system of “omnidirectional marketing matrix + transparent pricing ” to enhance exposure and cost-effectiveness. Launched the “Traffic Linkage Discount Package” to expand publicity through UGC activities, while strengthening the perception of cost-effectiveness through standardized pricing.
WT Strategies	WT1: Differentiated products can be achieved through industrial chain integration and cultural and creative experiential innovation. This involves tapping into the county's cold non-heritage resources, developing “theme packages + cultural and creative DIY ” products, and forming a “experience + consumption” closed loop. WT2: Reduce the cost of tourist attractions through

	community building and talent reserve. The development of night-time programmes will be synchronized to extend the consumption period and activate night-time and off-season consumption. Introduce the “community co-construction + emergency talent pool” model to increase talent reserves.
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5.1.3 Conclusion of the validation of strategies to improve the attractiveness of tourist attractions in Taiyuan City

In general, all 9 experts agreed that the strategies as a whole have high feasibility, which is in line with the current situation of the development of recreational tourism in Taiyuan City and can also meet the future development needs of Taiyuan City's recreational tourism, especially the SO strategy has the highest feasibility, but some of the strategies need to be slightly adjusted and improved. The final strategies after adjustment and modification according to the expert suggestions in connoisseurship are 2 SO strategies, 3 ST strategies, 2 WO strategies, and 2 WT strategies, as follows:

Table 15 Optimized strategies of recreational tourism in Taiyuan City

SO strategies	SO1: Seizing the opportunities of growing domestic demand for tourism and the traffic economy (concerts, marathons), to improve the efficiency of traffic conversion through brand integration and upgrade of ancillary services. SO2: Taking advantage of the 5G infrastructure, low-altitude tourism policy, and online platform technology to expand market coverage through the digital dissemination of intangible cultural heritage and ensure full-time operation.
ST strategies	ST1: Delineate cultural heritage core protection zones and adopt “limited reservation + digital display” to reduce human intervention and realize sustainable development. Centered on “low-threshold interaction + multi-scenario customization,” to deepen the integration of conservation principles into the visitor

	experience. ST2: Create a “night-time and off-season consumption + genuine product guarantee ” system to strengthen brand trust while balancing off-peak season traffic. ST3: Build competitive barriers through “deep cultural experiences + cross-regional resource complementarity.” Upgrade entertainment facilities into cultural experience platforms while collaborating with neighboring provinces to achieve resource complementarity, thereby avoiding direct competition.
WO strategies	WO1: Build an 'online + offline' foreign language service network and promote the standardisation of multilingual infrastructure to bridge the talent gap. WO2: Leverage online platforms and traffic events, and build a system of “omnidirectional marketing matrix + transparent pricing + quality assurance” to enhance exposure and cost-effectiveness.
WT strategies	WT1: Create differentiated products through industry chain integration and cultural and creative experiential innovation. WT2: To reduce the cost of tourist attractions through community co-construction and a talent pool. Introduce the “community co-construction + emergency talent pool” model to increase talent reserves.

5.2 Research Discussion

5.2.1 Discussion of the current situation of recreational tourism in Taiyuan City

In response to the current situation of recreational tourism in Taiyuan City, the researcher will compare the results with those of previous studies. The researcher will then analyze the points of consistency and conflict in the development of the tourism

industry in Taiyuan City and discuss the reasons for these conflicts, as well as their implications for the future development of the tourism industry.

This study aligns closely with the conclusions of Wang Xin (2012). Both emphasize the core role of quality service and professional talent in supporting the tourism experience. Wang Xin noted that Taiyuan tourism must enhance tourist appeal by “improving service standards and optimizing the tourism environment,” specifically highlighting how tour guide narration deepens tourist understanding of historical and cultural resources. This study further clarifies that the historical and cultural narration capabilities of tour guide teams can significantly elevate the quality of cultural experiences, fully aligning with Wang Xin's perspective that “service is the key to tourism competitiveness.” Research indicates that cultural tourists exhibit a particularly strong demand for in-depth interpretation. The professional competence of Taiyuan's tour guide teams represents a crucial advantage in meeting this demand and distinguishing the city from its neighbors.

This study aligns closely with the conclusions of Xu Busheng (2003), both acknowledging the foundational support value of Taiyuan's scarce historical and cultural resources and hardware facilities for the tourism industry. Xu Busheng proposed that Taiyuan should “Integrate core resources such as the Jinci Temple and Jinyang culture while improving hardware facilities” to build a tourism brand; This study explicitly highlights the uniqueness and scarcity of resources like Jinci Temple and Tianlongshan Grottoes, alongside hardware advantages such as 5G coverage and recreation facilities. This approach aligns directly with Xu Busheng's development strategy of “resource-centric development with facilities as the foundation.” Furthermore, Xu Busheng emphasized the “significant potential for sustainable utilization of Jinyang culture,” which fully aligns with the perspective in this study's S3 that “intangible cultural heritage and folk customs can be transformed into core attractions.”

This study resonates with research of LunXin (2024), both highlighting deficiencies in Taiyuan's tourism products and nighttime infrastructure. It points out that some nighttime tourism clusters in Taiyuan suffer from “monotonous business

formats and inadequate facilities,” requiring activation of nighttime consumption through “enriching scenarios and improving facilities.” Meanwhile, this study clearly identifies severe homogenization of tourism products and a shortage of nighttime service facilities in newly developed attractions. Furthermore, Lun Xin proposes “creating nighttime cultural consumption clusters,” which aligns perfectly with the “intangible cultural heritage-themed nighttime projects” optimization direction designed for W3 in this study.

This study differs in focus from Yu Lulu's research. Yu Lulu (2023) concentrates solely on the “cloud tourism” domain, emphasizing how online technologies (VR, live streaming) empower “visual experiences and promotion,” without linking transportation improvements to the synergistic effects of the traffic economy. This study constructs a three-dimensional opportunity framework of “Transportation - Technology - Traffic Flow.” It acknowledges the innovative value of online technologies in marketing and services (e.g., smart guides, online reservations), highlights the foundational role of transportation improvements (tourist routes, high-speed rail) in enhancing tourist accessibility, and further positions the traffic economy (concerts, marathons) as a “vehicle for opportunity conversion.” This divergence stems from differing research objectives: Yu Lulu's study aimed to advance cloud tourism development, while this research explores diverse opportunities for comprehensive recreation tourism, requiring multi-factor synergy.

5.2.2 Discussion of strategies to improve the attractiveness of tourist attractions in Taiyuan City

This study focuses on developing tourism resources and improving the attractiveness of tourist attractions in Taiyuan City. It proposes four types of strategies (SO, ST, WO and WT) based on a SWOT analysis and a TWOS matrix. By comparing this study with previous studies, a high degree of consistency is achieved in most areas, particularly concerning the ecological environment, tourists' demands, and infrastructure optimization. However, there are also some conflicts with previous findings in certain areas, mainly due to Taiyuan City's specific resource advantages and policy context.

In the terms of SO strategies are closely with the findings of Wang Xin (2021). Wang Xin proposed “hosting large-scale festival events and building cultural tourism brands,” noting that traffic-generating events like concerts and marathons can attract media attention and tourist participation. He further emphasized that “tourism imagery should keep pace with the times, leveraging digital technology to disseminate culture.” This study's SO1 strategy integrates traffic events with Jinci Temple and intangible cultural heritage resources through “post-event cultural add-ons” packages and traffic-exclusive intangible cultural heritage gift boxes. The SO2 strategy achieves digital dissemination via the “Cloud View of Taiyuan” low-altitude project and the animated series “Stories of Jinyang.” Both strategies affirm the value of resource integration, traffic synergy, and technological empowerment for cultural tourism development. The SO2 strategy stands in stark contrast to the research by Guo et al. (2016) addressed the “lack of nighttime activities” in the Changfeng Business District by proposing “developing nighttime activities such as night tours and night cycling based on existing venues,” focusing on leveraging existing facilities to fill the gap in nighttime experiences. In contrast, this study's SO2 strategy integrates low-altitude tourism policies with 5G technology to create a multi-dimensional, round-the-clock operation model combining “online VR tours + offline low-altitude experiences.” This approach not only fills the nighttime void but also extends the “cloud-based discovery → offline consumption” chain. This divergence primarily stems from differing research scopes; Guo Kailu et al. focused on the single Changfeng Business District, while this study covers the entire Taiyuan region. This broader scope enables integration of historical sites, intangible cultural heritage, and emerging policy resources to achieve more multidimensional experiential innovation.

WO strategies align with Wang Fan's (2023) findings. Wang Fan proposed “enhancing infrastructure and advancing digital transformation to improve service quality,” stressing “expanding brand reach through UGC content.” This study's WO1 strategy employs “multilingual smart guide screens + cloud-based foreign language tours” to address foreign language talent shortages through technology, while WO2 strategy leverages TikTok challenges and online pricing campaigns to optimize

marketing and pricing. Both strategies acknowledge the critical role of digitalization and online marketing in tourism services and brand development. Shen Yue centers its strategy on “cultural tourism IP + industrial integration,” deeply aligning marketing with industrial upgrading. Beyond transparent disclosure (red and black lists), it enhances value through a diversified product system integrating tourism with agriculture, wellness, and sports. Compared to the author’s opinion focus on cost-effectiveness, Shen Yue (2025) employs traffic-driven events to launch dynamic promotions and publicly disclose price structures, thereby boosting perceived value. Its strategy prioritizes “end-to-end conversion of marketing activities.”

WT strategies align with Wang Ying (2024)’s research conclusions. Wang Ying proposed “tapping niche cultural resources and avoiding homogenization through an ‘experience + consumption’ closed loop,” suggesting “engaging social forces in resource conservation to reduce costs.” This study’s WT1 strategy develops “intangible cultural heritage + homestays + cuisine” packages and establishes cultural and creative DIY workshops, while the WT2 strategy implements the “cultural guardians” community co-creation model. Both approaches acknowledge the significance of niche resource development and social participation in avoiding competition and alleviating the tension between resource conservation and funding constraints. The WT2 strategy’s “development of low-cost nighttime projects (e.g., Jin Temple Night Shadow Light Show)” aligns with Guo Kailu et al. (2016) findings in “Current Status and Optimization of Recreation Tourism Development in Taiyuan’s Changfeng Business District.” Guo Kailu et al. identified “insufficient nighttime activities and post-closing visitor attrition” in Changfeng Business District, recommending the creation of Taiyuan’s “city that never sleeps.” This study integrates nighttime projects with cultural heritage preservation; both are aimed at stimulating nighttime consumption. The distinction lies in Guo Kailu et al. (2016) focusing on optimizing facilities within a single area, whereas this research incorporates cultural elements to achieve differentiation.

ST strategies differ from Wang Ying’s (2024) research. Wang Ying focused on the single resource of the ancient Great Wall village in Jielingkou Village, proposing to “collaborate with surrounding areas to create a scenic corridor and define the

positioning as ‘Border Defense and Historical Reflection’; In contrast, this study strategy integrates diverse resources such as Taiyuan's Jinci Temple and intangible cultural heritage to launch an “immersive theater showcasing Jin merchant tales.” It collaborates with Shaanxi and Henan to establish the “Yellow River Cultural Tour Route” while defining the positioning as “deep immersion in Jin culture.” This divergence primarily stems from differing resource endowments. Taiyuan possesses richer historical and intangible cultural heritage resources, enabling the construction of more diverse, differentiated experiences beyond reliance on a single ancient village resource. The “authentic intangible cultural heritage supply stations + blockchain traceability” measures in ST2 strategy align with Wang Fan's research conclusions. Wang Fan (2023) advocates “strengthening tourism product quality oversight to prevent low-quality counterfeits from damaging destination reputation.” This study ensures product quality through “authenticity alliances, blockchain traceability, and official channel disclosures.” Both recognize brand trust maintenance as vital for mitigating counterfeit threats, differing only in focus: Wang Fan emphasizes macro-level regulatory recommendations, while this study proposes concrete implementation plans tailored to Taiyuan's intangible cultural heritage and cultural creativity sectors.

5.3 Research Recommendations

Due to the researcher's limited scientific research ability and level of experience, this study still has some shortcomings. However, the results are valuable for developing recreational tourism in other Chinese cities and provide ideas for developing recreational tourism in Taiyuan City.

5.3.1 Recommendations for applying the results of the study

This study provides practical and strategic recommendations for developing tourism in Taiyuan. The suggestions aim to optimize the use of tourism resources, improve tourist satisfaction, and support sustainable economic growth. Specifically, the paper provides actionable guidance for the Taiyuan Tourism Bureau, tourism enterprises, and attraction managers for practical implementation.

(1) Synergistic promotion of multiple factors to improve the overall development quality

When applying the research results, the Taiyuan Tourism Bureau, tourism enterprises, and attraction managers should consider the key factors of ecological environmental protection, infrastructure improvement, and the diverse needs of tourists. They should then promote the project synergistically to ensure a positive interaction between tourism development, historical and cultural heritage, and ecological protection. This will enhance Taiyuan's overall attractiveness and competitiveness as a cultural and tourism destination. This will further enhance the overall attractiveness and competitiveness of Taiyuan as a cultural and tourism destination.

(2) Pay attention to the ecological bottom line and cultural authenticity of resource development.

When extracting the value of tourism resources and launching new tourism products, the concept of sustainable development must be adhered to, and the intensity of development must be strictly controlled. This will protect the original natural ecology and cultural landscape of attractions and prevent 'fast-food development' and 'homogenized construction.'

(3) Establish a dynamic monitoring and feedback mechanism to strengthen the implementation of the strategy.

To ensure the effective implementation of the culture and tourism integration strategy, the tourism authorities in Taiyuan should establish a scientific monitoring and evaluation mechanism to regularly track and evaluate key performance indicators such as visitor satisfaction, the impact on the industry, and the dissemination of culture after the strategy has been implemented. At the same time, this should be combined with feedback from tourists and changes in the market to dynamically adjust and optimize strategic measures and promoting the cultural and tourism industry toward institutionalization, standardization, and refinement.

5.3.2 Recommendations for further research

Based on the recreation and tourism strategy proposed for Taiyuan City in this study, there are many areas that warrant further exploration in the future. To continue promoting academic research and optimizing practices in related fields, the researcher makes the following four suggestions:

(1) Expand the scope of the study to enhance the breadth and representativeness of the sample.

If future studies continue to focus on cultural and tourism integration in Taiyuan, the survey area and sample size should be expanded to include different types of tourist attractions, groups of tourists, and cultural venues. This would enhance the universality and persuasive power of the study's results. At the same time, sports tourism, recreational tourism, health tourism, the convention and exhibition economy, and other emerging industries could be introduced as areas of research to expand the analytical scope and provide more in-depth theoretical support for the diversified development of tourism in Taiyuan.

(2) Strengthen the empirical testing of strategies and improve the feedback and iterative mechanisms.

The current study mainly focuses on strategy design and theory construction. The proposed strategic path can be verified through field pilots, tracking research, and comparative analysis. Dynamic evaluation of the policy implementation effect can identify possible problems in real operations in time, enabling the strategy to be fine-tuned to enhance the practicality and sustainability of the research results.

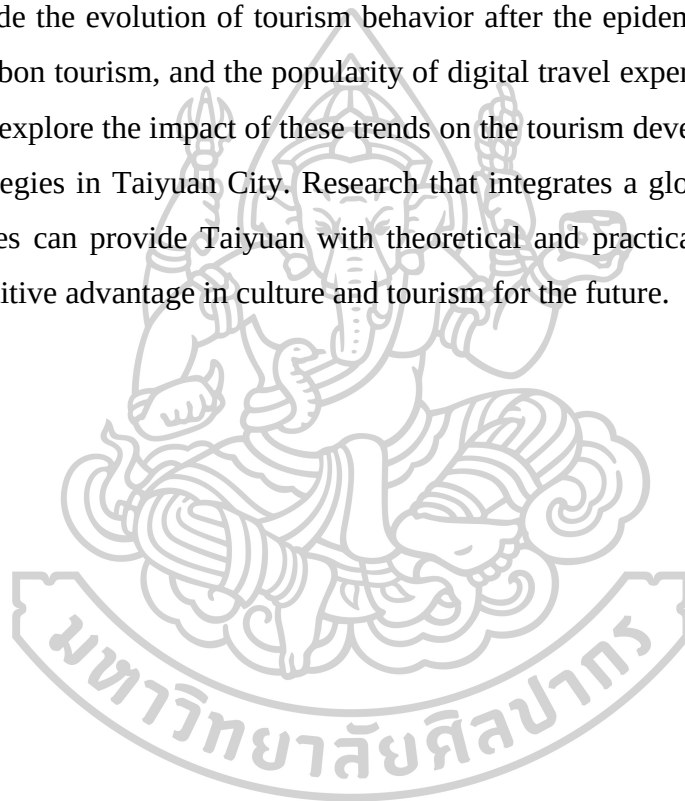
(3) Integration of interdisciplinary methods to enhance comprehensive research capacity.

Future research could introduce theories and methods from cultural anthropology, environmental science, economics, communication, and related disciplines to develop a multidimensional, cross-disciplinary analysis framework. For instance, cultural anthropology could help to explore the revitalization of Jin culture in tourism scenarios; environmental science can assess tourism's ecological impact and communication science can examine the formation of cultural and tourism IPs in the

digital media era. This approach enables a more comprehensive examination of the systematic challenges and countermeasures for the integrated development of culture and tourism.

(4) Focus on the impact of international trends and macro-environmental changes.

Against the backdrop of the deep reconfiguration of the global tourism landscape, future research should focus on changing trends in the international tourism market. These include the evolution of tourism behavior after the epidemic, the rise of green and low-carbon tourism, and the popularity of digital travel experiences. The research should also explore the impact of these trends on the tourism development models and market strategies in Taiyuan City. Research that integrates a global perspective with local realities can provide Taiyuan with theoretical and practical support to build a new competitive advantage in culture and tourism for the future.



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Appendix

Appendix A: Taiyuan City recreational tourism survey questionnaire

Dear Madam / Sir,

Hello! Thank you for taking time out of your busy schedule to participate in this questionnaire survey. I am a Ph.D. student of Recreation Tourism and Sport Management, Faculty of Education, Silpakorn University, Thailand. This is a research questionnaire on the current situation of recreational tourism in Taiyuan. This questionnaire aims to understand the experience and satisfaction of tourists in the process of tourism. This questionnaire is anonymous, and the data is for academic research only. There is no wrong or right answer. Please answer according to your true thoughts. We will guarantee the privacy of the questionnaire. Please rest assured to fill it in. In order to ensure the authenticity and validity of the data, please answer item by item. Your support is of great significance to this study. Thank you for your support!

Part I: Basic Information

1. Your gender:

A. Male

B. Female

2. You come from_____

3. Your age :

A. Under 18 years old

B. 19-40 years old

C. 41-60 years old

D. 61 years old or over

4. Your occupation:

A. Student

B. Government/business employee

C. Freelance/Retired person

D. Other (Please specify) _____

5. Your education:

A. High school and below

B. Specialized education

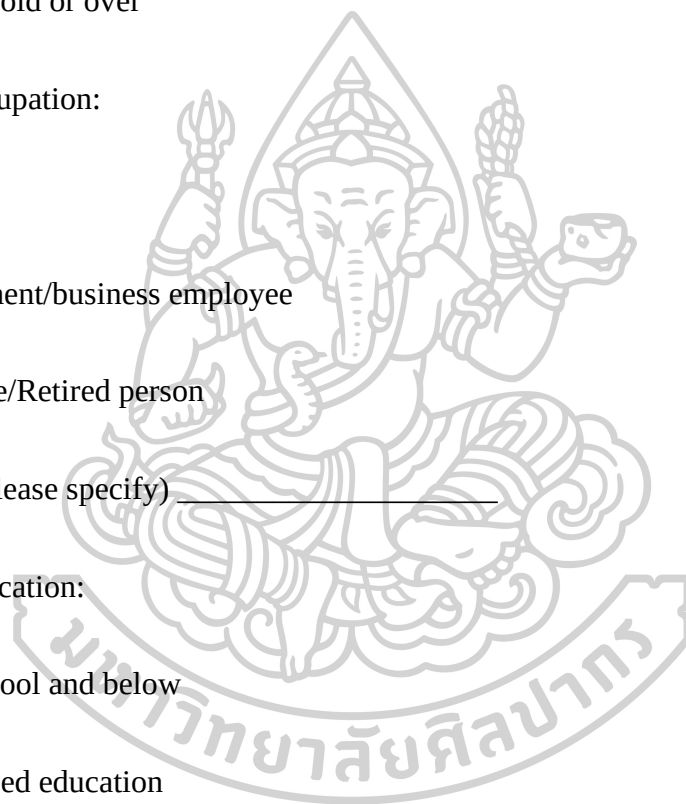
C. Bachelor's degree

D. Master's degree or higher

6. Your monthly income:

A. Less than 2000 RMB

B. 2001- 5000 RMB



C.5001- 8000 RMB

D. More than 8000 RMB

Part II: Tourism Behavior

7. How many times have you travelled to Taiyuan?

A. 1 time

B. 2-3 times

C. More than 3 times

Other (Please specify) _____

8. How long will you stay in Taiyuan?

A. Within 1 day

B. 1 - 2 days

C. 3 - 5 days

D. More than 5 days

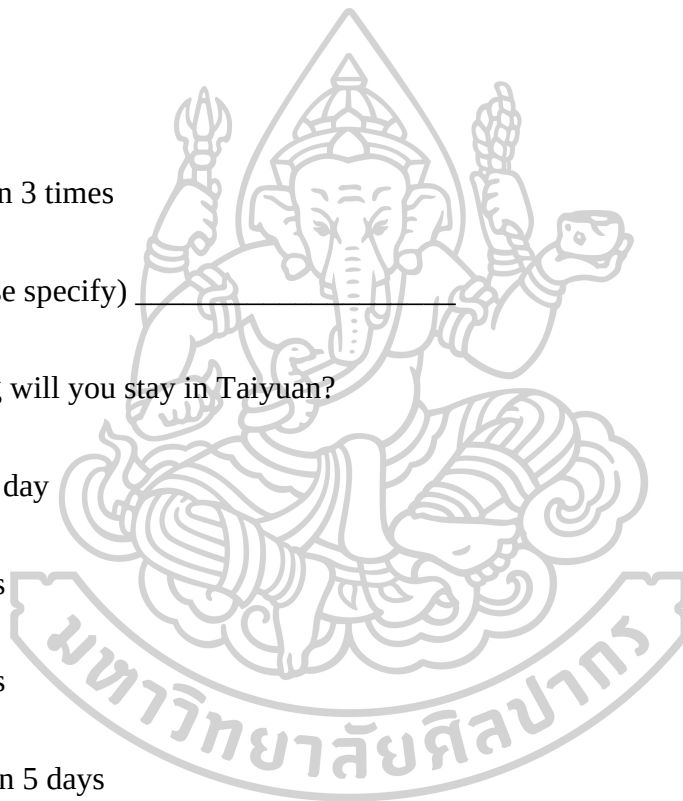
9. With whom you travel to Taiyuan ?

A. Alone

B. With family

C. With colleagues/friends

D. Other (Please specify) _____



10. How about your travel budget in Taiyuan ?

A. Less than 1000 RMB

B. 1001 - 3000 RMB

C. 3001 - 5000 RMB

D. More than 5000 RMB

11. What is your purpose of visiting Taiyuan?

A. Sightseeing (To see the famous scenery, historical monuments, etc.)

B. Recreation (To relax and enjoy the slow life)

C. Cultural experience (Tasting food, participating in folk life, visiting museums, etc.)

D. Other (Please specify) _____

12. How did you get Taiyuan tourism information?

A. Television and radio

B. Social Media

C. Introduced by family and friends

D. Other (Please specify) _____

13. What did you spend most during your trip to Taiyuan?

A. Accommodation

B. Food

C. Shopping

D. Other (Please specify) _____

14. What were the main attractions you visited during your trip to Taiyuan?

A. Jinci Park

B. Taiyuan Ancient Country Town

C. Zhonglou Walking Street

D. Other (Please specify) _____

Part III Tourist Satisfaction

15. How well do you know Taiyuan's tourist attractions?

A. Excellent

B. Good

C. Fair

D. Poor

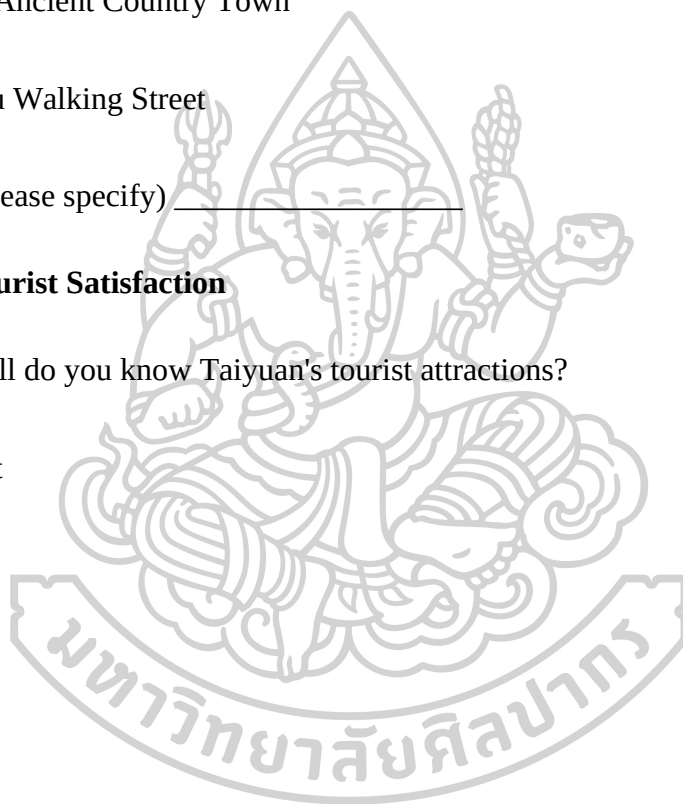
16. What is your expectations for recreational tourism in Taiyuan?

A. Excellent

B. Good

C. Fair

D. Poor



17. Did the trip in Taiyuan meet your expectations?

A. Excellent

B. Good

C. Fair

D. Poor

18. Do you think your overall travel costs in Taiyuan were reasonable?

A. Excellent

B. Good

C. Fair

D. Poor

19. What do you think of the environment of tourism attractions in Taiyuan?

A. Excellent

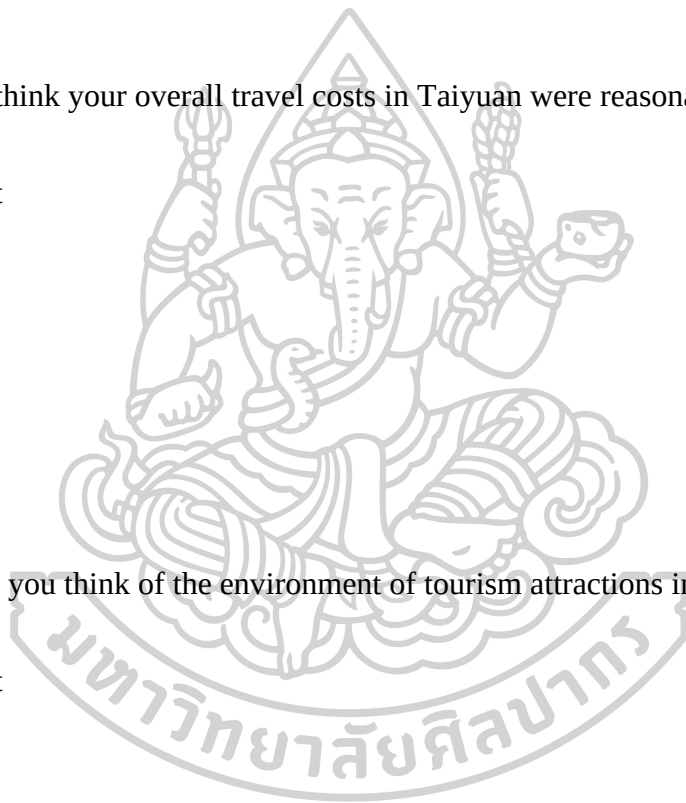
B. Good

C. Fair

D. Poor

20. How to improve the environment tourism attractions in Taiyuan? (Multiple choice)

A. Increasing greening and improving air quality



B. Strengthening waste management and classifying scenic spots

C. Reduce tourist congestion and improve sightseeing comfort

D. Strengthening the protection of cultural heritage and natural resources

21. Which of the infrastructures in Taiyuan's tourist attractions are you most concerned about in Taiyuan? (Please rank from highest to lowest)

A. Reception facilities (Travel information and navigation)

B. Entertainment facilities (Supporting entertainment facilities for tourist attractions)

C. Safety facilities (Equipment maintenance and peripheral safety management)

D. Transportation facilities (Transportation convenience within and around tourist attractions)

22. Which of the quality of staff serving Taiyuan tourist attractions concerns you the most in Taiyuan? (Please rank from highest to lowest)

A. Professional competence (Having relevant qualifications)

B. Service attitude (Uniform dress code)

C. Service quality (Popularity of Putonghua and foreign languages)

D. Health condition

23. Which activities would you like to participate in Taiyuan ? (Multiple choice)

A. In-depth cultural heritage experience (e.g. archaeology, explanation of ancient buildings, etc.)

B. Natural ecology tours (e.g. hiking, camping, etc.)

C. Food tour (such as local special food tasting, food festival activities)

D. Sports and outdoor activities (e.g. cycling race, concert, etc.)

24. What do you think the specialty of Taiyuan recreational tourism? (Multiple Choice)

A. Historical monuments and natural scenery (e.g. Jin Temple, Twin Pagodas Temple and other attractions with deep historical background or Fen River scenic area, mountains and forest resources around Taiyuan)

B. Folk culture (e.g. Shanxi noodle culture, traditional festivals, local opera, paper-cutting, etc.)

C. Festivals and events (e.g. Taiyuan International Marathon, concerts, temple festivals, local folklore exhibitions, etc.)

D. Other (Please specify) _____

25. Do you think the prices of tourist attractions in Taiyuan are reasonable?

A. Excellent

B. Good

C. Fair

D. Poor

26. Do you think Taiyuan's tourist attractions are transparent about their fees and concessions?

- A. Excellent
- B. Good
- C. Fair
- D. Poor

27. Do you think there is compulsory consumption in Taiyuan's tourist attractions?

- A. Excellent
- B. Good
- C. Fair
- D. Poor

28. What do you think about the recreational tourism resources in Taiyuan?

- A. Excellent, there are many places worth visiting
- B. Good, basically able to meet the demand
- C. Fair, needs further development
- D. Poor, fewer attractions to choose from

29. Would you choose Taiyuan as a recreational tourism destination again?

- A. Probably would
- B. Not sure
- C. Probably would not
- D. Definitely would not

30. Would you recommend Taiyuan as a recreational tourism destination to friends or

family?

- A. Probably would recommend
- B. Not sure
- C. Probably would not recommend
- D. Definitely would not recommend



Appendix B: Interview Form on Recreational Tourism in Taiyuan

Dear Madam / Sir,

This interview form is mainly used to interview the staff of Taiyuan City Tourism Bureau, local residents, staff of tourist attractions, and staff of travel companies. All the data collected will be used for academic research only, and we sincerely thank you for your participation, as well as your support and help for this study!

1. Does Taiyuan have a high-quality tourism service team? Is there any problem of brain drain or lack of professional competence of service personnel?
2. What innovative management methods has Taiyuan adopted to improve the quality of tourism services, optimize the operation of tourism attractions, or enhance tourists' experience? Have these management methods achieved the expected results in actual implementation, or have there been any unexpected problems?
3. Could you analyze the unique advantages of these resources in attracting tourists in relation to Taiyuan's natural scenery, cultural heritage or other specialty resources, and at the same time, does Taiyuan face any resource waste, over-exploitation or other sustainability problems in the process of resource development and protection? How do these problems affect the long-term development of recreational tourism in Taiyuan?
4. Could you analyze whether Taiyuan's capital investment in tourism infrastructure construction, special tourism project development or marketing promotion is reasonable from the perspective of actual capital operation? Has the use of these funds

achieved the expected economic and social benefits, or are there problems such as uneven distribution of funds and inefficient use of funds?



Appendix C: Process of Connoisseurship

1. Pre-meeting preparation

- (1) The host creates a link to the Tencent meeting and sends it to the experts.
- (2) Wait for the experts to enter the meeting and then check the equipment. (camera, microphone)

2. Meeting Process

- (1) The host opens the meeting and introduces the participating experts.
- (2) The host presents the meeting's goal and the pertinent strategies for discussion.
- (3) Expert Discussion
 - 1) Please discuss the feasibility of these strategies overall to improve the attractiveness of tourist attractions in Taiyuan City. Please prioritize all strategies.

(Which strategies have the highest feasibility? Which has the lowest? Why?)
 - 2) Please separately discuss the feasibility of SO strategies for improving the attractiveness of tourist attractions in Taiyuan City and provide valuable suggestions for these strategies.

(What additional activities could be added? Please explore the implementation challenges and potential solutions for emerging sectors like low-altitude tourism. How can we enhance the synergy between crowd-drawing events and cultural tourism resources?)

Please separately discuss the feasibility of ST strategies to improving the attractiveness of tourist attractions in Taiyuan City and provide valuable suggestions for these strategies.

(What other activities could be organized? Does this strategy fully leverage Taiyuan's unique resources? In addressing homogenized competition from surrounding areas, what measures could further strengthen differentiation?)

Please separately discuss the feasibility of WO strategies for improving the attractiveness of tourist attractions in Taiyuan City and provide valuable suggestions for these strategies.

(What other activities can enhance the appeal of Taiyuan's tourist attractions? Can multilingual services combined with smart devices truly replace professional foreign language talent? How can we balance “low-price traffic generation” with “service quality” to avoid falling into a price war?)

Please separately discuss the feasibility of WT strategies to improving the attractiveness of tourist attractions in Taiyuan City and provide valuable suggestions for these strategies.

(What other activities can be developed? How can niche intangible cultural heritage in rural areas sustainably attract visitors through market-oriented approaches? How can long-term mechanisms for community participation in resource conservation be designed to avoid becoming mere formalities?)

3) Other suggestions

(4) Meeting Summary

- 1) The moderator briefly summarized the content of the meeting;
- 2) Express gratitude to the participating experts;
- 3) Announce the end of the meeting.

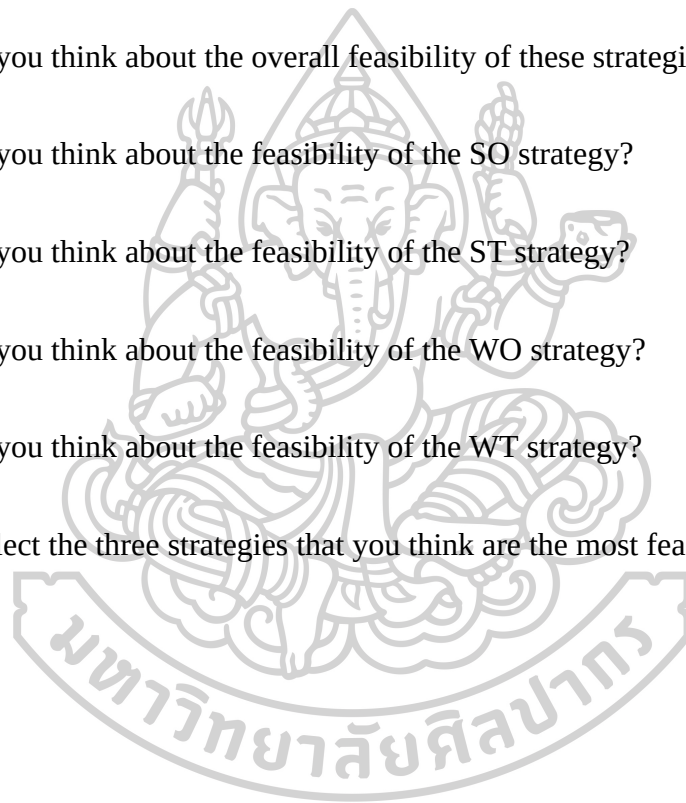
3. Group photo



Appendix D: Interview Form on Strategy Feasibility

This interview form is mainly used to interview the staff of the Taiyuan City Tourism Bureau, tourist attraction managers, travel company managers, and tourists. All the data collected is only used for academic research, and we sincerely thank you for your participation, as well as your support and help for this study!

1. What do you think about the overall feasibility of these strategies?
2. What do you think about the feasibility of the SO strategy?
3. What do you think about the feasibility of the ST strategy?
4. What do you think about the feasibility of the WO strategy?
5. What do you think about the feasibility of the WT strategy?
6. Please select the three strategies that you think are the most feasible and explain the reasons.



Appendix E: Expert Evaluation Form for Questionnaire Validity

Dear Experts:

I am a Ph.D. student of Recreation Tourism and Sport Management, Faculty of Education, Silpakorn University, Thailand. My thesis is titled “Strategy of recreational tourism management for promoting tourist attractions in Taiyuan”. Now, I am currently designing a questionnaire about leisure tourism in Taiyuan city, aiming to investigate tourists' travel experience and satisfaction during their visit to Taiyuan city. In order to evaluate the validity of the questionnaire, I would like to consult you and ask for your opinion. Please provide your valuable comments! I would like to thank you sincerely!

The following criteria was used by the experts to assess whether the tool could be used as an instrument for data collection for this study:

+1 indicates Sure that the information is appropriate

0 indicates Unsure of the appropriateness of the information

-1 indicates Sure that the information is not appropriate

Please tick "√" the appropriate box.

Silpakorn University Student (Thailand): Ying Lu

April, 2025

Contents	Rating			Suggestion
	+	0	-1	
Basic Information				
1. Your gender:				
A. Male				
B. Female				
2. You come from _____				
3. Your age :				
A. Under 18 years old				
B. 19-40 years old				
C. 41-60 years old				
D. 61 years old or over				
4. Your occupation:				
A. Student				
B. Government/business employee				
C. Freelance/Retired person				
D. Other(please specify) _____				

5. Your education: A. High school and below B. Specialized education C. Bachelor's degree D. Master's degree or higher				
6. Your monthly income: A. Less than 2000 RMB B. 2001 - 5000 RMB C. 5001 - 8000 RMB E. More than 8000 RMB				
Tourism Behavior				
7. How many times have you travelled to Taiyuan? A. 1 time B. 2-3 times C. More than 3 times D. Other (please specify) _____				
8. How long will you stay in Taiyuan?				

A. Within 1 day B. 1-2 days C. 3-5 days D. More than 5 days				
9. With whom you travel to Taiyuan ? A. Alone B. With family C. With colleagues/friends D. Other (please specify) _____				
10. How about your travel budget in Taiyuan ? A. Less than 1000 RMB B. 1001-3000 RMB C. 3001-5000 RMB D. More than 5000 RMB				
11. What is your purpose to visit Taiyuan? A. Sightseeing (to see the famous scenery, historical monuments, etc.) B. recreation (to relax and enjoy the slow life)				

C. Cultural experience (tasting food, participating in folk life, visiting museums, etc.) D. Other (please specify) _____				
12. How did you get Taiyuan tourism information? A. Television and radio B. Internet C. Introduced by family and friends D. Other (please specify) _____				
13. What did you spend most during your trip to Taiyuan? A. Accommodation B. Food C. Shopping D. Other (please specify) _____				
14. What were the main attractions you visited during your trip to Taiyuan? A. Jinci Park				

B. Taiyuan Ancient County Town C. Zhonglou Walking Street D. Other (please specify) _____				
Tourist Satisfaction				
15. How well do you know Taiyuan's tourist attractions? A. Excellent B. Good C. Fair D. Poor				
16. What is your expectations for recreational tourism in Taiyuan? A. Excellent B. Good C. Fair D. Poor				
17. Did the trip in Taiyuan meet your expectations?				

A. Excellent B. Good C. Fair D. Poor				
18. Do you think your overall travel costs in Taiyuan were reasonable? A. Excellent B. Good C. Fair D. Poor				
19. What do you think of the environment of tourism attractions in Taiyuan? A. Excellent B. Good C. Fair D. Poor				
20. How to improve the environment tourism attractions in Taiyuan? (Multiple choice)				

A. Increasing greening and improving air quality B. Strengthening waste management and classifying scenic spots C. Reduce tourist congestion and improve sightseeing comfort D. Strengthening the protection of cultural heritage and natural resources				
21. Which of the infrastructures in Taiyuan's tourist attractions are you most concerned about? (Please rank from highest to lowest) A. Reception facilities (travel information and navigation) B. Entertainment facilities (supporting entertainment facilities for tourist attractions) C. Safety facilities (equipment maintenance and peripheral safety management) D. Transportation facilities (transportation convenience within and around tourist attractions)				

22. Which of the quality of staff serving Taiyuan tourist attractions concerns you the most? (Please rank from highest to lowest) A. Professional competence (having relevant qualifications) B. Service attitude (uniform dress code) C. Service quality (popularity of Putonghua and foreign languages) D. Health condition				
23. Which activities would you like to participate in Taiyuan ? (Multiple choice) A. In-depth cultural heritage experience (e.g. archaeology, explanation of ancient buildings, etc.) B. Natural ecology tours (e.g. hiking, camping, etc.) C. Food tour (such as local special food tasting, food festival activities) D. Sports and outdoor activities (e.g. cycling race, concert, etc.)				

24. What do you think the specialty of Taiyuan recreational tourism? (Multiple Choice) A. Historical monuments and natural scenery (e.g. Jin Temple, Twin Pagodas Temple and other attractions with deep historical background or Fen River scenic area, mountains and forest resources around Taiyuan) B. Folk culture (e.g. Shanxi noodle culture, traditional festivals, local opera, paper-cutting, etc.) C. Festivals and events (e.g. Taiyuan International Marathon, concerts, temple festivals, local folklore exhibitions, etc.) D. Other (please specify) _____				
25. Do you think the prices of tourist attractions in Taiyuan are reasonable? A. Excellent B. Good C. Fair				

D. Poor				
26. Do you think Taiyuan's tourist attractions are transparent about their fees and concessions? A. Excellent B. Good C. Fair D. Poor				
27. Do you think there is compulsory consumption in Taiyuan's tourist attractions? A. Excellent B. Good C. Fair D. Poor				
28. What do you think about the recreational tourism resources in Taiyuan? A. Excellent, there are many places worth visiting B. Good, basically able to meet the demand C. Fair, needs further development				

D. Poor, fewer attractions to choose from				
29. Would you choose Taiyuan as a recreational tourism destination again? A. Probably would B. Not sure C. Probably would not D. Definitely would not				
30. Would you recommend Taiyuan as a recreational tourism destination to friends or family? A. Probably would recommend B. Not sure C. Probably would not recommend D. Definitely would not recommend				

Please give me your valuable comments on what you think needs to be done to improve this questionnaire.

Expert Signature

April , 2025

Appendix F: Expert Evaluation Form for Interview Form Validity

Dear Experts:

I am a Ph.D. student of Recreation Tourism and Sport Management, Faculty of Education, Silpakorn University, Thailand. My thesis is titled “Strategy of recreational tourism management for promoting tourist attractions in Taiyuan”. Now I am currently designing an interview form about leisure tourism in Taiyuan city, aiming to investigate tourists' travel experience and satisfaction during their visit. To ensure the validity of the interview form, I would greatly appreciate your expert opinion and feedback. Thank you sincerely for your time and valuable comments.

The following criteria was used by the experts to assess whether the tool could be used as an instrument for data collection for this study:

+1 indicates Sure that the information is appropriate

0 indicates Unsure of the appropriateness of the information

-1 indicates Sure that the information is not appropriate

Please tick "√" the appropriate box.

Silpakorn University Student (Thailand): Ying Lu

April , 2025

Contents	Rating			Suggestion
	+	0	-1	

	1			
1. Does Taiyuan have a high-quality tourism service team? Is there any problem of brain drain or lack of professional competence of service personnel?				
2. What innovative management methods has Taiyuan adopted to improve the quality of tourism services, optimize the operation of tourism attractions, or enhance tourists' experience? Have these management methods achieved the expected results in actual implementation or have there been any unexpected problems?				
3. Could you analyze the unique advantages of these resources in attracting tourists in relation to Taiyuan's natural scenery, cultural heritage or other specialty resources, and at the same time, does Taiyuan face any resource waste, over-exploitation or other sustainability problems in the process of resource development and protection? How do these problems affect the long-term development of				

recreational tourism in Taiyuan?				
4. Could you analyze whether Taiyuan's capital investment in tourism infrastructure construction, special tourism project development or marketing promotion is reasonable from the perspective of actual capital operation? Has the use of these funds achieved the expected economic and social benefits, or are there problems such as uneven distribution of funds and inefficient use of funds?				

Please give me your valuable comments on what you think needs to be done to improve this interview form.

Expert Signature

April , 2025

Appendix G: Results of IOC of Questionnaire

Contents	Expert			IOC
	A	B	C	
Basic Information				
1.Your gender:	+1	+1	+1	1
A. Male				
B. Female				
2. You come from_____	+1	+1	+1	1
3. Your age :	+1	+1	+1	1
A. Under 18 years old				
B. 19-40 years old				
C. 41-60 years old				
D. 61 years old or over				
4. Your occupation:	+1	+1	+1	1
A. Student				
B. Government/business employee				
C. Freelance/Retired person				

D. Other (please specify) _____				
5. Your education:	+1	+1	+1	1
A. High school and below				
B. Specialized education				
C. Bachelor's degree				
D. Master's degree or higher				
6. Your monthly income:	+1	+1	+1	1
A. Less than 2000 RMB				
B. 2001 - 5000 RMB				
C. 5001 - 8000 RMB				
D. More than 8000 RMB				
Tourism Behaviour				
7. How many times have you travelled to Taiyuan?	+1	+1	+1	1
A. 1 time				
B. 2-3 times				
C. More than 3 times				
Other (please specify) _____				
8. How long will you stay in Taiyuan?	+1	+1	+1	1

A. Within 1 day B. 1-2 days C. 3-5 days D. More than 5 days				
9. With whom you travel to Taiyuan ? A. Alone B. With family C. With colleagues/friends D. Other (please specify) _____	+1	+1	+1	1
10. How about your travel budget in Taiyuan ? A. Less than 1000 RMB B. 1001-3000 RMB C. 3001-5000 RMB D. More than 5000 RMB	+1	+1	+1	1
11. What is your purpose to visit Taiyuan? A. Sightseeing (to see the famous scenery, historical monuments, etc.) B. Recreation (to relax and enjoy the slow life)	+1	+1	+1	1

C. Cultural experience (tasting food, participating in folk life, visiting museums, etc.) D. Other (please specify) _____				
12. How did you get Taiyuan tourism information? A. Television and radio B. Internet C. Introduced by family and friends D. Other (please specify) _____	+1	0	+1	0.66
13. What did you spend most during your trip to Taiyuan? A. Accommodation B. Food C. Shopping D. Other (please specify) _____	+1	+1	+1	1
14. What were the main attractions you visited during your trip to Taiyuan? A. Jinci Park B. Taiyuan Ancient County Town C. Zhonglou Walking Street	+1	+1	+1	1

D. Other (please specify) _____				
Tourist Satisfaction				
15. How well do you know Taiyuan's tourist attractions? A. Excellent B. Good C. Fair D. Poor	+1	+1	+1	1
16. What is your expectations for recreational tourism in Taiyuan? A. Excellent B. Good C. Fair D. Poor	+1	+1	+1	1
17. Did the trip in Taiyuan meet your expectations? A. Excellent B. Good C. Fair D. Poor	+1	+1	+1	1

18. Do you think your overall travel costs in Taiyuan were reasonable? A. Excellent B. Good C. Fair D. Poor	+1	+1	+1	1
19. What do you think of the environment of tourism attractions in Taiyuan? A. Excellent B. Good C. Fair D. Poor	+1	+1	+1	1
20. How to improve the environment tourism attractions in Taiyuan? (Multiple choice) A. Increasing greening and improving air quality B. Strengthening waste management and classifying scenic spots C. Reduce tourist congestion and improve sightseeing comfort	+1	+1	+1	1

D. Strengthening the protection of cultural heritage and natural resources				
21. Which of the infrastructures in Taiyuan's tourist attractions are you most concerned about? (Please rank from highest to lowest) A. Reception facilities (travel information and navigation) B. Entertainment facilities (supporting entertainment facilities for tourist attractions) C. Safety facilities (equipment maintenance and peripheral safety management) D. Transportation facilities (transportation convenience within and around tourist attractions)	+1	+1	+1	1
22. Which of the quality of staff serving Taiyuan tourist attractions concerns you the most? (Please rank from highest to lowest) A. Professional competence (having relevant qualifications) B. Service attitude (uniform dress code) C. Service quality (popularity of Putonghua and foreign languages) D. Health condition	+1	+1	+1	1

23. Which activities would you like to participate in Taiyuan ? (Multiple choice) A. In-depth cultural heritage experience (e.g. archaeology, explanation of ancient buildings, etc.) B. Natural ecology tours (e.g. hiking, camping, etc.) C. Food tour (such as local special food tasting, food festival activities) D. Sports and outdoor activities (e.g. cycling race, concert, etc.)	+1	+1	+1	1
24. What do you think the specialty of Taiyuan recreational tourism? (Multiple Choice) A. Historical monuments and natural scenery (e.g. Jin Temple, Twin Pagodas Temple and other attractions with deep historical background or Fen River scenic area, mountains and forest resources around Taiyuan) B. Folk culture (e.g. Shanxi noodle culture, traditional festivals, local opera, paper-cutting, etc.) C. Festivals and events (e.g. Taiyuan International Marathon, concerts, temple festivals, local folklore exhibitions, etc.) D. Other (please specify) _____	+1	+1	+1	1

25. Do you think the prices of tourist attractions in Taiyuan are reasonable? A. Excellent B. Good C. Fair D. Poor	+1	+1	+1	1
26. Do you think Taiyuan's tourist attractions are transparent about their fees and concessions? A. Excellent B. Good C. Fair D. Poor	+1	+1	+1	1
27. Do you think there is compulsory consumption in Taiyuan's tourist attractions? A. Excellent B. Good C. Fair D. Poor	+1	+1	+1	1
28. What do you think about the recreational tourism resources in Taiyuan? A. Excellent, there are many places worth visiting	+1	+1	+1	1

B. Good, basically able to meet the demand C. Fair, needs further development D. Poor, fewer attractions to choose from				
29. Would you choose Taiyuan as a recreational tourism destination again? A. Probably would B. Not sure C. Probably would not D. Definitely would not	+1	+1	+1	1
30. Would you recommend Taiyuan as a recreational tourism destination to friends or family? A. Probably would recommend B. Not sure C. Probably would not recommend D. Definitely would not recommend	+1	+1	+1	1

Appendix H: Results of IOC of Interview Form

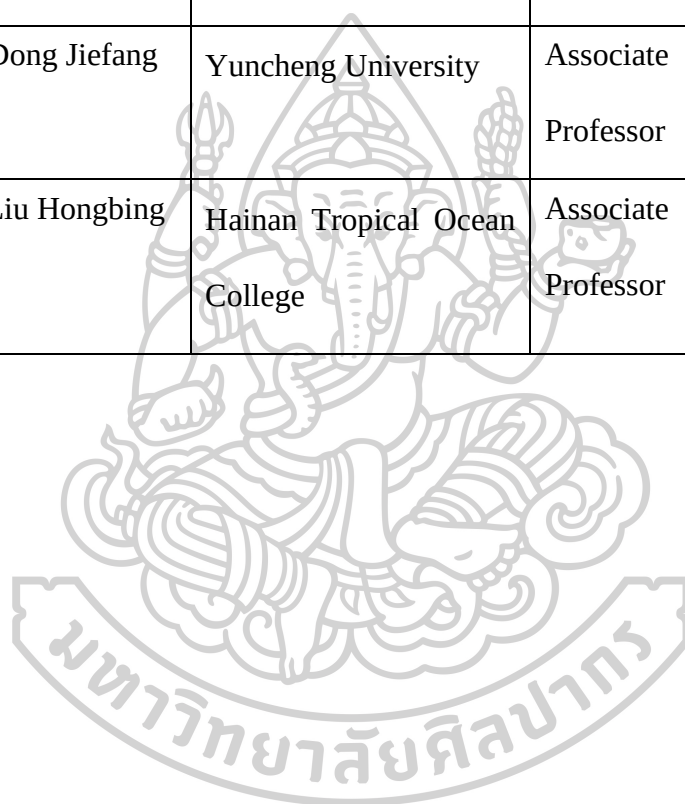
Contents	Expert			IOC
	A	B	C	
1. Does Taiyuan have a high-quality tourism service team? Is there any problem of brain drain or lack of professional competence of service personnel?	+1	+1	+1	1
2. What innovative management methods has Taiyuan adopted to improve the quality of tourism services, optimize the operation of tourism attractions, or enhance tourists' experience? Have these management methods achieved the expected results in actual implementation or have there been any unexpected problems?	+1	+1	+1	1
3. Could you analyze the unique advantages of these resources in attracting tourists in relation to Taiyuan's natural scenery, cultural heritage or other speciality resources, and at the same time, does Taiyuan face any resource waste, over-exploitation or other sustainability problems in the process of resource development and protection? How do these problems affect the long-term development of recreational tourism in Taiyuan?	+1	0	+1	0.66
4. Could you analyze whether Taiyuan's capital investment in tourism infrastructure construction, special tourism project development or marketing promotion is reasonable from the	+1	+1	0	0.66

perspective of actual capital operation? Has the use of these funds achieved the expected economic and social benefits, or are there problems such as uneven distribution of funds and inefficient use of funds?				
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Appendix I: List of IOC

No.	Name	Work unit	Professional title	Educational qualifications
1	Mr. Xu Anfeng	Hainan Tropical Ocean College	Professor	Ph.D.
2	Ms. Dong Jiefang	Yuncheng University	Associate Professor	Ph.D.
3	Mr. Liu Hongbing	Hainan Tropical Ocean College	Associate Professor	MA.



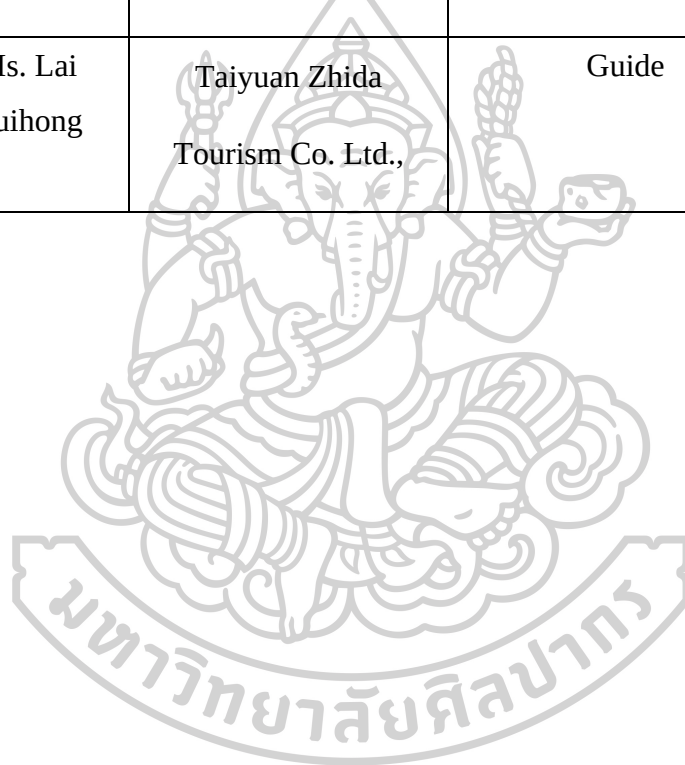
Appendix J:List of Interview

List of Interviewees	Unit	Interview Date
Interviewee 1	Manager of Taiyuan tourism company	18/06/2025
Interviewee 2	Manager of Taiyuan tourism company	18/06/2025
Interviewee 3	Staff of the Taiyuan City Tourism Bureau	18/06/2025
Interviewee 4	Manager of Taiyuan tourism company	19/06/2025
Interviewee 5	Staff of Jinci Park	23/06/2025
Interviewee 6	Staff of Taiyuan Ancient County Town	23/06/2025
Interviewee 7	Staff of Taiyuan Botanical Garden	23/06/2025
Interviewee 8	Staff of Former Site of Shanxi Governor's Office (Jinshang Museum)	24/06/2025
Interviewee 9	Staff of Zhonglou Walking Street	24/06/2025
Interviewee 10	Resident in Taiyuan (40)	24/06/2025
Interviewee 11	Resident in Taiyuan (20)	24/06/2025
Interviewee 12	Resident in Taiyuan (56)	24/06/2025
Interviewee 13	Staff of Taiyuan Shuangta Temple Park.	25/06/2025
Interviewee 14	Staff of the Taiyuan City Tourism Bureau	25/06/2025
Interviewee 15	Staff of the Taiyuan City Tourism Bureau	25/06/2025

Appendix K:List of Connoisseurship

No.	Name	Work unit	Professional title	Educational qualifications
1	Mr. Gao Nan	Shanxi University of Finance and Economics	Professor (Tourism Management Field)	Doctor
2	Mr. Zhang Xincheng	Shanxi University of Finance and Economics	Professor (Recreation and Tourism Management Field)	Doctor
3	Ms. Zhang Yan	Shanxi Vocational University of Culture and Tourism	Professor (Culture and Tourism Management Field)	Doctor
4	Mr. Zhang Han	Guotai Haitong Securities Co. Ltd.,	General Manager of Industry Research Department (Tourism Field)	Master
5	Ms. Wang Jia	Taiyuan City Culture and Tourism Bureau	Deputy Director	Master

6	Mr. Su Qibin	Shuangta Temple	Director	Bachelor
7	Mr. Jiang Qi	Wucheng community in Taiyuan	Director	Master
8	Ms. Zhu Meilin	Taiyuan Gangzhonglv Tourism Co. Ltd.,	Executive Director	Bachelor
9	Ms. Lai Ruihong	Taiyuan Zhida Tourism Co. Ltd.,	Guide	Bachelor



Appendix L: Invitation of IOC



No. 8612/2637

Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

May 19, 2025

Title: Invitation to be an inspector of research tool quality

Dear Associate Professor Dong Jiefang, Ph.D.

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. In this regard, Faculty of Education, Silpakorn University would like to invite you to inspect the quality of research tools for the student.

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "Siriwan V." with a stylized flourish at the end.

Assoc. Prof. Dr. Siriwat Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095



No. 8612/2638

Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

May 19, 2025

Title: Invitation to be an inspector of research tool quality

Dear Professor Xu Anfeng, Ph.D.

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. In this regard, Faculty of Education, Silpakorn University would like to invite you to inspect the quality of research tools for the student.

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

x *Siriwan.Y*

Assoc. Prof. Dr. Siriwan Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095



No. 8612/2639

Faculty of Education, Silpakorn University
 Sanamchandra Palace Campus,
 Nakhon Pathom 73000, Thailand

May 19, 2025

Title: Invitation to be an inspector of research tool quality

Dear Associate Professor Liu Hongbing, MA.

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. In this regard, Faculty of Education, Silpakorn University would like to invite you to inspect the quality of research tools for the student.

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

A handwritten signature in blue ink that reads "Sirinam V."

Assoc. Prof. Dr. Sirinam Vanichwatanavorachai
 Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
 Nakhon Pathom, Office Tel. 034-255-095

Appendix M: Invitation Letter of Connoisseurship

No. 8612/3156



Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

August 7, 2025

Title: Invitation to Attend the Expert Reference Seminar on Connoisseurship

Dear Professor Gao Nan, Ph.D.

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. would like to invite you to join the expert reference seminar (Connoisseurship) to support the dissertation process

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

A handwritten signature in blue ink, which appears to read "Siriwan.V".

Assoc. Prof. Dr.Siriwan Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095

No. 8612/3757



Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

August 7, 2025

Title: Invitation to Attend the Expert Reference Seminar on Connoisseurship

Dear Professor Zhang Xincheng, Ph.D.

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. would like to invite you to join the expert reference seminar (Connoisseurship) to support the dissertation process

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

Assoc. Prof. Dr. Sirirwan Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095

No. 8612/3758



Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

August 7, 2025

Title: Invitation to Attend the Expert Reference Seminar on Connoisseurship

Dear Professor Zhang Yan, Ph.D.

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. would like to invite you to join the expert reference seminar (Connoisseurship) to support the dissertation process

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

Assoc. Prof. Dr. Siriwan Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095

No. 8612/3759



Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

August 7, 2025

Title: Invitation to Attend the Expert Reference Seminar on Connoisseurship

Dear Zhang Han,

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. would like to invite you to join the expert reference seminar (Connoisseurship) to support the dissertation process

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

Assoc. Prof. Dr.Siriwan Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095



No. 8612/3760

Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

August 7, 2025

Title: Invitation to Attend the Expert Reference Seminar on Connoisseurship

Dear Wang Jia,

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. would like to invite you to join the expert reference seminar (Connoisseurship) to support the dissertation process

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

A handwritten signature in blue ink that reads "Sirinam.V".

Assoc. Prof. Dr.Siriwan Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095



No. 8612/3766

Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

August 7, 2025

Title: Invitation to Attend the Expert Reference Seminar on Connoisseurship

Dear Su Qibin,

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. would like to invite you to join the expert reference seminar (Connoisseurship) to support the dissertation process

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

Assoc. Prof. Dr. Siriwan Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095

No. 8612/3767



Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

August 7, 2025

Title: Invitation to Attend the Expert Reference Seminar on Connoisseurship

Dear Jiang Qi,

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. would like to invite you to join the expert reference seminar (Connoisseurship) to support the dissertation process

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

A handwritten signature in blue ink, which appears to read "Sirirwan V.".

Assoc. Prof. Dr. Sirirwan Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095



No. 3768

Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

August 7, 2025

Title: Invitation to Attend the Expert Reference Seminar on Connoisseurship

Dear Zhu Meilin,

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. would like to invite you to join the expert reference seminar (Connoisseurship) to support the dissertation process

Your kind assistance and academic contribution is much appreciated.

Yours sincerely,

A handwritten signature in blue ink, which appears to read "Siriwan.V".

Assoc. Prof. Dr. Siriwan Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095

No. 8612/3769



Faculty of Education, Silpakorn University
Sanamchandra Palace Campus,
Nakhon Pathom 73000, Thailand

August 7, 2025

Title: Invitation to Attend the Expert Reference Seminar on Connoisseurship

Dear Lai Ruihong,

Miss Ying LU is a graduate student ID 650630081 at Silpakorn University and is studying for Doctor of Philosophy Program in Recreation Tourism and Sport Management at Faculty of Education, Silpakorn University. Currently, she is conducting her Independent study entitled: Strategy of Recreational Tourism Management for Promoting Tourist Attractions in Taiyuan. would like to invite you to join the expert reference seminar (Connoisseurship) to support the dissertation process

Your kind assistance and academic contribution is much appreciated.

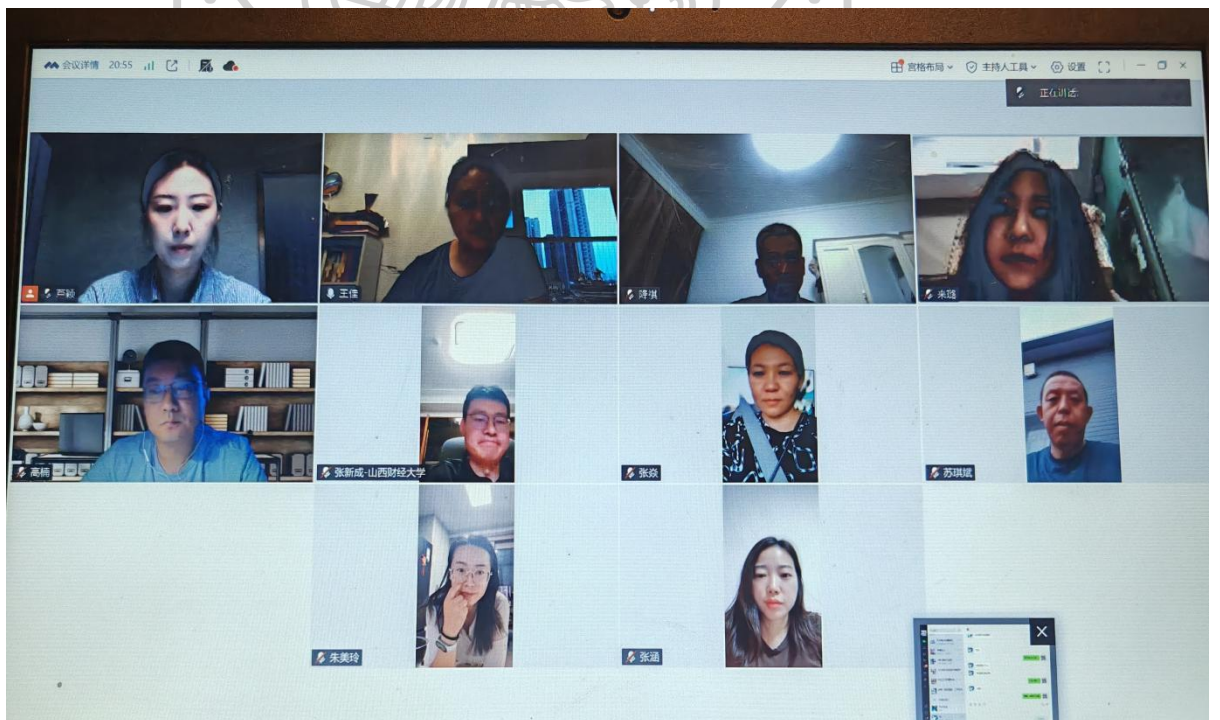
Yours sincerely,

A handwritten signature in blue ink, which appears to read "Siriwan.V".

Assoc. Prof. Dr.Siriwan Vanichwatanavorachai
Deputy Dean for Academic Affairs

Faculty of Education, Silpakorn University
Nakhon Pathom, Office Tel. 034-255-095

Appendix N: Photos of connoisseurship



Appendix O:Details of TOWS Matrix Analysis

ST Strategies:

1. S1 + T1: Respond to the threat of rapid changes in tourists' demand with the historical and cultural interpretation ability and service professionalism of the tour guide team. Segment the market according to tourists' interests and design thematic and niche in-depth explanation routes. Launch niche theme tours such as “Exploring the Secrets of the Jin Temple” and “Decoding the Art of Tianlong Mountain Grottoes”, led by senior tour guides, to meet the demand for personalized cultural experiences.
2. S1 + T2: Respond to the threat of service quality competition from neighboring cities with highly qualified service personnel and unique cultural explanations. Reinforce the label of “service differentiation” to create the reputation of “Taiyuan service”. Launch the “Gold Medal Tour Guide Challenge”, where the selected tour guides exclusively take the “Taiyuan Cultural Experience Special Line” and provide more than expected explanations (e.g., complimentary teaching of Jin Opera stanzas) to differentiate their services from those of neighboring cities.
3. S1 + T3: Respond to the threat of over-exploitation of cultural heritage with the cultural communication ability of tour guides. Incorporate the concept of resource protection into the guided tours and guide tourists to civilized tourism. Train tour guides to master “conservation-oriented explanation techniques”, add “cultural relics protection tips” to their explanations at core attractions such as the Jin Temple, and launch the “I'll take a picture of Taiyuan's cultural relics (no touching)” punch-card

campaign. and launched the “I take a picture of Taiyuan's cultural relics (no touching)” punch card activity.

4. S2 + T1: A perfect safety management system is used to cope with potential safety risks in the face of rapid changes in market demand. When responding quickly to new tourism demands, we will upgrade safety measures simultaneously. In response to the emerging demand for “hiking Xishan”, relying on the professional medical team of S2, we have set up “emergency medical points” along the hiking routes and introduced “safe hiking packages” (including insurance, guides and first aid kits), guide and first aid kit).

5. S2 + T2: Respond to the threat of vicious competition from low-quality products with standardized safety management and service standards. Create a “Safe Tourism Demonstration Area” brand to differentiate from imitation products. Jointly publish a white paper on tourism safety in Taiyuan with core attractions, publicize safety standards (e.g., the frequency of amusement ride inspections), and award “safety certification marks” to businesses that meet the standards, which are recommended by official platforms to enhance tourists' trust.

6. S2 + T3: Respond to the safety pressure of tourist overload during peak seasons with a professional emergency response and medical team. Strengthen safety control and improve the efficiency of emergency response during the peak tourist season. During the peak season, a “Safety Command Center” is set up in popular attractions such as the Jin Temple and the Zoo to monitor the flow of people in real time, and a

medical team is stationed on site to open a “Peak Season Emergency Channel” to ensure that emergencies are responded to within 10 minutes.

7. S3 + T1: Diversification of core resources to respond to the threat of increasingly diversified tourist demand. Combine historical sites with non-heritage to develop composite tourism products. Launch a “dual heritage experience tour”, visiting Tianlongshan Grottoes in the morning (tangible heritage), and experiencing the intangible heritage of “grotto statue clay molding” in the afternoon (intangible heritage), to meet the diversified needs of tourists for “viewing + participation”. This is to meet the diversified needs of tourists for “viewing + participation”.

8. S3 + T2: Respond to the threat of homogenized competition with scarce resources such as Jin Temple and Tianlong Mountain. Dig deep into the unique value of the scarce resources to create an unrepeatable product. Using the “Statue of the Maid of the Temple of the Holy Mother of God” of Jin Temple as IP, develop an immersive scripted tour “A Day in the Life of a Maid of God”, which combines the restoration of historical scenes and interactive puzzles, and utilize the uniqueness of the resources to form a differentiated competitiveness.

9. S3 + T3: Take advantage of 5G/wireless network coverage to counter the threat of over-development and the difference between off-peak and on-peak seasons. Balance resource protection and tourist experience through technical means to alleviate off-season idleness. Develop the “5G Cloud Tour of Jinci” online program, live broadcasting the attraction through VR technology in off-season, and tourists can watch the tour guide's explanation by paying for it online; offline launching the

“Off-season Staggered Peak Tour”, and enjoying discounts on tickets with the records of online cloud tours, so as to reduce the pressure of development in peak seasons.

SO strategies:

1. S1 + O1: Capitalize on the expanding domestic leisure tourism market with the professional competence of tour guides and service staff. Expand the supply of services to meet the cultural experience needs of more tourists. Carry out the “Tour Guide Expansion Program” to train more tour guides with knowledge of history and culture, and launch the “Family Cultural Tour” line, in which tour guides who are good at interacting with children will lead them to experience non-heritage handicrafts, so as to capture the family tourism market.

2. S1 + O2: Take advantage of the tour guides' cultural explanations, and utilize the opportunities of low-altitude tourism and other emerging industry policies. Combine the cultural explanation with the emerging industry to enhance the added value of the product. In line with O2's low-altitude tourism policy, launch the “helicopter + tour guide” package, tourists in the air overlooking the ancestral temple of Jin and the Western Hills, tour guides synchronized explanation of the historical background of the ground landscape, to achieve the "aerial sightseeing + cultural interpretation of the double experience.

3. S1 + O3: Use efficient tourist service centers to take advantage of traffic economy opportunities such as concerts. Provide convenient services during traffic events to convert temporary traffic into tourist consumers. Set up a “Taiyuan Tourism Service Station” at the concert venue, with S1 consultants providing one-hour short-distance

tour recommendations, direct shuttle buses from the concert to Jinci, and discounts on guided tours with concert tickets. 4. S2 (Improvement of security mechanisms, traffic economy)

4. S2 + O1: Capitalize on the growth in the number of tourists with professional security capabilities. Use safety as a selling point to attract customers with high safety requirements (e.g. senior citizens, parent-child groups). Create the “Safe and Secure Tour in Taiyuan” brand, and launch the “Safe and Secure Tour for the Elderly” for the elderly segment, which includes full medical accompaniment and barrier-free facilities, and relies on S2's emergency response mechanism to reduce safety concerns.

5. S2 + O2: Use mature emergency management experience to capitalize on the government's policy support for recreation tourism. Seek policy funding to upgrade safety facilities and set up industry safety benchmarks. Apply for policy funding to pilot an “intelligent safety early warning system” in key attractions (combined with AI to monitor the flow of people and the weather), linking with S2's medical team to realize “early warning of risks - rapid response to emergencies”, and create a safety demonstration project supported by policy. 6. S2 + O3 (Policy Support)

6. S2 + O3: Use the safety management capacity within the attraction and take advantage of the opportunity to improve transportation connections between attractions. Optimize the safety connection of inter-attraction tours and enhance the experience of multi-attraction linkage. For the dedicated tourist buses opened in O3, set up “safety guides” between the bus stops and the entrances of scenic spots to assist

tourists in safe transfers; and provide “safety brochures” (including emergency numbers of each scenic spot) for tourists on cross-scenic spot tours.

7. S3 + O1: Capitalize on the growing demand from tourists with abundant resources and perfect hardware. Develop “resources + technology” integration products to attract different types of tourists. In attractions such as the Jin Temple, the 5G coverage of S3 is utilized to launch the “AR non-legacy interactive” program, where tourists can trigger non-legacy animations (e.g., Jin opera characters explaining the history) by scanning the monuments to satisfy young tourists' demand for technology + culture.

8. S3 + O2: Take advantage of the unique natural and cultural resources, and utilize the policy to encourage the development of new modes such as water tourism. Combine resource characteristics to develop emerging industry products. Based on O2's policy planning, develop a “water culture route” on Fen River, where tourists can enjoy the “Fen River Evening Ferry” along the way while watching the historical images of Jin Temple and Tianlong Mountain Grottoes on the big screen on the boat. "The guide will explain the connection between the Fen River and Taiyuan civilization.

9. S3 + O3: Use cultural and creative IPs and cultural and museum resources to capitalize on online platforms and traffic event opportunities. Take advantage of the traffic heat to promote cultural and creative products and enhance brand influence. During the marathon, the online platform (Jittery Voice, Little Red Book) initiated the “Taiyuan Wenbo Blind Box” lottery, which contains S3's special cultural creations

(such as Tianlongshan Grotto replica ornaments); offline at the end of the race to set up the cultural creations display area, where tourists can scan the code to see the historical story behind the cultural creations.

WO strategies:

1. W1 + O1: In response to the disadvantage of the shortage of talents, take advantage of the opportunity of the expansion of the tourism market for more service personnel. Attract and train professionals through policies and market demand. To address the shortage of foreign language talents, cooperate with local universities to set up “Taiyuan Tourism Talent Orientation Classes”, providing scholarships and attraction internships, and giving priority to hiring after graduation; to address the shortage of foreign language talents, cooperate with translation platforms to recruit “part-time foreign language guides”, and pay for their services according to the number of times they have provided them, so as to supplement foreign language services. In view of the shortage of foreign language talents, we cooperate with translation platforms to recruit “part-time foreign language guides” and pay for the number of services to supplement foreign language services.

2. W1 + O2: In response to the weakness of talent loss, utilize the policy to support recreation tourism opportunities. Seek policy funding to improve the treatment of talents and reduce wastage. Apply for policy subsidies and set up a “cultural service allowance” for tour guide teams (based on the number of years of experience in giving tours and tourist evaluations); give extra incentives to tour guides who master multiple languages to increase the retention rate of talents.

3. W1 + O3: To address the weakness of inadequate foreign language services, take advantage of the opportunities of online platform technology. Make up for the shortcomings of offline foreign language talents through online tools. Deploy “multilingual intelligent guide robot” (supporting Chinese, English, Japanese and Korean languages) in the attraction, linking to the online translation database; tourists can scan the code to wake up the robot and get the explanation of the attraction, alleviating the pressure of foreign language services in W1.

4. W2 + O1: In response to the weakness of low cost performance, take advantage of tourists' willingness to pay for quality services. Optimize the price system and introduce “clearly marked price quality packages”. Integrate attraction tickets, catering and explanation services, and launch “Taiyuan Safe Tour Package”, with detailed prices (e.g., “Jinci Temple Ticket + Guide Explanation + Shanxi Knife-shaved Noodles = 198 RMB”), to attract tourists who value value for money through “Transparent Pricing”. "This attracts tourists who emphasize value for money.

5. W2 + O2: In response to the weakness of insufficient collaboration in attractions, take advantage of the policy to encourage unified planning. Take advantage of the policy to promote the union of attractions and form regional tourism synergy. With policy support, set up the “Taiyuan Scenic Spot Union”, launch the “One Ticket” (covering 10 scenic spots such as the Jin Temple and Tianlong Mountain), unify publicity, and share sources of tourists, so as to solve the collaboration and publicity problems of W2.

6. W2 + O3: In response to the weakness of insufficient publicity, take advantage of traffic events such as concerts and online platform opportunities. Borrow traffic events for high-frequency publicity to enhance the awareness of the attraction. During the concert, put “scenic short video advertisement screen” around the venue, playing the highlights of the Jinci Temple, the ancient county town and other attractions; launch the Shake topic “Tour Taiyuan after the concert”, and tourists posting related videos can participate in the lottery of scenic area tickets, expanding the publicity. publicity.

7. W3+ O1: In response to the weakness of product homogenization, take advantage of the diverse needs of tourists for differentiated products. Develop niche and specialty products to meet market segmentation. Tap into the culture of Taiyuan's “old alleys” and develop the “Old City Slow Tour” program (different from traditional attractions), where tourists stroll along Liu Xiang and Zhonglou Streets and experience old stores (such as Ninghua House Vinegar Workshop) with the “Story of the Old City” explanation, avoiding the difference with neighboring areas. The “Old City Stories” program (different from traditional scenic spots) allows visitors to stroll along Liu Xiang and experience old shops (e.g. Ninghua Vinegar Workshop), with “Old City Stories” explanations, avoiding homogenization with neighboring cities.

8. W3 + O2: In response to the weakness of lagging facilities in remote attractions, take advantage of policy support for infrastructure development. Strive for policy funding to improve facilities in remote attractions and develop emerging industries. According to the policy, apply for funds for Yangqu County and other remote

attractions to build parking lots, tourist toilets, and synchronize the development of “rural non-heritage experience” new business (such as following the villagers to learn how to make yellow rice cake), with the improvement of facilities to drive the development of new businesses.

9. W3 + O3: In response to the weakness of the shortage of nighttime facilities in newly built attractions, make use of the opportunities of transportation improvement and online technology. Improve nighttime facilities and promote nighttime programs in combination with transportation and online. Add night lighting and rest areas in Taiyuan Ancient County Town (a newly built attraction), open a special night tourism line “downtown - Ancient County Town”; promote “Ancient County Town Night Tour Package” (including light show and night snacks) through Meituan and Dianping, and enjoy transportation subsidies for online ticket purchases.

10. W4+O1: In response to the weakness of insufficient funds, especially the shortage of inputs in remote scenic areas, the opportunity of expanding demand in the domestic recreation and tourism market has been utilized to attract the participation of social capital to fill the funding gap. Launched the “scenic area construction and sharing plan” to attract social capital to invest in infrastructure and realize the revenue share, oriented by market demand. Screening remote scenic spots with potential, such as Yangqu County and Qingxu County, packaging “folk experience + eco-agriculture” development projects (fitting the market demand for rural tourism), attracting cultural and tourism enterprises to invest in the construction of parking lots and tourist centers, and enterprises can obtain a 3-5 year share of the right to operate catering and cultural

and creative businesses; launching the “Adopt an Ancient Tree” program at the same time. Simultaneously launch the “Adopt an ancient tree” and “Contract an acre of orchard” programs for tourists to participate in, and raise funds for facility maintenance.

11. W4 + O2: To address the disadvantages of the funding problem and to take advantage of the opportunities for policy funding support. Accurately declare policy projects for funding support and optimize the distribution of funds. For W4, the county's ability to undertake funds is weak, led by the municipal cultural and tourism departments, joint county scenic areas to declare the “Shanxi Province rural tourism support project”, and strive for special funds for the construction of facilities in remote attractions, to improve the accuracy of the use of funds. 11.

12. W4 + O3: In response to the weakness of the lack of precision in publicity funds, the use of traffic economy brings free exposure opportunities. Borrow traffic events for low-cost publicity to improve the efficiency of funds. In traffic events such as marathons and concerts, distribute “Taiyuan Tourism Card Maps” (with scenic area discount information) to participants, and encourage tourists to spontaneously share them on social media platforms; cooperate with netizen bloggers to replace pure capital investment with “exchange resources” (free scenic area experience in exchange for promotional videos), thus reducing the cost of publicity.) instead of pure capital investment to reduce the cost of publicity.

WT Strategies:

1. W1 + T1: Target the weakness of talent that makes it difficult to cope with rapid changes, and circumvent the threat of lagging service due to fast changing market demand. Simplify the service process and reduce talent dependence by standardization. Formulate the “Taiyuan Tourism Service Standard Manual” (including core content of explanation and emergency tactics), so that even temporary staff can get started quickly; for foreign language services, create “multilingual service cards” (including translation of commonly used languages), so as to reduce the dependence on professional foreign language talents.

2. W1 + T2: To address the weakness of low service quality caused by insufficient talents and to avoid the threat of being outperformed by neighboring high-quality services. Focus on core services and ensure that basic services do not lag behind. Temporarily give up high-end customized services, focus resources to ensure the quality of core services such as basic explanation and safety guidance, such as equipping all tour guides with a “word predictor” to ensure the accuracy of the basic information, and avoiding the decline in service quality due to the lack of talent.

3. W1 + T3: Aim at the weaknesses of insufficient publicity on resource protection and weak service capacity in off-season due to shortage of talents, and avoid the threats of over-exploitation of resources and seasonal idleness, and improve the effectiveness of talents through standardized tools and off-season reserves. Develop a standardized manual for resource protection explanation, use off-season to carry out talent training, and reduce the immediate dependence on professionals. Prepare the “Taiyuan Cultural Heritage Protection Manual” (including core resource protection

points and emergency handling words) for temporary staff to learn quickly; organize “talent reserve camps” in the off-season to train temporary staff to master basic cultural relics protection knowledge (e.g., general knowledge of ancient tree maintenance at the Jinci Temple), and to assist the professional team in guiding tourists to tour in a civilized manner during the peak season; in response to the foreign-language In response to the gap in foreign language services, we have produced a multilingual “Resource Conservation Notes” e-brochure (available by scanning the code) to make up for the shortcomings in conservation publicity caused by the lack of talents.

4. W2 + T1: Address the weakness of prices and publicity, which are difficult to adjust in a timely manner, and avoid the threat of stagnant product sales due to rapid changes in demand. Adopt flexible pricing and fast publicity mode. Launch “dynamic pricing tickets” on the tourism platform (discounts in off-season and slight increases on weekends) to quickly respond to changes in demand; set up the “Taiyuan Tourism Express” public number to update activity information weekly, replacing traditional publicity with short and fast graphics to improve timeliness. 5. W2 + T2 (rapid changes in market demand)

5. W2 + T2: Aiming at the weakness of poor collaboration and homogenization of attractions, circumventing the threat of being squeezed out of the market by the neighboring joint scenic spots. Short-term priority is given to integrating internal resources to form a small-scale differentiation. Select geographically similar attractions such as the Jin Temple and Tianlong Mountain to offer “bundled discounts”

(20% cheaper for joint tickets) and unify the design of promotional posters to avoid fighting alone; highlight the combination of “landscape+culture” (Jin Temple culture+Tianlong Mountain natural scenery) in products to differentiate from neighboring single-type scenic spots. The combination of “landscape + culture” (Jin Temple culture + natural scenery of Tianlong Mountain) is emphasized in the product, so as to differentiate it from the neighboring single-type attractions.

6. W2+ T3: In response to the weaknesses of non-transparent charges and dispersed publicity that lead to overloading of popular attractions in peak seasons and coldness in off-seasons, circumvent the threats of over-exploitation of resources and seasonal idleness, and balance the flow of tourists by means of price regulation and coordinated publicity. Implement “differentiated pricing in low and peak seasons + coordinated publicity for the whole region” to guide the reasonable distribution of passenger flow and reduce the pressure on the development of core resources. During peak season, implement “step fare” (20% increase in price during peak traffic hours) for core scenic spots such as Jin Temple and Tianlong Mountain, and use the excess revenue for resource protection; synchronize with the “Taiyuan Scenic Spot Alliance” to publicize non-popular scenic spots (e.g., Qinglong Ancient Town in Yangqu), and launch the Simultaneously promote non-popular scenic spots (e.g. Yangqu Qinglong Ancient Town) through the “Taiyuan Scenic Spot Alliance”, and offer “core scenic spots + cold scenic spots” joint tickets (30% discount on the total price), so as to divert the pressure of peak season. During the off-season, the “All-Region Beneficial Ticket” (including 10 scenic spots, with a price of 50% of the peak season) is uniformly launched, and publicity is focused through Jitterbug and local life platforms,

attracting the public and neighboring tourists to visit the area in a staggered manner, and reducing the idleness of the resources.

7. W3+ T1: To address the disadvantages of slow updating of products and outdated facilities, and to circumvent the threat of product obsolescence due to rapid changes in demand. Develop low-cost, easy-to-adjust asset-light projects. Add “flash experience areas” in existing attractions (e.g. non-heritage stalls with monthly changing themes), which can quickly respond to market demand without large-scale reconstruction of facilities; use existing venues to organize “Taiyuan Tourism Creative Bazaar”, which attracts local creators to display new products and enrich the types of products. The existing venue will be used to organize the “Taiyuan Tourism Creative Bazaar”, attracting local creators to display new products and enriching product types.

8. W3 + T2: To address the weakness of product homogenization and easy counterfeiting, and to avoid the threat of image damage from low-quality counterfeits. Register core IP to strengthen brand recognition. Register copyrights for core cultural symbols such as the statue of the maid of honor at the Jin Temple and the Buddha's head at Tianlong Mountain, and launch officially certified cultural creations (e.g., replica ornaments with anti-counterfeiting markings); and set up “official cultural creations stores” at attractions to enhance added value through packaging and storytelling and to differentiate them from imitation products.

9. W3 + T3: To address the weakness of off-season coldness exacerbated by fewer nighttime programs, and to circumvent the threat of idle resources caused by tourism seasonality. Develop low-cost nighttime programs to activate off-season nighttime

consumption. In winter (off-season), use the existing square of the scenic area to hold the “Taiyuan Folk Lantern Festival” (using reusable lanterns), together with the “Warm Winter Snacks Area” (local merchants stationed there), which can attract citizens and tourists to spend money in the night time without the need for large-scale construction.

10. W4 + T1: In response to the weakness of lagging behind in product updating due to insufficient funds, and to circumvent the threat of product obsolescence due to rapid changes in market demand, adapt to the market by flexibly adjusting the strategy at low cost. Establish a “Small Rapid Response Fund” to focus on asset-light project development and shorten the product iteration cycle. Set aside 10% of the annual budget as an “innovation contingency fund” for the rapid development of seasonal and thematic light projects (e.g., according to the demand of tourists for “national trend,” temporarily add a “Hanfu flash shooting spot in Jinci Temple,” without the need for large-scale transformation); quarterly research market demand, with the fund to support the attraction to adjust the category of cultural and creative products (such as the summer launch of the “cool theme” non-heritage folding fan, the winter changed to “hand warmers + paper-cut patterns” combination), to keep up with the changes in demand with low investment.

11. W4 + T2: Aiming at the weakness of insufficient funds to create differentiated products, avoiding the threat of peripheral competition and imitation products, and focusing on strengthening the uniqueness of the core resources and the recognition of genuine products. Focus limited funds on the creation of core IP and authentication

system to reduce the impact of homogenization and counterfeiting. Reduce investment in non-core attractions and focus funds on “IP deepening” in core attractions such as the Jin Temple and Tianlong Mountain (e.g., designing an exclusive story line for the statue of the maid of the Jin Temple and developing a series of cultural creations called “A Day in the Life of a Maid of Honor”); and utilize the remaining funds to build the “Genuine Traceability Miniature”. “Genuine Traceability Small Program” (access to blockchain technology), where tourists can scan the code to verify the authenticity of the cultural and creative products, and set up “Genuine Products Display Area” in the attraction synchronously, so as to use the limited resources to highlight the core differences and the value of the genuine products, and reduce the impact of the imitation products.

12. W4+ T3: In response to the weakness of insufficient funds that make it difficult to balance protection and development, circumvent the threat of overdevelopment that damages resources. Prioritize resource protection and develop low-cost projects moderately. Reduce the investment in new projects and focus funds on cultural relics restoration in core attractions such as the Jin Temple (e.g., reinforcement of murals); develop “zero-destruction experience projects” (e.g., set up “cultural photography spots” on the periphery of the attraction), which not only avoids damage to the resources, but also generates revenues.

VITA

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