

ICEMSS

Proceedings of the

International Conference on Engineering, Management and Social Sciences

"Exploring insights of recent developments in Management and Social Sciences"

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ICEMSS – 24



International Conference on Engineering, Management and Social Sciences

Bangkok, Thailand

20th - 21st December, 2024

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Acknowledgement

ZEP Research is hosting the ICEMSS-24 International Conference on Engineering, Management and Social Sciences at Bangkok, Thailand on 20th -21st December, 2024. The main objective is to grant the amazing opportunity to learn about groundbreaking developments of this era, talk through difficult workplace scenarios with peers who experience the same pain points, and experience enormous growth and development as a professional. There will be scope of continuous networking opportunities and informational sessions. The sessions serve as an excellent opportunity to soak up information from widely respected experts. Connecting with fellow professionals and sharing the success stories of your firm is an excellent way to build relations and become known as a thought leader.

I express my hearty gratitude to all my Colleagues, Staffs, Professors, Reviewers and Members of organizing committee for their hearty and dedicated support to make this conference successful. I am also thankful to all our delegates for their painstaking effort to travel such a long distance to attain this conference.

Priyanka Sahu

Mrs. Priyanka Sahu
Founder
ZEP Research

Editorial

Dear All Participants,

On behalf of the Organizing Committee of the International Conference on Engineering, Management, and Social Sciences, 2024. I am honored to invite you to participate in this academic conference under the theme "Exploring insights of recent developments in Management and Social Sciences"

This conference serves as a platform for knowledge exchange and experience sharing among academics, researchers, and experts worldwide, focusing on presenting the latest research and innovations that bridge management sciences and social sciences.

In an era of rapid global changes in technology, economy, and society, this conference presents a significant opportunity to exchange perspectives and approaches in dealing with emerging challenges.

We are pleased to welcome leading experts from around the world who will share their experiences and visions through keynote speeches, research presentations, and workshops.

The conference will cover diverse topics including innovation management, social and cultural changes, sustainable development, human resource management in the digital age, and the application of technology in solving social problems.

I sincerely hope that this conference will mark the beginning of academic collaborations that will lead to knowledge development and innovations beneficial to global society.

Best Wishes



Dr. Dowroong Watcharinrat
Editor
Associate Professor, Faculty of Liberal Arts
Shinawatra University, Thailand

Preface

ZEP Research is hosting the ICEMSS Conference at Bangkok, Thailand on 20th -21st December, 2024. This edition of conference is called in Bangkok. Hosted onsite and online mode for the convenience of our attendees.

It is our pleasure to have Professor Dr. Rohan Singh, Dr. Chuanchen Bi, Dr. Kamal Gulati, Dr.Chanyanan Somthawinpongsai and Dr. Sukumaran, C as our Session Chair and the Keynote Speakers- Prof. Dr. Nidhi Agarwal will be spoken on The Role of Transdisciplinary Education in Promoting Global Citizenship, Dr. Chai Ching Tan will be spoken on Hospitality Customer Intentions to Write Fake Online Reviews: A Cross-Cultural Approach, Assoc. Dr. Abdallah Al-Azri,Prof. will be spoken on Driving Sustainable Tourism: Shaping Oman's Path towards Resilience and Growth and Dr. Dowroong Watcharinrat will be spoken on Sustainable Development Goals for Education and the Guest Speaker- Dr.Yannakorn Toprayoon, ICEMSS Conferences aims to set a collaborative goal for finding of new dimensions in research field, ICEMSS is bound to serve as a platform that facilitates the deliberation of the challenges involved in the practical implementation of all the most advanced knowledge produced in the fields of Management, Education, Social Sciences, applied science, and various field of engineering and technology.

This conference serves as a crucial platform for researchers, practitioners, and industry leaders to exchange ideas, share insights, and forge collaborations. Through keynote presentations, technical sessions, and interactive workshops, we aim to explore the latest developments, thoughts, and ethical considerations in this rapidly evolving field.

We are honoured to host distinguished experts and enthusiasts from around the globe, each contributing unique perspectives and expertise.

We extend our heartfelt gratitude to all participants, sponsors, and organizers whose dedication has made this event possible. Let us embark on this journey of discovery, innovation, and collaboration.

Welcome to the International Conference on Engineering, Management and Social Sciences.

International Conference on Engineering, Management and Social Sciences

Bangkok, Thailand

20th -21st December, 2024

Keynote Speakers



Dr. Dowroong Watcharinrat
Associate Professor, Faculty of Liberal Arts,
Shinawatra University, Thailand

Message

Welcome to the International Conference on Engineering, Management, and Social Sciences (ICEMSS-24). I hope this event provides you with valuable knowledge, experiences and innovations in the fields of engineering, management, social sciences, education and culture which you can apply to your work, research, knowledge creation and development in all relevant areas.

It is my sincere hope that everyone participating in this seminar will find satisfaction, happiness, and new experiences while also engaging in meaningful exchanges of information with attendees from various countries and cultures throughout your stay in Thailand.

Finally, I wish all seminar participants a safe journey back to your home countries.

Dr. Dowroong Watcharinrat
Keynote Speaker
ICEMSS-2024



Prof. Dr. Nidhi Agarwal
Professor, Faculty of Social Science and Humanities
Lincoln University College, Malaysia

Message

It is with immense gratitude and honor that I am going to join the International Conference on Engineering, Management, and Social Sciences (ICEMSS). As a Professor at the Faculty of Social Science and Humanities, Lincoln University College, Malaysia, I am deeply committed to advancing global education and fostering collaborative research in social sciences and humanities.

The topic of my keynote, "The Role of Transdisciplinary Education in Promoting Global Citizenship," reflects the growing need for innovative educational frameworks that transcend disciplinary boundaries. In an increasingly interconnected world, transdisciplinary education is not only a necessity but a catalyst for cultivating cultural sensitivity, critical thinking, and a sense of shared responsibility among learners. These attributes form the cornerstone of global citizenship, equipping individuals to address complex global challenges with empathy and innovation.

I am excited to share insights into how transdisciplinary approaches can bridge gaps between disciplines like engineering, management, and social sciences to foster meaningful contributions to society. I hope this conference will inspire thought-provoking discussions and pave the way for collaborative research aimed at addressing the dynamic challenges of our time.

Thank you, and I wish all delegates a productive and enriching conference experience!

Prof. Dr. Nidhi Agarwal
Keynote Speaker
ICEMSS-2024



Dr. Chai Ching Tan
Senior faculty, Department of Management,
Rajamangala University of Technology Rattanakosin, Thailand

Message

I congratulate the conference committee for organizing ICEMSS-24 in Bangkok, Thailand, from December 20th to 21st. The conference gathers researchers and practitioners in the fields of engineering, management, and social science to share their research findings and practical implications for improving the quality of management and social practices and engineering inventions. At international conferences, we can meet many colleagues from around the globe, exchange experiences and knowledge, integrate each other's works into our works to improve voices of diversity and inclusivity, and explore further innovative ideas to help each of us strengthen our works at home.

I wish all the participants a memorable experience from the ICEMSS-24.

Dr. Chai Ching Tan
Keynote Speaker
ICEMSS-2024



Dr. Abdullah Khalfan AL Azri
The Deputy of the Assistant Vice Chancellor of Academic Affairs
University of Technology and Applied Sciences-IBRA
Sultanate of Oman

Message

It is my pleasure and privilege having got the opportunity to be a keynote speaker at the "International Conference on Engineering, Management, and Social Sciences (ICEMSS 2024)", which will be held during 20th - 21st December 2024 at Bangkok, Thailand. This conference has set a stage to showcase the latest trends and advancements in the field of Engineering, Management, and Social Sciences. The objective of familiarizing the participants with developments in the said fields is praiseworthy. I am confident that this platform exposes the need of the hour with regard to opening up doors for collaboration for a better and sustainable future. This attempt to bring together experts, academicians, scholars, researchers, and practitioners to share their knowledge for building a better tomorrow is highly appreciated and I thank the ZEP Research for organizing this conference. I hope that this conference will be fruitful in achieving its intended objectives.

Wishing the conference all success!

Warm Regards,

Dr. Abdullah Khalfan AL Azri
Keynote Speaker
ICEMSS-2024

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International Conference on Engineering, Management and Social Sciences

ABSTRACTS

Leaders' Personality Traits and Teachers' Organizational Citizenship Behavior: Towards A Leadership Excellence Initiative

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Abstract

This study assessed the personality traits of leaders and the level of Organizational Citizenship Behavior (OCB) among teachers at Shandong Electronic Vocational and Technical College. It aimed to gather information to improve teacher engagement and propose leadership training that fosters traits linked to positive OCB, such as conscientiousness, openness, and extraversion. The Big Five Model Theory and a 25-item OCB scale were used to evaluate 190 teachers across six academic departments. The findings revealed that teachers believe their leaders excel in all five personality traits, and their assessme nts are consistent across demographics. Teachers demonstrated strong OCB, fostering teamwork and enhancing institutional effectiveness. No significant differences in OCB were found based on demographic factors, and a strong positive link was identified between teachers' OCB and leaders' traits.

Recommendations include mentorship programs, leadership development focusing on emotional intelligence and creativity, and initiatives to promote and reward OCB across the institution. Leadership training should emphasize traits that foster a positive school culture, teamwork, and generosity.

***Keywords**: Personality traits, organizational citizenship behavior (OCB), teacher engagement, leadership training, big five model theory conscientiousness, openness, extraversion, institutional effectiveness, teamwork, positive school culture*

Involvement of Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) in Sociocultural and Academic Activities: Its Implications in the Department of Education Programs, Projects and Activities

Mario P. Mogote, PhD[1], Jay A. Delideli, MILE[2], Mae Karen R. Pascua, MILE[3], Joevenelle P. Mallorca, LPT[4]
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Abstract

This qualitative research design using in-depth Interview aimed to find out the LGBTQ involvement in sociocultural and academic activities and its implication to the Department of Education (DepEd) programs, projects and activities. Ten (10) teaching and non-teaching DepEd personnel who are members of LGBTQ family were the respondents of the study and were subjected to in-depth Interview. The study revealed that LGBTQ community are more inclined in Sports, Beauty Pageants, Literary and Musical Contest, School Related Activities, Field Trips and Festivals. However, they are less involved in academic activity as they are only involved in Quiz Bee contest. The results of this study also revealed that LGBTQ teachers are inclined to perform in different programs, projects and activities of DepEd. However, other LBTQ members are hesitant to show their fullest talent and real personality because they feel that they are not yet welcomed in the DepEd family.

Keywords: *Department of Education Programs, LGBTQ, Projects and Activities, SocioCultural and Academic Activities*

Earning Possibilities and Influencing Factors in the Informal Sector for the Climate Migrants Living in Dhaka City's Slums

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Abstract

The informal sector is playing an active role employing the displaced climate migrants due to environmental hazards and climate changes from the different parts of Bangladesh. Moving from rural to urban setting for exploring employment options, this sector emerges as a life saver. This study investigates dynamics of informal sector regarding the opportunities for the climate migrants who are living in Dhaka city's slum area. The paper explores the varieties of informal sector employment accessible to climate migrants in Dhaka City and the factors that influence climate migrants' involvement in the informal sector. Through thematic analysis of 15 interviews with working migrants and key informants from the development sector, supplemented by reports, news, and research articles, this study examines the spectrum of informal sector employment opportunities available to climate migrants in Dhaka city. The study highlights the offering of the sector's perspective on Dhaka city's social integration, migrants' possible earning sources, lived experiences and challenges. The findings provide policymakers and stakeholders with useful insights on how to fulfill climate migrants' job demands in urban settings, inclusive urban planning, and this paper will be a source for advocacy of social protection, skill development and education for climate migrants.

Keywords: *Climate Migrants, Earnings, Informal Sector, Urban integration.*

The Future Role of Artificial Intelligence in Human Resources for the Fast-Moving Consumer Goods Sector in an Emerging Country

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Abstract

The use of Artificial Intelligence (AI) has become more common in the last few years. The world is greatly impacted by the usefulness of AI. Different industries have already adopted AI into their system to increase the pace and productivity of their work. The FMCG industry is very fast-paced. Taking the fast-paced nature of the FMCG industry into consideration, this research tried to find out the potential benefits of integrating AI in the Human Resources of the industry, the challenges to integrating AI in the industry as well as the impact of AI in future Human Resources in the FMCG industry. To find answers to these questions, a qualitative research methodology was adopted to get detailed information on the research through the questionnaires with employees working in the FMCG industry. This research shows people working in the FMCG industry were very positive regarding the use of AI in the industry. At the same time, they were a bit concerned about adapting to this new technology. However, most of them could not deny the potential benefits it could bring to the industry and the positive impacts it will create in the future of the industry. But to avail its full potential, the challenges of integrating AI in the industry at the earliest is a must.

Keywords: *Artificial Intelligence, FMCG, Future Human Resources, Integrating AI, Positive Impacts, Challenges, Potential Benefits.*

Advancing Financial Inclusion: Mobile Financial Services as a Catalyst for a Cashless Bangladesh

Tazrian Binte Ansar[1], Dr. Nusrat Hafiz[2], Proma Quadir[3], Tasfia Zaheen[4], Sardauna Abdul Sobur Dembo[5], Khadiza Afroz Raisa[6]
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Abstract

This paper is focused on exploring the significance of digital payments through Mobile Financial Services (MFS) in creating a cashless Bangladesh. Compounded by the fact that the government is also interested in such an overarching goal, it increases the likelihood that the industry can leave yet another mark in shaping the nation's perception of how payments ought to be made. The paper delves into understanding the ever-evolving financial inclusion landscape brought forth by introducing MFSs within the country. Despite many people remaining unbanked, the market is optimistic that it will change by the end of this decade. The MFS industry of Bangladesh has made significant strides in making mobile banking services accessible specifically to the unbanked rural population. An interview of 12 respondents aided in gathering necessary qualitative data to discern their financial literacy, awareness and perception towards MFS in Bangladesh. Furthermore, secondary research has been conducted to analyse the methods and approaches utilised by successful international MFSs that local organisations can implement, thereby stimulating economic growth by reducing transaction expenses and improving access. Crucial comparisons were made between the international and national players to pinpoint areas of improvement as well. Ultimately, all findings are essentially concerned with assessing the current situation of the industry, providing valuable insights and recommendations as to how they can navigate through challenges and opportunities to make cashless Bangladesh a feasible reality not only for the urban population, but the marginalised and remote communities as well.

Keywords: *Cashless Bangladesh, economic growth, financial inclusion and literacy, unbanked rural population*

Role of Dynamic Capabilities on the Organizational Growth of Women-led SMEs Moderated by Digitalization

Dr. Muhommad Azizur Rahman[1], Dr. Nusrat Hafiz[2], Md. Mizanur Rahman[3], Yasmin Jamadar[4], Zerin Tasnim[5], Md. Shahnewaz Bhuiyan[6], Nusrat Tasnim Tahsin Anita[7]

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Abstract

Positioned at the low-growth end of the economy, women-led small and medium-sized enterprises (SMEs) in developing countries struggle to adapt to volatile, uncertain, complex, and ambiguous (VUCA) environments to optimize their limited resources for sustainable competitive advantage. This study seeks to explore the relationship between their dynamic capabilities for organizational growth within a single framework, highlighting how technology plays crucial role in this relationship. It breaks new ground by extending the Dynamic Capabilities Theory to include gender-specific constructs in a resource constraints scenario typical of developing countries, incorporating digitalization as a continuous moderating variable.

Addressing the industry gap, the study emphasizes the need for empirical investigation into how dynamic capabilities of the WLSMEs affect their organizational growth by incorporating digital technology. Employing a deductive approach, the research involved stratified random sampling to retrieve the sample frame from the registered women-SMEs of Bangladesh. The quantitative responses were collected via self-administered questionnaires. SPSS was employed for descriptive statistics, reliability tests, and preliminary data analysis, while AMOS was used for structural equation modeling (SEM) to test the hypothesized relationships between the organization's dynamic capabilities and organizational growth. Additionally, qualitative data were collected through focus group discussions and analyzed thematically to identify recurring themes in the transcribed discussions.

This exploratory study reveals that when women-led SMEs leverage their dynamic capabilities, they can significantly boost their organizational growth. Digitalization creates synergistic effects that establish a robust framework foundation. The study recommends that women-led SMEs adopt innovation on the signature practices to effectively respond to a VUCA environment by creating, integrating, and modifying their limited digital, financial, and networking resources. This will enhance the organizational growth for the women-led SMEs even in the VUCA and resource-constraint business environment.

Keywords: *Developing countries, Dynamic Capabilities Theory, Resource-constraints, Quantitative analysis.*

Gender Analysis of Ballroom Dance Knowledge and Skills Among Faculty Members of Cavite State University

Armand G. Aton[1], Sixto N. Ras Jr.[2], Karen M. Tilan[3], Jenny Danica P. Abayari[4]
[1,2,3,4]Cavite State University, Philippines

Abstract

Ballroom dancing within higher education institutions can enhance students' physical health, social connections, and artistic expression. Of these benefits, faculty members stand to be major facilitators since their depth of knowledge and teaching skills will directly affect students' participation and learning outcomes in dance education. However, scant research still exists on the knowledge and competencies of male and female faculty members teaching ballroom dance, especially in higher education institutions.

This paper discusses the knowledge and skills that male and female Cavite State University, Philippines faculty members instructing ballroom dance possess. This indicates the relationship between gender and knowledge in all aspects: the type of dances, movements, music and rhythm, costume, competition, and general dancing ability. In theory-based aspects of ballroom dancing, male and female faculties were highly knowledgeable; however, there is a gap present among faculties in practical dances. More specifically, women perform slightly better in understanding dance actions and competitive ballroom dancing, but the difference is not statistically significant except in the case of dance actions. The study thus suggested comprehensive training programs where theoretical knowledge would be combined with practice workshops and sessions suited for men and women alike. The research contributes to the discussion of gender issues and education in physical education by offering insights into the development of teacher training and curriculum design aimed at an inclusive learning environment in ballroom dance education.

Keywords: *ballroom dancing, gender difference, faculty competencies, higher education*

The Impact of Culture on Corporate Social Responsibility

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Abstract

Corporate social responsibility (CSR) is a topic that has been intensely debated over the decades. This has become more prominent in developing countries due to several constraints existing. Hence, this study aimed to look at the culture's influence on CSR activities of multinationals and to what extent they varied between different countries.

An extensive literature review was conducted about CSR, culture, Hofstede's cultural dimensions, and ethics to establish relationships and enhance better understanding for readers. The next section dealt with research methodology. Based on the research philosophy, an inductive approach was adopted in the form of a single case study. Appropriate indicators were chosen to justify the choice of company chosen. The report then progressed to the case study analysis. Nigeria's oil industry's background was provided to enlighten readers. Country cultural comparisons were conducted between the United Kingdom and Nigeria with Hofstede's model of national culture. This also helped in discussing CSR activities undertaken in both countries and mak-ing critical evaluations.

Therefore, this research made contributions in helping to show the stark contrast that exists in CSR programs being undertaken by MNCs in different countries. While Nigeria's CSR tended to focus more on community development, the UK's was more concerned with shaping bright minds and advanced education. This helped in provid-ing managerial implications and directions for future research. Despite the difficulties associated with studying culture, sufficient attempts have been made to develop and understand the links between these concepts and implications for multinationals and host countries, respectively. Criticisms of case study and concepts were also high-lighted to address limitations of the study.

Keywords: *Culture, Corporate social responsibility, Ethics*

Tourism Development of Jizu Mountain Scenic Area under the Rural Revitalization Perspective

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Abstract

In recent years, the urban tourism market has become saturated, and the cultural tourism market has gradually shifted towards county-level and rural areas. Meanwhile, driven by the Rural Revitalization policy, rural tourism has increasingly become a hot project in the tourism sector. As an important tourist attraction in Dali, Yunnan, Jizu Mountain Scenic Area plays a significant role in promoting local economic development and rural revitalization. In the wave of rural tourism development, actively exploring sustainable development paths is essential. Jizu Mountain Scenic Area has successfully attracted a large number of tourists by combining various promotional methods. In 2023, the number of tourists received increased significantly year-on-year. However, to stand out in the preliminary list of national 5A tourist attractions, the scenic area still faces numerous challenges. This paper uses the PEST analysis to examine the impact of the macro environment on the scenic area and employs the SWOT analysis to comprehensively assess its internal strengths and weaknesses, as well as external opportunities and threats. Through in-depth analysis of the current situation and challenges faced by Jizu Mountain Scenic Area, the paper uses the 4P tool to formulate specific marketing strategies and implementation plans, aiming to enhance the scenic area's market competitiveness, promote sustainable development, and contribute to the rural revitalization process in the Jizu Mountain region.

Keywords: *Rural Revitalization, Jizu Mountain Scenic Area, Tourism Development*

Current Situation for the Sustainable Cultural Tourism Operation Management of Qianxinan Prefecture in the Context of New Media

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Abstract

The cultural and tourism industries are continuously evolving, with the marketing environment undergoing constant change. The use of new media marketing to promote rural tourism has become a prevailing trend within the contemporary cultural and tourism sectors. Abundant tourism resources serve as a fundamental prerequisite for the development of a tourist destination, while effective tourism marketing strategies are equally indispensable. Qianxinan Prefecture, located in Guizhou Province, leverages its favorable climate, rich natural tourism resources, and ecological health industries to advance the coordinated development of a diverse range of "tourism +" industries. The region aims to establish itself as an international mountain tourism destination and a leading domestic holiday health care destination. This study focuses on the sustainable cultural tourism of Qianxinan Prefecture. In the context of new media, the cultural tourism industry of Qianxinan Prefecture faces fresh opportunities for transformation and growth. This paper employs a PEST analysis to examine the current state of cultural tourism in Qianxinan Prefecture, investigates the existing challenges in the marketing and management of cultural tourism operations.

Keywords: *New Media Environment, Cultural Tourism Operation, Sustainable Development, Qianxinan Prefect*

Current Food Tourism Development in Qianxinan Prefecture, PR. China

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Abstract

Food reflects culture, and food tourism is considered a branch of cultural tourism. It is a type of travel that focuses on the enjoyment of food, emphasizing the use of food-related resources as attractions. Through these experiences, tourists can enjoy unique, unforgettable, and culturally rich journeys. Food tourism also plays a crucial role in differentiating tourism development strategies. The ability of food to attract tourists to various places—whether streets, malls, or scenic spots—brings significant economic benefits, making it one of the primary economic drivers in the tourism industry. Consequently, promoting food has become an essential component of tourism marketing strategies. Qianxinan Prefecture in Guizhou Province boasts a distinctive ethnic minority food culture. However, its tourism marketing strategy tends to copy those of other cities, failing to capitalize on its own unique cultural strengths. This has led to a homogenized approach and lower visibility. This study focuses on the food tourism of Qianxinan Prefecture, employing methods such as observation and interviews, and uses the STP (Segmentation, Targeting, Positioning) framework to clarify market positioning and explore the current state of food tourism in the region.

Keywords: *Food tourism，Current situation of development，Qianxinan Prefecture*

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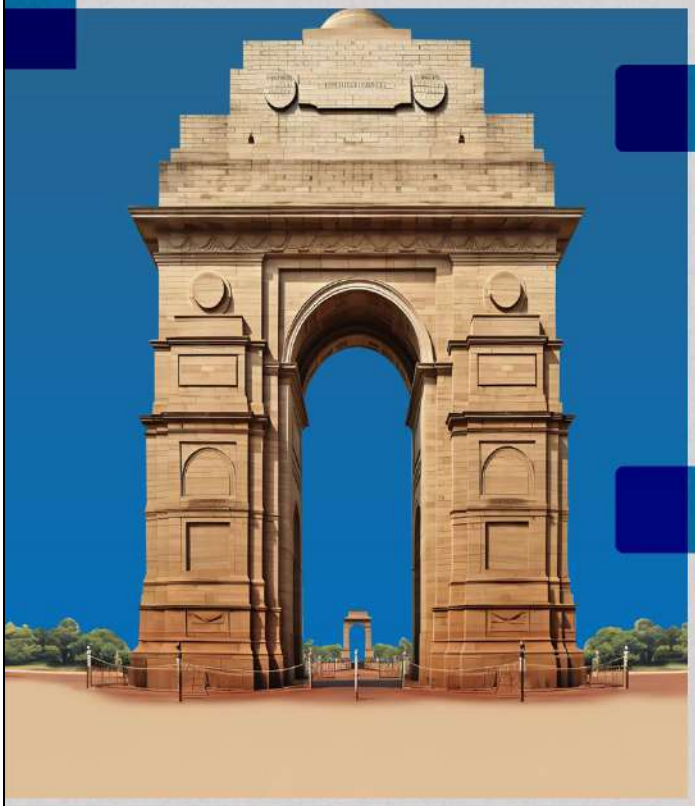
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Climate-Tech Innovations: Shaping India's Renewable Energy

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Abstract

India's rapid economic growth and population surge have intensified its energy demands, positioning it as a significant contributor to global carbon emissions through coal dependency. The nation faces mounting climate-related challenges such as extreme weather and agricultural instability. To mitigate these risks and achieve sustainable energy security, India is increasingly focusing on renewable energy (RE) technologies, primarily solar and wind, complemented by climate-tech innovations like energy storage and smart grids. This research adopts an explanatory sequential design of mixed-methods research combining 150 stakeholders' qualitative interviews and quantitative data from databases to assess the efficiency, cost, and environmental impact of these technologies. Solar photovoltaic systems are found to be the most promising RE technology in terms of emissions reduction of 18MtCOze and capacity addition of 30,000 MW, besides the achievement of a 20% cost reduction within five years. The research outlines the infrastructural, regulatory, and skills barriers to penetration and recommends policy, Research, and Development. And grid infrastructure improvements. Results highlight the importance of adopting distributed structures and climate-tech solutions as key strategies for achieving the decarbonisation of the Indian economy as well as indicating numerous socio-economic benefits, including employment opportunities and improving access to electricity in rural areas.

Keywords: *Renewable energy, Climate-tech, Energy Storage, Carbon emissions, Low-Carbon Transition.*

Exploring Health and Well-Being Among Elderly Engaged in Karakol Dance Across Selected Towns in Cavite

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Abstract

The world's older population is increasing rapidly, and it is becoming much more diverse. In the Philippines, the segment of the population aged 60 and above is expected to be the fastest-growing sector. According to Asia Pulse reports (2003), the number will balloon to 22 million by the year 2040 if the status quo is maintained. As of 2004, there are approximately 4.7 million elderly Filipinos, comprising an estimated 6.9% of the total population. It goes against the prevailing strong evidence that a regular regimen of physical exercise can have significant benefits in health preservation and life extension (Lievesley, 2010).

While there is considerable literature extolling the benefits of physical activity for older adults, research examining traditional dance practices and their impact on the health and well-being of older adults is very limited. A community-based activity, the Karakol dance has cultural and social significance in terms of representing the diversity of heritage in the Philippines. The studies pointed out the beneficial effects of dancing on seniors: improved physical, mental, and emotional health conditions were reported (Connor, 2000). The traditional dance engagement is one window through which this cultural practice could be analyzed for possible positive health consequences and satisfaction with life among the elderly.

This is a study gap the research will attempt to fill by determining the effects of participating in karakol dance on health and well-being among elderly women in Cavite. In particular, it looks into the effect on the physical, emotional, mental well-being, life enjoyment, and quality of life. From the study of these variables, the research intends to determine the importance of the cultural dance in enhancing elderly wellness and determine factors that influence participation. These findings will be useful to the elderly, health professionals, physical educators, and researchers, as a means of bettering their understanding of activities that are culturally embedded and promote health among older adults.

Keywords: *Health and well-being, Traditional Dance Practices, elderly wellness, Cultural Heritage, Elderly.*

Digital Transformation Trends in Business, Finance and Human Resource Management: A Review

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Abstract

Digital transformation (DT) has moved from being an optional tech upgrade to an essential for businesses responding to a growing global population. This shift has prompted many organizations to rethink their processes and operations. Experts warn that companies that don't swiftly adopt DT strategies risk being left behind in today's digital landscape. While some studies have focused on areas like digital marketing and accounting, many only scratch the surface of how DT has evolved in business particularly in the fields of human resource management and finance. This study aims to provide a comprehensive review of existing research on DT, highlighting trends and themes in the literature. The key questions are: How has DT changed over time? What themes are being explored? Understanding these aspects is vital for businesses navigating the digital world. The research methodology involves a review of the development and application of DT in business, human resource management, and finance, with a focus on key trends to suggest future directions for business practices.

Keywords: *Artificial intelligence (AI), Digital transformation(DT) , Fintech, Human Resource Management (HRM) digitalization*

The Dominant Sports Coaching Style Preferred by the Athletes from a State University in the Philippines

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Abstract

This research explores the dominant sports coaching style preferred by athletes at Cavite State University Imus Campus in the Philippines. Drawing upon a descriptive research methodology, the study investigates athletes' preferences across various demographic factors and types of sports played. A total of 183 officially enrolled athletes participated in the study, providing valuable insights into their coaching preferences.

The findings reveal a universal preference for democratic coaching styles ($\bar{x}$= 4.69) among athletes, emphasizing collaboration, communication, and participatory decision-making. Regardless of age, sex, year level, or degree program, athletes consistently rated democratic coaching as their preferred style. However, variations and exceptions were observed across certain types of sports, highlighting the importance of tailored coaching approaches. An interesting finding emerged regarding archery, where the athlete's average ratings for all coaching styles—Democratic, Autocratic, and Laissez-Faire—were consistently rated as $\bar{x}$=5.00, suggesting a preference for any coaching style by a single athlete. Moreover, exceptions were observed in specific sports. For instance, in Chess, an Autocratic coaching style was dominant, indicating a preference for a directive approach ($\bar{x}$=4.91). Similarly, in Lawn Tennis, athletes showed dual preferences for both Democratic and Autocratic coaching styles.

It is significant that coaches recognize and adapt to athletes' preferences to optimize engagement, motivation, and performance outcomes. Aligning the appropriate coaching style to the athletes' preference, can enhance the overall athletic experience and contribute to the success and satisfaction of athletes in their sporting endeavors

Keywords: *Sports coaching, Coaching Style, athletes motivation and performance*

Artificial Intelligence (A.I) in the Lens of School Heads of Public High Schools

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Abstract

This qualitative study aimed to examine the impact of the integration of artificial intelligence on educational pedagogies, analyze the challenges arising from the incorporation of artificial intelligence in the educational landscape, and investigate the facilitating factors introduced by artificial intelligence in the context of educational pedagogies as perceived by the school heads of public high schools during the school year 2023-2024. The data was gathered through open-ended interview questions and analyzed using thematic analysis. The results revealed three main themes. The first theme discussed the advantages of AI tools like ChatGPT, Google Bard, and Quilbot, which help teachers improve research, personalized instructions, work outputs, and grammar. The second theme highlighted the disadvantages of AI, such as the potential exploitation of teaching capabilities and compromised soft and hard skills. The third theme highlighted the lack of AI literacy among teachers, with some being unaware of its use and others using it due to poor internet connectivity in the school. It is recommended that teachers must be trained to integrate AI into their teaching practices, including legal and ethical aspects. They should be knowledgeable about data privacy and security, ensuring students and parents understand how data is collected, used, and stored. Informed consent from all stakeholders is crucial for implementing AI tools, ensuring only necessary data is collected for legitimate educational purposes. Access to AI and internet connectivity is essential for AI-powered learning platforms, personalized content algorithms, real-time feedback systems, and collaborative online environments.

Keywords: *artificial intelligence, school heads, algorithms, educational pedagogies, implementation*

Mental Health, Psychological Well-Being, and Financial Literacy Status of BPO Employees in Imus City, Cavite

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Abstract

The study was conducted from May 2023 to June 2024. The respondents were the BPO Employees working in Imus City, Cavite. This study aimed to determine the following: (1) the demographic profile of the BPO employees working in Imus City, Cavite based on (a) age (b) sex (c) civil status (d) educational attainment (e) employment status (f) length of service: (2) the mental health condition of BPO employees in terms of: (a) anxiety (b) depression (c) behavioral control (d) positive affect (e) emotional ties (f) life satisfaction: (3) the psychological well-being of BPO employees in terms of: (a) self-acceptance (b) environmental mastery (c) personal growth (d) autonomy (e) positive relations with others (f) purpose in life: (4) the financial literacy of BPO employees in terms of: (a) savings (b) budgeting (c) investing, and (5) if there's a significant relationship between the mental health issues, well-being, and financial literacy of BPO employees across companies. (6) if there's a significant difference between mental health issues, well-being, and financial literacy when grouped according to demographic profile.

The study employed a quantitative method, more specifically, descriptive-correlational design. Non–probability sampling was used for sampling procedure. Survey questionnaires were used to gather data. Descriptive and inferential statistic were employed to analyze the gathered raw data from 366 respondents working in Imus City, Cavite.

The study also showed the mental health condition of BPO employees. The study revealed that the equivalent interpretation of the participants' mental health conditions affect them in terms of anxiety, depression, behavioral control most of the time. Moreover, the participants' mental health conditions affect them in terms of the general positive effect, emotional ties, and life satisfaction has an equivalent interpretation of some of the time. The study showed the equivalent interpretation of the psychological well-being of BPO employees in terms of self-acceptance, environmental mastery, personal growth, autonomy, positive relations with others, and purpose in life has an equivalent interpretation of somewhat agree. Furthermore, Financial Literacy of BPO employees in terms of savings, budgeting and investing showed that all of the participants are fully aware and financial Literate. The researchers computed out of the 366 participants in terms of age, most people who responded to the questionnaires were between the ages of 18 - 25. In terms of sex, the majority of the respondents were female, 40.2 percent. For civil status, most respondents were single. In terms of the educational attainment, most of the respondents were college graduates. In terms of the employment status, majority of the respondents were full time. In terms of the length of service of the participants, most of the respondents were working in their respective company for 1-5 years. Moreover, it was found out that there is a significant relationship between mental health, psychological well-being, and financial literacy in terms of age, civil status, educational attainment, employment status and length of service. However. sex, civil status in terms of mental health and psychological well- being and age in terms of mental health and financial literacy are found not significant.

Keywords: *mental health, psychological well-being, financial literacy, BPO employees*

Mental Health, and Performance of Selected Working Student Under the Business and Administration Related Courses of Cavite State University

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Abstract

The study focused on the working students of business-related courses at Cavite State University. The study aimed to determine (1) the demographic profile of the respondents in terms of sex, age, year level, civil status, job status, net income as a working student, allowance for school projects, allowance for school activities, weighted average, satellite campus where they enrolled, and field of specialization; (2) determine the reasons for becoming working students; (3) assess the mental health of working students in terms of (a) mental well-being (b) anxiety level; (4) determine the academic performance of working students (5) determine the job performance of working student; and (6) determine the significant association between the level of mental health and performance in terms of (a) academic performance (b) job performance.

The study employed a quantitative method, more specifically, a descriptive-correlation design. Purposive quota sampling, a type of non-probability sampling, was used for the sampling procedure. Survey questionnaires were used to gather data. Descriptive and Gamma statistics were employed to analyze the gathered raw data from 150 respondents.

Based on the demographic profile results of the study, female respondents were 65.33%, most respondents were 21 – 24 years old, and the majority were in 4th-year college and single. Most of the respondents were under part-time status with a monthly net income of PHP 6,000 – PHP 6,999. Part of their income which was below PHP 2,000 were allotted for school project and school activities. In terms of academic performance, the majority of the respondents had an average of 1.75 to 2.00. Most participants were from the Imus Campus and took up Marketing Management. The common reason for the students to work was to support their education. The study revealed the participants' well-being was on an average level. Also, the anxiety level was experienced for several days. The study also revealed that 50.67% of the respondents had an excellent performance both in academics and job. Then, there was a significant association between mental health and the performance of working students.

The researchers recommend that the student seek appropriate coping skills and address any underlying mental health conditions. It is also advised for the students to take their overall well-being, including physical and emotional. For employers, it is recommended to help their student employees by encouraging them to take breaks and also look after their well-being. For the students to take care of their well-being, parents are recommended to have a daily conversation with their children. For educators, it is highly recommended to help the students in their roles by being aware and considerate of their circumstances. For the guidance counselor, it is highly recommended to provide projects that support the mental well-being of the students. Another recommendation is to conduct some events to divert the stress, anxiety, and depression of the student to focus on something else or their hobbies like art, cooking, baking, etc.

Keywords: *mental health, working students, academic performance*

Navigating AI and Women Empowerment: A Qualitative Analysis of the Intersection Between Technology and Work-Life Balance of Female Faculties in Universities– A Bangladeshi Perspective

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Abstract

This research study explores how Artificial intelligence (AI) has undeniably transformed corporate management practices, particularly within human resources and employment sectors by impacting tasks such as recruitment, performance evaluation, and workforce planning. AI supports women's empowerment by providing multiple advancements and opportunities. Even though these advancements are innovative, the presence of gender prejudice and stereotypes continue to create significant challenges in academic settings, particularly affecting the professional development and growth of women, and contributing to their underrepresentation in faculty roles. The female faculty members within the universities in Bangladesh frequently encounter challenges in achieving a coordinated work-life balance, which hampers their career progression and overall engagement. However, proactive steps can be implemented to mitigate these discriminations and promote a more inclusive and diverse academic environment. Through structured interviews with female faculty members at Bangladeshi educational institutions, this qualitative study explores these complex topics. It looks into how the work-life balance and empowerment are affected by individual AI proficiency, the accessibility of AI infrastructure, and the demographic variables including age, marital status, education level, and experience. By examining these dynamics, the aim of this study is to provide some valuable insights into enhancing women's empowerment and optimizing work-life balance within academic settings. The findings highlight the critical role that AI capabilities play in shaping work-life balance and empowerment dynamics among the female faculty members. Moreover, it also stresses the importance of demographic factors in understanding these outcomes. By exploring and addressing these dynamics, the study can be seen as a valuable resource for enhancing women's empowerment and optimizing performance evaluation systems within educational institutions. This study contributes to a holistic understanding of how AI influences women's empowerment and their ability to maintain work-life balance effectively, thereby leading to an enhancement of the overall effectiveness and efficiency of educational institutions in Bangladesh

Keywords *: Academic Environment, Artificial Intelligence, Bangladesh, Gender Discrimination, Women Empowerment, Work-Life Balance.*

Strategies for Sustainable Waste Management and Human Resource Development to Achieve Zero Waste and Create Jobs

Dr. Tarnima Warda Andalib[1], Dr. Nusrat Hafiz[2], Takmilla Tabassum[3], Shosunth Chandra Sarker[4], MD Saif Safayat[5], Maisha Nuzhat Haque[6]

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Abstract

Waste sustainability and HR strategies for zero waste and job creation highlight the critical role of waste management in a zero-waste future, as well as economic growth through job creation has an emphasis on development that has been discussed by the United Nations Environment Programme in 2021. Few scholars like Zaman and Lehmann mentioned that Sustainable management practices include proper collection, processing, recycling, and disposal to reduce waste generation and environmental impact. By adopting a zero-waste approach, organizations can reduce their carbon footprint, conserve natural resources, and create new opportunities for waste separation, recycling, composting, and recycling discussed by Gharfalkar and colleagues in 2015. These changes require reforms in human resource management (HRM) to align personnel strategy with sustainable development objectives. Human Resources Human resources should focus on hiring and training employees with expertise in green practices, fostering a culture of environmental responsibility, and developing programs to support policies that will persist. Srivastava and Andalib separately discussed that by integrating sustainable development into HRM, organizations can become employees who are not only environmentally responsible but can also provide innovation and efficiency in sustainable waste management, ultimately resulting in sustainable employment and economy.

Keywords : *Sustainable Waste Management, Human Resource Development, Zero Waste, Job Creation*

Smart Waste Solutions: Harnessing Technology for a Greener Future

Dr. Tarnima Warda Andalib[1], Dr. Nusrat Hafiz[2], Nadia Afroze Disha[3], Farjana Alam Omey[4], Ahshanul Labby[5], Ummay Maimona Chaman[6]

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Abstract

The study investigates the relationship between technological innovation, waste management, and environmental sustainability. A Partial Least Squares Structural Equation Modelling (PLS) approach was used for analysis. The data was collected from a sample of companies in the textile industry. The results suggest that Technological innovations for waste management positively and significantly affect environmental sustainability. This study concludes that different sorts of waste are managed differently by applying technological innovations that drive towards environmental sustainability and emphasize the need to prioritize and adopt sustainable techniques for waste reduction and energy use in sustainable manufacturing practices. The study has practical and managerial implications in all production or manufacturing industries and provides a guideline for managers and policymakers to ensure environmental sustainability.

Keywords : *Environmental Sustainability, Technological innovations, Waste Management, Managers' guideline, Policy makers*

Enhancing Employee Well-Being Through Industrial Psychology: A Holistic Approach to Workplace Productivity and Mental Health

Dr. Tarnima Warda Andalib[1], Dauwood Ibrahim Hassan[2], Nadia Afroze Disha[3], Dr. Nusrat Hafiz[4], Takmilla Tabassum[5], Samiha Ibnat Barna[6]

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Abstract

This paper aims to explore the critical role of industrial psychology in enhancing employee well-being through a holistic approach that balances workplace productivity and mental health. According to industrial psychology, the mental, emotional, and environmental aspects of work are pivotal in promoting a healthy and productive workforce. Thus, the study focuses on understanding how well-being initiatives, such as reducing workplace stress, improving motivation, and providing psychological support, contribute to overall job satisfaction and employee performance. By examining theories such as Maslow's Hierarchy of Needs and the Job Demands-Resources (JD-R) theory, the study highlights the significance of addressing both basic needs and work-life balance to create a supportive and mentally healthy work environment. The methodology used in this research is qualitative, drawing insights from various case studies and literature reviews on employee well-being and industrial psychology. It also highlights the influence of leadership styles, particularly transformational leadership, on the creation of supportive and low-stress environments that lead to psychological well-being and job satisfaction of employees. The findings of the study underscore the importance of prioritizing mental health and well-being in modern workplace settings. The implication of this research for managers thus is that to have a more engaged and satisfied workforce and to see long-term improvements in employee productivity and organizational sustainability, they must adopt a holistic approach to employee well-being by integrating mental health support, leadership development, and work-life balance into the workplace environment.

Keywords: *Mental Support, Leadership, Work-Life Balance, Industrial Psychology*

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Pertaining Ontological Paradigm to Construct Nexus of Recruitment and Selection Strategies in HRM for Sustainability: Integrating AI Tools with Employee Rights Protocols

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Abstract

This paper aims to reflect on recruitment and selection techniques engraved in the Human resource management practices in the listed manufacturing companies of Bangladesh. These companies have their own customized HRM policies and practices. Employees of any company are divided into mainly two sections, which are first, white-collar executives or management employees and second, blue-collar or labours, and all of them have certain employee' rights declared in the guideline of Bangladesh Labour Act 2006. In this paper, researchers have taken insights into the ontological paradigm and applied the qualitative research methodology with multiple case studies technique where twelve case studies are conducted. Through these case studies, in-depth interviews are done to dig more into the situation and to understand the practical scenario regarding the implementation of employee rights issues. Nevertheless, in this study, how AI integration is possible in the context of recruitment and selection, those opportunities are explored and pointed out as well. In any HRM framework, many dimensions are present, in this particular study the authors have focused on one particular dimension, which is the 'Recruitment and Selection Method'' in the HRM framework.

Keywords: *Recruitment & Selection, HRM framework, Artificial Intelligence, Employee Rights, Case studies*

Teachers' Self-Efficacy and Students' Learning Engagement : Basis for a Mentoring Program

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Abstract

This study assessed teachers' self-efficacy and students' engagement in Shandong Electronic Vocational and Technical College, Jinan City, Shandong Province, China. The result paved the way towards designing a mentoring program for teachers. The respondents of the study were third year students enrolled in Digital Information and Digital Media courses within Shandong Electronic Vocational and Technical College exploring the impact of teachers' self-efficacy on their engagement. Most of the respondents were male and were within the age group of 19 -20 years old. It can be concluded that teachers' self-efficacy in terms of instructional strategies, classroom management, and student involvementis evident, as observed by the student respondents. This implies that while teachers are competent in key areas, enhancing student engagement could lead to even better learning outcomes and a more balanced approach to effective teaching. When it comes to the assessment of their profiles, It was reveals significant age-based differences in students' assessments of teachers' self-efficacy, highlighting that age influences students' perspectives, while sex and academic major do not. The students exhibit behavioral, emotional, and cognitive engagement, though each area receives varying emphasis. This suggests that while students are actively participating in their education, there may be imbalances in how they engage, highlighting the need for targeted efforts to promote a more holistic and balanced approach to student involvement in learning. Significant age-based differences were found in students' assessments of engagement, with views on cognitive, affective, and behavioral engagement shifting with age. However, no differences were observed based on sex or major, indicating similar opinions across these groups. Overall, the study showed that there was a strong positive correlation between teachers' self-efficacy and student engagement.

Keywords: *Teachers' Self-Efficacy, Students' Learning Engagement, Instructional Strategies, Classroom Management, Student Involvement*

The Interplay Between Peer Relations and Class Participation in PE

Lianqian Li[1], Rodil F. Fadri[2]
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Abstract

The importance of participating in physical education classes is widely recognized, yet the low student engagement remains a concern. This study employs a quantitative research method, utilizing both descriptive and multiple linear regression designs. It evaluates how peer relationships influence participation in physical education classes. The focus is on non-physical education major students at three selected universities in Chongqing, China. The study aims to determine if peer relationships can predict college students' class participation. A random sample of 379 respondents was surveyed using a well-established and reliable questionnaire. The results indicate that respondents have positive evaluations of their intimacy, popularity, trust, and insight with friends. Students show engagement in cognitive, behavioral, emotional, and social aspects. The combination of intimacy, trust, and insight can predict college students' participation in physical education classes. These findings suggest that teachers or school administrators can enhance class participation by fostering peer relationships. This study's analysis enhances the understanding of college student class participation and proposes a framework for peer relationships and participation in physical education classes. The results offer insights for interventions to improve class participation through peer relationships. The findings have positive implications for policy-making by school administrators and instructional strategies by teachers.

Keywords *: college students; peer relationships; class participation; physical education*

School Innovation Culture as Predictor of Teachers' Research Competence

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Abstract

The study assessed the school innovation culture and teachers' research competence in selected higher education institutions in Hunan, China. It assessed school innovation culture using the sub-variables: strategy, support mechanism, structure and creative behavior. For the assessment of research competence, the study used the sub-variables research methodology, research ethics, and utilization of research. The study also determined the predictive role of innovation culture on teachers' research competence. The study involved 305 teacher respondents who were selected randomly from a total population of 1460 teachers. The instrument used for data gathering was developed by the researcher. It was validated, pilot tested and showed acceptable reliability results. The finding showed a weak innovation culture in the investigated schools. The respondents assessed innovation culture as weak in all its sub-variables. It implies there is lack of organized effort to foster innovation culture in the investigated schools. The findings also showed poor research competence among the respondents. They have poor competence in research methodology, ethics, and utilization. Based on the result of the multiple linear regression analysis, the study concluded that school innovation culture has predictive influence on the teachers' research competence. It implies that the weak school innovation culture has a negative influence on the research competence of the teachers. The study highlights the need to strengthen innovation culture to increase research productivity in schools.

Keywords : *school innovation culture, research competence*

Modernizing Land use Governance: Integrating Smart Technologies, Sustainability, and Ethics in Urban Planning

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Abstract

This research investigates critical land use governance and urban planning concerns, focusing on sustainable development, information technology incorporation, and global change adaptations. These questions are: How can national land use policies be mainstreamed sustainably? How can local leaders better appreciate comprehensive land use planning? What are the ethical implications of using AI in urban planning? And how can public awareness of land use management be increased? The study adopts a comprehensive literature review methodology that combines findings from various urban planning disciplines. It argues that sustainable and inclusive land-use governance must take an integrated approach focusing on sustainability, social equity, technological advancement, and local context. Current practices usually fall short of addressing intricate urban issues, necessitating new paths to resilient, sustainable, and just cities. This study is driven by the pressing need for adaptive governance systems and novel approaches to urban planning amidst rapid urbanization, climate change, and technological disruptions.

Keywords : *Urban Planning, Smart Cities, Sustainability, Governance, Environmental Planning*

Shadow Economy of the Middle East and Assessment of the Effectiveness of Measures for Taxation of Hidden Income

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Abstract

The shadow economy is the most problematic issue today because its high level suspends integration and social-economic development of the country. Middle East countries are characterised by a fairly high level of the shadow economy. The presence of high hidden incomes in the Middle East is accompanied by a low standard of living in these regions, a high level of poverty, and a lack of social development in these countries. The development of shadow activity in the Middle East region causes and supports the shadowing of the economy at the international level. The purpose of this paper is to examine and generalise aspects of the shadow economy of Middle East countries and assess the effectiveness of measures for taxation of hidden income. That is why, using the analysis method, it was determined that the level of the shadow economy in the Middle East is the inverse of the effectiveness of the fiscal policy. Through mathematical modelling, a regression of the dependence of the effectiveness of measures on taxation of hidden income and the strength of legal rights index in the public sector of the Middle East was constructed, which proved the inverse relationship between the level of the shadow economy and fiscal policy, because 82% of changes in tax revenues can be explained by changes in their legal regulation. Considering the proof of the dependence of the effectiveness of taxation of hidden income in the Middle East on fiscal policy, measures were developed and proposed to improve the tax system in the countries of this region. It is determined that the main areas of reducing the level of the shadow economy and improving the effectiveness of measures for taxation of hidden income should be the expansion of taxes, increasing interest rates on taxes, improving the system of income legalisation, and regulating informal activities.

Keywords: *tax revenues; fiscal system; strength of legal rights index; financial monitoring; non-cash payment.*

Women-led Sustainability-focused Tech-Startups in Bangladesh

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Abstract

Sustainability startups aim to achieve environmental sustainability by addressing material and energy waste and introducing cost-effective technologies to reduce reliance on non-renewable resources. As a critical priority for developing regions, they must balance environmental benefits with the impacts of resource-intensive technologies. In Bangladesh, startups are increasingly investing in the ICT sector to ensure sustainable development. Nevertheless, despite women outpacing men in educational achievements, their representation in technopreneurship lags behind. Hence, this study aims to investigate women's role in sustainability-focused technology startups in Bangladesh. It will also analyze how these ventures contribute to sustainability goals. This study adopts a qualitative research approach, utilizing in-depth interviews with four Bangladeshi women entrepreneurs leading sustainability-focused tech startups in Bangladesh as primary data. Secondary data is gathered from a range of sources to provide broader context and support the analysis. Key findings indicate that while women's overall participation in Bangladesh's technology sector is still limited in terms of contributing to sustainability goals compared to men, their progress in promoting sustainable practices is commendable. Nevertheless, the findings also offer room for enhanced opportunities for female entrepreneurs for sustainability goals in some sectors, such as eco-friendly technology, sustainable fashion, skincare and makeup, agritech, and waste management solutions. This study encourages further exploration into gender imbalances and opportunities for women in sustainable entrepreneurship, paving the way for a more inclusive startup ecosystem. It also proposes that social values, the education system, and individual capabilities and resources are essential for fostering women's sustainable entrepreneurship. Examining these aspects will provide deeper insights into the factors influencing the gender disparity in technology-driven sustainability entrepreneurship. This understanding can lead to the development of more impactful strategies to empower female entrepreneurs in Bangladesh and other developing regions.

Keywords *: Female founders, ICT sectors, Sustainability-focused tech startups, Technopreneurship*

Crowdfunding Platforms as a Capital Formation Tool for Young Filipino Entrepreneurs: Empirical Evidence and Growth Implications

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Abstract

This study investigated the factors determining the behavioral intention of young Philippine entrepreneurs to use crowdfunding to finance their small enterprises. The capacity of behavioral intention to predict the use behavior of crowdfunding platforms was also assessed. Partial least squares-based structural equation modeling method (PLS- SEM) was used to analyze responses collected from 270 young Philippine entrepreneurs. The unified theory of acceptance and use of technology (UTAUT) with extensions of three constructs was employed. The findings reveal that blockchain technology has insignificant impact on both perceived usefulness and perceived ease of use. Moreover, platform quality, social influence and performance expectancy has significant and positive influence on perceived ease of use and perceived usefulness. In last, perceived ease of use and perceived usefulness are significantly and positively related with intention to use crowdfunding platform. This research adds to numerous bodies of literature and suggests a course of action for future scholars and professionals.

Keywords: *Blockchain technology, performance expectancy, platform quality, intention to use crowdfunding platforms*

An Assessment of the Practices on Continuous Quality Improvement (CQI) Among Teacher Education Institutions in Basilan

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Abstract

Like any other higher learning institutions, PHEIs in Basilan, an island province of the Philippines in the Bangsamoro Autonomous Region for Muslim Mindanao (BARMM), are also confronted with challenges when it comes to Quality Assurance in tertiary education. The study was conducted to Assess the Practices on Continuous Quality Improvement among Teacher Education Institutions in Basilan and provide a framework which can be used when engaging in quality improvement efforts. The study employed a mixed methods design, quantitative data were collected purposively from sixty (60) faculty members using an adapted questionnaire formulated by Thalner (2005) and descriptive statistics were used to analyze the weighted means, standard deviations, and ranges for the various variables. While the qualitative data were collected from College deans, and program chairpersons and the Vice president for academic affairs, utilizing FGD and KII. Results showed that awareness on the continuous quality improvement is present but the need to strengthen the training on the process and methods should not only among department heads to strengthen the commitment as a shared culture in the pursuit of quality assurance, Commitment towards continuous quality improvement regardless of departments and among stakeholders is evident to be a powerful tool given the training and other resources available, support mechanism for a continuous quality improvement must be guided by a framework best fit for academic institutions. Thus, all HEIs should maintain and enhance standards as well as review policies. Quality assurance is a way for institutions to maintain standards and continuously improve the standards of education, facilities, support, among others, Commitment to provide excellent customer service which will be strengthen if there will be trainings and webinars and emphasize commitment towards continuous quality improvements in the core values of the academic institutions.

Keywords: *Academic program review, accreditation, benchmarking, SWOT analysis, quality assurance*

The Relationships Among Factors Influencing Communication to Promote Sustainable Tourism in the Municipal Area of Prachuap Khiri Khan Province

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Abstract

This research aims to explore the relationships among factors influencing communication to promote sustainable tourism in the municipal area of Prachuap Khiri Khan Province. A multi-stage sampling approach was employed, incorporating stratified random sampling, simple random sampling, and accidental sampling methods. Data were collected from a sample of 400 Thai tourists using a questionnaire. The data were analyzed using both descriptive and inferential statistical methods. The findings reveal significant relationships between demographic factors such as gender, education level, duration of stay, and place of residence and the development of communication strategies for promoting sustainable tourism. Specifically, female and LGBTQ+ tourists, individuals with educational attainment below the bachelor's degree level, those staying for 5–7 days, and tourists residing in the central region demonstrated greater receptiveness to sustainable tourism communication compared to other groups. These results provide valuable insights for designing effective and inclusive communication strategies tailored to diverse audience segments. Such strategies are essential for fostering long-term sustainable tourism practices and addressing the varying needs and preferences of different tourist demographics.

Keywords: *sustainable tourism, communication, influencing factors, Prachuap Khiri Khan Province*

The Threat of Intelligent Automation to the Strength of Human Resources in the Banking Industry is a Cost-Effective Business – A Study on Selected Banks

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Abstract

The amalgamation of intelligent automation and organization has brought incredible sustainable gateway to the banking industry. A one-time investment in technology instead of multiple reinvestments on an annual basis can reduce banks' expenses in many ways. The cutting age technology create the space for the organization to create a different value in the market to generate more customers by providing them on a fingertip service without any hassles. The aim of the study is to find out the intelligent automation taking over the strength and requirement human resources of the banking industries. The banking industry are implementing the intelligent automation technology according to the changing scenario of the demand of the market. The adoption of the new technology comparatively less cost against the long-term different type of investment on human resources and their development. The study is based on the secondary data collected from the different source of literature reviews and banks. This study is a comparative study between public and private banking sectors. Therefore, different type of public and private banks has been taken to fulfil the requirement to the study. At the end, the conclusion part will be covered with some suggestion based on the secondary source of the study.

Keywords: *Intelligent Automation, Artificial Intelligent, Human Resources, Banking Industry, Cost Effective*

Enhancing Clinical Decision Support Systems for Respiratory Ailments

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Abstract

The purpose of this study is to assist clinicians in making informed decisions using the newly developed Clinical Decision Support System. This system offers rapid data analysis techniques to generate reliable predictions based on stored data through regression analysis. The study highlights the system's ability to foresee potential future issues or necessary actions. Evaluation results from IT experts and end users indicate that the system meets the ISO 25010 software quality standards to a "Very Great Extent" in terms of Functional Sustainability, Performance Efficiency, Compatibility, Usability, Reliability, Security, Maintainability, and Portability. The system effectively addresses problems by providing fast and reliable data analysis, thereby simplifying decision-making for physicians and nurses. Additionally, electronic record-keeping has proven to be more efficient, secure, portable, and space-saving. The system's timely record summaries offer immediate access to current medical records, analyze records, and predict future outcomes based on the analyzed data.

Keywords: *Decision, Data Mining, Predictive Analytics*

Assessments towards Effectiveness and Impact of Pearson Edexcel Curriculum: A Case Study among PE Learners at SMA Lokon St. Nikolaus Tomohon City, Indonesia

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Abstract

It will look into the effectiveness and impact the Pearson Edexcel curriculum has on Pearson Edexcel learners at SMA Lokon St. Nikolaus, Tomohon City, Indonesia, in addressing how well the curriculum supports the students with regard to learning outcomes. It also looks into whether the curriculum is adaptable and relevant to the local educational environment. Through surveys and interviews conducted with both students and teachers, this study identifies major strengths and challenges faced by the learners who have taken the Pearson Edexcel framework.

These findings show that the curriculum is well-structured in terms of how the student learns about the concepts of PE to improve their performance. The study has also identified certain areas wherein the curriculum is not fully adapted to local students' needs, such as resource and support issues for practical work. In fact, the engagement of teachers and flexibility within the curriculum are found to be the key factors for the effectiveness of the curriculum.

Summarizing, this study concludes that the Pearson Edexcel curriculum positively influences the learners of PE in SMA Lokon St. Nikolaus; however, resource management and adaptation to context still have room for improvement. Based on these findings, suggestions for local authorities and schools will be addressed to work toward increasing effectiveness in implementing international curricula for teachers' and students' benefit.

Keywords: *Pearson Edexcel (PE), SMA Lokon, Effectiveness, Impact, Curriculum, Sekolah Lokon*


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Bridging Connections: A Digital Transformation's Role in Strengthening Academic Cohesion

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Abstract

This study investigates how digital transformation can strengthen core cohesion within an academic institution, particularly through fostering a unified academic and operational environment. Anchored in core values of Connect, Cooperate, and Collaborate, the research explores how digital tools can promote cohesion and alignment among faculty, students, and staff. The primary areas of focus include enhancing digital infrastructure, supporting data-driven decision-making, improving cross-functional collaboration, and streamlining communication channels. The study leverages cloud-based systems, data analytics, and centralized communication platforms to facilitate cohesive interactions across departments and roles. Additionally, complementary training programs and feedback mechanisms are established to ensure that digital transformation initiatives align with the institution's mission of preparing future-ready professionals within a continuously evolving educational landscape.

To measure the effectiveness of digital transformation in promoting cohesion, quantitative data were collected through structured surveys administered to faculty, students, and administrative staff. These surveys measured factors such as engagement levels, communication effectiveness, and perceptions of institutional alignment. Statistical analysis reveals significant correlations between the use of digital tools and measurable improvements in academic cohesion, collaborative learning, and operational efficiency. Furthermore, results indicate that a digitally cohesive environment not only enhances individual engagement and communication across groups but also fosters a stronger sense of community within academic and administrative sectors.

The study's initial findings highlight that digital transformation, when thoughtfully implemented, can transcend traditional boundaries within an institution, fostering an integrated environment where technology facilitates collaboration, shared goals, and community spirit. The insights gained from this research emphasize that digital initiatives, such as data-driven decision-making and cross-functional communication platforms, are most effective when they are aligned with the institution's values and operational objectives.

By developing a comprehensive framework for digital cohesion, this research shows that academic institutions can address contemporary educational demands while preserving their foundational values. Ultimately, this study underscores the importance of aligning technological initiatives with institutional values and goals, positioning digital transformation as a means to create a connected, empowered, and sustainable academic community that is equipped to meet the challenges of modern education.

Keywords*: digital transformation, core cohesion, academic institutions, collaborative learning, operational efficiency.*

Assessing the Global Power City Index in National Capital Region: Determination of Urban Influence and Economic Strength in the 21st Century

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Abstract

Cities are key drivers of economic expansion, cultural progress, and political leadership. Cities have traditionally served as a center for innovation and progress, shaping the present global environment by bringing people together for ideas, trade, and talent from many jurisdictions, making them locations of progression and influence. In today's linked world, cities are increasingly competing to establish themselves as global power centers. Cultural impact, political stability, and advances in governance and technology are among the indicators used in this rivalry, which goes beyond economic productivity.

The GPCI assesses cities based on their ability to recruit and retain human capital, investment, and enterprises, as well as a variety of other characteristics such as Economy, Research and Development, Cultural Interaction, Livability, Environment and Accessibility. Understanding these elements will be crucial in this period, as difficulties will only increase with climate change, rapid technology breakthroughs, and growth in socioeconomic disparity. Cities do not just fight for global domination, but also for sustainability, resilience, and a high quality of life for their residents. As a result, the GPCI is becoming an increasingly significant instrument for measuring future competitiveness and preparation.

The Global Power City Index lists a number of critical concerns that the National Capital Region, or Metro Manila, must overcome in order to increase its global competitiveness. The greatest problem is infrastructural development and urban congestion. Metro Manila has significant traffic difficulties and outdated transit infrastructure, which impede access and economic production. The challenges identify certain critical areas where concerted efforts and significant reforms are needed to improve Metro Manila's GPCI rankings and overall global standing. The advantages will not only improve NCR's competitiveness, but will also help to create a more resilient, egalitarian, and sustainable metropolitan environment.

In essence, researching GPCI in NCR lays out a road map for sustainable urban development, increases global competitiveness, and improves inhabitants' quality of life. The GPCI results will give a more data-driven view on where NCR is, what problems it must face, and how it could strategically position itself as a world-class city in the 21st century.

Keywords: *Global Power City Index, GPCI, Economy, Research and Development, Cultural Interaction, Livability, Environment and Accessibility*

Reading Comprehension Levels of College Freshmen Students Based on Their Reading Skills

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Abstract

This study employed a descriptive-exploratory research design to evaluate reading comprehension among freshmen in the College of Education, specifically those in Bachelor of Secondary Education (BSEd) and Bachelor of Elementary Education (BEEd) programs. Using a teacher-made test, it assessed comprehension across three levels: literal, interpretative, and critical. Findings indicate that students demonstrate commendable proficiency, excelling in literal comprehension by effectively identifying details and understanding text structure. Interpretative skills rank closely behind, as students generally grasp main ideas and make inferences, though there is room for improvement in predicting outcomes and recognizing underlying values. While critical reading ranks third, students show a foundational capacity for analysis and synthesis, indicating growth potential in critical thinking. BEEd students outperform BSEd students in interpretative reading, likely due to curriculum emphasis on interpretation, while BSEd students show greater strength in literal comprehension. To address these findings, the study recommends targeted activities to enhance critical thinking skills, such as exercises focused on recognizing author bias and interpreting complex implications, alongside referent identification activities to reinforce literal comprehension. Regular assessment and differentiated instruction may also help address the disparities between BSEd and BEEd students, promoting a balanced development of reading comprehension skills across both programs.

Keywords: *Reading Comprehension, Reading Skills, Reader-Response, Schemata, Three Levels of Reading Comprehension*

Waste Management Utilization Practices in Selected Barangays of District 6 Zone 64 City of Manila

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Abstract

This study investigates the waste management utilization practices in selected barangays of District 6, Zone 64, City of Manila. The research objectives to evaluate the effectiveness of current waste management strategies and identify areas for improvement. Data was collected through surveys, interviews, and direct observation of waste disposal and recycling practices in selected barangays. The findings reveal a significant reliance on traditional waste disposal methods, with limited implementation of recycling and composting programs. The study highlights the need for enhanced community education and infrastructure development to promote sustainable waste management practices. Recommendations include the introduction of promoting the 3Rs (Reduce, Reuse, Recycle), provide in service trainings and seminar workshops, enhanced public awareness campaigns, Invest in Advanced Recycling Technologies, Strengthen Waste Management Regulations, Support Community-Based Initiatives. The results of this study contribute to the broader goal of achieving sustainable urban waste management in City of Manila.

Keywords: *Ecological Solid Waste Management, Reduce, Reuse, Recycle, Advanced Recycling Technologies*

Data Warehouse Design and Analytics Framework for Churn Mitigation Solutions

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Abstract

Customer churn remains a significant challenge for the telecommunications industry, impacting revenue and customer loyalty. This study aims to address this issue through the design and implementation of a data warehouse framework tailored to consolidating churn-related data and enabling advanced analytics for churn mitigation. The research outlines a systematic approach to creating a centralized data warehouse that integrates diverse data sources such as customer demographics, service usage, billing information, and customer interactions, ensuring data integrity, scalability, and analytical readiness. Key processes in this framework include the Extract, Transform, Load (ETL) procedure to gather, clean, and structure data, along with preprocessing techniques to improve data quality and consistency. The centralized data repository facilitates efficient reporting and decision-making, forming the foundation for future predictive modeling and advanced churn analytics. This approach aims to enhance churn prediction accuracy, identify high-risk customers, and support targeted retention strategies, ultimately providing a strategic tool for customer retention efforts in the telecommunications industry. The conceptual framework of this study illustrates the flow of data from source integration through ETL to the creation of churn prediction models, customer segmentation, and actionable business insights that inform targeted retention interventions. This research contributes to the development of data-driven solutions that enhance customer retention and reduce churn in a competitive market.

Keywords: *Data Warehouse, Data Preprocessing, Customer Churn, Subscriber Retention, Predictive Modelling, Hyperparameter Tuning*

Forecasting of Dengue Outbreak Risk Level in Quezon City and Manila City: Analyzing Patterns and Predictive Models

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Abstract

Dengue fever remains a pressing public health issue in the Philippines, significantly affecting health systems and socio-economic stability. With outbreaks increasingly linked to environmental and socio-economic factors, timely forecasting is essential for effective public health planning. This study focuses on developing a predictive framework to assess dengue outbreak risk levels in Quezon City and Manila City. By integrating three critical datasets—Historical Dengue Cases, Weather Data, and Socio-economic Data—the study aims to provide a comprehensive understanding of the key factors driving dengue transmission. The Historical Dengue Cases dataset offers insights into temporal trends and geographical distribution, while Weather Data includes variables such as temperature, rainfall, and humidity, which are crucial in modeling mosquito breeding conditions. Socio-economic Data, covering indicators such as population density and income levels, further contextualizes the human and environmental factors influencing outbreak patterns. To identify the most effective approach for dengue risk prediction, the study evaluates three classification models: Logistic Regression, Random Forest, and XGBoost. Each technique is assessed based on its predictive accuracy, interpretability, and robustness, ensuring the chosen model meets the demands of early warning systems.

The outcome of this research is a forecasting tool tailored to urban settings like Quezon City and Manila City, where population density and climate variability heighten dengue risks. By enabling targeted interventions, such as vector control and community awareness programs, this tool aims to optimize resource allocation and reduce the health and economic impacts of outbreaks. This study aims to strengthen public health preparedness by leveraging data-driven solutions to mitigate the impact of dengue and build resilience in high-risk communities.

Keywords: *Blockchain technology, performance expectancy, platform quality, intention to use crowdfunding platforms*

Public Private Partnership for Sustainable Tourism in Oman

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Abstract

The aim of this research is to explore the role of Public-Private Partnerships (PPPs) in promoting sustainable tourism development in the Sultanate of Oman, emphasizing on their significance in terms of pooling of knowledge and capital, building the needed tourism infrastructure, safeguarding the ecosystem, heritage and the country's rich culture and traditions, etc. The study employed a quantitative research methodology to evaluate the effectiveness of PPPs in fostering sustainable tourism in Oman. A survey was administered using a structure questionnaire to assess the alignment of PPPs with Oman's sustainable tourism initiatives. Using snowball sampling, data was collected from 35 key stakeholders involved in sustainable tourism in Oman. Multiple regression analysis was employed using SPSS software to study the impact of PPPs on sustainable tourism. The study affirmed that PPPs would ensure pooling of knowledge and environmental protection thereby having significant impact on tourism development in Oman, while the influence of PPPs on infrastructure development and capital accumulation for tourism growth is found to be negligible. The study revealed that stable political environment, prudent governance and social/community support to be the critical success factors for strengthening PPPs while emphasizing on the need for effective risk management practices and accurate cost-benefit analysis to further strengthen the partnership between the two sectors. The study concludes by offering both theoretical and practical implications to the policymakers and industry leaders for positioning Oman as one of the preferred global tourism destinations.

Keywords: *critical success factors, economic diversification, PPP, sustainable tourism.*

Embracing Metaverse towards Sustainable Tourism in Oman

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Abstract

The metaverse, a digital environment linking augmented and virtual reality technologies, is an evolving tool for transformation across industries. This conceptual paper explores the potential of a metaverse in revolutionizing Oman's tourism landscape. Leveraging metaverse in tourism sector can help Oman in achieving its sustainable development goals. This paper discusses the role of a metaverse in designing inclusive and innovative tourism experiences while addressing the challenges of resource management, cultural conservation, and over-tourism. This paper is developed by reviewing a wealth of relevant literature to explore the implications of metaverse on sustainable tourism in Oman. It is an attempt to make Oman's rich heritage, culture and natural beauty accessible to global travellers and strengthen Oman's potential to market its tourism attractions to global tourists. The paper proposes suggestions to policy makers on the strategic initiatives with regard to integrating metaverse-driven solutions in Oman's tourism industry for achieving the goals of social and economic sustainability aligned with its Vision 2040.

Keywords: *augmented reality, metaverse, sustainable tourism, virtual reality, Vision 2040, etc.*

Lived Experiences of Contract of Service Social Workers

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Abstract

This thesis investigated the lived experiences of contract-of-service social workers through the lens of Clark Moustakas' phenomenological method. This approach allowed for an in-depth exploration of the subjective experiences and meanings that these professionals attach to their experiences with the primary social welfare agency of the Philippines. By conducting comprehensive, semi-structured interviews with contract-of-service social workers, the study captured the essence of their experiences. Through Moustakas' systematic data analysis steps, including horizontalization, clustering of meanings, and textual-structural synthesis, the research uncovered central themes such as being overworked and being exposed to hazard-prone tasks. The study underscored the need for enhanced support mechanisms and policy reforms to address the unique experiences faced by contract-of-service social workers. By providing a nuanced understanding of their lived experiences, this thesis contributes valuable insights into the field of social work and offers practical recommendations for improving the conditions and support systems for contract-of-service social workers.

Keywords: *Lived experiences, Contract-of-Service Social Workers, Contractualization, Non-standard forms of employment, Contract of Service*

Building Intelligent Systems for Task Automation Using AI and NLP Technologies

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Abstract

Artificial Intelligence refers to developing computer systems that can perform tasks requiring human intelligence. It encompasses machine learning, problem-solving, and understanding and responding to natural language. Artificial Intelligence technology allows machines to interpret visual information. They are applied in image recognition, object detection, voice recognition, and facial recognition. This paper aims to develop a sophisticated virtual assistant, leveraging AI and natural language processing capabilities. The virtual assistant is designed as an application program that comprehends natural language voice commands, enabling users to delegate tasks seamlessly. Natural Language Processing enables computers to understand, interpret, and generate human language. They are used in virtual assistants, language translation, and chatbots.

The central objective of this paper is to develop an advanced virtual assistant that surpasses traditional voice recognition systems. The envisioned virtual assistant aims to exhibit intelligence and user-friendliness by understanding context, adapting to user preferences, and executing diverse tasks through voice commands. Inspired by leading virtual assistants such as Siri, Alexa, and Google Assistant, this paper not only draws inspiration but also integrates functionalities that include sending automatic emails, accessing specific images and videos, playing music, and seamlessly opening websites like Google, Wikipedia, YouTube, Facebook, among others. The aspiration is to provide users with a comprehensive and interactive virtual assistant experience that caters to many daily tasks.

Keywords: *Artificial Intelligence, Natural Language Processing, Virtual Assistant, User Interaction, Machine Learning.*

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The Current Situation of the Combination of Health Qigong and Modern Health Management Industry

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Abstract

With the increase in global health awareness and the rapid development of the health industry, consumers have displayed an increasing demand for health healing and traditional Chinese health preservation. As one of the traditional Chinese exercise and health methods, Health Qigong has shown remarkable effects in regulating the body and mind, enhancing immunity, and has gradually attracted the attention of the modern health management industry. However, due to factors such as cultural differences and ambiguous market positioning, Health Qigong still faces many challenges to its promotion within the industry. Based on a literature review, this study systematically analyzes the application status, potential advantages and obstacles of Health Qigong in the health management industry and proposes a commercialization model that combines innovative paths, such as cultural tourism and digital communication. The research results show that Health Qigong has broad potential in the global health management market, and its modernization and international promotion will provide new ideas for the health management industry.

Keywords: *commercial model, digital communication, Health Qigong, modern health management industry.*

1. INTRODUCTION

As global health awareness continues to increase, consumer demand for health treatments and traditional health care is growing year by year. The modern health management industry is developing rapidly under this background, and continues to integrate diversified health services and healing methods to meet people's comprehensive concerns regarding their physical and mental health. In this context, traditional Chinese health-preserving methods have gradually entered the international perspective along with their unique theoretical system and curative effects. Among these effects, as an important representative of traditional Chinese exercise health care, Health Qigong shows significant physical and mental regulation and health-promoting potential with the holistic concept of "regulating the body, regulating the breath, and regulating the mind". Extensive research supports its effectiveness in improving mental health, improving chronic disease management, and enhancing body balance. However, the promotion of Health Qigong in the modern health management industry faces many practical challenges. First, because Health Qigong is based on Eastern culture, its connotations and practical methods are relatively unfamiliar to some international audiences, and these cultural differences have become a major obstacle to its promotion. Secondly, Health Qigong has not yet formed a systematic path in terms of market positioning and promotion strategy, it lacks the support of a business model that meets the needs of modern health management. The article aims to research the question: What is the current application status of Health Qigong in the modern health management industry? What are the main obstacles it faces? This study aims to analyze the

current application status of Health Qigong in the modern health management industry, to identify its potential obstacles, and propose targeted commercialization paths. Furthermore, the study aims to explore the application model of combining Health Qigong with the modern health management industry, and to provide theoretical support and practical guidance for its commercialization path.

Based on the above, this study takes Health Qigong as an entry point, focuses on its application status and development potential in the modern health management industry, explores the commercialization path of Health Qigong in the global health management market, and provides a basis for the modernization and internationalization of traditional sports and health projects. It will provide theoretical support and practical reference for cultural promotion.

2. LITERATURE REVIEW

2.1. Theoretical Basis of Health Qigong

2.1.1 Definition and Classification of Health Qigong

In 1996, the Chinese government issued the "Notice on Strengthening the Management of Health Qigong in Society", officially using the term "Health Qigong". The term was introduced to facilitate the standardization of Health Qigong practice, to distinguish it from Health Qigong and Medical Health Qigong, and to emphasize that the main purpose of Health Qigong is to promote physical health, rather than to treat diseases. In 2000, the State Sports General Administration issued the "Health Qigong Management Measures", defining Health Qigong as: "A traditional national sports project that combines physical activities, breathing, and psychological adjustment as the main form of exercise, and is an integral part of China's long-standing culture."(Guo 2018) Health Qigong is a mind-body exercise that integrates traditional Chinese medicine and Taoist philosophy. It achieves harmony and balance between body and mind through the organic combination of "adjusting the body" (movement), "adjusting the breath" (breathing), and "adjusting the mind" (consciousness). Common Health Qigong exercises include Ba Duan Jin, Wu Qin Xi, Liu Zi Jue, Yi Jin Jing, Da Wu, Ma Wang Dui Dao Yin Shu, etc. Each exercise has its own unique characteristics and is suitable for people of various ages and health needs. Studies have shown that Health Qigong is not only a form of physical exercise, but also contains profound cultural and philosophical connotations. It helps to regulate Qi and blood, balance Yin and Yang, and promote the overall development of the practitioner's physical and mental health through positive psychological guidance and self-regulation.

2.1.2 Physiological and Psychological Benefits of Health Qigong

The mechanism of Health Qigong's effect on health has been confirmed by many studies. Physiologically, it improves cardiopulmonary function, enhances immunity, and improves symptoms of chronic diseases through slow and gentle movements, deep breathing, and focused mental activities. For example, Health Qigong can significantly lower blood pressure, relieve chronic pain, and improve the balance of practitioners. Psychologically, Health Qigong helps to reduce stress, improve anxiety and depression symptoms, and enhances overall well-being. Some systematic literature reviews have further confirmed that Health Qigong is particularly effective for patients with chronic diseases (such as diabetes, hypertension and arthritis) and can serve as an important auxiliary means of comprehensive treatment.(Toneti 2020)

2.2. Current Status and Shortcomings of the Commercialization of Health Qigong

Although the potential of Health Qigong in the field of health is widely recognized, its commercialization direction faces many challenges. On the one hand, current research focuses on the health and wellness effects of Health Qigong, while relatively few studies are conducted on commercialization models, operating mechanisms and market demand analysis. Moreover, the promotion of Health Qigong is also limited by cultural differences and market acceptance. Existing literature shows that although Western countries are increasingly accepting traditional Chinese sports, their understanding of their cultural background and theoretical basis is still limited. Furthermore, the relatively boring and single practice content, as well as the lack of a standardized curriculum system and training certification mechanism, also lead to limiting the development potential of Health Qigong in the international health market.

In short, although the theoretical basis and health benefits of Health Qigong have been fully recognized by the academic community, its application and commercialization model within the modern health management industry still need to be explored further. This study will be dedicated to

filling these research gaps and proposing innovative paths and strategies for the integration of Health Qigong within the health management industry.

3. METHODS

A qualitative research method is adopted by this study, with a systematic literature review as the main tool, to integrate and analyze the research results in the fields related to Health Qigong and the modern health management industry. By focusing on the key issues in existing research, the core advantages of Health Qigong and its potential path to combine with the industry are summarized. This study relies mainly on the collection and analysis of secondary data, and provides a solid theoretical and practical foundation for the research by integrating existing literature, industry reports and market data. The sources of literature data include international authoritative journals, academic databases (such as Scopus, Web of Science) and related books, which are used to analyze the application theory and development trend of Health Qigong in the field of health management.

4. RESULTS

4.1 Overview of the Development of the Modern Health Management Industry

4.1.1 Concept and Trend of Health Management

Health management is a systematic management process with disease prevention and health promotion at its core. Its goal is to improve the health level of the population through early intervention, personalized services and comprehensive health monitoring. In recent years, with the aging of the global population and the increase of chronic diseases, the health management industry has seen rapid development. Market trends show that digital, personalized and integrated health services are gradually becoming the key development direction of the industry. For example, the integration of health big data and artificial intelligence technology makes personalized health intervention and prediction possible, further promoting the refinement and intelligence of health management.(Wang 2018)

4.2 Advantages of Combining Health Qigong with Modern Health Management

As an important part of traditional Chinese health culture, Health Qigong has significant physical and mental adjustment effects, especially in chronic disease management and mental health promotion.

Physiological level:

Through the practice of Health Qigong, the cardiovascular function of practitioners can be improved and the immune system can be enhanced. For example, a randomized controlled study showed that Health Qigong was significantly effective in reducing blood sugar levels in patients with type 2 diabetes. The gentle movements and breathing adjustments of Health Qigong have significant advantages in improving the balance ability of the elderly, thereby reducing the risk of falls.

Psychological level:

By "regulating the mind," Health Qigong can significantly reduce stress levels and improve symptoms of depression. Research shows that the anxiety scores of patients in the Health Qigong group were reduced by more than 25%. Combined with the uniqueness of modern health management, Health Qigong not only emphasizes the coordination of body and mind, but is also extremely similar in concept to Western mindfulness training (Mindfulness), which helps to integrate with international health management methods. (McCaffrey and Fowler 2003)

4.3 The current status of health management in the world and China

4.3.1 The current status of global health management

The global health management industry is experiencing rapid growth. According to Statista, the global health management market size equated to around US$390 billion in 2023 and is expected to exceed US$600 billion by 2028, with an average annual growth rate of 7.8%.(Statista 2023)This trend has driven the growth in demand for chronic disease management, preventive medical care and mental health services. Digital and personalized health management has become the main direction of future development. For example, Livongo in the United States provides personalized health management solutions for diabetic patients through big data and artificial intelligence. The increasing global aging population and surge in chronic diseases have also further promoted the development of the health management industry, especially in regard to chronic disease intervention and health management services for the elderly.

4.3.2 The status of health management in China

The Chinese health management industry is developing rapidly. In 2023, the market size exceeded RMB 600 billion, with an average annual growth rate of around 10%. The Outline of the Healthy China 2030 Plan has promoted the construction of a health management service system, covering multiple fields such as disease prevention, health promotion and chronic disease intervention. The integration of traditional Chinese medicine and traditional culture is a major feature of China's health management industry. The rapid development of digital health management has also brought new opportunities to China's health industry. For example, platforms such as Ping An Health and Ali Health have gained a broad user base through remote consultation and health management services. (Ye 2024)

Common trends in global and Chinese health management.

The global and Chinese health management industries are facing common trends of digitalization, personalization and growing demand for chronic disease management. China's health management industry has obvious advantages in the unique advantages of traditional culture, especially the integration of traditional Chinese medicine provides a good foundation for the promotion of Health Qigong. In the future, by combining traditional culture with modern technology, China is expected to play a greater role in the global health management industry.

4.4 Successful cases of combining traditional sports with the health industry

4.4.1 Enlightenment from the commercialization path of yoga

As a traditional way of healing the body and mind, yoga has successfully achieved global commercialization. Its successful experience includes:

Branded operation: Yoga has established international recognition through the establishment of branded institutions such as the Yoga Alliance. Health Qigong can learn from this model to promote the construction of standardized courses and certification systems.

Diversified communication channels: Yoga has attracted a large number of international users through multi-channel promotion such as video platforms and social media. Health Qigong can expand its market influence through short videos, live courses and other means.

Combination of culture and health: Yoga combines Indian culture with the needs of modern health concepts to form a brand image of a healthy lifestyle. Health Qigong can combine the concept of "adjusting the body, regulating the breath, and regulating the mind" to attract users around the world who are interested in physical and mental balance.(Li 2023)

Health tourism: Yoga is integrated into the health tourism industry and attracts tourists from all over the world. Health Qigong can also be promoted in health tourism destinations to enhance brand awareness and market share.(Sutarya 2020)

4.4.2 Experience in the development of Tai Chi industrialization

The international promotion experience of Tai Chi also provides valuable reference for Health Qigong. Its successful experience includes:

Dual-track development of competition and health preservation: Tai Chi not only participates in competitions, but also enters the field of health management through health preservation courses. Health Qigong can learn from this idea and provide personalized services and courses for various groups of people.

Government support and cultural promotion: Tai Chi entered the international market with the help of government support and cultural promotion. Health Qigong can also strive for similar policy support to promote the process of globalization.(Oh et al. 2018)

Enterprise operation and cross-border cooperation: Tai Chi expands its influence by cooperating with fitness brands, Health Qigong can also cooperate with international fitness chains and be incorporated into regular courses.

Research support and scientific certification: The health benefits of Tai Chi have been widely recognized, and Health Qigong should also strengthen scientific research, provide data support, and enhance market trust. (Wang 2024)

4.5 Challenges in the Commercialization of Health Qigong

4.5.1 Cultural Cognition Gap

The Western market still has limited knowledge of traditional Eastern sports forms, which leads to cultural cognition barriers regarding the international promotion of Health Qigong. Compared with widely accepted sports forms such as yoga, the concepts, methods and health benefits

of Health Qigong have not yet become familiar to most Western consumers. The lack of easy-to-understand popular science materials and communication strategies for the target market makes it difficult for Health Qigong to quickly occupy the market.(Munir, Ansari, and Brown 2021)

To meet this challenge, it is necessary to use digital communication models to develop multilingual promotional content, and convey the core concepts and practical values of Health Qigong to audiences from various cultural backgrounds through channels such as short videos, social media and health bloggers. At the same time, it can be combined with immersive cultural experience projects to allow consumers to feel the unique charm of Health Qigong as an actual experience, thereby enhancing awareness.

4.5.2 Lack of International Standardization

At present, there is a lack of unified international certification standards for curriculum setting and the coaching qualifications of Health Qigong. This not only affects its speed of promotion in the global market, but also easily forms a sense of distrust among consumers.(Boaventura, Jaconiano, and Ribeiro 2022) In addition, the lack of a standardized system may lead to uneven teaching quality, affecting its brand reputation and market competitiveness.

To solve this problem, we can learn from the successful experience of industries such as yoga and establish an international certification system covering curriculum outlines, coach qualifications, and exercise effect evaluation. For example, we can cooperate with the International Health Management Association to develop a universal Health Qigong certification framework to provide authoritative qualification endorsements for coaches and institutions. This will not only help to standardize industry standards, but also enhance consumer trust and lay the foundation for Health Qigong to open up the national market development.

4.5.3 Fierce market competition

When entering the international market, Health Qigong will inevitably face competition from mainstream sports forms such as yoga and Pilates. Yoga, in particular, has occupied a large market share worldwide, has a mature curriculum system and a broad user base. If Health Qigong cannot find a differentiated entry point, it may be difficult to make a breakthrough in the health and fitness industry.

5. CONCLUSION

5.1 Research summary and conclusion

Through systematic review and analysis, this study clarified the academic value of Health Qigong in the field of health promotion and the practical significance of its commercialization path. Research shows that Health Qigong provides significant effects in regulating physical and mental health, especially in improving immunity, reducing stress, and improving sleep, offering a scientific basis for its use as a health intervention method. At the same time, Health Qigong has significant potential in the modern health management industry. Through the comprehensive effects of regulating the body, breath, and mind, combined with cultural communication and digital promotion, it can build a competitive commercial model and achieve globalization. promotion. This research provides a new perspective and theoretical support for the integration of traditional Chinese medicine health theory with modern health management systems, and provides specific guidance for industry practice.

5.2 The innovation of commercialization of Health Qigong on the health management industry

The commercialization path proposed in this study provides a new perspective for the global promotion of Health Qigong. By drawing on the successful business cases of yoga and Tai Chi, Health Qigong can be combined with innovative models such as cultural tourism and digital communication, so that Health Qigong can be better integrated into the modern health management industry. The study suggests that when promoting Health Qigong globally, digital technology and health management platforms can be used to improve its accessibility and user experience; at the same time, cultural tourism resources can be used to carry out immersive experience courses to enhance its global popularity and appeal. Through this integration, Health Qigong can not only expand its market, but also promote the mutual penetration and integration of traditional culture and modern health concepts.

5.3 Recommendations for future research

Future research should further explore the cultural communication strategies in the commercialization process of Health Qigong, especially in terms of communication effects and acceptance in the Western market. It is necessary to strengthen research on the adaptability and

popularity of Health Qigong, in different cultural backgrounds, to promote global development. Future research can focus on the integrated development of Health Qigong and modern health management science, as well as its application effects in regard to chronic disease treatment and health management in an aging society, to enhance its scientific nature and international recognition.

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Current Status of Food Tourism Development in Qianxinan Prefecture

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Abstract

Food is a reflection of culture, and food tourism is considered a branch of cultural tourism. It is a type of travel that focuses on the enjoyment of food, emphasizing the use of food-related resources as attractions. Through these experiences, tourists can enjoy unique, unforgettable, and culturally rich journeys. Food tourism also plays a crucial role in differentiating tourism development strategies. The ability of food to attract tourists to various places—whether streets, malls, or scenic spots—brings significant economic benefits, making it one of the primary economic drivers in the tourism industry. Consequently, promoting food has become an essential component of tourism marketing strategies. Qianxinan Prefecture in Guizhou Province boasts a distinctive ethnic minority food culture. However, its tourism marketing strategy tends to copy those of other cities, failing to capitalize on its own unique cultural strengths. This has led to a homogenized approach and lower visibility. This study focuses on the food tourism of Qianxinan Prefecture, employing methods such as observation and interviews, and uses the STP (Segmentation, Targeting, Positioning) framework to clarify market positioning and explore the current state of food tourism in the region.

Keywords: *Current situation of development, Food tourism, Qianxinan Prefecture.*

1. INTRODUCTION

Countries around the world focus on developing unique, locally distinctive tourism products in the growth of culinary tourism. By offering a range of one-of-a-kind culinary experiences, they aim to attract visitors seeking authentic, original flavors that can only be found in specific regions. Many places are renowned worldwide for their culinary specialties, with popular destinations including Bangkok in Thailand, Provence in France, and Munich in Germany. Numerous studies have shown that local cuisine can be enhanced during travel. At the same time, tourist experience Countries have also emphasized branding in culinary tourism, working to build high-value tourism brands. For instance, in 2023, Thailand's Tourism Authority launched the "Amazing Thailand Culinary City" project to increase global awareness of Thai cuisine. France, moving beyond simply hosting international wine festivals, saw its tourism agency in 2022 promoting an immersive culinary travel route called the "Valley of Gastronomy," allowing visitors to experience local culture and customs more deeply. In the United States, as a culturally diverse country, the National Tourism Board introduced a multilingual version of The Culinary Guide: Tasting Your Way Through the USA in 2014 to showcase regional American flavors to international visitors and promote culinary tourism across the country(Boyne, Hall et al. 2003).

The International Mountain Tourism and Outdoor Sports Conference, which has been held seven times, is a national and international summit focusing on mountain tourism that was approved by the State Council to be held in Guizhou. The first six conferences were all held in Qianxinan Prefecture, making it the only region in China to host this event. Through organizing this conference, tourism in

Qianxinan saw significant growth in the four years from 2016 to 2019 (before the COVID-19 pandemic), with tourist numbers increasing from 28.66 million to 70.90 million visitors, and tourism revenue rising from 22.6 billion yuan to 73.2 billion yuan. By the end of 2022, the prefecture received a total of 33 million tourists throughout the year, generating a comprehensive tourism revenue of 29.777 billion yuan(Maoli, Quanbin et al. 2023). However, the development of culinary tourism in the region faces some inevitable challenges. First, the market positioning is unclear, with insufficient focus on specific target groups. Second, there is a high degree of homogeneity, and the region's unique strengths are not highlighted. Third, outdated business practices in the food and beverage industry no longer meet modern consumer demands. Lastly, commercialization and lifestyle shifts have altered some traditional ethnic cuisines(Zhao 2023).

In light of the information shown above, this paper examines the current state of culinary tourism in Qianxinan, revealing the essential characteristics of culinary tourism, its influencing factors, and its role within tourism marketing strategies. By using Qianxinan as the case study, the paper analyzes its culinary tourism development to provide academia and practitioners with a more comprehensive, in-depth understanding. This analysis aims to lay a foundation for future culinary tourism marketing strategies in Qianxinan and offers insights that may serve as references for other cities developing their own tourism marketing strategies.

2. LITERATUREREVIEW

2.1 Food tourism

2.1.1 The definition of food tourism

Food tourism was originally defined as a special form of tourism activity, stemming from the concept of "culinary tourism" introduced by Long L. in 1998. He considered food tourism as tourists' cross-border participation in a series of activities including the consumption, preparation, and presentation of exotic foods(Long 2004). However, after research showed that most English speakers associated the term "culinary" specifically with professionally trained chefs, the World Food Tourism Association changed the term to "Food Tourism" in 2012(Association 2020). This type of tourism emphasizes food-related resources as attractions, allowing travelers to gain distinctive, unforgettable, and culturally rich experiences through food, combining social and recreational aspects. Food is an essential part of tourism products, with food-related expenses making up about 25% of total travel spending(Erik 2006). In the 1950s, culinary tourism evolved from French wine tourism, farm tourism, and rural tourism. With the rise of culinary tourism and governments' recognition of its economic contributions, food tourism has flourished in the global tourism market. This is particularly evident in two key areas: "intangible cultural heritage" and "internet popularity"(Fenglin 2024). This information indicates that tourists often travel to destinations that are renowned either for their currently trending cuisine or rich cultural culinary traditions, such as Provence in France, Chengdu in China, and Bangkok in Thailand.

2.1.2 The characteristics of food tourism

As early as 2001, Erik Wolf, the president of the World Food Travel Association, categorized food tourism into three types based on consumer behavioral intentions, cooking classes, food tours and food festivals. This categorization was also validated by Shenoy in their thesis(Shenoy 2005). In a journal published by Xiang Li. in 2019, these three types of food tourism were further elaborate(Xiang Li 2019). According to the 2024 analysis report by Value Market Research(Research 2024), food tourism involves exploring local and regional culinary experiences as the primary motivation for travel. Travelers engage in food tourism to discover and appreciate different cuisines, local cooking traditions, and food-related cultural practices, including visiting food markets, participating in cooking classes, and dining at local restaurants. It contributes to the destination's economic development, promotes cultural exchange, and allows travelers to immerse themselves in the culinary heritage of different regions.

1) Cooking Classes. Culinary education is an important part of European gastronomic tourism(Zhen, Wang et al. 2019). Europe cooking schools typically offer flexible short-term training courses lasting a week or a month to meet tourists' needs. Food Tours for the purpose of learning and experiencing culinary skills, focusing more on food preparation and cooking styles(Henderson 2009), For example, the culinary training programs at " Top 5 Culinary Schools In The World " reflect people's enthusiasm for learning culinary skills(Ireland 2022).
2) Food Tours. Ashleigh and other scholars believe that this kind of travel emphasizes the actual use,

preparation style and food context of food. "Food tourism" not only pays attention to the consumption of the food itself, but also pays attention to the culture behind food consumption and the communication with local residents(Ellis, Park et al. 2018). Chen Duoling believes that food tourism is a series of activities carried out by tourists who leave their daily residence or living place and are attracted by any tourism resources related to food, such as food tasting, consumption, production and display, and take this as their main purpose(Duling and Yixian 2017). In the new media era, Zhou believes unique cuisines have gained visibility through short mobile videos, creating a new marketing model of "food check-ins." Governments are increasingly emphasizing various unique local cuisines in their tourism marketing strategies, making them city landmarks(Rui 2016).

3) Food Festivals. These are celebratory events that showcase and sell food from specific regions or areas(Hall 2003). In a report by Mastercard Economics(Martinez 2024), benefiting from the European Football Championship, Munich, Germany topped the list of popular cross-border travel destinations from June to August 2024. During the Rio Carnival, international tourists' spending on food and groceries increased by 156%. Additionally, restaurants within 4 kilometers of Taylor Swift concert venues saw a 68% increase in sales during event periods compared to a regular day. Similar food festivals are held all over the world. According to Mehmet Kaback research, food festivals have three commonalities: first, the time is the national holiday of each country; second, the activity method is combined with the local ethnic culture; third, the food is of mainly local characteristics(Kabacık 2024).

2.2 Development status of food tourism in China

China is one of the world's three major culinary nations, with a rich and long-standing food culture. In Lin Wang's research on the development history of Chinese food, Chinese food culture has developed into a complete and unique cultural system after thousands of years of continuous development and improvement(Ling 2023). As people's living standards have improved, food culture has entered an era of diversification, with dining demands shifting from "satisfying hunger" to "pursuing gastronomic pleasure," and from "physiological needs" to "psychological satisfaction." People's dietary demands have gradually become more diverse and personalized - they not only want to eat, but also want to experience distinctive flavors, refined taste, and cultural significance through their dining experiences(Xuelian, Junzhong et al. 2007).

As an important branch of niche tourism, culinary tourism not only enriches tourism products but also showcases local history and culture. In Yunyun Li's research(Yunyun, Lingen et al. 2019), it is found that the proportion of "food" consumption in the major elements of tourism is getting higher and higher, and it is second only to shopping consumption in international tourism consumption. In a report released by the China Tourism Academy(Bin 2022), over 40% of post-90s generation experienced rural tourism at least once in 2021. Young people particularly favor ancient villages and towns with cultural backgrounds, where diverse experiences such as culinary tastings, fruit picking, and intangible cultural heritage activities, often centered around guesthouses, have become new engines for rural tourism development. This clearly illustrates the strong appeal of culinary experiences to travelers during their trips. According to data from the China Tourism Academy cited in a Zhao news report(Shan 2014), 93.1% of tourists consider experiencing local cuisine as a major factor in tourism, and 82.5% of tourists are interested in the cultural connotations inherent in the food, indicating that food culture has a tremendous appeal to people. In a specialized survey(Fenglin 2024), 21.8% of tourists consider food as a journey to deeply experience local culture. 59.3% of tourists express a willingness to further understand the destination's food culture, if given the opportunity. 26.2% of tourists are willing to learn the cooking techniques and methods of the destination's specialty dishes.

Dongxiang Li cited the rich raw materials and variety of Chinese cuisine(Dongyang 1998). Yang believes that China has a systematic set of craftsmanship and techniques in food preparation. The cooking methods are diverse, with different techniques varying in details, all pursuing the perfect combination of "color, aroma, and taste."(Liu 2007). Maria believes that the reason why Chinese food culture stands unique in the world and remains enduring is primarily because China has perfectly combined food with culture, forming a complete and independent theoretical system that can also include medicinal cuisine or therapeutic

food(Yani 2012).

2.3 STP

Three essential elements of marketing strategy - Segmentation, Targeting, and Positioning (STP) were proposed by American marketing scholar Wendell R. Smith in 1956(Moutinho 1956). Segmentation is the practice of dividing the market into different customer groups. The variables that should be considered during segmentation have been a subject of debate among scholars. American scholar Philip Kotler proposed incorporating geographical, demographic, psychological, and behavioral factors into the consideration(Philip Kotler 1997) Targeting is determined after Segmentation is completed. It is the process where businesses use undifferentiated marketing strategy, differentiated marketing strategy, and concentrated marketing strategy to satisfy one or several sub-markets with corresponding products and services. Positioning is about creating a product position and marketing mix that is most likely to attract the selected target audience. Jack Trout believes that market positioning should offer more differentiated products or services than competitors and communicate this difference to the consumers effectively(Jack Trout 2011). Sales entities, targeting the psychology of potential customers, establish certain personality characteristics of the products and services in the minds of target customers through functional positioning, symbolic positioning, and experiential positioning.

2.4 Consumer behavior research

2.1.1 Maslow's hierarchy of needs[1]

Human needs appear in a hierarchical form, starting from basic needs and gradually developing upward to higher-level needs. When one set of needs is satisfied, that set no longer serves as a motivating factor. The hierarchy of needs theory is widely applied in the field of sociology and serves as an assessment tool(William Kremer 2013), especially in areas such as education, social work, and marketing. Similarly, the demand for food culture experiences stems from tourists' elevated demands for food tourism. Fenglin and his group based on Maslow's Hierarchy of Needs theory, categorizes food tourism consumer motivations into three types(Fenglin 2024):

The first level of food tourism needs is basic needs, corresponding to the physiological and safety needs in Maslow's hierarchy, including appetite satisfaction and food safety assurance. The second level of food tourism needs is sense of belonging needs, corresponding to the social and esteem needs in Maslow's hierarchy, including social interaction needs and the need for respect. The third level of food tourism demand is growth demand, corresponding to self-realization in Maslow's demand theory, that is, the experience of food culture.

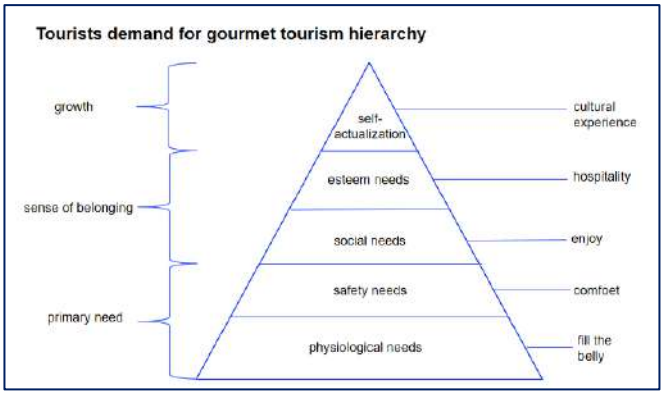


fig. 1 2024 China Food Tourism Development Report(Fenglin 2024)

2.4.2 Serial mediation model about food consumption value

The consumption value theory (CVT) was first put forward by Sheth(Sheth, Newman et al. 1991). Consumers are influenced by underlying functional, conditional, social, emotional, and cognitive values when making purchasing decisions, but the importance of each value depends on the context in which they consume(Rousta 2020). However, food consumption differs from general product purchases, as it also needs to focus on multiple value factors such as health and quality. Therefore, Choe(Choe and Kim 2019). proposed the seven-dimensional extended consumption value theory based on the theory of consumption value, which includes the quality value, health value, economic value, emotional value, prestige value, interactive value, and cognitive value of the food. (Wenli, Yuchen et al. 2022), constructed a chain mediation model to study the impact of food consumption values on tourists' behavioral intentions. The results showed that food consumption values not only have a significant positive impact on tourists' behavioral intentions, but also indirectly influence their behavioral intentions through three pathways: the mediating

effects of destination food image, food attitudes, and the chain mediation effect of both factors.

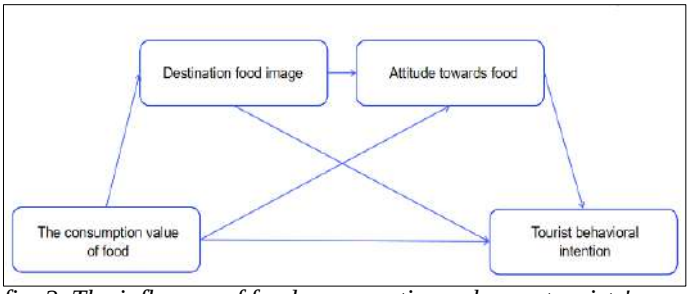


fig. 2 The influence of food consumption value on tourists' behavioral intention(Wenli, Yuchen et al. 2022)

Summary:

With the shift in tourism space from scenic spots to experiences, the role of food in the construction and development of tourist destinations has become increasingly prominent. In the 2024 China Tourism Innovation Development Press conference(Shan 2014), marketing cases that highlight local food culture, such as the 'Successful Family Feast' in Nanan, the Tangshan Banquet, Liaoning 'Red Flag Grand Market', and 'Jiangnan's No.1 breakfast'2, have achieved significant success. In the tourism industry, consumer behavior has changed, and food has now been incorporated into the strategic vision of local tourism development, becoming a new driving force for promoting tourism consumption, advancing the high-quality development of the tourism sector. The development of tourism is no longer just about the commercialization of scenic areas but should focus more on meeting consumer needs.

3. METHOD

This study takes China's Qianxinan Prefecture in Guizhou Province as the observation subject. It employs qualitative research methods, through observation and interviews, to record and analyze the current state of food tourism development in Qianxinan Prefecture, and thereby identify existing issues through its development status. The aim is to use the current development status as an entry point to leverage the distinctive advantages of ethnic minority cuisine in Qianxinan Prefecture and enhance its position in cultural tourism promotion. Using STP theory, this study is divided into three steps:

First, based on the chain mediation model of food consumption values' impact on tourist behavioral intentions, this study categorizes food tourism visitors into food tourists, experience tourists, and general tourists. Interviews are conducted with these three tourist groups, and the collected information is organized and summarized using triangulation to derive market segmentation in Qianxinan Prefecture's food tourism development.

Second, based on the established market segmentation, determine the status of these markets and evaluate the commercial attractiveness of each segment, while analyzing the food consumption values of Qianxinan Prefecture to observe whether each market segment has corresponding food service providers targeting them as their audience.

Finally, define the market positioning of Qianxinan Prefecture's food tourism industry within the overall tourism sector, including its current product positioning strategy and marketing mix choices. This will ultimately yield a comprehensive understanding of the current state of food tourism development in Qianxinan Prefecture.

4. RESULT

4.1 Development status of gourmet tourism in Qianxinan

4.1.1 Qianxinan Prefecture food culture

Qianxinan is located at the junction of Guizhou Prefecture, Yunnan and Guangxi provinces, it consists of the Buyi and Miao3. Its unique geographical features, mild climate, and the integration of diverse ethnic cultures have shaped the distinctive culinary culture of Qianxinan. In recent years, the exploration of local culinary traditions has given Qianxinan cuisine a vibrant life, allowing visitors to savor local flavors while experiencing the unique nostalgia and cultural essence of the region. On major travel platforms in China, "food tourism" has already become an appealing "cultural emblem" of Qianxinan(Jinjin 2024), Buyi Badawan4, Anlong banquet of lotus5, Zhenfeng Grey rice dumpling6, Qinglong spicy chicken, carrying rich cultural heritage and ethnic customs, has deeply attracted tourists from all over the world.

Food culture is the embodiment of a national culture and is primarily composed of three elements. Ingredients, the region's proximity to mountains and rivers provides a unique variety of local delicacies, including rare mountain ingredients and fresh river fish, which lay a solid foundation for its culinary

traditions. Character, the local ethnic minorities, who often call themselves "children of the mountains," have long nurtured a culture of respect and reverence for nature. This has given rise to a distinctive culinary identity, with cooking techniques and methods unique to each ethnic group. Openness, while preserving their own culinary heritage, the people of Qianxinan have also embraced elements from neighboring Sichuan, Yunnan, Hunan, and Guangxi cuisines, creating a richly diverse and ever-evolving food culture.

4.1.2 Development status of food tourism in Qianxinan

With the collaborative efforts of government departments in culture, tourism, commerce, and broadcasting, the development of the Qianxinan food tourism brand has entered a new phase, led by government initiatives. Cultural promotion events such as the International Mountain Tourism and Outdoor Sports Conference and the "August 8" （Lunar calendar） Ethnic Festival demonstrate that the strategic vision for tourism development in Qianxinan is no longer limited to scenic beauty; food, as a cultural medium, has become a top priority. Additionally, coverage on domestic media platforms like China News and News Live, alongside the influence of food bloggers on TikTok, REDnote, and Bilibili7, has brought Guizhou's cultural heritage into the public eye, attracting numerous visitors.

In terms of impact, food tourism has successfully established a foundational concept; however, food festivals and tourism promotion still rely heavily on local specialties and traditional dishes. Innovations in cuisine to cater to the contemporary tastes of modern travelers, particularly with regard to restaurants and culinary creators, remain limited and there is room to further explore the "food + tourism" business model.

4.2 Food consumption value

Quality and value. In terms of quality and value, the ingredients in Qianxinan cuisine mainly consist of mountain delicacies and river-fresh produce, reflecting the region's hot and humid climate, with a flavor profile that leans toward spiciness. Traditional dishes often feature, not only common farm-grown vegetables, but also wild greens like fiddlehead ferns, Chinese toon, and Qingming vegetables8(Lei, Yimo et al. 2008). These wild plants are highly valued in traditional Chinese medicine for their medicinal properties, though their taste may not be universally appreciated, especially by first-time visitors, who might be deterred by their unique aroma. Take houttuynia cordata as an example: in China, only Guizhou commonly serves this herb as a dish, incorporating it frequently as an ingredient or garnish. This distinct usage often prompts visitors to ask restaurant owners whether any local dishes include houttuynia cordata, as its strong flavor is unfamiliar and sometimes challenging for newcomers.

Health value. The Qianxinan Culinary Association has signed cooperation agreements with local farming and breeding bases, turning the region's green products into high-quality ingredients and ensuring the healthiness of the sourced raw materials. Each year, Qianxinan hosts the "Guizhou Skills Competition—Tourism Star-Rated Hotel Industry Staff Competition," a comprehensive event aimed at enhancing the skills of culinary chefs and service staff. This competition contributes to upgrading tourism dining services and guarantees healthy cooking practices. Traditional Chinese medicine (TCM) incorporates an extensive understanding of herbal remedies, many of which grow in secluded mountainous areas. Surrounded by mountains, Qianxinan is rich in these native herbs. Although many medicinal herbs are now cultivated on a larger scale, the local tradition of using herbs in cooking remains. This practice, steeped in TCM knowledge, is integrated into a variety of dishes, from stews to cold appetizers, and involves the use of numerous herbs and fungi, enhancing both the flavor and health benefits of the cuisine.

Economic value. According to the report(Government 2022). In 2022, the government boosted cultural and tourism consumption by distributing discount coupons. From the date of issuance until the end of the year, a total of 722,355 coupons were distributed across various mobile app platforms, amounting to 25.765 million yuan in discounts, with 17.827 million yuan already redeemed. This initiative stimulated a total consumption of 68.831 million yuan. According to a report by the Guizhou Provincial Department of Culture and Tourism, from January to November 2022, the average spending per tourist in Qianxinan was 905.35 yuan, with 5.2018 million overnight stays recorded.

Emotion and cognition value. Qianxinan has adopted an "agriculture + culture + tourism" model, utilizing agritourism to offer visitors hands-on experiences such as fruit and vegetable picking and family-friendly farm activities. These experiences help tourists learn how to identify various crops and produce. Additionally, with an "open kitchen" design, visitors can participate in preparing traditional ethnic foods, such as dyeing sticky rice with natural plant pigments to make colored rice or using wooden mallets to pound cooked sticky rice into mochi. At the 2022 "Cultural and Natural Heritage Day" in Guizhou Province, Qianxinan organized two traditional craft enterprises to participate in demonstrations, providing hands-on teaching in pastry making and tea roasting techniques for attendees.

Prestige value. Since hosting the inaugural International Mountain Tourism and Outdoor Sports Conference in 2015, the Qianxinan Department of Culture and Tourism has introduced local specialty dining services in tourist attractions and ethnic minority settlements. The focus has been on developing high-end dining experiences that highlight ethnic minority cultures. In a select few upscale restaurants themed around local minority cultures, not only are traditional ethnic dishes served, but the dining environment also reflects the rich cultural heritage of the region. For example, a special hospitality etiquette of the Miao nationality is "Gaoshan Liushui9" , In the taste of ethnic food and wine, you can also feel the national culture.

Interactive value. During special festivals or peak tourist seasons, local ethnic groups in Qianxinan organize traditional banquets in their villages. These events allow visitors to savor specialty dishes, especially the "Eight Bowls", while enjoying "Bayin Zuochang" (a seated musical performance featuring eight kinds of traditional instruments). Before the banquet, locals warmly welcome tourists by demonstrating the preparation and cooking processes of the ingredients, often inviting guests to join in. Carefully designed scenes create interactive spaces where visitors can fully engage in the cultural experience.

4.3 STP analysis of food tourism development

4.3.1 Segmentation

Since this research discusses food tourism using Qianxinan as a starting point, local tourists from Qianxinan Prefecture were not included as samples in the discussion. Based on interviews about travel motivations and behavioral intentions of non-local tourists, visitors were segmented by behavior and psychology into three categories: food tourists, experience tourists, and general tourists. Through the feedback received from these three types of tourists after their travels, the study also determined the food consumption value of culinary tourism in Qianxinan Prefecture.

food tourists. Qianxinan governs eight main cities, each separated by at least 80 kilometers, and each city is famous for distinct local delicacies. This means that food tourists seeking to try all the region's specialties often come with well-researched plans, clear motivations, and detailed itineraries. With the high prevalence of new media, many of these tourists are drawn by video content on platforms like TikTok, REDnote, and Bilibili, where local cuisine inspires them to make food exploration their primary reason for travel.

experience tourists. As an autonomous prefecture for ethnic minorities, Qianxinan hosts various cultural festivals, such as the "Torch Festival" celebrating ethnic customs and the "Colored Sticky Rice Festival" highlighting traditional foods. Additionally, each year on San Yue San (the third day of the third lunar month) and Ba Yue Ba (the eighth day of the eighth lunar month), the entire region observes a one-day holiday with celebratory events. In April 2023, Wangmo County, under Qianxinan jurisdiction, organized a parade with 55 teams comprising around 3,000 members from the Buyi and Miao ethnic groups across nearby towns. The event featured tastings of traditional ethnic foods, performances of ancient Buyi songs, a tea tasting for Babu purple tea, and a showcase of Wangmo unique agricultural products.

general tourists. Influenced by the traditional "sightseeing + group tour" model, developing tourist attractions in Qianxinan often rely on designated restaurants as focal points for food tourism. These attractions typically use the standardized rating systems of star-rated hotels and A-level scenic spots to classify and grade dining options. For group tours, travel agencies usually arrange for tourists to stay in hotels that combine dining and lodging for efficiency, allowing travelers to complete their daily itinerary more quickly. Hotels which partner with travel agencies, primarily serve tourists who have no time to enjoy food. The food they cook has been modified in taste to cater to foreign tourists and has lost local characteristics. If the travel agency's itinerary lacks opportunities for traditional local

food tastings, tourists may leave with little understanding of the unique culinary identity of Qianxinan.

4.3.2 Targeting

In the Wanfenglin10, the dining industry centers around a pastoral experience, with "agritourism" as the main operating model. These establishments often retain traditional Chinese rural tools, which intrigue urban visitors eager to try them. Examples include wood-fired clay stoves for cooking, stone mills for grinding soybeans to make tofu or soy milk, and grooved stone vats for mashing sticky rice.

Each agritourism site typically has its own theme, such as fishponds for fishing or gardens where visitors can pick vegetables or fruit. After gathering their ingredients, guests have them prepared by the host for their evening meal. Agritourism in this area combines hands-on cooking experiences with food culture. However, as the hosts are usually local farmers, they may lack in-depth knowledge of the cultural meanings behind the dishes they prepare and can mostly explain only the cooking techniques, leaving the cultural stories behind the food largely unexplored.

Enjoy delicacy. Traditional cuisine in Qianxinan is primarily represented by street food and long-established eateries, often tucked away in inconspicuous corners or small storefronts with minimal promotion, catering mainly to locals. However, with the rise of new media, online exposure has made it easier for these hidden gems to gain visibility at a lower marketing cost. While egg fried rice isn't exclusive to Qianxinan, pairing it with local side dishes—such as pickled radish, water celery, and cold shredded potatoes, has created a regional twist. In Wanfenglin Scenic Area, there is even a "Egg Fried Rice Street," where over 30 restaurants specialize in this dish. During peak tourist season, they collectively serve more than 30,000 portions daily.

Visit food culture. As an autonomous prefecture for ethnic minorities, Qianxinan celebrates the traditional festivals of San Yue San (the third day of the third lunar month) and Ba Yue Ba (the eighth day of the eighth lunar month) each year. During these festivals, locals wear traditional attire and hold a "Hundred Family Banquet." Ba Yue Ba, known as the Miao New Year, retains several traditional customs despite increasing modernization and features a three-day celebration. During this period, Wangmo County saw an average daily visitor flow of over 90,000 people, marking an increase of over 500% year-on-year. On the peak day of Ba Yue Ba, the number of visitors reached 100,000, a growth of over 600% compared to the previous year. By September 11, the scenic area had welcomed approximately 300,000 visitors overall.

4.3.3 Positioning

Popular food tourism in Qianxinan promotes local culinary culture in distinct ways. Popular food tourism highlights authentic local street culture, allowing visitors to experience the vibrant local scene. High-end food tourism, on the other hand, emphasizes quality ingredients, elegant settings, and refined service to convey a sense of sophistication and unique appeal. Both approaches showcase Qianxinan culinary culture in different formats.

For popular food tourism, trendy "internet-famous" dishes and modernized presentations of local specialties are often introduced. Utilizing marketing models like the Hotelling model, Qianxinan has established food streets and food cities. For instance, Maling Night Consumption Cluster, a night economy hub integrating nighttime scenery, performances, tours, and shopping, has gained popularity, especially during summer. Since its opening in January 2023, this area has attracted nearly 400 vendors. From January to August, the region saw a 9.76% year-on-year increase in tourist arrivals and an 11.41% growth in total tourism revenue.

High-end food tourism in the region emphasizes health and wellness. Najv·Heyuan Wellness Tourism Town, located near the Wanfenglin, is a comprehensive service center built upon a 600-year-old Buyi village, integrating Buyi culture with tourism, wellness, conferences, accommodation, and dining. According to the town's manager, Peng Ning, from January to August, the town welcomed over 2.8 million visitors, generating approximately 24 million yuan in revenue. Additionally, Yuntun Ecological Sports Park in Lutun, offers unique accommodations such as treehouse hotels, hot spring resorts, and luxury stargazing hotels, alongside outdoor barbecue and camping experiences.

In terms of service quality, Qianxinan has been actively enhancing its hospitality standards. At the 2022 Guizhou Skills Competition in the Tourism and Hospitality category, the region achieved notable accolades, winning one individual second

prize, two individual third prizes, one individual excellence award, and a group second prize.

5. DISCUSSION AND CONCLUSION

In the progression of modern tourism, traditional tourism faces issues like severe homogenization, lack of effective marketing, and unclear target markets. Developing food tourism requires a cultural tourism marketing approach that highlights the unique attributes of different regions, creating differentiation in the tourism market based on distinct cultural characteristics. The growth of culinary culture relies heavily on building and refining a modern dining industry framework, which involves modernizing various aspects such as ingredient cultivation, product development, culinary innovation, the preservation of traditional skills, supply chain management, and sustainable practices. Through cross-industry and cross-sector collaboration, food tourism can draw from advanced concepts and technologies in other fields, enhancing its own innovation and competitiveness. This integration also encourages the transformation and upgrading of other industries, introducing new business models and revenue streams.

This study uses the development status of food tourism in Qianxinan Prefecture, Guizhou Province, China, as its research focus. A chain mediation model is applied to segment customer groups, followed by an analysis of the current food industry target markets based on these segmented groups. The goal is to determine the market positioning of Qianxinan food tourism and construct an STP model to understand the current state of its development.

Qianxinan has actively promoted mountain tourism festivals and Guizhou cuisine; however, some tourist restaurants and food providers have yet to prioritize enhancing the value of food consumption, leading to persistent challenges. These issues underscore the strategic importance of food tourism within tourism development. Only by continually enhancing the value of food experiences and exploring local culinary culture can a positive tourism environment be created.

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Current Development Status of Jizu Mountain Scenic Area under the Background of Rural Revitalization

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Abstract

In recent years, the urban tourism market has become saturated, and the cultural tourism market has gradually shifted towards county-level and rural areas. Meanwhile, driven by the Rural Revitalization policy, rural tourism has increasingly become a hot project in the tourism sector. As an important tourist attraction in Dali, Yunnan, The Jizu Mountain Scenic Area plays a significant role in promoting local economic development and rural revitalization. In the wave of rural tourism development, actively exploring sustainable development paths is essential. Jizu Mountain Scenic Area has successfully attracted a large number of tourists by combining various promotional methods. From 2023, the number of tourists received will increase significantly year-on-year. However, to stand out in the preliminary list of national 5A tourist attractions, the scenic area still faces numerous challenges. This paper uses the PEST analysis to examine the impact of the macro environment on the scenic area and employs the SWOT analysis to comprehensively assess its internal strengths and weaknesses, as well as external opportunities and threats. Through in-depth analysis of the current situation and the challenges faced by Jizu Mountain Scenic Area, the aim is to enhance the scenic area's market competitiveness, promote its sustainable development, and contribute to the rural revitalization process of the Jizu Mountain region.

Keywords: *Rural Revitalization, Jizu Mountain Scenic Area, Sustainable Development, Current Development Status.*

1. INTRODUCTION

With the rapid development of the global economy and the acceleration of urbanization, rural areas are facing unprecedented challenges. Outflow of the rural population, depletion of agricultural resources, lagging infrastructure, and the widening urban-rural gap have become major obstacles to the economic and social development of rural areas. In response to these challenges, the 19th National Congress of the Communist Party of China in 2017 proposed the “Rural Revitalization Strategy” and established it as a national development priority. This strategy aims to promote the modernization of agriculture and rural areas while fostering a comprehensive revitalization of such areas through multifaceted policy support and resource integration.

The proposal of the Rural Revitalization Strategy marks a significant turning point in the economic and social development of China’s rural regions. Although China has significantly enhanced its overall national strength through the Reform and Opening-up policy along with its rapid economic growth, the economic development of rural areas, especially in remote regions, has lagged behind. However, the urban-rural development gap has become increasingly prominent. A large portion of the rural labor force has migrated to urban areas, leading to decreased agricultural productivity, a

hollowed-out rural social structure, and persistent rural poverty (Qiao 2008). The formulation of the Rural Revitalization Strategy emerged against this backdrop. It is not only a national strategy to address the "Issues Concerning Agriculture, Rural Areas, and Farmers" but also a necessary step for China's modernization.to continue. The core objectives of the Rural Revitalization Strategy are reflected in five key aspects: industrial prosperity, ecological livability, flourishing culture, effective governance, and affluent living. The comprehensive implementation of this strategy provides a systematic solution to the structural issues faced by rural China. It is not merely a national policy but an important measure for addressing issues such as imbalanced and inadequate urban-rural development and the lag in agricultural modernization (Huang 2018). The background of its proposal stems from the fact that, after rapid urbanization and industrialization, rural economic and social development has lagged behind, with farmers faced with low incomes and poor living conditions. In order to achieve the sustainable development of rural areas, the rural revitalization strategy elevates the issues of agriculture, rural areas, and farmers to a new level.

In the process of implementing the Rural Revitalization Strategy, rural tourism plays a crucial role as an important means of promoting rural economic development, providing both cultural heritage preservation and ecological protection. In recent years, rural tourism has gradually become a significant bridge for promoting urban-rural interaction, contributing to the development of infrastructure, the increase in employment opportunities, and the improvement of farmers' incomes. Through rural tourism, natural and cultural resources in rural areas are more fully developed and utilized, further fostering comprehensive rural development.

Rural tourism not only provides farmers with diversified sources of income, but also drives local cultural and ecological preservation efforts. Many rural areas, relying on their natural environment, traditional culture, and agricultural resources, have developed unique tourism projects that attract many tourists who are eager to experience rural life. It has contributed to both the growth of the rural economy and the promotion of urban-rural exchanges and cultural heritage transmission. Especially in a country like China, with a long history and abundant natural resources, the development of rural tourism not only meets market demand but also aligns with the overall goals of the national rural revitalization strategy. Under the context of rural revitalization, the development of rural tourism has become an important pathway for many rural areas to achieve economic revitalization. On the one hand, the extension of the tourism industry chain has promoted the development of related industries, such as agricultural product sales, handicraft production, and agricultural experience projects. On the other hand, the construction of tourism infrastructure has improved rural transportation, accommodation, and other conditions, raising the living standards of rural residents. Furthermore, this tourism has also facilitated environmental improvements in rural areas, leading to the protection and restoration of natural landscapes and ecosystems in many regions.

Jizu Mountain, located in Binchuan County, Yunnan Province, China, is a renowned Buddhist Mountain. Its rugged terrain resembles the shape of a chicken's foot, leading to it being named "Jizu Mountain." Not only famous for its unique geographical features, the Mountain is also known for its profound Buddhist cultural heritage, making it one of China's sacred Buddhist sites. As a national scenic area, there are many resources that are both natural and provide a cultural heritage. In addition to its Buddhist culture, the scenic area preserves many rare species of plants, animals and unique ecosystems. Its exceptional geographical location and rich cultural history make it an ideal site for rural tourism development. Driven by the Rural Revitalization Strategy, the Jizu Mountain Scenic Area not only has the potential to promote the development of the rural economy, but can also play a significant role in cultural preservation and ecotourism. As an important tourism destination in Yunnan Province, Jizu Mountain has a far-reaching impact on the local economy. However, its development presents both significant opportunities and numerous challenges. With the continuous expansion of the tourism market, the number of visitors to the scenic area has increased year by year, raising demands upon the area's infrastructure, service quality, and ecological preservation. Therefore, finding ways to promote the sustainable development of the scenic area while maintaining its ecological and cultural resources has become an

urgent issue that needs to be addressed.

So as to deeply analyze the status of the Jizu Mountain Scenic Area, this paper adopted the PEST analysis method to evaluate the macro-environmental factors influencing the area. Additionally, SWOT analysis evaluates internal strengths and weaknesses, as well as external opportunities and threats, to explore the challenges Jizu Mountain faces in its development and to provide theoretical support in addressing these issues. The significance of this research lies in providing a theoretical foundation, and practical guidance, for the sustainable development of the Jizu Mountain Scenic Area. By analyzing the internal and external environments of the area, the study identifies its development potential and challenges, explores marketing strategies suitable to Jizu Mountain, and provides new practical cases for enriching sustainable marketing theory. In the context of increasingly intense competition in the tourism market, sustainable marketing strategies are crucial for enhancing the market competitiveness of scenic areas. By exploring scientifically effective sustainable marketing strategies, the Jizu Mountain Scenic Area can further enhance its brand image and market appeal, strengthening its competitiveness in both domestic and international tourism markets. This approach will also better meet the diverse needs of tourists, improve tourists' satisfaction, promote the healthy development of local tourism, drive economic growth in rural areas, improve the income levels and quality of life for residents, encourage urban-rural integration, narrow the urban-rural gap, and provide strong support for the realization of rural revitalization.

2. LITERATURE REVIEW

2.1 Rural Revitalization

The term "rural revitalization" is widely used in research on rural development, but its definition and application are not uniform. In 2017, the 19th National Congress of the Communist Party of China first proposed the core political concept of "implementing the rural revitalization strategy, "aiming to promote the comprehensive development of rural areas in multiple dimensions—economic, social, cultural, and ecological, through a series of policies and actions. The goal being to improve the living standards of farmers, while achieving rural prosperity, urban-rural integration, and sustainable development. This strategy is considered China's "ballast stone" in responding to globalization challenges. It is enriched by both theoretical and practical considerations of rural construction and was a significant deployment of the 19th National Congress on "rural development." As the overarching framework for the new era's "three rural issues" (agriculture, rural areas, and farmers), the rural revitalization strategy is also an essential development plan for China's modernization. Its core objectives focus on "prosperous industries, livable ecological environments, civilized rural customs, effective governance, and affluent living standards." The guiding principle is to "prioritize the development of agriculture and rural areas," with the aim to "accelerate the modernization of agriculture and rural areas," addressing the problem of insufficient development momentum in rural regions (Han 2018).

The concept of rural revitalization encompasses various aspects, including economic, social, cultural, ecological, and governance dimensions, with the goal of promoting the comprehensive development and modernization of rural areas. Economically, it emphasizes diversifying industries and developing modern agriculture to increase farmers' incomes. Socially, it focuses on improving infrastructure and public services to enhance the quality of life for farmers. Culturally, the strategy aims to both preserve excellent traditional culture and cultivate rural civilization. Ecologically, it promotes green development to achieve a win-win outcome for economic and ecological benefits. In terms of governance, it stresses strengthening grassroots organization building to enhance rural governance capabilities. The goal is to promote sustainable development in rural areas through comprehensive measures, achieving common prosperity for both urban and rural areas (Zhang 2018).

2.2. Rural Tourism

Rural tourism is a key component of the rural revitalization strategy, aimed at improving the local economy structure and increasing farmers' incomes through the development of the tourism industry. It typically focuses on rural natural landscapes, cultural heritage, and lifestyles to attract urban tourists for experiential consumption, thus achieving a win-win situation for both urban-rural

interaction and rural development. With the continuous promotion of rural revitalization policies, and the increasing popularity of the cultural and tourism market, rural tourism has become a hot topic in the tourism industry. Currently, there is no clear definition of rural tourism. The European Union and the Organization for Economic Co-operation and Development (OECD) define rural tourism as tourism activities occurring in rural areas, with "rurality" as the essence and core element of rural tourism (Xu 2024). In China, scholars have presented various interpretations of the concept. Some view rural tourism as tourism to rural destinations, where rural landscapes and activities are the key features. Others summarize it as a tourism experience based on the rural spatial environment, characterized by unique production methods, culture, and scenery. It integrates sightseeing, entertainment, leisure, vacation, and shopping, making use of the urban-rural differences in its planning and design (Liu 2024). Given the different emphases, practical contexts, and research perspectives, scholars' definitions of rural tourism vary. Based on these concepts, scholars have categorized rural tourism into different types, such as sightseeing, folk, and leisure tourism. Additionally, rural tourism is sometimes divided into categories like ancient village tourism and modern agricultural tourism, with research in these areas advancing the development of the rural tourism landscape. In recent years, rural tourism in China has flourished, becoming an essential tool for driving rural economic growth, promoting employment, and raising farmers' incomes. According to data from the Ministry of Culture and Tourism of China, the number of visitors to rural tourist destinations, as a proportion of total domestic tourism, has been steadily increasing, making rural tourism a new driving force for rural economic growth. The development of rural tourism is closely linked to the rural revitalization strategy, facilitating industrial revitalization, ecological protection, and cultural heritage preservation.

2.3 PEST Analysis

PEST analysis is a method of evaluating the impact of political, economic, social and technological factors, in the external macro-environment, on an organization or project. In the study of scenic spot development, PEST analysis helps to identify external macro-environmental factors that affect scenic spot development. For example, government policy support or restrictions, the level of economic development, social and cultural changes, and technological progress can have a direct, or indirect,, impact on the development of scenic spots (Johnson 2008).

2.4 SWOT Analysis

SWOT analysis is a method used to formulate strategic plans by analyzing an organization's internal strengths, weaknesses, and external opportunities and threats. In the study of scenic area development, SWOT analysis is commonly used to assess both the internal resources and external environment of a scenic area in order to develop targeted strategic measures. For example, some scenic areas may have abundant natural and cultural resources, which represent their strengths; however, simultaneously, the lack of infrastructure or the increasing number of competitors could pose weaknesses, or threats, to their development (Sammut - Bonnici and Galea 2015).

3. METHODS

This study adopts a qualitative research approach, which provides more detailed and comprehensive analysis when dealing with multiple factors such as policy, economy, society, and culture. This research collects relevant information through interviews with various participants, including scenic area managers, tourists, and residents, to explore the current development of Jizu Mountain Scenic Area under the context of the Rural Revitalization Strategy.

The scope of the research focuses primarily on the Jizu Mountain Scenic Area, a distinctive tourist destination in Yunnan Province, known for its rich natural resources and cultural background. The research subjects include scenic area managers, local government officials, residents, and visiting tourists. By interviewing the various participants, the study aims to gain insights into their perceptions and experiences regarding the Jizu Mountain Scenic Area, which will then facilitate an understanding of the area's development dynamics and future market positioning and direction.

This study will utilize secondary data such as relevant policy documents, statistical data, academic papers, market research reports, etc. to provide

background information and theoretical support for the research.

In the data analysis phase, this study will employ PEST and SWOT analysis methods. The PEST analysis will be used to evaluate the external environmental factors affecting Jizu Mountain Scenic Area, such as political, economic, social, and technological factors, exploring how these macro-environmental elements may impact the development of the area. For example, the support of the Rural Revitalization policy and changes in market demand are key political and social factors influencing the future development of the scenic area. Simultaneously, the SWOT analysis helps to assess the internal resources and external environment of the scenic area, identifying its strengths, weaknesses, opportunities, and threats. The natural landscape and cultural resources of Jizu Mountain are considered its strengths, while incomplete infrastructure may be a weakness of its current development. External opportunities, such as government policy support and increasing tourist demand, present significant prospects for the area's development, while threats include intensified regional competition and the challenge of environmental protection. These analyses will provide a scientific basis for formulating clearer development strategies for the scenic area.

4. RESULTS

To thoroughly analyze the development environment of Jizu Mountain Scenic Area under the Rural Revitalization Strategy, this chapter first applies the PEST analysis method to examine the external macro-environment of the scenic area. Specifically, it explores aspects such as policy support, economic growth, changes in social demand, and technological advancements, analyzing how the national Rural Revitalization Strategy, shifts in the tourism market, and the application of digital technologies influence the tourism development in the region. Building on this analysis, the chapter further utilizes the SWOT analysis method to assess the internal resources and conditions of Jizu Mountain Scenic Area. It evaluates the area's strengths and weaknesses in aspects such as natural resources, infrastructure development, visitor service quality, scenic area management, financial investment, and regional competition. At the same time, the chapter combines the external opportunities arising from the growth of the tourism market, and the pressures related to ecological environmental protection, to analyze the sustainable development pathways and strategic direction for the scenic area in the context of the Rural Revitalization Strategy (Tian 2009).

4.1 PEST Analysis

PEST analysis is used to examine the macro-environment in which a scenic area operates. When analyzing the development status of Jizu Mountain Scenic Area, it helps us to comprehensively understand the key factors that impact the region's development. The analysis includes four main aspects—political, economic, social, and technological, each of which plays a significant role in regional development. The following section will discuss the impact of each of these factors on the Jizu Mountain Scenic Area. Starting with the political environment, this section will analyze the influence of relevant regulations on the region and provide a foundation for the subsequent economic, social, and technological analyses, aiming to provide a comprehensive understanding of the external development environment of Jizu Mountain Scenic Area (LI 2023).

1) Political Environment

The political environment plays a decisive role in the development of the tourism industry, providing clear guidance and strong policy support for business growth. Jizu Mountain is in Binchuan County, Dali Prefecture, Yunnan Province, and is a 4A-level tourist attraction as well as a key area supported by the Rural Revitalization Strategy. While Yunnan Province is home to numerous 4A-level scenic spots, and Dali Prefecture has several attractions of the same grade, the status of Jizu Mountain within the province, or the prefecture, is not particularly prominent. However, Yunnan Province places great importance on the development of the tourism industry and actively promotes new tourism experiences, including rural tourism, cultural tourism, and outdoor adventure, so as to attract a diverse range of tourist consumers. Rural tourism is an important initiative for Yunnan's rural revitalization, and Jizu Mountain, as a key supported area in Dali Prefecture, benefits from policy support in various forms,

including tourism funds, infrastructure construction, and maintenance provided by both the provincial and prefectural governments. This policy backing offers strong support for the sustainable development of the scenic area. Moreover, the Yunnan Provincial Government is actively promoting the integration of Jizu Mountain into the Greater Western Yunnan Tourism Circuit. Leveraging cultural and tourism brands such as “There is a lifestyle called Dali” and organizing special events, the government further enhances Jizu Mountain’s visibility both domestically and internationally, helping it play a significant role in rural revitalization.

2) *Economic Environment*

The economic environment is a crucial factor in the development of the tourism industry, as it not only imposes external constraints on the market but also determines the overall macro scale of the market. The economic conditions required for tourism development include the local level of economic development, the extent of the tertiary sector’s growth, transportation infrastructure, and more. The tourism consumption trends in China during 2023 reflect the recovery of domestic tourism demand and a significant growth in the tourism market. In the first half of 2023, the value of the total number of domestic tourism trips in China reached 4.891 billion yuan, a year-on-year increase of 93.3%. The demand for inter-provincial travel has also increased significantly. Domestic tourists spent a total of 4.91 trillion yuan on travel, a year-on-year increase of 140.3%. Binchuan County, where Jizu Mountain is located, has a relatively weak economic foundation, but in recent years, with increased government investment in tourism infrastructure, the pace of cultural and tourism project construction has accelerated. Improvements in transportation conditions and visitor facilities have gradually attracted many more tourists. The growth of the tourism industry has not only driven the development of related sectors such as catering and accommodation, but has also brought direct fiscal benefits to the local government through ticket revenues and tourist consumption. Moreover, tourism has boosted the sale of agricultural products and local handicrafts, thereby increasing residents' incomes and improving their living standards, which in turn contributes to the development of the rural economy.

3) *Social Environment*

The social environment plays a significant role in the development of tourism businesses, particularly in terms of the degree to which society and culture recognize tourism. In a society with advanced communication technologies, the transmission of tourism culture within the social environment is constantly evolving. Under the impetus of the rural revitalization policy, residents in the surrounding areas of Jizu Mountain have gradually become involved in the tourism industry, enhancing local services such as accommodation, dining, and cultural experiences. As the demand for nature and cultural tourism continues to grow, Jizu Mountain has attracted many tourists due to its unique Buddhist culture and beautiful natural landscapes, which have spurred the development of eco-tourism and cultural projects. The government places high importance on cultural preservation, ensuring that tourism development does not compromise the integrity of traditional culture, while also promoting the overall improvement of infrastructure and services. Rural revitalization has also encouraged many young people to return to their hometowns to start businesses, fostering the rise of agritourism, handicraft production, and other unique industries. This not only enriches the visitor experience but also promotes the sustainable development of the local economy and society. Additionally, since 2023, "reverse tourism" has become a popular trend among young people, with more opting for less popular destinations to enjoy a more relaxed form of travel. This trend has contributed to the development of tourism in second and third-tier cities(Wu 2024).

4) *Technological Environment*

The technological environment plays a crucial role in the development and promotion of tourism products, influencing the future market and direction of products. In line with the implementation of the spirit of the 20th National

Congress of the Communist Party of China and documents such as the "14th Five-Year Plan for Tourism Industry Development" and "Measures for Promoting the High-Quality Development of Tourism Consumption," which aim to integrate the digital economy and tourism, Yunnan Province's Department of Culture and Tourism issued the "Smart Tourism Innovation and Development Action Plan" in April 2024. To implement this action plan, Jizu Mountain has been gradually incorporating digital management systems, creating a brand that combines the region's unique agricultural cultural heritage with rural tourism. The site has introduced platforms like online booking, self-service ticketing, smart guides, and the "One Phone to Tour Yunnan" system, which not only enhances visitor experience but also improves management efficiency. The introduction of 5G networks and smart tourism services has further supported the development of the scenic area. Additionally, to ensure the sustainability of eco-tourism, the scenic area has implemented "smart toilets," ecological monitoring, and other environmental technologies to effectively protect the ecological environment amid increasing tourist numbers, thereby reinforcing its image as a green, eco-friendly destination.

5) *Conclusion*

Through the PEST analysis, a comprehensive understanding of the external macro environment of Jizu Mountain Scenic Area, in the context of rural revitalization, can be gained. From a political perspective, under the overarching framework of rural revitalization, the government has strongly supported the development of Jizu Mountain, helping it become a model for regional and rural tourism. Economically, as China's cultural and tourism market continues to shift, the tourism revenue and local economy of Jizu Mountain have been boosted. On the social level, a significant number of residents, and young people returning to their hometowns, have actively participated in the development of the regional tourism industry, enriching the services offered by the scenic area. In recent years, the significant improvement in digitalization has provided a solid foundation for the smart development of the scenic area, ensuring an enhanced visitor experience. These factors together lay a solid foundation for the sustainable development of Jizu Mountain Scenic Area

4.2 SWOT Analysis

After analyzing the external environment of Jizu Mountain Scenic Area, this study employs SWOT analysis to further assess its internal strengths and weaknesses, as well as external opportunities and threats. This approach allows for a comprehensive consideration of both the favorable and unfavorable factors within and outside the region, helping to better understand the current development situation of Jizu Mountain and the challenges it may face in the future. The following sections will analyze the strengths, weaknesses, opportunities, and threats of the scenic area, aiming to provide valuable references for future strategic planning and resource optimization in the region (Wang 2007).

1) *Strengths*

Jizu Mountain Scenic Area, located in Dali Prefecture, Yunnan Province, is renowned for its unique natural landscapes and rich Buddhist culture (Shi 2021). The area is home to many ancient temples and Buddhist relics, making it an important destination for religious pilgrimage and cultural experiences. Additionally, as an eco-tourism destination, Jizu Mountain boasts beautiful natural surroundings and diverse plant and animal resources, providing it with a natural competitive advantage in both the eco-tourism and cultural tourism markets. In addition, relying on the unique geographical advantages of Jizu Mountain, the scenic area has also adopted a "Tourism + Sports" strategy, hosting events such as cross-country running and downhill cycling competitions. These sports activities attract a large number of outdoor sports enthusiasts, further enhancing the scenic area's visibility. With the support of the rural revitalization policy, Jizu Mountain Scenic Area has received substantial government funding for infrastructure development and cultural heritage preservation. In recent years, the area's transportation conditions, and visitor service facilities have significantly improved. The gradual introduction of smart tourism technologies has greatly enhanced both

the visitor experience and the efficiency of scenic area management, boosting its competitive edge in the market. In 2023, the scenic area welcomed 732,000 visitors, a 43.18% year-on-year increase, and its revenue surpassed 100 million yuan, growing by 49.12%. With the continued implementation of promotional measures, during the first day of the 2024 May Day holiday, the scenic area welcomed 5,899 visitors, marking a 58.07% year-on-year increase and setting a record, showcasing the immense potential of the Jizu Mountain Scenic Area.

2) *Weaknesses*

While Jizu Mountain Scenic Area's marketing strategy has achieved some success, its share of visitor numbers and revenue remains relatively low within Dali Prefecture, accounting for only 0.768% and 0.062%, respectively. The development of the scenic area reflects several areas in need of improvement. Despite strong governmental support, the overall quality of the area has been improved, but compared with other mature 4A and 5A scenic areas, there are still certain shortcomings. For instance, public transportation to Jizu Mountain is relatively inconvenient, particularly for visitors without private vehicles, making it difficult to access the scenic area. Additionally, transportation within the area, such as cable cars or shuttle buses, sometimes fails to meet the demand required during peak tourist seasons. Furthermore, during times of high visitor traffic, waste management and sanitation maintenance often fall behind, leading to sub-optimal environmental conditions in some parts of the area, which negatively impacts the overall visitor experience. In terms of infrastructure, the road conditions leading to Jizu Mountain are poor, particularly the mountain roads, which are steep and have uneven surfaces, thus diminishing the quality of the tourism experience. Additionally, the area may lack sufficient resting facilities and public toilets. On the management front, promotional activities during holidays are often concentrated, with clear distinctions between the peak and off-peak tourist seasons. There is also a lack of unified pricing management for internal vendors, leading to unreasonable pricing in food, shopping, and other services. This results in higher costs for visitors, impacting their satisfaction. These issues not only affect the tourist experience but also constrain the further development of the scenic area. Compared to other well-known tourist destinations in Yunnan, such as Lijiang and Dali, Jizu Mountain has a lower market profile. Limited brand promotion has hindered its ability to attract visitors and penetrate the market, affecting its long-term visitor numbers and market influence (Chen 2012).

3) *Opportunities*

The deepening implementation of the rural revitalization strategy has brought new development opportunities for Jizu Mountain Scenic Area, including substantial resource investment and policy support. This provides a chance to accelerate infrastructure development and the protection of cultural resources at the Mountain. With the increasing demand for ecological and cultural tourism among modern tourists, Jizu Mountain can develop more specialized projects, such as religious cultural experiences and eco-friendly hiking tours. These initiatives can meet specific market demands and attract a broader range of visitors. Additionally, with the continuous improvement of digital promotion capabilities, Jizu Mountain can leverage platforms like short video apps, social media, and smart management systems to enhance its marketing efforts and attract more potential tourists. The rise of smart tourism presents new opportunities for improving both the management and service quality of the scenic area. Through digital technologies such as 5G coverage, smart guiding systems, and online booking services, Jizu Mountain can not only enhance the visitor experience but also optimize management efficiency.

4) *Threats*

Jizu Mountain Scenic Area faces significant market competition due to the well-established tourism systems in other popular destinations within Yunnan Province, such as Dali Ancient City and Lijiang Ancient City. These destinations have greater appeal in terms of visitor resources and tourism infrastructure, putting Jizu Mountain at a disadvantage. The

key challenge for the scenic area is how to stand out in such a competitive environment and so attract more visitors. Moreover, with the increase in tourist numbers, the pressure on the ecological environment of Jizu Mountain is also growing. The scenic area must strike a balance between expanding tourist reception capacity and protecting the natural resources to prevent ecological damage that could negatively impact its long-term sustainability and development.

5) Summary

Strengths (S)	1. Unique natural landscapes and strong Buddhist cultural appeal. 2. Abundant ecological and cultural tourism resources. 3. Support from the rural revitalization policy and government funding. 4. Favorable geographical conditions that support the "tourism + sports" strategy. 5. Infrastructure improvements and the introduction of smart tourism technology enhance visitor experience and management efficiency.
Weaknesses (W)	1. Relatively low share of visitor reception and income in Dali Prefecture. 2. Inconvenient public transportation and inadequate internal transportation arrangements. 3. The maintenance and management of hygiene and sanitation require improvement. 4. Underdeveloped infrastructure, particularly poor road conditions. 5. Limited market visibility and insufficient brand promotion efforts.
Opportunities (O)	1. Policy support and resource investment resulting from the rural revitalization strategy. 2. Increasing demand for ecological and cultural tourism, and the expansion of the cultural tourism market. 3. The booming digital promotion trend through short videos and social media platforms. 4. The potential of smart tourism technology to improve management and service quality. 5. Considerable potential for developing specialized projects.
Threats (T)	1. Intense competition from popular tourist destinations like Dali and Lijiang. 2. Growing pressure on the ecological environment, requiring a balance between development and preservation. 3. The potential for facility overload as the number of visitors increases.

4.3 Research Summary

This chapter has provided a comprehensive evaluation of Jizu Mountain Scenic Area under the context of rural revitalization, using both PEST and SWOT analyses to assess its external macro-environment and internal conditions. The PEST analysis reveals that the policy support and the rural revitalization strategy have brought substantial investments in tourism infrastructure and cultural preservation to Jizu Mountain. The economic and technological environments are improving, which has attracted more tourists and enhanced management efficiency and environmental protection capabilities. The social environment, with increased participation from residents in tourism and cultural activities, has not only enriched the visitor experience but also driven local economic development. In the SWOT analysis, the natural and cultural resources of the area, along with policy advantages and the application of digital technology, have provided Jizu Mountain with a competitive edge. However, weaknesses such as insufficient infrastructure and limited brand promotion are hindering its further development. The opportunities arising from rural revitalization and digital promotion offer potential for growth, yet the area faces significant threats from competition from other popular tourist destinations and increasing pressures on ecological protection. Overall, while Jizu Mountain Scenic Area holds significant potential under the support of rural revitalization policies, it must balance infrastructure improvements, brand promotion, and ecological protection to achieve sustainable development. Addressing these challenges will be key to ensuring the area's long-term success and contribution to the broader goals of rural revitalization.

5. CONCLUSION

5.1 Main Conclusions

This study, through a PEST and SWOT analysis of Jizu Mountain Scenic Area within the context of rural revitalization, has yielded several key findings. Firstly, Jizu Mountain has benefitted significantly from the strong support of the Yunnan provincial government, with the implementation of rural revitalization and tourism development strategies providing ample policy and financial backing, thus greatly enhancing infrastructure and visitor experiences. The unique Buddhist culture and abundant natural resources confer a competitive advantage in both ecological and cultural tourism, establishing a solid foundation for its growth. However, the scenic area still faces challenges in visitor reception capacity and service quality, particularly during peak periods, with room for improvement in facility maintenance. This also highlights its gaps in brand promotion and management standards when compared to other well-established scenic areas. Additionally, while the advancement of rural revitalization and smart tourism has created new opportunities in cultural

preservation, ecological experiences, and technological applications, Jizu Mountain encounters competitive pressure from more developed destinations such as Lijiang and Dali. To maintain market attractiveness, the area must effectively balance visitor growth and ecological preservation to ensure sustainable development.

Based on these conclusions, the study proposes several recommendations to facilitate sustainable development at Jizu Mountain Scenic Area. Firstly, leveraging policy support to further upgrade infrastructure, such as transportation facilities, visitor centers, and public service amenities, can help meet visitor demand during peak times and improve overall service quality. The scenic area should also actively promote its cultural and ecological highlights through digital channels such as social media and short video platforms to attract more potential visitors. In the tourism market, Jizu Mountain can carve out a differentiated market position by leveraging its unique religious culture and outdoor adventure opportunities to enhance brand recognition. Furthermore, as visitor numbers increase, the scenic area must implement strict environmental protection measures, such as promoting low-carbon travel and waste sorting, to ensure ecological sustainability. Community engagement is also pivotal in the scenic area's development; by encouraging residents to participate in tourism through services like homestays and handicrafts, that not only increase residents' income but also strengthen their sense of belonging, fostering mutual progress between the scenic area and the community.

5.2 Future Research Directions

To address the limitations of the current research, future studies could explore several aspects. First, conducting field research through interviews or surveys to gather genuine feedback from visitors and community residents would provide more objective data support, thereby better reflecting the actual development situation of the scenic area. Secondly, future research could incorporate quantitative indicators such as visitor satisfaction, economic benefits, and environmental performance to provide more comprehensive data analysis on the development status of the scenic area, offering scientific evidence for management decisions. Additionally, research subjects could be expanded to other similar rural scenic areas in Yunnan province. By comparing the development models and outcomes of different scenic areas under the rural revitalization strategy, valuable insights and optimized strategies for the management and development of Jizu Mountain Scenic Area could be derived.

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The Relationships Among Factors Influencing Communication to Promote Sustainable Tourism in the Municipal Area of Prachuap Khiri Khan Province

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Abstract

This research aims to explore the relationships among factors influencing communication to promote sustainable tourism in the municipal area of Prachuap Khiri Khan Province. A multi-stage sampling approach was employed, incorporating stratified random sampling, simple random sampling, and accidental sampling methods. Data were collected from a sample of 400 Thai tourists using a questionnaire. The data were analyzed using both descriptive and inferential statistical methods. The findings reveal significant relationships between demographic factors such as gender, education level, duration of stay, and place of residence and the development of communication strategies for promoting sustainable tourism. Specifically, female and LGBTQ+ tourists, individuals with educational attainment below the bachelor's degree level, those staying for 5–7 days, and tourists residing in the central region demonstrated greater receptiveness to sustainable tourism communication compared to other groups. These results provide valuable insights for designing effective and inclusive communication strategies tailored to diverse audience segments. Such strategies are essential for fostering long-term sustainable tourism practices and addressing the varying needs and preferences of different tourist demographics.

Keywords: *sustainable tourism, communication, influencing factors, Prachuap Khiri Khan Province*

1. INTRODUCTION

Tourism is a critical industry contributing significantly to the economic, social, and environmental systems of many countries worldwide. However, unmanaged tourism growth can have adverse impacts on destinations, including the degradation of natural resources and ecosystems, conflicts between tourists and local communities, and the erosion of traditional identities and lifestyles [1]. In response to these challenges, the concept of sustainable tourism has gained increasing global attention, emphasizing a balanced approach to economic, social, and environmental development [2]. Communication plays a pivotal role in promoting sustainable tourism by raising awareness, educating stakeholders, shaping attitudes, inspiring action, and encouraging tourists, businesses, and communities to adopt behaviors aligned with sustainability principles [3].

Thailand is a popular tourist destination, attracting a significant number of visitors annually due to its diverse tourism resources, including natural attractions, historical landmarks, cultural heritage, and unique lifestyles [4]. One of the

provinces with high tourism potential is Prachuap Khiri Khan, renowned for its coastal attractions, beautiful beaches, and waterfalls. However, environmental issues such as coastal erosion, excessive waste, and the degradation of tourist sites have become increasingly severe [5]. Municipal governments in Prachuap Khiri Khan have emphasized communication campaigns to instill sustainable tourism principles and promote stakeholder engagement, aiming to preserve the beauty of tourist sites and ensure their coexistence with local communities for future generations [6].

The success of communication strategies for promoting sustainable tourism depends on understanding the factors influencing target audiences' perceptions and responses. A review of the literature reveals that demographic factors, including gender, age, education level, occupation, and income, are associated with tourists' behaviors and their perceptions of tourism-related information [7]. For instance, older, highly educated, and higher-income Vietnamese tourists are more aware of and engaged in sustainable tourism activities [8], aligning with findings that older European tourists are more willing to support environmentally friendly tourism compared to younger tourists [9]. Additionally, female tourists exhibit a more positive attitude toward sustainable tourism than males [10]. Travel frequency and length of stay are positively correlated with awareness and commitment to sustainable tourism [11]. Family travelers often prefer group tours, while solo travelers or those with friends tend to choose independent travel, influencing their behaviors and information engagement [12]. Moreover, tourists primarily receive sustainable tourism information through personal recommendations and social media platforms [13].

Geographic origins also play a crucial role. Tourists from regions with high environmental awareness tend to exhibit more responsible tourism behaviors than those from areas with lower conservation priorities [14]. Tourists from developed European countries demonstrate greater interest in ecotourism and sustainable tourism compared to those from developing countries [15]. Malaysian tourists visiting

Thailand from urban areas are more likely to be aware of sustainable tourism practices than those from smaller towns or rural regions [16].

While the relationship between demographic characteristics, tourism behaviors, and geographic origins with sustainable tourism practices has been studied internationally, there is limited empirical evidence in Thailand, particularly in secondary destinations like Prachuap Khiri Khan. Most studies focus on developed countries, where cultural values, social norms, and tourism patterns differ significantly. Local studies often lack in-depth exploration of how these factors influence tourists' engagement with sustainable tourism communication. Quantitative research examines correlations between variables, but the underlying mechanisms remain unexplored.

This study seeks to explore the relationship between demographic characteristics, tourism behaviors, and places of origin with sustainable tourism communication in Prachuap Khiri Khan municipality. The research aims to provide actionable insights for designing tailored communication strategies, creating engaging content, and selecting effective channels to reach different tourist segments. These efforts will support balanced tourism development across economic, social, cultural, and environmental dimensions, ensuring long-term sustainability as a tourist destination.

2. RESEARCH OBJECTIVES

To examine the Relationships Among Factors Influencing Communication to Promote Sustainable Tourism in the Municipal Area of Prachuap Khiri Khan Province

3. RESEARCH METHODS

A. Research Design

This study employed a quantitative research design to investigate the relationships among demographic characteristics, tourism behaviors, and tourists' places of residence with the development of communication strategies for promoting sustainable tourism in Prachuap Khiri Khan Province.

B. Research Process

This study employed a quantitative research design to systematically examine the relationships between demographic characteristics, tourism behaviors, and tourists' places of residence and the development of communication strategies aimed at promoting sustainable tourism in Prachuap Khiri

Khan Province. The research methodology encompassed multiple stages of sampling, data collection, and a comprehensive evaluation of the research instrument to ensure its validity and reliability. Subsequent data analyses were conducted to generate detailed insights into the factors influencing the effectiveness of communication strategies, with the ultimate objective of advancing sustainable tourism practices in the region. The following sections outline the specific procedures employed in this research, as illustrated in Figure 1.

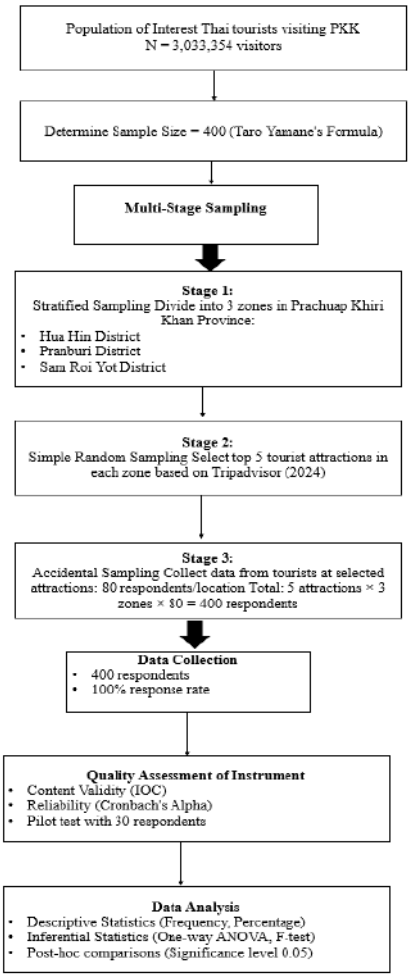


Fig 1 Research Process Flowchart

Population and Sample

The population for this study consisted of Thai tourists visiting Prachuap Khiri Khan Province, totaling 3,033,354 visitors [17]. The sample size was determined using Taro Yamane's formula with a 95% confidence level and a 5% margin of error, resulting in 400 respondents. A multi-stage sampling method was employed:

1) Stratified Sampling: Divided Prachuap Khiri Khan Province into three main tourist zones: Hua Hin District, Pranburi District, and Sam Roi Yot District.

2) Simple Random Sampling: Selected the top five tourist attractions in each zone based on Tripadvisor's 2024 rankings, specifically choosing locations with ratings of 4.0 or higher and the highest number of reviews.

3) Accidental Sampling: Collected data from tourists visiting these five attractions during the data collection period, totaling 400 respondents (80 tourists from each location).

Research Variables

The independent variables included demographic characteristics, tourist behavior, and place of residence, specifically gender, age, education level, occupation, average monthly income, place of residence, frequency of travel, average duration of stay, travel patterns, and sources of travel information. The dependent variable was the development of communication strategies for promoting sustainable tourism, synthesized from relevant literature and research [18], [19]. This comprised three components: selection of appropriate communication channels, stakeholder engagement and interaction, and destination image and brand building.

Data Collection

Data were collected from 400 respondents following the predetermined sampling procedures, with a 100% response rate. The research instrument underwent systematic quality assessment for both content validity and reliability:

Content Validity: Evaluated using the Index of Item-Objective Congruence (IOC) technique, with five experts assessing the congruence between questionnaire items and operational definitions. Items with an IOC value ranging from 0.60 to 1.00 were considered acceptable for use [20].

Reliability: Assessed using Cronbach's Alpha Coefficient, with an acceptable threshold set at 0.80. The revised questionnaire was piloted with 30 respondents similar to the target population but not part of the actual sample [21].

4. RESULTS

A comprehensive survey examined communication strategies for promoting sustainable

tourism in Prachuap Khiri Khan province, yielding significant demographic and behavioral insights. The demographic analysis revealed that female respondents constituted the majority (57.50%, n=230), while individuals aged 30-39 years represented nearly half of the sample (49.00%, n=196). Educational and occupational data indicated that bachelor's degree holders comprised more than half of all participants (55.50%, n=222), with private-sector employees representing the largest occupational segment (36.75%, n=147). Regarding economic status, the most frequently reported monthly income was 20,001-30,000 baht (23.25%, n=93). The geographical distribution showed that central Thailand residents accounted for the highest proportion of respondents (35.00%, n=140). Analysis of travel patterns demonstrated distinct behavioral characteristics. A majority of respondents (61.75%, n=247) visited Prachuap Khiri Khan province 1-2 times per year, with most stays lasting 3-4 days (82.25%, n=329). Family and relative-oriented travel emerged as the predominant pattern (50.25%, n=201), followed by friend-group travel (30.75%, n=123). Regarding information sources for travel planning, the Tourism Authority of Thailand website emerged as the primary resource (63.25%, n=253), complemented by substantial utilization of social media platforms including Facebook, Instagram, Twitter, and TikTok (34.50%, n=138).

Table 1 Homogeneity of Variance Analysis (n=400)

Independent Variable	Levene Statistic	p	Variance Homogeneity
Gender	.377	.686	Homogeneous
Age	.340	.712	Homogeneous
educational	1.663	.174	Homogeneous
Occupation	.586	.673	Homogeneous
Income	1.331	.258	Homogeneous
place of residence	**4.246**	**.002**	**Heterogeneous**
frequency of travel	.401	.752	Homogeneous
average duration of stay	1.675	.189	Homogeneous
travel patterns	1.948	.121	Homogeneous
sources of travel information	.355	.552	Homogeneous

Table 2 Comparing Relationships Among Factors Influencing Communication to Promote Sustainable Tourism in Prachuap Khiri Khan Municipality (n=400)

Independent Variable	Mean Differences in Sustainable Tourism Communication (S.D.)											
Gender	M	LGBTQ+	Bachelor's degree	Master's Degree	Doctoral Degree	Northeastern Region	Northern Region	1–2 days	3–4 days	F	Welch	P
Female	3.82 (.375)	3.92* (.389)		-	-	-	-	-	-	3.973*	-	020
Educational	4.11 (.343)	-	3.82** (.424)	3.85** (.424)	3.87* (.355)	-	-	-	-	4.934**	-	.002
Place of Residence	3.97 (.332)	-	-	-	-	3.75** (.357)	3.78* (.470)			-	6.190**	.001
Average Duration of Stay	4.11 (.322)	-	-	-	-	-	-	3.73** (.404)	3.80** (.350)	33.028**	-	.001

Table 1 presents the results of the homogeneity of variance test for the independent variables and sustainable tourism communication in Prachuap Khiri Khan Province. The analysis indicated that most independent variables exhibited homogeneous variances ($p > .05$), including gender ($p = .686$), age ($p = .712$), educational level ($p = .174$), occupation ($p = .673$), income ($p = .258$), frequency of travel ($p = .752$), average duration of stay ($p = .189$), travel patterns ($p = .121$), and sources

of travel information ($p = .552$). These findings support the application of one-way ANOVA to analyze mean differences across groups for these variables. In contrast, the variable place of residence demonstrated heterogeneous variance ($p = .002$), suggesting that Welch test is more suitable for examining mean differences among domicile groups due to its robustness to variance inequality.

The analysis of Table 2 revealed significant differences in sustainable tourism communication influence among demographic groups ($p < .05$ and $p < .01$). Due to unequal variances ($p > .05$), one-way ANOVA with Tukey HSD post-hoc tests were conducted for multiple comparisons. Gender analysis demonstrated that female respondents exhibited significantly greater influence on sustainable tourism communication compared to gender-diverse individuals ($p < .05$). Educational background analysis revealed that respondents with below-bachelor's degrees showed significantly higher influence than those holding bachelor's, master's, and doctoral degrees ($p < .01$). Duration of stay analysis indicated that tourists staying 5-7 days demonstrated significantly stronger influence on sustainable tourism communication than those staying 1-2 days or 3-4 days ($p < .01$)

5. DISCUSSIONS

The research findings indicate a relationship between demographic factors, tourism behavior, and tourists' places of residence with the development of communication strategies to promote sustainable tourism in the Prachuap Khiri Khan municipality. It was found that female tourists have a greater influence on sustainable tourism communication compared to male tourists [22]. This finding aligns with previous studies that have shown female tourists to have a more positive attitude towards sustainable tourism than male tourists [23], and that gender influences eco-tourism and conservation behavior, with female and LGBTQ+ tourists often being more aware and prioritizing sustainable tourism [24].In terms of educational levels, the study found that tourists with education levels below a bachelor's degree have a greater influence on sustainable tourism communication than those with higher education levels. This contrasts with the findings of studies on tourists from other countries, which could be due to social and cultural context differences [25]. However, within the Thai context, the study found that Thai tourists with lower education levels tend to prioritize the conservation of natural resources and local culture more than those with higher education levels, possibly because higher-educated tourists often have higher incomes and more diverse travel options, leading them to place less emphasis on sustainability issues [26].Additionally, the findings indicate that educational factors are related to Thai tourists' awareness of

environmental and cultural conservation. Tourists with lower education levels are more likely to value conservation, while those with higher education levels may prioritize different values, such as seeking comfort or luxurious activities [27]. Another perspective is that less educated tourists might be more easily influenced by sustainable tourism communication due to having less access to diverse information and being more receptive to messages than highly educated tourists [28]. Therefore, communication targeting less educated tourists, using accessible language and channels, may be more effective in fostering sustainable tourism awareness. For the factor of average duration of stay, the study found that tourists who stay for 5-7 days have a greater influence on sustainable tourism communication compared to those who stay for 1-2 days or 3-4 days. This aligns with previous findings showing a positive relationship between travel frequency, length of stay, and awareness and commitment to sustainable tourism. Longer stays provide tourists with more opportunities to access information and participate in responsible tourism activities [29]. Regarding place of residence, the study found that tourists from the central region have a greater influence on sustainable tourism communication than those from the northeastern and northern regions, consistent with the finding that tourists from regions with high environmental awareness tend to exhibit more responsible tourism behaviors [30]. Additionally, tourists from urban areas are more likely to be aware of sustainable tourism practices than those from smaller towns or rural areas [31].

6. RECOMMENDATIONS

Future studies should expand the scope to include a wider range of tourist destinations, covering both major and secondary sites across different regions of Thailand. This will provide data that represents a broader spectrum of tourists and

allow for comparisons of factors influencing sustainable tourism communication in various areas. Additionally, to monitor changes in tourist behavior and attitudes over time, a longitudinal study should be conducted, collecting repeated data every six months or annually. This will help observe changes in factors affecting sustainable tourism. Beyond demographic factors, tourism behavior, and place of residence, other interesting factors should also be studied, such as psychological factors (e.g., values, personality), perception factors (e.g., risk perception, value perception), and social factors (e.g., social norms, influence of reference groups). Understanding these factors will provide a more comprehensive insight into the elements influencing sustainable tourism.

7. CONCLUSION

This research explored the relationships between demographic factors, tourism behavior, and tourists' places of residence with the development of communication strategies to promote sustainable tourism in the Prachuap Khiri Khan municipality. The findings highlight significant connections between these factors and perceptions, attitudes, and behaviors related to sustainable tourism. In terms of gender, it was found that female and LGBTQ+ tourists are more influenced by sustainable tourism communication than male tourists, indicating the importance of considering gender differences in communication strategy development. However, regarding educational levels, the study found differing results from other research, with tourists having education below a bachelor's degree being more influenced by communication efforts than those with higher education levels. This difference may be due to cultural and contextual variations within Thai society. Additionally, the duration of stay and place of residence play crucial roles. Tourists staying longer or coming from regions with higher environmental awareness tend to have greater awareness and engagement in sustainable tourism. These findings underscore the need to tailor communication strategies to the specific characteristics of target groups to maximize the effectiveness of promoting sustainable tourism. However, since this study was limited to the municipality of Prachuap Khiri Khan, further research in more diverse contexts, including both major and secondary tourist destinations, is needed to gain comprehensive insights and develop effective communication strategies for each area.

In summary, this study provides valuable insights into the factors influencing communication for promoting sustainable tourism, which will be highly beneficial for policymakers and practitioners in developing effective and targeted communication strategies. Nonetheless, further research is necessary to deepen understanding and continue promoting sustainable tourism in Thailand.

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Current Situation for the Sustainable Cultural Tourism Operation Management in Qianxinan Prefecture under New Media Era

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Abstract

The cultural and tourism industries are continuously evolving, with the marketing environment undergoing constant change. The use of new media marketing to promote rural tourism has become a prevailing trend within the contemporary cultural and tourism sectors. Abundant tourism resources serve as a fundamental prerequisite for the development of a tourist destination, while effective tourism marketing strategies are equally indispensable. Qianxinan Prefecture, located in Guizhou Province, leverages its favorable climate, rich natural tourism resources, and ecological health industries to advance the coordinated development of a diverse range of "tourism +" industries. The region aims to establish itself as an international mountain tourism destination and a leading domestic holiday health care destination. This study focuses on the sustainable cultural tourism in Qianxinan Prefecture. In the context of new media, the cultural tourism industry in Qianxinan Prefecture faces fresh opportunities for transformation and growth. This paper employs a PEST analysis to examine the current state of cultural tourism in Qianxinan Prefecture, investigates the existing challenges in the marketing and management of cultural tourism operations.

Keywords: *New Media Era, Cultural Tourism Operation, Sustainable Development, Qianxinan Prefecture*

1. INTRODUCTION

With the rapid development of Internet technology, there has emerged a new type of communication media based on Internet technology, ‘new media’, with its massive, interactive, portable, timeliness and global characteristics, which are deeply loved by everyone. In the era of continuous development of new media, various short video platforms came into being. Users can obtain information of interest through short videos ranging from a few seconds to a few minutes on the platform(Xiaoyu 2023). From the barbecue in Zibo, the "Village Super League11" in Guizhou, to the Ice and Snow Festival in Harbin and the Malatang in Tianshui, these successful hits have given full play to the role of new media and the market in mass large-scale cultural and sports tourism activities, making the local characteristics widely spread and attracting many tourists to try the experience.

The karst topography and geomorphology in Xingyi City of southwest Guizhou Province are obvious. Here, mountains and rivers sit close to each other, field upon field face each other, city scenery is integrated, and culture and production embrace each other, forming a beautiful outlook of "six sceneries in one city", all within 25 kilometers around the city center. The short video "Wanfeng Mountain Residence Map", shot in Qianxinan Prefecture with Xingyi as the background swept the network, enabling various scenic spots in Xingyi to receive traffic, and local tourism to retain its popularity.

Looking at the new hot spots of cultural tourism, the net red cities, net red scenic spots, and net red cultural phenomena in China, which have become popular in recent years, they all have two common characteristics, one is to open the tourism development model in the way that young people like, and the other is the huge influence of digitalization and technology empowerment. It can be said that if tourism wins the young generation, it wins the future. The Internet has become an important channel for young people to obtain information, and it is also the main body of China's tourism market, and naturally the main consumer provider of rural tourism. The continuous deepening of the integration of new media and cultural tourism is no longer in the era of passive play, but is now more "I like it, so I'll visit," and "I want to experience it, so you build it"(Ren 2023). Although the development of the tourism economy in Qianxinan Prefecture is obvious to all, the research on tourism operation management and marketing strategy under the new media environment is still a little weak. In the face of increasingly mature consumer groups and new tourism market demands, the marketing concept of tourism operation management, under the new media environment, must be changed. The investigation and field study show that there are some problems in the operation and management of Qianxinan cultural tourism under the new media environment:

1) New media marketing is single channel and the content is old and homogenized. The Qianxinan tourist area has unique cultural resources with national characteristics, but many short video accounts use the same subject matter, the same editing method, the same hash-tags, and similar content soundtrack, resulting in a lack of vitality and innovation within the short video content. This may lead to audience aesthetic fatigue, and inevitably result in the loss of a large number of audience groups, over time.
2) The coverage of new media is not extensive enough to arouse and gain the support of the people. Short video platform construction is in a fragmented state, the main body of short video is mostly the agriculture, rural areas, and farmers network celebrities or media practitioners, and official intervention is insufficient. Most short video works are dominated by static natural scenery, and the fragmentation of the narrative text is obvious, which is not conducive to improving the audience's sense of resonance.
3) The team is not professional enough and lacks a scientific and clear marketing plan. In the process of new media marketing, there is the dilemma of a lack of excellent operational talents. Most short video creators are local farmers, self-employed people and ordinary tourists, who lack experience and skills in short video shooting, resulting in a lack of professionalism in regard to topics, editing, shooting and soundtrack choice of the short video creation.
4) Most of the new media audiences are local and 'quite aged'. The audience group is mainly in the province, which is weak and does not radiate to the national audience. Relying only on local media and Guizhou provincial level operations to carry out external communication results in the effect not being distinct.

As a new type of tourism marketing method, new media has shown great potential and value in promoting the cultural tourism industry and stimulating people's impulsive travel intention(Shengyuan and Yanqiang 2023).Researching this phenomenon can further enrich the tourism marketing theory system, while at the same time effectively enhancing the brand awareness and influence of cultural tourism enterprises in better operation and effective use of cultural tourism resources. A successful operation model is the basic prerequisite for the sustainable development of cultural tourism projects. By developing sustainable tourism, we can achieve the dual goals of improving tourism economic benefits and coordinating local social interests, provide practical cases for the construction of local cultural tourism operation management and marketing models, and provide research experience for rural revitalization.

2. LITERATURE REVIEW

2.1 New Media Era

2.1.1 Concept of the New Media Era

The new media environment mainly relies on digital technology to efficiently process various types of information, ensuring that users can participate in content creation through comments, shares, likes, and other forms of engagement. This

environment can provide personalized content recommendations based on user interests and needs, thereby enhancing the accuracy of information and user satisfaction. New media is characterized by interactivity and immediacy. Through social media platforms, users can connect with others and share diverse types of information—such as text, images, audio, and video—anytime and anywhere. Combined with the fragmented nature of information dissemination, this environment allows users to access large amounts of brief, simple, and fast information. This feature accelerates the speed of information transmission, enabling users to obtain the latest news and the information they need in real time(Pingjing 2024).

2.2 Sustainable Development

2.2.1 Concept of Sustainable Development

The concept of "sustainable development" was first mentioned in the book World Conservation Strategy: Living Resource Conservation for Sustainable Development. The widely accepted international definition, introduced at the 1992 United Nations Conference on Environment and Development, describes it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs(Yinxing and Futian 2023)."There are two influential international definitions of sustainable tourism development. The first was proposed by the World Tourism Organization in 1993: "Sustainable tourism development is aimed at meeting people's growing economic, social, and aesthetic needs while preserving cultural integrity and maintaining ecological balance. It provides livelihoods for today's hosts and guests while promoting and protecting the interests of future generations, granting them the same opportunities." This definition highlights the goal of tourism development and establishes the principle of equitable regional development between hosts and guests.The second definition emerged from the 1995 World Conference on Sustainable Tourism held in Spain, which adopted the Charter for Sustainable Tourism Development and the Sustainable Tourism Development Action Plan. This definition emphasizes that the essence of sustainable tourism is to view tourism, nature, culture, and the human environment as an interconnected whole(Yanfen 2016).

2.2.2 Dimensions of sustainable development

The goals of sustainable development aim to achieve a balance and harmony among economic, social, and environmental factors, promoting mutual growth in economic advancement, social equity, and environmental protection.

Economic Sustainability:This involves achieving economic growth through the rational use of resources and efficient production methods to ensure the long-term availability of resources and the sustainability of economic development. It emphasizes avoiding short-sighted approaches and excessive exploitation or wastage of resources.

Social Sustainability: This aims to meet basic human needs, promote social equity, reduce poverty, and improve quality of life. It stresses equality across different social classes and groups, with a focus on fair distribution in areas such as education, healthcare, and employment, to foster social stability and growth.

Environmental Sustainability: This requires protecting natural resources and ecosystems in economic and social activities, reducing pollution, conserving biodiversity, and addressing climate change. The goal is to maintain the health and stability of natural ecosystems.

2.2.3 Sustainable Development Stakeholder Relationship

Stakeholders are individuals or institutions that have economic relations with enterprises. Stakeholder theory emphasizes the comprehensive balance of interests of all parties to achieve win-win results. In the new media environment, understanding and analyzing the relationship between stakeholders and establishing an effective communication and collaboration mechanism between organizations and the environment are crucial for the long-term sustainable development of enterprises. With the development of the social economy, all stakeholders must not only pursue interests, but also assume social responsibilities. Through the sharing of interests and risks, enterprises can better adapt to changes and improve their ability to resist risks, thereby better achieving the strategic goals of the organization. Through preliminary research by observation and literature methods, it is concluded that there are six stakeholders in tourism sustainability management.

Figure 1 shows the relationship between stakeholders.



Fig. 3
Relationship between stakeholder and sustainable tourism(Purwaningsih, Agusti et al. 2020)

In Figure 1, each indicator of sustainable development is addressed by a model involving six stakeholders. Visitors focus on satisfaction, safety, cultural understanding, their role in nature conservation, efforts to minimize environmental impact, and energy use. The local community is concerned with tourism's economic impact, including income, market promotion, local product sales, job opportunities, residents' responsibilities, and control over pollution and resource consumption. Management agencies are responsible for destination management, advertising, public relations, providing facilities for visitors, water and energy consumption, and opportunity costs of the location. The government emphasizes public sector investment in facilities such as accommodation and sanitation, increasing tourism revenue, and managing the socioeconomic effects on the local population, energy consumption, and waste management. Tourism support facilities include accommodations (hotels), dining, and existing tourism-related businesses. Support facilities are not always physical; they also include social aspects, such as NGOs, which advocate for infrastructure protection, cultural promotion, pollution reduction, rural environment conservation, and participation in events and event tourism(Purwaningsih, Agusti et al. 2020).

2.2.4 Tourism Life Cycle Theory

In 1980, Butler proposed the S-curve and the six-stage model, introducing the Tourism Life Cycle Theory. This theory outlines the life cycle of a tourist destination, progressing through stages from inception, development, and maturity to eventual decline. Butler divided the evolution of a tourist destination into six stages: Exploration, Involvement, Development, Consolidation, Stagnation, and either Decline or Rejuvenation(Mei 2023).

The Tourism Life Cycle Theory is a well-established theory in tourism research and serves as an important tool for guiding the high-quality and sustainable development of tourist destinations. Researchers can use the Tourism Life Cycle Theory to determine which stage a destination is currently in, describe the characteristics of that stage, and predict potential issues that may arise. This enables timely interventions and adjustments to identify development trends for the next phase and to develop feasible strategies, allowing the tourism life cycle to progress into a new stage of growth. By effectively applying the Tourism Life Cycle Theory, not only can the development and market changes of a destination be explained and described, but the future trends of its growth and evolution can also be forecast. This predictive capability is precisely what makes the Tourism Life Cycle Theory valuable in the practical application of tourism development(Dan 2023).

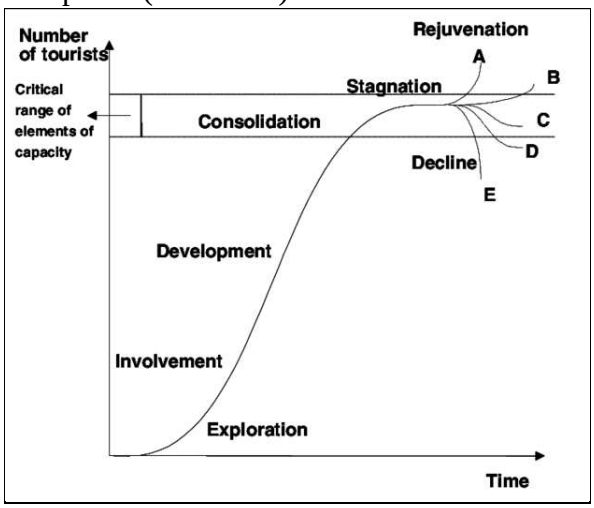


Fig. 4
life cycle of destination (Reindrawati, Rhama et al. 2022)

2.3 Sustainable Operations Management

2.3.1 Concept of Operations Management

Operations management refers to the control and management of the operational process, encompassing the entire process related to products and services. This includes organizing, planning, executing, and controlling processes to ultimately achieve a company's goal of profitability(Tinggui 2020).

2.3.2 Objectives and Essence of Operations Management

The goal of operations management in a company is to increase both value and utility, thereby achieving sustainable economic benefits and long-term development. The essence of operations management is for a company to achieve value-added outcomes through effective management. Under optimal conditions, it integrates company resources to deliver products and services that satisfy customers(Youtao 2023).

2.3.3 Analysis of Key Success Factors in Tourism Operations Management

The study of key success factors began in the 1860s and was first used in the field of information systems, but has been expanded to a wider range of management in the past 20 years. Among the key success factors, it is necessary to pay attention to its limiting areas, characteristics, environments, situations, events, activities, strategic factors, variables, etc. If these factors are used properly and maintained for a long time, they will lead an event, individual, department, organization, and company to success and generate profits. Key success factors can be identified and controlled. The core idea of key success factors is that several key factors play a decisive role in the success or failure of a company or project. After leaders screen out a few key influencing factors from a large number of influencing factors, they regard them as the key control points for project success, and formulate project management goals around them to determine the priorities of management(Changhong 2019).

2.4 PEST Analysis

In the late 20th century, Johnson and Scholes of the United States established the PEST model based on their summary of environmental analysis. PEST analysis has been widely used in recent years and can analyze the external macro-environment of an enterprise, including various external factors related to the operation and management of the enterprise. Based on the characteristics of the research object, the four key external environmental factors, namely the political environment, economic environment, social environment and technological environment, are mainly used to explore their impact on corporate activities and decisions(Yuting 2023).

1) Political environment, mainly analyzing factors that may have an impact on the long-term development of the enterprise, such as political strategies, systems, laws, etc.
2) Economic environment, analyzing the internal and external economic environment, economic policies and other factors faced by the enterprise, and understanding their role in the formulation of corporate goals and strategies;
3) Social environment, including factors affecting the operation of the enterprise from national culture, beliefs, values, etc.;
4) Technological environment, including factors affecting the operation of the enterprise from technological capabilities, policies, dynamics, etc.

Summary

This chapter reviews the new media environment, sustainable development, operation management theory, PEST analysis method and related literature. This article will use the PEST analysis method to deeply study the cultural tourism industry and build a three-dimensional media operation development system based on new media and sustainable development, and provide a basis and practical guidance for the sustainable operation management of the cultural tourism industry in Qianxinan Prefecture.

3. METHOD

3.1Research Design

This study takes Qianxinan Prefecture as the research object. This paper uses qualitative analysis method. First, through field research and observation, it sorts out the tourism statistics and news text materials of Qianxinan Prefecture under the new media environment. Based on the tourism destination life cycle theory, combined with the stakeholder-related theory, understand its impact on operation management. And through marketing situation analysis, understand the current development situation and what problems and obstacles exist in development. Secondly, the analysis method involved in this paper is PEST analysis. Through the external environment analysis (political, economic, social, and technological) based on the PEST analysis method for the cultural and tourism operation management of Qianxinan Prefecture, finally, suggestions are made for

sustainable cultural and tourism operations, in order to provide certain theoretical references for the development and operation of tourism projects and increase their possibility of success.

3.2 Data Collection Methods

3.2.1 Observation Method

This study adopts a non-participatory observation method. During the observation process, in order to effectively record the observed information and obtain detailed and comprehensive data, systematic observation will be further used to ensure the scientificity and objectivity of the observation results. Through in-depth observation, this study aims to provide a deeper understanding of the research issues and make substantial contributions to related research in this field.

3.2.2 Interview Method

This study will adopt an in-depth interview method. The in-depth interview method can deeply understand the expectations, acceptance psychology and specific behaviors of the actual interviewees in this research field. Achieve a deep understanding of the current status of the local cultural tourism industry. The interview method can provide a favorable basis for authenticity and reliability in the research field. Through sorting and analysis, corresponding optimization paths and countermeasures can be proposed later.

3.3 Determine the sample size

The data collection for this study will be derived from the analysis of stakeholder theory, and structured in-depth interviews will be conducted with the local tourism bureau, employees of local cultural and tourism enterprises, foreign tourists, and local people. The thoughts and expressions of the interviewees will provide powerful data. Knowing their needs, interests, and preferences through interviews can help the study to have a deeper understanding of their behavior and decision-making process, as well as to determine their areas of interest and the factors affecting consumer behavior.

Finally, the reliability is guaranteed in the following way: the researcher improves the validity and accuracy by using triangulation in data collection, which can reduce bias or the limitations of a single source. Therefore, reliable data can be provided for the direction of its research.

4. RESULT

4.1 Current Status of Sustainable Cultural Tourism Development in Qianxinan Prefecture under the New Media Environment

4.1.1 Qianxinan Prefecture

The Qianxinan Prefecture in Guizhou Province is located at the junction of Guizhou, Yunnan, and Guangxi. Its capital, Xingyi City, connects westward to Yunnan and southward to Guangxi. With its pleasant climate, beautiful landscapes, rich cultural heritage, abundant natural resources, and strong ethnic customs, the prefecture has been recognized by the Chinese Meteorological Society with the title "China's Capital of Year-Round Health and Wellness." Qianxinan Prefecture, as a region inhabited by ethnic minorities, is home to more than 40 ethnic groups, including the Bouyei, Miao, and Yi peoples. The hard-working, sincere, hospitable, and supportive nature of the local people has cultivated a vibrant and diverse ethnic culture and customs.Qianxinan boasts a wealth of intangible cultural heritage, with numerous items recognized across different levels. It currently has 14 items on the national intangible cultural heritage list, including the Yi people's "Amei Qituo12", covering 20 sites, as well as 110 items on the provincial list, including Buyei cultural elements, covering 128 sites, and 244 items on the prefecture-level list(Daily 2023). These rich intangible cultural resources provide excellent opportunities for tourism development in scenic areas and villages, empowering the growth of the local cultural and tourism industries.

On December 29, 2023, the 13th meeting of the Standing Committee of the Ninth People's Congress of Qianxinan Prefecture reviewed and approved a proposal to position "Health and Wellness Destination, Cultural Xingyi" as the city's official brand(Congress 2023). This new city positioning is aimed at promoting high-quality tourism development in the prefecture. Qianxinan continues to promote the integration of culture and tourism, fully leveraging its unique geographical and ethnic advantages. The strategic development plan, "Cultural Tourism to Revitalize the Prefecture," focuses on cultivating market players, upgrading industry segments, improving service quality, and revitalizing underutilized projects. Xingyi City, as

the permanent host of the International Mountain Tourism and Outdoor Sports Conference, has increasingly capitalized on the mountain tourism and outdoor sports sectors. By focusing on "resources, customers, and services," the region actively explores multi-industry integration of cultural tourism, wellness tourism, sports tourism, and rural tourism, strengthening the "Health and Wellness Destination, Cultural Xingyi" city brand, enhancing its international reputation.

4.1.2 Current Status of Sustainable Cultural Tourism Development in Qianxinan under the New Media Environment

The Guizhou Provincial Government has vigorously implemented the "Tourism Industrialization" strategy, focusing on the three key elements of "resources, customers, and services," and has been continuously advancing four major actions: cultivating market players, upgrading industry segments, improving service quality, and enhancing project quality and efficiency. The aim is to accelerate the transformation and upgrading of the tourism industry, striving to build a world-class tourism destination and boost the development of a strong tourism province. In 2023, Guizhou Province received a total of 636 million tourists and achieved a tourism income of more than 740 billion yuan(Guizhou 2024). New forms of tourism continue to emerge, "Huang Xiaoxi, eat dinner13" has become a new tourism word, "village super" and "village BA" are popular in the circle, "small cars and small groups14" and "Zhizhichuanfei15" and other new products have formed new explosive models, and the travel market entities have a net increase of 19,000 households, reaching a total of 340,000 households.

Qianxinan Prefecture has taken full advantage of the tourism hotspots across the province by leveraging platforms like TikTok, WeChat Video, REDnote, and others to strengthen online marketing and promote tourism. The prefecture has also collaborated with online travel agencies such as Tongcheng and Ctrip to increase visibility and boost marketing efforts. By integrating Qianxinan's tourism resources under the "Wanfeng Mountain Forest" and "Sunshine Qianxinan" tourism brands, it has enhanced offline promotional efforts and focused on making the "off-peak seasons lively." Initiatives like "Travel with the Event" and events like the "Legendary Challenge Race (Guizhou Xingyi)" have been held to attract more visitors to Qianxinan for tourism and cultural experiences. In 2024, the prefecture will focus on promoting intangible cultural heritage through various travel incentives and six types of summer special products, adding new play styles, business models, and experiences in the field of intangible heritage tourism, thereby enriching the tourism market supply. Qianxinan’s scenic areas have launched a variety of immersive, interactive, and experiential cultural tourism products based on the region's rich intangible cultural heritage, allowing visitors to experience the unique charm of the intangible heritage. Over the past few years, Qianxinan has targeted domestic markets, frequently conducting promotional activities in regions like the Guangdong-Hong Kong-Macao Greater Bay Area, Chengdu-Chongqing Economic Zone, Central China, East China, and North China. With its strategic location as a gateway in the "Guizhou-Anshun Huangguoshu-Xingyi Wanfeng Mountain-Kunming Yunnan-Southeast Asia" golden tourism line, the prefecture has been actively promoting connectivity while also expanding the international tourism market. As the consumer market matures and new tourism demands emerge, Qianxinan's challenge lies in how to ensure sustainable development and promote more "hotspots." This is crucial not only for the high-quality development of the tourism industry but also for meeting the growing demand for a better quality of life among the population. However, new media-driven tourism development also reveals areas for improvement in China's tourism industry. The current status of sustainable cultural tourism development in Qianxinan can be summarized as follows:

1) Emergence of New Travel Trends: Recently,lesser-known, off-the-beaten-path destinations have become popular. During the 2023 "May Day" holiday, Qianxinan saw significant growth in tourist numbers, marking a new development opportunity for the region's tourism industry. However, this surge in tourism also brought challenges, such as congestion at certain scenic spots and difficulties in finding parking during peak periods.
2) Mismatch between Expectations and

Experience: Qianxinan offers stunning natural landscapes such as dramatic mountain scenery, cloud-covered peaks, and misty valleys, but some visitors, attracted by promotional materials, feel disappointed upon arriving. This issue stems from poorly planned tourism routes, poorly located viewpoints, cable car stations, and key information points, leading to underwhelming visitor experiences due to inadequate development work.

3) Lack of Comprehensive Planning and Service Diversification: At present, many of the cultural tourism projects in Qianxinan lack overall planning and design, leading to a narrow range of products and services. The existing offerings fail to fully attract tourists, and there are issues with limited visitor demographics and types of tourism. The goal of "attracting customers, retaining customers, and serving customers" has yet to be fully realized, which hampers the broader development of related industries.
4) Seasonal Imbalance in Visitor Demographics:Currently, cultural tourism projects primarily target middle-aged and young adults, whose travel patterns are concentrated during peak seasons. This creates an imbalance in visitor numbers, with some projects being overcrowded during peak periods but experiencing low turnout during off-peak times. This seasonal fluctuation leads to wasted resources and increased operational costs as facilities such as hotels, accommodations, and sports venues remain underutilized.
5) Limited Geographic Reach and Audience: Due to the region's geographic and transportation challenges, current cultural tourism and wellness projects have limited impact and small outreach, mainly attracting visitors from neighboring provinces and districts. Weekend getaways and day trips account for a significant portion of the visitor base, further limiting the potential for broader tourism expansion.

4.2 PEST Analysis of Sustainable Cultural Tourism Operation and Management in Qianxinan Prefecture under the New Media Environment

4.2.1 Political Environment

The integration of health and wellness tourism with cultural tourism is an inevitable trend for the high-quality development of the tourism industry in the new era. It is a necessary choice for advancing the innovative development of cultural and tourism industries. General Secretary Xi Jinping emphasized: "The cultural industry and the tourism industry are inseparable. We must insist on using culture to shape tourism and using tourism to highlight culture, promoting the integration of culture and tourism development, allowing people to experience the beauty of culture and the beauty of nature while appreciating the beauty of nature and cultivating their hearts and souls(Ke 2024)." He further stated, "We must develop the tourism industry, enrich the ecological and cultural connotations of tourism, and actively promote health care, elderly care, leisure, and entertainment services, making these sectors important emerging industries." This important speech by General Secretary Xi provides a clear direction for promoting the integration of health and wellness tourism with cultural tourism.

Currently, the Chinese government is implementing strategies such as "Healthy China," "Cultural Power," and "Rural Revitalization." Against this backdrop, Qianxinan Prefecture is positioning itself as a "health and wellness destination" for the city and actively promoting the development of cultural tourism and wellness industries, fostering a diverse integration of rural industries. In 2020, the 12th Plenary Session of the 7th Qianxinan Prefecture Committee made a strategic decision to develop the prefecture through culture and tourism, taking the lead in raising the tourism industry to a strategic level in the prefecture. During the 14th Five-Year Plan period, we will actively promote the development of integrated industries such as leisure and vacation, health tourism, and mountain sports tourism based on the "14th Five-Year Plan for Cultural and Tourism Development in Guizhou Province"(Bureau 2022). In 2023, Qianxinan fully launched the "Health and Wellness Destination, Cultural Xingyi" initiative, outlining its vision to develop the prefecture into a "health and wellness product supply region in the border area of Guizhou, Yunnan, and Guangxi," an "ecological wellness backyard for the Greater Bay Area," and an "international tourism wellness destination(Bo 2023)." A series of related documents have been issued to promote the development of the cultural tourism and wellness industries, providing important support for the

development of foundational, related, and derivative wellness industries in Qianxinan Prefecture.Through policy-level support, it is possible to attract more inter-provincial and international tourists, promote regional tourism linkages, and create tourism clusters with complementary economic effects.

4.2.2 Economic environment

In 2023, Qianxinan Prefecture welcomed 42.49 million domestic tourists, generating a total tourism revenue of 41.213 billion yuan, demonstrating a rapid growth trend in the tourism market(tourism 2024).Through the development of the "Health & Wellness Destination, Cultural Xingyi" brand, Qianxinan has actively guided the development of cultural tourism resources and the creation of economic benefits. Qianxinan Prefecture is rich in intangible cultural heritage resources, combined with its natural and cultural assets, they have provided a solid economic foundation for the development of the cultural tourism industry.The growth of tourism has driven the transformation and diversification of the local economy, helping to alleviate the constraints imposed by a single economic model. However, as the number of tourists continue to grow, Qianxinan faces challenges related to transportation, infrastructure, and service support. In particular, road congestion and a shortage of parking spaces during peak seasons have led to a decline in the overall visitor experience. This phenomenon has somewhat limited the further enhancement of economic benefits.

4.2.3 Social Environment

Qianxinan Prefecture is home to more than 40 ethnic minorities, including the Bouyei, Miao, Yi, and others. The traditional cultures, arts, festivals, and customs of these ethnic groups provide rich tourism resources. For example, the Yi ethnic group's "Amei Qituo" dance, Bouyei wedding customs, and Miao embroidery are part of the region ’s intangible cultural heritage, offering visitors the opportunity to experience the unique ethnic flavors of the area. Modern tourists are increasingly inclined toward experiential and immersive tourism, demanding higher levels of interactivity and participation. By integrating intangible cultural heritage with tourism, Qianxinan allows tourists to deeply engage with ethnic cultures and experience the region’s diverse cultural atmosphere. This meets the needs of the new generation of tourists who prefer personalized travel experiences, and the shift in consumption patterns has encouraged the local tourism industry to move from traditional sightseeing to interactive, experience-based tourism. This has also driven the development of more innovative cultural tourism products.However, due to the lack of a comprehensive planning and layout, the current cultural tourism projects in the region are not sufficiently diverse, and the goal of "attracting, retaining, and serving customers" has not been fully realized.

In recent years, Xingyi City in Qianxinan has been continuously promoting mountain tourism, leveraging its geographical advantages and using new media to develop folk customs and sports such as road running, mountain biking, cave exploration, car camping, and river rafting. The region has hosted various domestic and international mountain tourism and outdoor sports events, contributing to the integration of cultural tourism, sports, wellness, and scientific education into a multi-dimensional industrial development model. However, despite these efforts, Qianxinan’s tourism industry faces challenges in terms of sustainable development. There is a significant seasonal disparity in the tourism market, with the middle-aged and young groups traveling mostly during holidays, while many homestays and tourist facilities remain idle during the off-peak season. This imbalance creates inefficiencies and limits the full potential of the local tourism sector.

4.2.4 Technological Environment

Following the decision by the Guizhou Provincial Committee and the Provincial Government to develop the big health industry and promote wellness tourism, Qianxinan Prefecture has focused on leveraging its unique local resources and on implementing the "Industry-Strong State" strategy. The region has made significant strides in expanding its health and wellness tourism sector. There are currently 2,307 medical institutions at various levels, and traditional Chinese medicine therapies, such as acupuncture, medicinal baths, foot therapy, and massage, are thriving. The local wellness and health product industry is also expanding, with notable products such as "Xingren

Job's Tears" and "Anlong Dendrobium" gaining prominence. A wellness-focused atmosphere is gradually being established(Ningjie 2023). The combination of "wellness + tourism," "wellness + sports," and "wellness + agriculture" has emerged as a new trend, and mountain sports and hot spring wellness have gradually become the region's tourism highlights. Ten national and provincial forest wellness pilot bases have been established, laying a solid foundation for the future development of cultural tourism and wellness industries.

Additionally, new media technologies, such as big data and social media, are empowering the region's wellness tourism industry. Through big data analysis, businesses and administrators can better understand market demand and optimize marketing strategies. Qianxinan Prefecture has actively utilized social media platforms such as TikTok, WeChat Channels, and REDnote for online promotion, while also partnering with online travel agencies like Ctrip and Tongcheng to promote its tourism resources. This comprehensive digital marketing strategy has significantly enhanced the visibility of Qianxinan's tourism brand, allowing more potential visitors to easily access travel information. By leveraging online platforms for precise marketing, bookings, and inquiries, Qianxinan has greatly expanded its tourism service coverage, attracting a growing number of young domestic and international tourists. At the same time, the intelligent reservation and service system can also improve the overall experience of visitors.

4.2.5 Summary of PEST Analysis under the New Media Environment

The development of Qianxinan's cultural tourism industry benefits from policy support, favorable natural conditions, abundant social and cultural resources, and technological innovation. National policies that encourage the integration of health and wellness tourism and cultural tourism provide strong support for Qianxinan's wellness tourism industry. The region's unique subtropical climate, excellent air quality, and abundant ecological resources create a natural advantage for health tourism. The rich ethnic culture and red revolutionary history, along with folk sports activities, add unique cultural attractions to wellness tourism. Furthermore, technological innovations, including the use of big data and new media technologies, have enhanced market analysis, brand visibility, and visitor experience, laying a solid foundation for the sustainable and high-quality development of Qianxinan's cultural tourism industry.In this regard, Qianxinan is still facing greater opportunities and challenges.

5. HDISCUSSION AND CONCLUSION

5.1 Discussion

Cultural tourism operations not only involve the development and utilization of tourism resources, but also require a deep understanding of the practices of regional culture. The key to success lies in accurately integrating the unique local culture with tourism resources, while emphasizing the three elements of culture, innovation, and emotional value. In cultural tourism operations, the operational model is the fundamental prerequisite for the sustainable development of tourism projects. By improving aspects such as operational management, content integration, marketing strategies, and innovation, and applying relevant marketing strategies, it is possible to promote sustainable development of the cultural tourism industry in Qianxinan. This will be an area of further study for researchers moving forward.

5.2 Conclusion

The findings reveal that the era of new media offers unprecedented opportunities for innovation and growth, while also presenting challenges that require adaptive strategies. Politically, Qianxinan benefits from favorable policies and initiatives by the government to promote cultural and eco-tourism, aligning with national strategies for rural revitalization and sustainable development. Economically, the region's stable growth provides a foundation for investments in tourism infrastructure, while its abundant natural landscapes, such as the Maling River Canyon and Wanfenglin, serve as unique selling points. Culturally, Qianxinan's diverse ethnic traditions and heritage offer rich opportunities for storytelling in the digital age. Technologically, the rapid development of new media platforms enables innovative marketing strategies, real-time interaction with tourists, and data-driven decision-making, enhancing visitor experiences.

Despite these advantages, challenges remain. Ecological preservation is crucial as increasing

tourism activities put pressure on the region's fragile environment. Moreover, fierce competition in the tourism market demands that Qianxinan differentiate itself with unique products and branding. Consumer preferences are also shifting toward experiential and personalized travel, necessitating flexibility in product design and service delivery. The role of new media in amplifying both positive and negative feedback further underscores the importance of maintaining high-quality services and effectively managing public perceptions.To achieve sustainable growth, Qianxinan must adopt integrated measures that leverage its strengths while addressing key challenges. Strategies could include developing eco-tourism initiatives aligned with global sustainable development goals, enhancing community engagement to ensure that local residents benefit economically and culturally from tourism, and utilizing new media to create immersive and interactive experiences that appeal to diverse audiences. Collaboration among stakeholders, including government agencies, private enterprises, and local communities,is critical for balancing development and preservation, ensuring the protection of the region's natural and cultural heritage.

In summary, Qianxinan is well-positioned to become a model for sustainable cultural tourism development in the era of new media. By effectively harnessing its political support, economic potential, cultural richness, and technological advancements while proactively addressing ecological, competitive, and consumer-related challenges, a sustainable tourism ecosystem can be built in the region.

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Strategic Planning for Sustainable Tourism Development: A Case Study of the China-Lao High-Speed Railway Corridor

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Abstract

Background: High-speed rail infrastructure has emerged as a transformative force for tourism, particularly under transnational initiatives like the **China-Lao High-Speed Railway**, developed as part of China's Belt and Road Initiative (BRI). Despite its significance, the sustainability of tourism development along this corridor remains underexplored, especially from a stakeholder-driven perspective.

Research Aim: This study aims to develop strategic frameworks for **sustainable tourism development** along the China-Lao High-Speed Railway corridor, emphasizing stakeholder collaboration, socio-economic impacts, and environmental preservation.

Methodology: Using a **qualitative case study** approach, the research incorporates data from **semi-structured interviews**, focus groups, participatory observations, and **document analysis.** Stakeholders include policymakers, local residents, tourism operators, and cultural leaders. Data were analyzed thematically using **SOAR analysis** to identify strengths, opportunities, aspirations, and results.

Findings: Key themes emerged, including the need for **policy alignment**, robust **stakeholder collaboration**, infrastructure improvements, and balancing **socio-economic benefits** with **environmental sustainability**. Issues such as tourism commercialization, local capacity gaps, and environmental degradation were also identified.

Implications: The research provides actionable strategies for **sustainable tourism planning** along the railway, advocating for inclusive stakeholder participation and regional cooperation. These findings offer **practical lessons** for similar transnational infrastructure projects globally, ensuring tourism growth aligns with sustainability principles.

Keywords: *Sustainable tourism, strategic planning, China-Lao railway, qualitative research, stakeholder collaboration, tourism policy.*

1. INTRODUCTION

Background

The China-Lao high-speed railway, a landmark infrastructure project under the Belt and Road Initiative (BRI), represents a transformative milestone in transnational connectivity. This railway, officially launched in December 2021, links China's Yunnan Province to Vientiane, Laos, aiming to shift Laos from a "land-locked" to a "land-linked" include enhancing t ss-border tourism oppo



High-speed rail infrastructure has demonstrated profound impacts worldwide, particularly in regions like Europe and Japan, where improved accessibility and reduced travel times have significantly boosted tourism and regional economies (Masson & Petiot, 2009; Hall, 2021). However, in developing areas such as the Greater Mekong Subregion (GMS), the long-term sustainability of such projects requires deeper exploration. Laos, a latecomer to international tourism compared to its neighbors, faces unique challenges and opportunities in leveraging this railway to support sustainable tourism development (Kuik & Rosli, 2023; China-Laos Railway Company Ltd., 2020).

Problem Statement

While the China-Lao high-speed railway presents significant tourism and economic opportunities, unplanned tourism development along the railway corridor could lead to socio-economic inequalities, cultural erosion, and environmental degradation. Key issues such as inadequate infrastructure, insufficient stakeholder collaboration, and unregulated tourism activities risk undermining the railway's long-term benefits (Tosun, 2001; Bramwell & Lane, 1994). Similar projects have already witnessed conflicts between local residents and tourism enterprises, alongside damage to fragile ecosystems (Zumitzavan, 2014; Khemthong & Xiaoyun, 2019).

Rationale

This research addresses a critical gap in understanding how infrastructure-driven tourism growth can align with sustainability strategies. Unlike previous studies focusing predominantly on economic impacts (Luo, 2023; Larpnun, 2023), this study adopts a qualitative approach to highlight stakeholder perspectives. By emphasizing stakeholder collaboration, policy alignment, and environmental management, the study provides actionable insights into sustainable tourism development along the China-Lao railway corridor. These findings aim to inform strategic planning to mitigate risks and enhance inclusive, long-term development (Sharpley, 2020; Bertocchi et al., 2020).

Research Gaps

Existing studies on transportation and tourism development in Laos remain limited. Although some research has explored the economic potential of the China-Lao railway (Zhang & Ma, 2019), few have examined sustainability impacts from diverse stakeholder perspectives, such as local communities, policymakers, and private-sector actors (Sun & Jing, 2014). This gap is especially pronounced in qualitative research, which is necessary to address the complex and multi-dimensional aspects of sustainable tourism (Amerta et al., 2018).

Research Aims and Objectives

This study aims to identify strategic planning approaches that balance tourism growth with sustainability goals along the China-Lao high-speed railway.

Specific Objectives:

1. To identify the key factors influencing sustainable tourism development along the China-Lao high-speed railway.
2. To explore stakeholder perspectives on balancing economic, socio-cultural, and environmental sustainability.
3. To propose a strategic framework for sustainable tourism development, incorporating stakeholder collaboration and policy alignment.

Research Questions

The study seeks to address the following questions:

1. What are the key factors influencing sustainable tourism development along the China-Lao high-speed railway?
2. How can strategic planning ensure tourism development aligns with environmental, socio-cultural, and economic sustainability goals?

Contribution

Theoretical Contribution: This research applies sustainable tourism principles and the SOAR framework to infrastructure-driven tourism planning, contributing to the

body of knowledge on stakeholder collaboration in emerging markets (Cole, 2019).

Practical Contribution: The findings provide a strategic framework for tourism planners and policymakers, ensuring a balance between tourism growth and sustainability. These insights are particularly relevant for other emerging destinations impacted by transnational infrastructure projects (Sharpley, 2020; UNWTO, 2019).

2. LITERATURE REVIEW

Theoretical Framework

1. Sustainable Development Theory

The concept of sustainable development, popularized by the Brundtland Report (1987), emphasizes balancing economic growth, social equity, and environmental preservation to meet present needs without compromising future generations (Banister, 2019). Within tourism, sustainable development underscores resource conservation, cultural preservation, and equitable economic benefits for local communities. This approach is particularly relevant to infrastructure-driven projects, such as the China-Lao High-Speed Railway, which must integrate sustainability principles to mitigate environmental and social challenges while fostering economic growth (Sharpley, 2020; Tosun, 2001).

2. Tourism Area Life Cycle (TALC)

Butler's Tourism Area Life Cycle (TALC) model describes the evolutionary phases of tourism destinations—exploration, development, growth, stagnation, and decline—and highlights how transport systems catalyze tourism growth (Bramwell & Lane, 1994). High-speed railways, such as the China-Lao corridor, amplify regional accessibility, attracting visitors to less-developed destinations while accelerating their progression through TALC stages. However, this also introduces challenges like managing carrying capacity and ensuring environmental sustainability during growth (Masson & Petiot, 2009; Zhang & Ma, 2019).

3. Stakeholder Theory

Freeman's Stakeholder Theory (1984) identifies stakeholders as individuals or groups impacted by organizational objectives, emphasizing their roles in decision-making processes (Zumitzavan, 2014). In the tourism context, effective stakeholder involvement—encompassing local residents, policymakers, private sectors, and tourists—ensures inclusive and sustainable planning. Addressing barriers such as power imbalances and limited participation channels is critical for equitable tourism governance (Sun & Jing, 2014; UNWTO, 2019). This theory underscores the importance of collaboration among internal and external stakeholders to manage the multi-dimensional impacts of tourism development.

3. INFRASTRUCTURE AND TOURISM

1. Global Examples of High-Speed Rail Promoting Tourism Growth

High-speed rail systems globally demonstrate their transformative potential in tourism development. For example:

- **Spain's AVE Network:** This system has enhanced domestic and international tourism flows, contributing significantly to regional economic integration (Masson & Petiot, 2009).
- **Japan's Shinkansen:** By connecting remote regions, the Shinkansen has boosted local economies while improving tourism accessibility and infrastructure (Horner & Swarbrooke, 2020).
- Similarly, the China-Lao High-Speed Railway is expected to stimulate economic activity and attract tourists to underdeveloped regions along its route (Luo, 2023).

2. Challenges of Unplanned Tourism Growth

Despite benefits, unplanned tourism growth often results in:

- **Environmental Degradation:** Overcrowding and resource exploitation damage fragile ecosystems (Khemthong & Xiaoyun, 2019).
- **Cultural Commodification:** Commercializing local traditions for tourism can erode their authenticity (Sharpley, 2020).
- **Socio-economic Inequalities:** Tourism revenues frequently bypass local communities, exacerbating disparities (Tosun, 2001)
- These risks highlight the importance of strategic planning to balance growth with

sustainability principles, particularly in transnational infrastructure projects.

4. SUSTAINABLE TOURISM DEVELOPMENT

1. Principles of Sustainable Tourism

Sustainable tourism integrates economic, environmental, and socio-cultural dimensions to balance competing priorities. According to the UNWTO (2019), its key principles include:

- **Environmental Conservation:** Protecting natural resources while minimizing ecological damage (Tahiri & Kovaci, 2017).
- **Cultural Preservation:** Respecting local traditions and fostering intercultural exchange (Cheer & Lew, 2017).
- **Community Participation:** Ensuring equitable decision-making and benefits for local stakeholders (Zumitzavan, 2014).
- The application of these principles is essential for mitigating the negative impacts of large-scale infrastructure projects, such as the China-Lao High-Speed Railway, while promoting long-term socio-economic resilience (Sharpley, 2020).

2. Best Practices for Tourism Linked to Infrastructure Projects

Case studies from transnational projects in Europe emphasize that sustainable tourism requires:

- **Policy Frameworks:** Aligning infrastructure growth with environmental safeguards (UNEP, 2005).
- **Stakeholder Collaboration:** Distributing responsibilities and benefits inclusively (Zumitzavan, 2014; Freeman, 1984).
- **Integrated Planning:** Managing resources and carrying capacity through coordinated tourism policies (Masson & Petiot, 2009). For the China-Lao High-Speed Railway, adopting these practices can address environmental challenges and enhance socio-economic benefits, particularly for underserved regions (Kuik & Rosli, 2023).

Research Gap

While existing literature provides valuable insights into infrastructure-tourism dynamics, significant gaps persist:

1. **Stakeholder Perspectives:** Few qualitative studies explore how key stakeholders, including local communities, policymakers, and businesses, perceive sustainable tourism (Amerta et al., 2018).
2. **Socio-cultural and Environmental Impacts:** Limited research addresses how transnational railway corridors influence the socio-cultural fabric and ecosystems of emerging tourism destinations (Shoowong, 2022).
3. **Application of Strategic Frameworks:** Frameworks like SOAR analysis remain underutilized in actionable tourism strategies (Cole, 2019).

This study addresses these gaps by adopting a qualitative, stakeholder-focused approach to examine the sustainable tourism potential of the China-Lao High-Speed Railway corridor.

5. METHODOLOGY

5.1 Research Design

This study adopts a **qualitative case study approach** to explore the **strategic planning** for sustainable tourism development along the **China-Lao high-speed railway corridor**. A qualitative research design is appropriate because it allows for an in-depth understanding of the complex relationships between stakeholders, infrastructure development, and sustainability principles. The focus is on collecting rich, descriptive data to gain insights into **stakeholder perspectives**, policy gaps, and contextual challenges related to sustainable tourism development.

The **case study** method is particularly suitable for this research as it enables the exploration of multiple data sources—interviews, focus groups, document analysis, and observations—within a **real-world context**.

5.2 Participants and Sampling

1. **Sampling Strategy**:

   Purposive sampling is used to identify **information-rich participants** who are directly involved in or affected by tourism development along the China-Lao high-speed railway corridor. Participants are selected based on their relevance, experience, and ability to contribute meaningful insights.

2. **Participant Groups**:

The following categories of stakeholders are included:

Stakeholder Group	Rationale for Inclusion
Policymakers and Government Officials	Provide insights into tourism policies, regulatory frameworks, and planning processes.
Local Community Leaders	Represent community perspectives on tourism opportunities, challenges, and local impacts.
Tourism Planners and Business Owners	Share knowledge on tourism infrastructure development and sustainability concerns.
Environmental Experts	Provide expertise on ecological impacts and environmental management practices.
Railway Project Managers	Offer perspectives on the integration of railway development with tourism.

3. **Geographical Coverage**:

The study focuses on key regions along the **China-Lao high-speed railway corridor**, including **Boten**, **Luang Namtha**, **Oudomxai**, **Luang Prabang**, and **Vientiane**. These locations are selected for their significant roles as tourism hubs and their proximity to the railway.

4. **Sample Size:**

Data collection will involve **20–30 participants**, ensuring diversity of perspectives. Sampling continues until **thematic saturation** is achieved, where no new themes or insights emerge from the data.

5.3 Data Collection Methods

This study relies on **four qualitative data collection methods** to ensure a comprehensive understanding of the research problem:

1. **Semi-Structured Interviews**:
   - Individual interviews with stakeholders are conducted using an open-ended interview guide to allow flexibility while maintaining focus on key research areas.
   - **Sample Questions**:
     - What challenges are you currently facing in ensuring sustainable tourism development along the railway?
     - How do you perceive the role of policies in balancing tourism growth with sustainability?
     - What are the opportunities and constraints in integrating local communities into tourism development?
   - Interviews are recorded, transcribed, and analyzed to identify patterns and themes.

2. **Focus Group Discussions**:
   - Focus groups are conducted with local community leaders and tourism planners to encourage dialogue, collaboration, and co-creation of ideas on sustainable tourism strategies.
   - Discussions emphasize community perspectives on tourism opportunities, challenges, and roles in development.
3. **Document Analysis**:
   - Relevant documents, such as tourism policies, environmental impact assessments, and master plans, are analyzed to provide contextual insights into planning processes.
   - Document analysis helps identify gaps in policies and align stakeholder perspectives with formal development plans.
4. **Field Observations**:
   - On-site visits to **key tourism destinations** and railway hubs allow the researcher to observe tourism activities, infrastructure, and environmental conditions firsthand.
   - Observations include interactions between tourists and local communities, tourism service quality, and environmental impacts.
   - **Field Notes** and photographs will be collected for qualitative analysis.

5.4 Data Analysis

The study adopts **Thematic Analysis**, a widely used qualitative method for identifying, analyzing, and reporting patterns (themes) within the data. NVivo software will assist in organizing and coding the data. The analysis process includes the following steps:

Stage	Description
Familiarization	Data (interview transcripts, field notes, documents) are read multiple times for immersion.
Initial Coding	Data are systematically coded to identify recurring concepts, phrases, and patterns.
Theme	Codes are organized into themes

Stage	Description
Identification	that reflect key findings related to policy alignment, stakeholder collaboration, and environmental concerns.
Theme Refinement	Themes are reviewed and refined to ensure they align with the research questions and objectives.
Interpretation	The identified themes are analyzed in relation to existing literature and the theoretical framework.

A **coding structure** will be developed and presented as an appendix to ensure transparency in the analysis process.

5.5 Ensuring Trustworthiness

To ensure the rigor and reliability of the qualitative findings, the following strategies will be applied:

1.**Triangulation**:
Data from multiple sources—interviews, focus groups, document analysis, and observations—are cross-verified to strengthen the credibility of findings.

2. **Member Checking**:
Participants will review and validate their interview transcripts and key findings to ensure accuracy and authenticity.

3.**Reflexivity**:
The researcher will maintain a reflexive journal to document personal biases, assumptions, and decisions made throughout the research process.

4.**Peer Review**:
Qualitative experts will review the methodology and findings to provide feedback and confirm the reliability of the analysis.

Table of Methods

Method	Purpose	Tools Used
Semi-Structured Interviews	To gather in-depth insights from stakeholders.	Interview guide, audio recordings
Focus Groups	To facilitate collective discussions and community perspectives.	Focus group guide
Document Analysis	To examine policies and reports for contextual understanding.	Policy documents, reports
Field Observations	To observe tourism dynamics and infrastructure.	Field notes, photographs

6. RESULTS/FINDINGS

The findings of this study are presented as emerging themes derived from qualitative analysis of the collected data, which include interviews, focus groups, document analysis, and observations. The analysis emphasizes the perspectives of stakeholders and the multi-dimensional aspects of sustainable tourism along the China-Laos High-Speed Railway corridor.

Theme 1: Strategic Policy Alignment

Focus on Integrating Policies for Balanced Growth

The findings highlight a lack of integrated tourism planning to align with infrastructure expansion. Policymakers emphasized the need for strategic policies that work alongside railway development to ensure sustainable growth.

"Tourism policies need to work alongside railway development plans to avoid ad-hoc tourism growth" *(Government Official, Yunnan Province).*

Key Observations:

- The rapid development of the railway infrastructure often precedes tourism-specific policies, leading to imbalanced tourism growth.
- Governments of China and Laos need to formulate joint guidelines to ensure cross-border tourism policies are sustainable and coherent.

Document Evidence:

Existing reports from regional tourism departments underscore the importance of aligning policies with the **Belt and Road Initiative** (BRI) to promote regional cooperation.

Theme 2: Environmental Sustainability Challenges

Balancing Development with Ecological Preservation

Stakeholders expressed concerns over environmental degradation caused by unregulated tourism and rapid construction of supporting infrastructure:

"The increased waste and lack of proper land-use planning are harming natural ecosystems" *(Environmental Expert, Luang Prabang).*

Key Issues Identified:

1. **Resource Management**: Inefficient water and energy consumption were observed in key tourism hubs.
2. **Land Use Conflict**: Construction projects often conflict with protected natural areas.
3. **Waste Management**: Insufficient waste disposal systems have been exacerbated by rising tourist numbers.

Document Analysis:

UNWTO principles of sustainable tourism emphasize the need for environmental conservation and ecological management. Policies for resource protection need urgent implementation.

Theme 3: Community Participation and Local Benefits

Inclusive Planning for Equitable Growth

Local residents and community leaders voiced concerns about exclusion from tourism planning processes. Stakeholder collaboration, particularly with local communities, was seen as critical to achieving sustainability:

"We need to benefit from tourism too, not just big businesses. Our culture must not become commercialized" *(Village Leader, Oudomxai).*

Key Observations:

- **Limited Participation**: Community members often serve as labor providers rather than decision-makers.
- **Economic Impact**: Tourism generates employment opportunities but remains concentrated in urban hubs, excluding remote villages.
- **Cultural Preservation**: Concerns over the commercialization of local traditions were widely shared.

Document Evidence:

The importance of balancing socio-cultural dimensions with economic gains is reiterated in sustainable tourism principles.

Theme 4: Stakeholder Collaboration

Multi-Stakeholder Coordination for Effective Implementation

Findings emphasize the critical role of stakeholders—government bodies, private investors, local residents, and tourism planners—in achieving sustainability. Coordination challenges include:

- **Limited Communication**: Gaps between policymakers and tourism operators hinder effective strategy implementation.
- **PPP Framework**: The public-private partnership (PPP) model remains underdeveloped, particularly in Laos, due to governance constraints.

"Collaboration between public and private entities is essential to share risks and responsibilities" *(Tourism Planner, Laos Ministry of Tourism).*

Best Practices:

Examples from international tourism infrastructure, such as Spain's AVE and Japan's Shinkansen, demonstrate the potential for coordinated planning to achieve sustainable outcomes.

Theme 5: Socio-Economic and Accessibility Impacts

Improving Accessibility while Ensuring Equitable Benefits

The China-Laos High-Speed Railway has enhanced accessibility to previously remote areas, promoting tourism and economic opportunities. However, disparities in socio-economic impacts were observed:

- **Tourism Concentration**: Economic benefits remain limited to key cities along the corridor (e.g., Luang Prabang, Vientiane).
- **Local Economy**: Small businesses face challenges competing with larger enterprises.
- **Accessibility**: Improved access has led to increased tourism flows, but uneven infrastructure distribution hinders equal benefits for all regions.

Community Insights:

"The railway brings tourists, but we need better public facilities and services to truly benefit" *(Small Business Owner, Boten).*

Document Evidence:

Literature highlights the role of infrastructure in driving economic growth but cautions against deepening inequalities.

The findings illustrate the interconnected challenges and opportunities associated with sustainable tourism development along the China-Laos High-Speed Railway. Table 1 summarizes the major themes and their implications:

Theme	Key Insights	Implications
Strategic Policy Alignment	Policies must integrate tourism planning with railway development.	Avoid ad-hoc tourism growth; enhance policy coherence.
Environmental Sustainability	Ecological challenges include land use conflicts and poor waste management.	Develop resource management and ecological protection strategies.
Community Participation	Local residents are excluded from planning; cultural authenticity is at risk.	Promote inclusive stakeholder engagement and cultural preservation initiatives.
Stakeholder Collaboration	Communication and coordination gaps hinder planning efforts.	Implement multi-stakeholder frameworks, emphasizing PPPs for resource sharing and governance.
Socio-Economic and Accessibility	Tourism impacts are concentrated; infrastructure disparities persist.	Improve equitable distribution of tourism benefits and infrastructure development.

The qualitative findings emphasize the necessity of strategic alignment, environmental preservation, and inclusive stakeholder participation. These themes collectively form the foundation for creating a sustainable tourism development framework tailored to the China-Laos High-Speed Railway corridor.

7. DISCUSSION

Key Findings and Interpretation

This study explored stakeholder perspectives on sustainable tourism development along the China-Lao high-speed railway corridor. The findings align with **Sustainable Development Theory** and **Stakeholder Theory**, offering practical strategies for achieving long-term sustainability goals:

- **Strategic Policy Alignment:** Integrating tourism development policies with railway infrastructure plans is critical. Policy alignment ensures growth occurs within sustainable limits, preventing unplanned mass tourism that could strain resources and disrupt local communities (Tosun, 2001; UNWTO, 2019).
- **Environmental Sustainability Challenges:** Stakeholders expressed concerns about waste management, biodiversity loss, and land degradation, mirroring challenges faced in Spain's AVE and Japan's Shinkansen projects (Masson & Petiot, 2009; Horner & Swarbrooke, 2020). These issues underscore the need for robust environmental monitoring frameworks in infrastructure-driven tourism (Khemthong & Xiaoyun, 2019).
- **Community Participation and Local Benefits:** Active involvement of local communities emerged as a key theme. Empowering local residents ensures economic benefits while preserving cultural heritage, reinforcing existing findings that participatory approaches foster equitable tourism development (Tosun, 2001; Zumitzavan, 2014).
- **Stakeholder Collaboration:** Effective collaboration between governments, tourism operators, and railway planners is essential. This aligns with **Public-Private Partnership (PPP) theory**, which has successfully been applied in similar infrastructure-driven tourism contexts (Freeman, 1984; Kuik & Rosli, 2023).
- **Socio-Economic and Accessibility Impacts:** The railway enhances accessibility, reducing travel time and costs, thereby supporting

economic objectives. However, equitable distribution of benefits is essential to avoid socio-economic disparities, a recurring challenge in large-scale infrastructure projects (Cheer & Lew, 2017; UNWTO, 2019).

Comparisons with Existing Literature

The findings align with global case studies highlighting high-speed rail infrastructure's role in tourism growth:

- **Spain's AVE Network:** Research shows Spain's high-speed rail system improved regional accessibility, created new tourism opportunities, and generated socio-economic benefits (Masson & Petiot, 2009).
- **Japan's Shinkansen:** The Shinkansen accelerated regional development and improved tourism infrastructure but faced environmental sustainability challenges similar to those identified in this study (Horner & Swarbrooke, 2020).
- **Belt and Road Projects:** Infrastructure under the Belt and Road Initiative fosters regional connectivity but often lacks strategic frameworks to mitigate environmental and social impacts, a gap addressed in this study (Larpnun, 2023).

The findings also resonate with principles outlined by the **UNWTO (2019)**, emphasizing the balance of economic viability, social equity, and environmental sustainability as essential pillars of sustainable tourism.

Practical Implications

The study provides actionable recommendations for policymakers, planners, and stakeholders:

1. **Integrated Policy Frameworks:** Develop policies that integrate tourism growth with environmental management and socio-cultural preservation. Aligned policies prevent unregulated development and ensure long-term sustainability (UNEP, 2005).
2. **Multi-Stakeholder Engagement Platforms:** Create platforms to foster collaboration among governments, tourism operators, and local communities. Stakeholder inclusion promotes equitable benefit sharing and addresses community needs (Freeman, 1984; Tosun, 2001).
3. **Community Empowerment:** Train and involve local residents in tourism management, ensuring they actively participate and benefit from tourism development (Zumitzavan, 2014; Cheer & Lew, 2017).
4. **Environmental Monitoring:** Implement ecological safeguards, including resource management policies and biodiversity conservation measures, to minimize infrastructure growth impacts (Khemthong & Xiaoyun, 2019).
5. **Regional Cooperation:** Promote regional partnerships to develop joint strategies for transboundary tourism planning and resource management (Kuik & Rosli, 2023).

Theoretical Contribution

This study contributes to existing theories in the following ways:

1. **Stakeholder Theory:** By categorizing stakeholders into internal (local residents, officials) and external (tourists, private investors), the research underscores the importance of participatory governance in achieving sustainable tourism outcomes (Freeman, 1984; Zumitzavan, 2014).
2. **Sustainable Development Theory:** The findings emphasize the interconnectedness of economic, socio-cultural, and environmental dimensions in tourism planning, advancing the application of sustainability principles to transnational high-speed rail corridors (Tosun, 2001; Sharpley, 2020).
3. **Tourism Area Life Cycle (TALC):** This study highlights the relevance of the TALC model in understanding how high-speed rail projects influence tourism growth and sustainability challenges at different life cycle stages (Bramwell & Lane, 1994; Zhang & Ma, 2019).

Limitations

While the study provides valuable insights, it has certain limitations:

- **Regional Focus:** The research focuses exclusively on the China-Lao high-speed railway, which may limit generalizability to other contexts (Larpnun, 2023).
- **Short-Term Observations:** Given the railway's recent operation, the study captures early-stage impacts, necessitating further

exploration of long-term implications (Kuik & Rosli, 2023).

Future Research Directions

To build on these findings, future studies could:

1. **Conduct Longitudinal Research:** Investigate long-term socio-economic, cultural, and environmental impacts of high-speed rail-driven tourism development (Masson & Petiot, 2009; Sharpley, 2020).
2. **Explore Regional Comparisons:** Examine similar infrastructure projects in Southeast Asia or Europe to generate comparative insights (Cheer & Lew, 2017; UNWTO, 2019).
3. **Expand Stakeholder Participation:** Include NGOs, environmental advocacy groups, and private investors to capture diverse perspectives (Freeman, 1984).
4. **Refine Strategic Models:** Test the SOAR analysis framework in other transnational contexts to offer a replicable strategy for policymakers (Cole, 2019).

8. CONCLUSION

This study investigated sustainable tourism development along the China-Laos High-Speed Railway corridor, focusing on the perspectives of diverse stakeholders. Key findings revealed the necessity of aligning tourism policies with infrastructure expansion, addressing environmental sustainability challenges, and ensuring equitable benefits for local communities. The study identified five core themes:

1. **Strategic Policy Alignment:** A lack of integrated tourism planning has led to ad-hoc growth, emphasizing the need for coherent policies linking tourism with railway development. Collaborative policies between China and Laos, grounded in regional cooperation, are critical to addressing imbalanced tourism growth.
2. **Environmental Sustainability Challenges:** Ecological degradation, resource mismanagement, and inadequate waste management were significant concerns, highlighting the tension between infrastructure expansion and environmental preservation.
3. **Community Participation and Local Benefits:** Limited involvement of local communities in decision-making processes jeopardizes cultural authenticity and equitable growth. Inclusive planning is vital to empower residents and distribute economic benefits fairly.
4. **Stakeholder Collaboration:** Coordination gaps between governments, private investors, and tourism operators hinder effective strategy implementation. Strengthening public-private partnerships (PPPs) is essential to fostering shared responsibilities and achieving sustainability.
5. **Socio-Economic and Accessibility Impacts:** While the railway has improved regional accessibility and tourism flows, economic benefits remain concentrated in urban hubs, leaving peripheral regions underdeveloped.

These findings provide a holistic understanding of the interconnected challenges and opportunities in achieving sustainable tourism development.

Practical Insights

The study offers concrete strategies for stakeholders to align infrastructure growth with sustainability:

1. **Integrated Policy Frameworks:** Formulate joint tourism policies that align with infrastructure projects, emphasizing long-term sustainability goals. These frameworks should prevent unplanned development and incorporate ecological conservation principles, as demonstrated by Spain's AVE and Japan's Shinkansen.
2. **Environmental Monitoring Systems:** Establish comprehensive environmental safeguards, including resource management and biodiversity conservation measures. Policies must address waste management and land-use planning to protect natural ecosystems.
3. **Community-Centric Development:** Actively involve local communities in tourism planning through capacity-building programs and participatory frameworks. Ensuring locals share in economic benefits while preserving their cultural heritage will promote inclusive growth.
4. **Multi-Stakeholder Collaboration Platforms:** Develop mechanisms to enhance communication and collaboration among governments, private investors, tourism planners, and local residents. Adopting PPP models can facilitate resource sharing, improve governance, and reduce planning inefficiencies.
5. **Equitable Infrastructure Development:** Improve tourism infrastructure in peripheral regions to ensure equitable economic opportunities. Addressing disparities in access

and facilities will foster balanced regional development.

Broader Implications

The findings have broader relevance for transnational infrastructure projects globally, particularly those under the Belt and Road Initiative (BRI). Lessons from the China-Laos High-Speed Railway underscore the importance of sustainability-focused planning in mitigating environmental and socio-cultural challenges. As high-speed rail projects increasingly reshape global tourism landscapes, strategic frameworks integrating environmental conservation, community empowerment, and multi-stakeholder collaboration will be vital.

Global examples, such as the AVE in Spain and Shinkansen in Japan, illustrate that while infrastructure can stimulate economic growth and tourism, it requires a deliberate focus on sustainability to avoid long-term harm to communities and ecosystems. These lessons are particularly relevant for developing regions experiencing rapid infrastructure expansion.

Call for Action

The study urges policymakers, planners, and stakeholders to prioritize sustainable tourism strategies in similar contexts:

- **Policymakers:** Establish and enforce integrated policies that balance tourism growth with environmental and socio-cultural sustainability. Governments must lead efforts to align development plans with international sustainability principles.
- **Tourism Planners and Investors:** Adopt participatory approaches to planning that ensure local communities are stakeholders, not bystanders. Private-sector involvement should emphasize social responsibility and environmental stewardship.
- **Local Communities:** Advocate for greater inclusion in tourism planning processes to ensure cultural authenticity and equitable economic benefits. Capacity-building initiatives should empower communities to take ownership of tourism resources.
- **Researchers:** Conduct longitudinal studies to evaluate the long-term impacts of tourism growth along high-speed rail corridors and refine strategic frameworks for sustainable development.

The findings call for a collaborative and forward-looking approach to ensure the China-Laos High-Speed Railway serves as a model of sustainable tourism development for other transnational infrastructure projects.

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