

# **Exploring the Digital Transformation of Talent Cultivation in Tourism Management Majors in Chinese Universities in the Digital Cultural Tourism Era**

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**Abstract:** With the rapid development of digital technology, the tourism industry has entered a new era, and digital cultural tourism has become a new trend in the tourism industry. In this context, the talent cultivation of tourism management majors in Chinese universities is facing new challenges and welcoming new opportunities that urgently need digital transformation. Taking the training of tourism management professionals in universities in China as the research object, this paper analyzes the connotation and ideas of digital transformation of tourism management professionals in universities in China. It puts forward that the training ability of digital talents in tourism management professionals in universities should be improved, and puts forward specific training strategies.

**Keywords:** Digital Cultural Tourism; Tourism Management Major; Talent Cultivation; Digital Transformation

## **1. Introduction**

The rapid development of digital technology and the popularization of the mobile Internet have made the tourism industry gradually turn to the direction of digitalization, intelligence and personalization based on the traditional model of sightseeing tourism. Tourism in the context of digitalization has changed people's travel mode and experience through technical means such as mobile communication, the Internet and big data, enhancing the convenience and interactive experience of tourism. The integration of digitalization and cultural tourism not only brings new opportunities but also new challenges to the traditional tourism industry. On the other hand, higher education in tourism in China is facing

enormous challenges, as the training direction of tourism management majors in universities is out of touch with market demand, social awareness is low, enrollment in tourism management majors is cold, and the rate of professional diversion and loss is high. In this context, the talent cultivation of tourism management majors in Chinese universities is facing an urgent need for digital transformation.

## **2. New Demand for Tourism Talents in the Era of Digital Cultural Tourism**

### **2.1 The Transformation and Upgrading of the Tourism Industry Has Raised New Standards for Cross-Border Talents.**

Wisdom scenic area digital upgrading to the tourist attractions to come to a "scene innovation", tourism without queuing, scenic area without charges, digital wisdom guide, full-fidelity 3D video, twin exhibition halls, creative interactive space, immersive and interactive digital space, digital scripted tours, AR study tours, 3D interactive digital cultural relics, etc., the digital technology is revolutionizing the Cultural tourism industry. In the context of the emergence of new forms of tourism, the talent demand of tourism enterprises has changed dramatically, in addition to professional knowledge, tourism professionals also need to have a series of information technology capabilities, such as digital technology, big data analysis, tourism e-commerce, new media operations. For this reason, cultivating tourism management professionals in colleges and universities needs to be extended to the direction of digital information technology.

### **2.2 New Digital Tourism Industry Creates New Demand for Digital Tourism Talents**

The pace of digital change in all areas of China's economy and society continues to accelerate, accelerating the process of digital transformation of various industries, the digital talent gap is getting bigger and bigger, and the lack of supply of high-quality digital talent urgently requires a large number of talents with digital knowledge and digital skills[1]. Digital performing arts, digital cultural and museums, online panoramic tours, immersive amusement parks, immersive performances and a host of other new forms of digitalized tourism have shone with the wide application of big data, artificial intelligence, virtual reality and other digital technologies in the field of tourism. The emergence of new industries generates new jobs and requires new types of professionals. The digital cultural tourism is an intellectually intensive high-tech industry, and talent is the first element of industrial development, which should accelerate the construction of a digital talent cultivation system. Tourism enterprises have higher requirements for talents mastering digital technology, and universities must take meeting market demand as a prerequisite, connect with employment, and cultivate applied talents who can improve the quality of tourism products and market competitiveness through big data analysis.

### **2.3 New Requirements Arising from China's National Education Digitization Strategy Initiative**

Relying on digital technology, higher education in the digital era breaks through the two-dimensional scenarios of space and time. It realizes the instant sharing of resources such as curricula, faculty, and infrastructure[2]. This makes the cultivation of professional talents in higher education present a new trend of digital development of education, and puts forward new requirements for proficient digital innovation ability, focusing on cross-industry and interdisciplinary knowledge and ability[3]. Digital cultural tourism is the future development direction of culture and tourism[4], the era of digital cultural tourism has put forward higher requirements for cultivating tourism talents, from the emphasis on knowledge to the quality of competence, innovation ability and digital thinking ability. The digital transformation of tourism management professional education is the new

requirement of the national education digital strategy action, and is also an inevitable trend of educational change.

### **3. Cultivation of Tourism Management Talents Connotation and Ideas of Digital Transformation**

#### **3.1 Connotation of Digital Transformation of Tourism Management Professional Training**

Zhu Zhiting suggests that digital education transformation is an all-around innovation and change in the education industry based on digital technology[5]. Yang Xianmin believes that education digital transformation is the comprehensive digitization of all elements and scenes of education through the innovative use of digital technology[6]. Zhang Ziyang proposes the connotation of digital transformation in education, in which human digital literacy and capacity building are the core and data is the key element, including realizing value optimization, innovation and reconstruction, and systematic change[7]. The tourism management professional talents in colleges and universities under digital cultural tourism should be applied and innovative talents with technology, tourism knowledge, digital thinking and cultural confidence. The digital transformation of talent cultivation of tourism management majors in colleges and universities is to apply digital technology in the whole process of educating people with moral integrity in tourism management majors, to promote the knowledge integration and digital innovation of tourism disciplines and majors through the upgrading of all-round technical facilities, the change of all-round learning mode, the reform of teaching mode in the whole field, as well as the interaction between the cognition of educational subjects and digital technology, etc.[8], to promote the high-quality development of professional education.

#### **3.2 Ideas for the Digital Transformation of Tourism Management Professional Talent Training**

China's tourism undergraduate education is facing a huge dilemma, with frequent cold enrollment in tourism majors and a low retention rate of graduates in the industry[9]. Therefore, college teachers majoring in

tourism management should keep pace with the times, take advantage of the east wind of the digital economy, actively learn and master big data, artificial intelligence and other analytical methods and tools, understand the new laws of management theories and methods in the digital era, keep pace with the times, constantly optimize the knowledge reserve and knowledge structure, take the lead in promoting the digital transformation of tourism management professional talent cultivation, and reverse as much as possible the shrinkage of tourism management undergraduate education. The situation of tourism management undergraduate education has shrunk. The idea of digital transformation of tourism management professional talent training (Figure 1), firstly, to strengthen the application of data analysis technology in the optimization of tourism management

decision-making, and deeply plant the digital concept and digital thinking in students' learning, secondly, to reposition the cultivation objectives, adjust the curriculum system, and implement the experimental and practical training links, and thirdly, to practically promote the implementation of the transformation idea through a series of initiatives, such as the implementation of the digitalization of tourism management professional. The third is to promote the implementation of transformation ideas through a series of initiatives, such as implementing the digital talent cultivation plan for tourism management majors (Figure 2), constructing the digital talent cultivation mode of "university-student-enterprise", creating digital teaching scenarios, strengthening teachers' and students' digital literacy, and improving teachers' digital teaching ability.

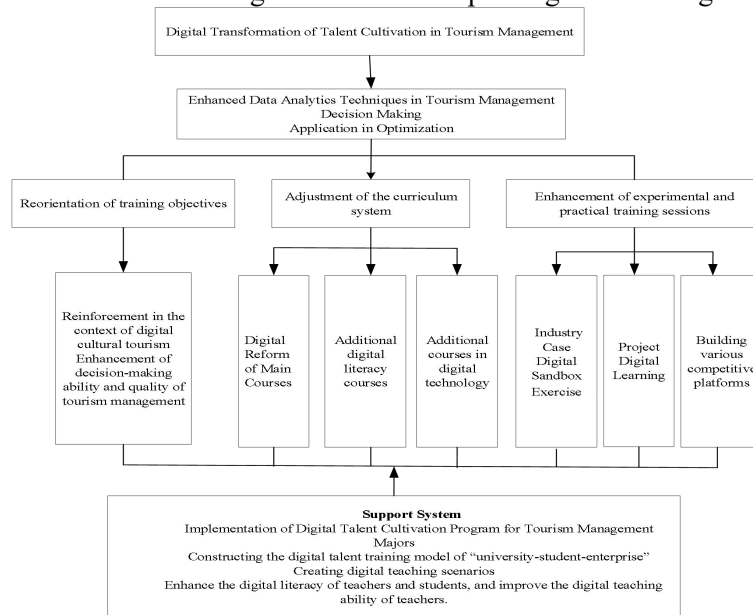


Figure 1. Digital Transformation Idea Map for Talent Cultivation of Tourism Management Majors

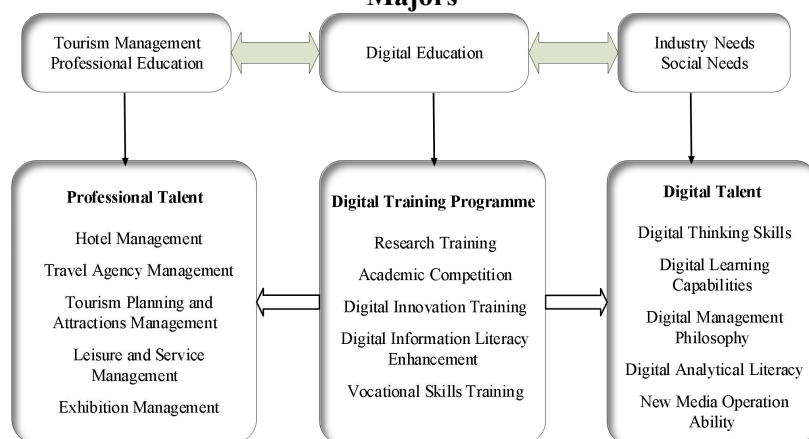


Figure 2. Digital Talent Cultivation Plan for Tourism Management

#### **4. Improving the Digital Talent Cultivation Capacity of Tourism Management Majors in Colleges and Universities**

##### **4.1 Upgrading the Infrastructure of Higher Education Institutions to Create a Digitized Teaching and Learning Scenario**

The competition in the digital economy is the competition of scene. The digital transformation of higher education requires the construction of a smart, immersive digital learning environment and the upgrading of the infrastructure of colleges and universities, so that the senses and experience of college students' learning will be new in the future. First, creating a dedicated educational network throughout the university, equipped with adequate and easily accessible smart devices, bridging the physical space and the information space, so that students can conveniently access learning resources anytime, anywhere. Second, the future classroom will become a flexible blended learning space that integrates online and offline. The classroom should be installed with necessary equipment such as projection and mobile terminals, which, combined with artificial intelligence, big data and other technologies, can collect, record and analyze students' learning behaviors in real-time. Third, relying on the Internet platform to build a virtual teaching and research office, which is a community of teachers temporarily formed through the network platform to jointly carry out teaching. In traditional teaching, the circle of teachers' exchanges is small, limited to the same specialty or the same institution, while the virtual teaching and research room can break through the time and space limitations with the help of "Internet+", and a variety of new teaching methods and ideas are opened up with the arbitrary superposition of cross-regional, cross-school, and cross-faculty personnel. Compared with the traditional teaching and research office, the virtual teaching and research office has a wider range of members, so the digital teaching scene can help broaden the vision of teaching and research and improve the effectiveness of teaching and learning[10], and its teaching design, case studies and teaching resources development are more convenient group efforts.

##### **4.2 Enhancing the Digital Literacy of Teachers and Students and Improving the Digital Teaching Ability of Tourism Teachers**

Lee Iacocca, former president of Ford Motor, said, "The formation of a nation's competitiveness does not begin in the factory or the laboratory, but in the classroom". The digitalization of the classroom is a prerequisite, while the digitalization of teachers is fundamental, people are the key to digital transformation, and the level of teachers' digital teaching ability determines the level of students' digital competence[11]. The digital transformation of higher education must first improve the digital literacy of teachers and students, digital literacy is the concept and ability to interact with artificial intelligence, machine learning, big data and other digital new media[12], including digital awareness, computational thinking, digital learning and innovation, digital social responsibility. Most current teachers of tourism majors in colleges and universities do not understand digital technology's nature, application space and scope, nor do they understand the operational methods of integrating digital technology with teaching[13]. Therefore, it is necessary to improve the skills of tourism professional teachers in using information technology through training, seminars and competitions, and to strengthen the training of their digital practice thinking and skills such as digital teaching ability, digital content creation, digital communication and cooperation[14].

##### **4.3 Accelerating the Reform of the Tourism Talent Training Model and Innovating a New Paradigm of Digital Parenting**

The digital society has brought great changes to the way of learning, which will gradually become diversified. Mobile learning, smart learning, virtual learning, personalized learning and other new learning modes emerge, while traditional paper-based learning, duck learning, fixed classroom learning, and subject-specific learning are slowly declining in status, so it is necessary to accelerate the reform of talent cultivation mode and innovate a new paradigm of digital parenting. The core participants of the "college students-college-enterprise" digital talent cultivation model include college students,

colleges and universities, and enterprises, as shown in Figure 3. The model presents a stable three-way win-win situation for college students, universities and enterprises. Colleges and universities build entrepreneurial incubation platforms for college students, open entrepreneurial practice guidance classes, and guide college students' entrepreneurial teams to go deeper into the market; college students bring entrepreneurial awards and teaching practice cases to colleges and universities. Enterprises provide entrepreneurial practice bases and various resources for college students, while college students become digital talents of enterprises. Colleges and universities provide expert support for enterprises and build channels for accurate docking with the market; enterprises become practical platforms for colleges and universities to implement teaching reform and explore talent cultivation

methods together in practice. Talent cultivation in colleges and universities should closely rely on the development of industries and enterprises, docking large-scale digital enterprises, keeping up with cutting-edge modern technology, carrying out order cultivation mode and modern apprenticeship cultivation mode, creating school-enterprise dual-integrated talent cultivation platform[15], realizing the three major functions of teaching, practice, and employment, and sharing resources and interests between schools and enterprises, only by carrying out in-depth industry-teaching fusion can the students be cultivated to meet the needs of industries and enterprises. Only through the deep integration of industry and education can we cultivate high-level talents to meet the needs of the industry and enterprises.

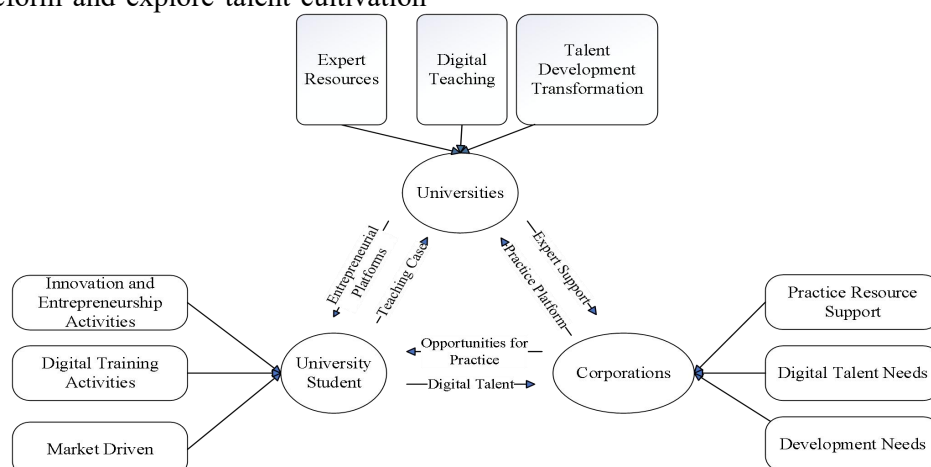


Figure 3. "University-Student-Enterprise" Digital Talent Cultivation Model

## 5. Digital Talent Cultivation for Tourism Management Majors in Colleges and Universities Strategies

### 5.1 Establishing the Teaching Concept of Deep Integration of Digital Cultural Tourism, and Repositioning the Training Objectives

To adapt to the development trend of digitalization of education, the existing teaching reform of tourism management majors has increased the number of big data, intelligent tourism, artificial intelligence and other emerging courses, realizing the digital technology and professional knowledge of the "hybrid", the simple superimposition of technology and teaching methodology of the teaching of the form, but also need to be

digitally empowered from the perspective of education to promote the digital - the deep integration of the world of culture and tourism. There is still a need to promote the deep integration of the digital world of culture and tourism from the perspective of digital empowerment of education, and to seek innovation in the integration of technology and teaching. The current professional teachers only teach basic information technology tools, less digital-cultural and tourism depth integration concept to guide the teaching of all aspects of talent training is bound to be the result of "integration but not integration", cannot realize the tourism professionals' digital transformation of the training objectives. Therefore, the teaching concept of digital talent training for tourism management majors in colleges and universities needs to further



reflect the deep integration of digital cultural tourism, integrate digital literacy and digital capabilities into the overall goal of talent training for tourism management majors in colleges and universities, and make data decision-making, data analysis and data application capabilities become the core advantages of tourism majors in the era of digital cultural tourism.

In addition, it is necessary to be alert to the digital-only ideology, which lopsidedly emphasizes students' digital literacy while neglecting their other literacies. In the context of digital cultural tourism, the goal of cultivating tourism management professional talents is positioned as follows: according to the development trend of digital economy and industrial demand, cultivate students who can adapt to the changes in the technological environment characterized by big data, cloud computing, virtual reality and artificial intelligence, and have digital management thinking and ability, data mining, big data analysis technology and other management decision optimization technology[16], and at the same time, master the basic theoretical knowledge of the cultural tourism industry and the Innovative and application-oriented digital cultural tourism talents with professional skills.

### **5.2 Developing Digital Courses and Building Digital Teaching Platforms**

Optimize and upgrade the curriculum system by matching the needs of the tourism industry. Advanced elements generated by the digital transformation of the tourism industry, such as new jobs and new skills, should be integrated into the professional curriculum, and digital teaching methods should be used to help the whole process of classroom instruction. First, additional courses on digital technologies such as big data, artificial intelligence, virtual reality, digital photography, etc. should be offered and made available for students to learn and use. The second is to set up theoretical courses related to digital tourism, such as smart tourism, new media operation, tourism e-commerce, etc. so that students can learn to use these skills and thus buttress the needs of the industry. Third, traditional courses are integrated into digital content, digital teaching modes and methods are adopted, and a digital teaching platform is built through

case digitization and project digitization. For example, the digital development of the course "Application of Big Data in Tourism and Hotel" can enhance the digital teaching innovation ability of professional teachers, create diversified and personalized teaching situations, and master the core logic of digital teaching. At the same time, with the help of case digitization, it demonstrates the process of handling real cases in enterprises, so that students can solve practical problems in a simulation environment and improve their knowledge of the industry and problem-solving ability. With the help of project digitization, project tasks are integrated into the traditional curriculum system in order to exercise students' ability to solve practical problems.

### **5.3 Deepening the Integration of Industry and Education, and Strengthening Practical Teaching and Internship Training**

Compared with the traditional tourism industry, digital tourism pays more attention to the cultivation of practical ability. Therefore, it is necessary to strengthen the development of industry-teaching integration and accurately docking the demand for talents in the tourism market, and it is unrealistic to rely only on the strength of one side of the university to cultivate digital cultural tourism talents, tourism colleges and universities should take the initiative to seek multi-party cooperation, such as the cooperation with cultural and tourism enterprises, industry associations, Internet companies and so on, and look for more opportunities for practical teaching and internship training, so that the students can practice what they have learned in a real working environment, which will enable them to cultivate qualified digital tourism management professionals. Construct a collaborative mechanism for industry-university-research services, establish a platform for cultural and tourism talents, and establish a cooperative mechanism for school-land and school-enterprise interaction; promote school-enterprise cooperation, hire industry experts to establish a professional steering committee for tourism management, integrate the advantages of tourism management majors, break down the customary barriers for professional teachers, and facilitate comprehensive and deep-level

cooperation between schools and enterprises; rely on the tourism big data innovation and application service platform, and carry out in-depth cooperation with enterprises, and apply it to the "1+X" tourism management program. "1+X" tourism big data analysis teaching[17] to improve students' digital learning and application ability.

#### **5.4 Integration of Innovation and Entrepreneurship Education into the Whole Process of Digital Education for Tourism Majors**

Nowadays, interactive teaching in colleges and universities is often in the "form", the university classroom is more and more like a teacher's personal performance show, undergraduate teaching is particularly serious, students are in a passive position, and there is no lack of students pretending to learn phenomenon. Students should be under the guidance of teachers to design and operate their practice sessions, set up discussion sessions, the teacher to guide the discussion, to solve the problem, to realize the multiple exchanges between teachers and students, students and students, to cultivate students' innovation ability. The cultivation of innovative ability is one of the core competencies for undergraduate students majoring in tourism management in universities [18]. Given the comprehensive, practical and innovative characteristics of the tourism management profession, the lecturing teacher should be like an entrepreneur who is pioneering, and the teacher should have full teaching freedom and curriculum autonomy, so that he or she can choose the teaching materials and teaching contents by himself or herself, to integrate innovation and entrepreneurship education into the whole process of digital education of the tourism management profession, and to cultivate the students' spirit of innovation, entrepreneurial awareness and innovation and entrepreneurial ability, and to further improve the quality of digital talent cultivation.

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