

16thICMR

Sustainable Tourism Management in the **Era of Digitaliztion:**

Trends, Challenges, and Innovative Solutio

CONFERENCE PROCEEDINGS 2025

17th - 24th October 2025

Uzbekistan,

Tashkent Chapter

In Collaboration with

New **Uzbekistan** University















Foreword

ICMR 2025

The Superior University, in partnership with New Uzbekistan University, proudly invites scholars, researchers, practitioners, policymakers, and students to participate in the 16th International Conference on Management Research (ICMR 2025). This year's conference focuses on the critical intersection of Sustainable Tourism Management and Digital Transformation, providing a platform for global dialogue on innovative solutions, emerging trends, and pressing challenges shaping the tourism industry in a rapidly evolving digital world. Our collaboration with New Uzbekistan University has significantly enriched the academic quality of the conference. The active participation of distinguished academics, industry experts, and students created dynamic discussions, bringing depth to debates on sustainable tourism, digital innovation, and contemporary management challenges. These proceedings capture the intellectual rigour, scholarly contributions, and innovative spirit of ICMR-2025. We hope this volume serves as a valuable reference for future research, policy development, and practice in tourism management and digital transformation.



Prof. Dr. Sumaira RehmanRector, The Superior University

Patron's Message

It gives me immense pleasure to extend my warmest greetings on the occasion of the 16th International Conference on Management Research (ICMR), being held for the very first time on an international platform in Uzbekistan. This milestone reflects our vision of transcending boundaries, building global academic linkages, and promoting meaningful dialogue among scholars, researchers, policymakers, and practitioners. The chosen theme, "Sustainable Tourism Management in the Era of Digitalization: Trends, Challenges, and Innovative Solutions," is both timely and relevant. As the world continues to recover from unprecedented global challenges, tourism stands as a vital industry that not only supports economies but also fosters cultural exchange and understanding. Digitalization, meanwhile, is reshaping how we experience, manage, and sustain tourism worldwide. This conference aims to explore innovative strategies that ensure tourism's growth aligns with principles of sustainability, inclusivity, and technological advancement. I am confident that this gathering will serve as a catalyst for new ideas, collaborative research, and actionable insights that address both local and global challenges. I look forward to witnessing the impactful discussions and outcomes that will emerge from this landmark event.



Dr. Sami Ullah BajwaDean Faculty of Business
Management Sciences

Dean's Message

It is a matter of great pride to announce that the 16th International Conference on Management Research (ICMR) will be hosted for the first time internationally in Uzbekistan. This milestone is a testament to Superior University's commitment to fostering global academic collaborations and creating platforms where knowledge transcends borders. The theme of this year's conference, "Sustainable Tourism Management in the Era of Digitalization: Trends, Challenges, and Innovative Solutions," reflects our dedication to addressing issues that are not only academically significant but also vital for shaping resilient societies and economies. Tourism, being one of the fastest-growing global industries, requires innovative frameworks to balance growth with sustainability. With the power of digital transformation, we now have the opportunity to reimagine tourism as a driver of inclusive development, cultural preservation, and economic prosperity. ICMR 2025 provides a unique opportunity for researchers, policymakers, industry experts, and academicians to engage in meaningful dialogue, share cutting-edge research, and develop actionable solutions that can influence policy and practice worldwide. I firmly believe that this conference will open new avenues for international partnerships and inspire collective efforts for a sustainable future.



Prof. Dr. Nadia Nasir Professor / Director Post Graduate Program of Business Administration

Conference Chair's Message

It is a distinguished honour to welcome you to the 16th International Conference on Management Research (ICMR 2025), being hosted for the first time internationally in Uzbekistan. This significant milestone marks an important progression in the evolution of ICMR and reflects the Faculty of Business and Management Sciences' unwavering commitment to strengthening global academic engagement and advancing cross-cultural knowledge exchange. The conference theme, "Sustainable Tourism Management in the Era of Digitalization: Trends, Challenges, and Innovative Solutions," underscores resolve to address critical issues at the intersection of sustainability, technological transformation, and tourism development. In collaboration with New Uzbekistan University and Asia International University, this conference convenes leading scholars, industry experts, and policymakers to deliberate on emerging trends and propose evidence-based, future-oriented strategies. I am confident that the scholarly contributions and partnerships cultivated through ICMR 2025 will generate meaningful impact and advance academic and professional practice globally.



Dr. Mahwish Zafar Director CARBS Policy Lab

Conference Manager's Message

I am delighted to share that the 16th International Conference on Management Research (ICMR 2025) will be held for the first time beyond our borders, in Uzbekistan, marking a remarkable expansion of ICMR's global footprint. Hosting this prestigious event internationally highlights the Faculty of Business and Management Sciences' commitment to building meaningful academic bridges and promoting research-driven dialogue across continents. The conference will revolve around the theme, "Sustainable Tourism Management in the Era of Digitalization: Trends, Challenges, and Innovative Solutions." This focus reflects the growing need to harmonize digital advancements with sustainable tourism practices. In an industry that shapes economies and cultures worldwide, rethinking tourism through a lens of innovation, sustainability, and responsibility has become more essential than ever. Our collaboration with New Uzbekistan University and Asia International University transforms ICMR 2025 into an influential gathering where researchers, practitioners, and policymakers can collectively explore emerging trends and co-create solutions for the future of global tourism. As a Conference Executive, I look forward to the fresh perspectives, research contributions, and strategic partnerships that will emerge from this year's discussions. ICMR 2025 promises to catalyze new ideas and impactful collaborations that will benefit both the academic and professional community worldwide.

Conference Program

ICMR 2025 Tashkent Chapter

The opening session comprises the formal welcome, introductory remarks, inaugural address, and Guest of Honor speeches. It establishes the conference's objectives, underscores its significance, and frames the central theme of ICMR-2025.

Conference Program-Tashkent Chapter

Saturday 18 October 2025

Sr	Time Sot	Activity	Name of Person
1	10:00	Welcome	Dr. Noureen Zahra (Virtual University, Pakistan)
			Master of the Ceremony
2	10:05 - 10:15	Welcome Note	Dr. Bahodir Ahmedov
			First Vice Rector, Academic Affairs
			New Uzbekistan University (NewUU)
3	10:15 - 10:25	Inaugural Speech	Prof. Dr. Sumaira Rehman
			Rector Superior University
4	10:25 - 10:35	Guest of Honor	H.E. Ahmed Farooq
		Speech	Ambassador of the Islamic Republic of Pakistan to Uzbekistan
5	10:35 - 10:45	Souvenir	Presented by: Dr. Bahodir Ahmedov (New Uzbekistan University)
		Exchange	Presented to:
			1. H.E Ahmed Farooq (Ambassador of the Islamic Republic of
			Pakistan to Uzbekistan)
			2. Dr. Sumair Rehman (Rector of Superior University)
			3. Dr. Sami Ullah Bajwa (Dean, Faculty of Business and
			Management Sciences, Superior University)
			4. Conf. Executives (Superior University)
			1. Prof. Dr. Nadia Nasir (Conference Chair)
			2. Dr. Mahwish Zafar (Conference Manager)
			Presented by: Prof. Dr. Ch. Abdul Rehman (Superior University)
			Presented to:
			Dr. Bahodir Ahmedov (First Vice Rector, Academic Affairs)
			2. Azizbek Marakhimov (Vice-Rector for International Affairs)
			3. Mr. Saqib Ali (Counsellor, Embassy of Pakistan, Tashkent)
			4. Conference Executives (NewUU)
			1. Dr. Irfanud Din
			2. Dr. Shukhrat Mardanov
	10:45 - 10:50		Seating arrangements for panel discussion
5	10:50 - 11:20	Panel	Concept Note: Tourism Potential between Pakistan and Uzbekistan in
		Discussion	the Age of Digitalization
			Moderator: Dr. Noureen Zahra (Virtual University, Pakistan)
			Developed to De Coming Wholil
			Panelist 1: Dr. Samina Khalil
			Economic Advisory Council to the Prime Minister of Pakistan
			Panelist 2: Mr. Baber Ayyaz
			Head Commercial Banking, Bank of Punjab
			Panelist 3: Christopher Hannum
			Associate Professor, New Uzbekistan University.

Panelist 4: Bahtiyor Eshchanov

			Professor, Head of Economics Department, New Uzbekistan
			University.
6	11:20 - 11:35	Keynote	Dr. Deniza Alieva
		Speaker	Management Development Institute of Singapore in Tashkent,
			Uzbekistan.
			Topic: From Communities to Digital Marketplaces - Rethinking
			Participation in Sustainable Tourism
7	11:35 - 11:50	Keynote	Dr. Shahid Mahmud
		Speaker	Chairman & CEO – Interactive Group of Companies
			Distinguished Fellow, Eisenhower Fellowships & Global Think Tank
			Network
			Co-Chair, Digital Futures Sector Committee (NUST Corporate
			Advisory Council)
			Topic: Building Digital Bridges: Technology Transfer and Expert
			Networks as Catalysts for Sustainable Tourism Development in
			OIC Member States
8	11:50 - 12:00	Memento	Presentation of mementos to distinguished speakers
		Presentation	Dr. Noureen Zahra
			Dr. Shahid Mahmud
			Mr. Baber Ayyaz
			Dr. Samina Khalil
			Dr. Deniza Alieva
			Dr. Bahtiyor Eshchanov
			Dr. Christopher Hannum
	12:00 - 12:30	Coffee Break	Coffee Break and Networking Session
9	12:30 - 14:30	Paper	Paper Presentation in 4 Parallel Sessions
		Presentations	

ICMR 2025 Tashkent Chapter

Presentation Paper Sessions

The paper presentation sessions at the Tashkent Chapter of ICMR-2025 feature research spanning four key thematic areas: sustainability and environmental performance, leadership and organizational behavior, artificial intelligence and smart tourism, and the integration of digital innovation in tourism and hospitality. These sessions showcase rigorous research, innovative methodologies, and practical insights that advance knowledge and practice in sustainable tourism and digital transformation in today's competitive era. Each session is chaired by distinguished academics, ensuring scholarly depth and high-quality discussion.

Session 1: Sustainability, Green Practices and Environmental Performance

Time: 12:30 AM-2:30 PM | Venue: MATH 105

Session Chair: Dr. Muzaffar Makhmudov | Co-Chair: Dr. Shazia Nauman

Sr	Authors	Research Paper Title
1	Ammarah Shahzad & Zaka Awan	Towards Net Zero: Sustainable Construction Practices and Project Delivery
2	Nazeer Ahmad	The role of mobile internet-based information in shaping rice farmers' income
3	Maimoona Abdur Rahim	Policy making and governance for sustainable tourism futures
4	Tuba Rasheed	Assessing energy vulnerability and its influence on environmental policy stringency: A comparative analysis of countries with aggressive net-zero targets
5	Zoya Tahir	When warnings fall on deaf ears: Cultural translation of international risk communication frameworks in Pakistan's climate-vulnerable tourism destinations
6	Saira Hassan	The role of social media influencers in shaping tourist awareness and environmental responsibility towards water pollution in northern Pakistan

Session 2: People, Leadership, and Performance

Time: 12:30 AM-2:30 PM | Venue: MATH 106

Session Chair: Salnikova Anastasiya Anatolevna| Co-Chair: Dr. Mahwish Zafar

Sr	Authors	Research Paper Title
1	Syeda Mahwish Raza Naqvi	The Power of character in shaping workplace outcomes through social capital and meaningfulness: A quantitative study
2	Dr Rizwan Qaiser Danish	Ethical Leadership and employee agility in banking sector: The mediating role of adaptive performance
3	Ramish Moeen	From injustice to inefficiency: How does interactional injustice prompt time-related performance fallout?
4	Hina Irfan	Educational leadership as a catalyst for sustainable tourism development
5	Shahzeb Azhar	Art, design, and creative expressions as engines of tourism growth
6	Natasha Saman Elahi & Aisha Sajjad	Exploitative Leadership and employee well-being: The dual role of challenge and hindrance stressors.
7	Tooba Javid	Leveraging emerging technologies for sustainable tourism entrepreneurship in developing economies: Insights from Nepal and Pakistan

Session 3: AI, Innovation and Smart Tourism

Time: 12:30 AM-2:30 PM | Venue: MATH 205

Session Chair: Dr. Qobiljon Toshnazarov| Co-Chair: Dr Sajid Nazir

Sr	Authors	Research Paper Title
1	Madiha Iqbal	Disaster-management crisis: a barrier to sustainable tourism in Pakistan. A qualitative synthesis study
2	Dr. Asghar Ali	Unleashing youth entrepreneurship in tourism: Barriers, enablers, and policy pathways in Pakistan
3	Sundas Azeem	The double-edged sword of AI: Digital overload, psychological safety, and employee mental health
4	Rabia Kanwal	The impact of marketing cues on impulsive buying behavior: Mediating effects of emotional arousal, product involvement as a moderator
5	Aamir Ilyas	Revamping talent acquisition: How dotlabs leveraged digital strategy to attract top talent
6	Qurat ul Ain	Antecedents of marketing agility in the textile sector of Pakistan: A qualitative inquiry
7	Jakhongir Odilov	Multi-stage adaptive intervention model: Enhancing receptivity through personalization and context-rich data

Session 4: Tourism, Hospitality & Digital Transformation

Time: 12:30 AM-2:30 PM | Venue: MATH 206

Session Chair: Wenshen Ye | Co-Chair: Dr. Samina Khalil

Sr	Authors	Research Paper Title
1	Dr. Mansoor Ahmed Junejo	Case Title: RT Café at the crossroads: Growth, focus, or transformation?
2	Asma Parveen	Bridging sustainability and knowledge: Investigating the influence of green intellectual capital on green innovation performance within SME's
3	Dr Madiha Rehman Farooqi	Trends, themes, and networks in sustainable tourism research: A Bibliometric perspective
4	Fatima Sabir	IoT domain model usage for the tourism industry: Technical aspects and developer perception
5	Ahmad Bilal	Cultivating entrepreneurial minds: Unleashing potential in Pakistan's emerging entrepreneurs using structural equational modelling.
6	Nozima Makhmudova	A conceptual model on the dual framework for generative AI integration in commercial banking
7	Sadaf Choudhary	Role of digital content marketing in fostering eco-conscious behavior among tourists

Paper Abstracts Presentation

ICMR 2025 Tashkent Chapter

The abstracts presented in this section highlight the scholarly contributions shared at the Tashkent Chapter of ICMR-2025. They reflect rigorous research, innovative approaches, and insights across sustainable tourism and digital innovation.

Session 1 Sustainability, Green Practices, and Environmental Performance

The Role of Mobile Internet-Based Information in Shaping Rice Farmers' Income

Nazeer Ahmed¹; Xiangyu Guo²
College of Economics and Management, Northeast Agricultural University, China^{1,2}.

Abstract

Digital technologies are reshaping agriculture, yet the extent to which mobile Internet—based information contributes to farmers' income remains underexplored in developing economies. This study investigates its role in rice production, a strategic crop for Pakistan's food security and rural livelihoods. Drawing on survey data from 683 rice farmers across Punjab, Sindh, and Balochistan, we employ an endogenous switching regression model to address selection bias, complemented by treatment effect estimation for robustness. Quantile regression captures heterogeneous effects across income groups, while a mediation model identifies the mechanisms through which digital information influences return. The findings reveal that mobile Internet adoption enhances farmers' economic outcomes, though the magnitude of impact varies across the income distribution. Reduced information acquisition costs and greater uptake of production technologies act as key mediating channels. By linking digital information with inclusive agricultural growth, this study offers evidence to guide rural development and digital policy strategies.

Keywords: mobile internet, digital information, rice farmers, agricultural income, Pakistan

Policy Making and Governance for Sustainable Tourism Futures

Maimoona Abdur Rahim National Defense University (NDU)

Abstract

The growth of tourism requires well-structured policies and effective governance to ensure that development remains sustainable, inclusive, and beneficial to local communities. This paper explores the role of policymaking in shaping tourism's trajectory, particularly in contexts where balancing economic growth with cultural and environmental preservation is critical. It analyzes frameworks of tourism governance, highlighting best practices from different countries where policies have successfully integrated sustainability, infrastructure development, and community participation. The paper argues that policy interventions in areas such as visa facilitation, infrastructure planning, environmental conservation, and investment incentives can determine the competitiveness of destinations. Furthermore, the research emphasizes the importance of evidence-based policy-making that aligns with global standards while reflecting local socio-cultural realities. The findings point toward a holistic policy approach that prioritizes collaboration among government, industry, and educational institutions. Strong governance, therefore, is positioned as the backbone for shaping resilient, inclusive, and future-ready tourism sectors.

Keywords: policy making, sustainable tourism futures

Assessing Energy Vulnerability and Its Influence on Environmental Policy Stringency: A Comparative Analysis of Countries with Aggressive Net Zero Targets

Tuba Rasheed

Lahore Institute of Science and Technology, Lahore

Abstract

Environmental challenges have become a central problem for countries striving to achieve sustainability and net-zero emission targets. It examines the roles of Energy Vulnerability, Energy Transition, Urbanization, Research & Development, Population Growth, as well as Gross Domestic Product impact on Environmental Policy Stringency by using net-zero emission targets countries from 1990 to 2023, with the Environmental Kuznets Curve hypothesis framework. Panel data econometric techniques, including FMLOS and DOLS. Results reveal that Energy Vulnerability, Energy Transition, Research and Development, and Gross Domestic Product have significant positive impacts on Environmental Policy Stringency, emphasizing energy security importance, technological innovation, along economic capacity in driving stricter environmental policies. Urbanization and Population Growth show adverse but statistically insignificant effects, indicating a limited influence of demographic factors. The study suggests that policymakers prioritize renewable energy adoption, technological development, and economic growth to enhance environmental governance and achieve sustainable net-zero emission objectives.

Keywords: environmental policy stringency, energy transition, urbanization, energy vulnerability, research & development

When Warnings Fall on Daeaf Ears: Cultural Translation of International Risk Communication Frameworks in Pakistan's Climate-Vulnerable Tourism Destinations

Zoya Tahir¹, Dr Sajid Hussain Zahid² Superior University Lahore ^{1,2}

Abstract

Pakistan's 2025 monsoon season has already claimed three times as many lives compared to last year, including tourists, making up a disproportionate number of deaths across the nation. More than 3,500 trapped tourists are participating in rescue efforts across the 2025 monsoon season alone. This research explores the disconnect between the way tourists perceive risk advisories and disaster management professionals' efforts to implement international safety protocols in a nuanced cultural environment. The sample size included 50 local tourists traveling within four high-risk areas, namely, Swat/Dir valleys, Hunza/Gilgit mountains, Murree/Galiyat hill stations, and Karachi coast, during the 2025 monsoon season, further expanding to 12 officials tasked with applying international risk communication norms. What the analysis found was that tourists depend more on family and local networks than on formal sources, and officials are at a loss to adapt Eurocentric, standardized frameworks to Pakistan's multilingual, community-bound society.

Our results indicate that existing global standards presuppose individual decision-making and integrated communication systems, while Pakistani travelers work within collective family arrangements and traverse fragmented institutional landscapes. Travelers tend to disregard federal meteorological warnings but rely on local hotel personnel or community elders, forming a credibility hierarchy that transnational frameworks fail to register. Moreover, risk assessment concepts embedded in global standards such as, personal responsibility and evidence-based decision-making, conflict with cultural perceptions of destiny, divine protection, and communal well-being. The research identifies specific adjustments necessary to ensure international safety frameworks are effective in the tourism industry in Pakistan, such as multilingual messaging approaches, connectivity with informal hospitality networks, and identification of family-based decision patterns. These conclusions provide practical recommendations for enhancing Pakistan's tourism safety systems while contributing to wider discourses related to localizing global risk communication benchmarks in developing nations.

Keywords: monsoon, tourism, climate risk, cultural translation, risk communication

The Role of Social Media Influencers in Shaping Tourist Awareness and Environmental Responsibility Towards Water Pollution in Northern Pakistan

Saira Hassan¹, Qirat ² Superior University Lahore ^{1,2}

Abstract

In recent years, Pakistan's northern regions have witnessed a sharp increase in tourism, which both boosted local economies and created serious environmental challenges. Careless tourist behaviors, including littering, excessive plastic use, and inadequate waste management, have made water pollution in rivers and lakes a pressing concern. Social media influences, particularly those on Instagram and YouTube, played a crucial role in shaping travel preferences and visitor behavior. However, little was known about their capacity to promote environmental awareness and responsibility in Pakistan. This study investigated how social media influencers shaped tourist knowledge and responsibility regarding water pollution in northern areas. A qualitative approach was employed, using semi-structured interviews with domestic travelers (n = 10) who followed travel influencers and influencers themselves (n = 5). Thematic analysis was applied to identify patterns of awareness, accountability, neglect, and influencer impact. Findings revealed that influencers primarily highlighted scenic beauty to attract viewers and maintain ratings, while paying limited attention to environmental responsibility. Both tourists and influencers agreed that sustainability should receive greater emphasis, as tourists often build trust and based travel decisions on influencer content. Encouragingly, some influencers had begun producing videos to raise awareness of ecofriendly practices, reflecting a gradual shift toward promoting responsible travel. The study contributes to the literature on sustainable tourism and aligns with SDGs 6 (Clean Water), 12 (Responsible Consumption), 13 (Climate Action), and 15 (Life on Land), offering insights for policymakers, NGOs, and digital content creators.

Keywords: social media influences, sustainable tourism, environmental responsibility, water pollution, tourist behavior

Session 2 People, Leadership, and Performance

The Power of Character in Shaping Workplace Outcomes through Social Capital and Meaningfulness: A Quantitative Study

Syeda Mahwish Raza Naqvi¹, Dr Sami Bajwa² Superior University, Lahore^{1,2}

Abstract

The research investigates how character strengths and sustainable psychological resources, such as social capital and workplace meaningfulness, can enhance job engagement and performance among faculty members in Pakistani higher education. This study addresses the critical gap regarding how organizations can leverage internal and external work resources to improve institutional performance in public and private universities, where workforce satisfaction and motivation have recently declined. The research relies on the Job Demands-Resources (JD-R) theory developed by Demerouti et al. (2001) to examine direct and indirect relationships between character strengths and social capital concerning their impact on job outcomes while exploring workplace meaningfulness as a mediator. This study offers original insights into global faculty research by observing the application of the JD-R model in Pakistani university settings. It provides specific operational guidance to higher education leaders and policymakers through research-based strategies that foster virtue-driven professional development programs, enhance academic collaboration structures, and promote improved job satisfaction.

The research supports national goals concerning human capital development and academic quality and explicitly fulfils SDG 3 (Good Health and Well-being) by assessing social capital, meaningfulness, and spiritual dimensions to improve faculty mental well-being and resilience. Private universities in Pakistan must establish fair work environments to counteract adverse work environments that affect many university workers. SDG 8 (Decent Work and Economic Growth) demonstrates the direct relationship between workplace fairness, motivation, and ethical leadership, enhancing institutional success, job engagement, and performance. The model promotes SDG 16 by implementing fundamental principles of justice, humanity, and social intelligence to establish an ethical academic environment and culture. The research uses quantitative methods, collecting surveys from university faculty in Pakistan. Semantic Modelling techniques assist in analyzing key construct relationships, resulting in a validated context-oriented model to enhance productivity and engagement in Pakistan's higher education sector.

Keywords: character strengths, social capital, workplace meaningfulness

Ethical Leadership and Employee Agility in Banking Sector: The Mediating Role of Adaptive Leadership

Dr. Rizwan Qaiser Danish¹, Dr. Majid Ali², Moaz Ahmad³, Anila Shahzadi⁴

^{1,3}Institute of Business Administration, University of the Punjab, Lahore, Pakistan

²Hailey College of Commerce, University of the Punjab, Lahore, Pakistan

⁴Hailey College of Banking and Finance, University of the Punjab, Lahore, Pakistan

Abstract

The purpose of this study is to investigate how ethical leadership supports employee agility in Pakistan's banking sector and to further find the mediating role of adaptive performance or the mechanism through which this relationship operates. While earlier research has proven that ethical leadership helps employees succeed, new studies point out how leadership changes to each culture, mainly in developing countries, which can improve employees' abilities to deal with new and quickly shifting conditions (Kim & Yoon, 2025). By using a quantitative approach, the research has collected surveys from 330 bank workers and carried out correlation, regression and mediation analysis to test the proposed links. The results are projected to bring about new ideas by findings on leadership and agility through adaptive performance, and to help manage banks smoothly as the market becomes more volatile. Limitations and future guidelines of this research have been discussed.

Keywords: ethical leadership, employee agility, adaptive performance, social learning theory, banking sector

Towards Sustainable Hospitality Performance: Leveraging Digital Literacy and Strategic-Operational Controls

Ramish Moeen¹, Dr Qasim Ali Nisar², Dr Sadia Cheema Ehtisham³, Dr Lars E Isaksson⁴ Superior University¹, Central Queensland University Australia^{2,3}, Queensland University of Technology Australia⁴

Abstract

Operating in a highly dynamic and competitive environment, the hospitality industry increasingly emphasizes customer experience and sustainability to ensure long-term success. Guided by the Resource-Based View (RBV), this study defines Experience Management (EM), Experience Co-creation (EC), and Service Interaction (SI) as strategic intangible resources that contribute to Sustainable Performance (SUP). These resources are integrated into Strategic Management Controls (SMC), while Social Sustainability (SS) and Digital Technology Literacy (DT) are viewed as Operational Management Controls (OMC) that support or influence resource deployment. Data were collected from 374 four- and five-star hotels in Pakistan, and hypotheses were tested using Partial Least Squares Structural Equation Modelling (PLS-SEM) via SmartPLS 4.0. The results reveal that EM, EC, and SI significantly positively impact SUP, with SS serving as a mediator, and DT moderating the strength of these relationships. The findings suggest that DT enhances the influence of strategic experiential resources on sustainable outcomes, highlighting its crucial role in leveraging these resources. This research advances the RBV by demonstrating how intangible experiential capabilities, when aligned with digital and sustainability-focused operational practices, create a competitive edge in service settings. Practically, it provides a strategic framework for hotel managers aiming to close skill gaps and boost sustainability by utilizing both experiential and technological assets. Additionally, the study offers actionable insights for policy development, CSR alignment, and governance practices to foster cleaner, future-ready hospitality operations.

Keywords: sustainable performance, hospitality industry, experience management, service interaction, social performance, consumer attitudes, employee skills

Educational Leadership as a Catalyst for Sustainable Tourism Development

Hina Irfan Beaconhouse National University, Lahore

Abstract

Tourism has emerged as a vital sector contributing to cultural exchange, economic growth, and social development. However, the sustainability and inclusivity of this sector depend significantly on the role of education and leadership. This paper explores how educational leadership can foster a skilled workforce, enhance awareness about cultural preservation, and promote responsible tourism practices. It argues that universities and colleges must integrate tourism studies, entrepreneurship, and community engagement into their curricula, ensuring that students become both knowledge producers and active contributors to local tourism economies. Through examples of leadership models, the study highlights how education leaders can connect industry, academia, and communities to create long-term benefits for tourism. The findings underscore the importance of empowering educators to influence policy, design innovative training programs, and instill values of stewardship and sustainability in future leaders. Educational leadership, therefore, emerges not just as an academic function but as a key driver for sustainable tourism development.

Keywords: educational leadership, sustainable tourism development

Art, Design, and Creative Expressions as Engines of Tourism Growth

Shahzeb Azhar

Beaconhouse National University, Lahore

Abstract

Tourism is not only about destinations but also about the experiences that inspire visitors. This paper examines the interrelationship between art, design, and tourism, emphasizing how creative expressions enhance cultural identity, attract diverse audiences, and promote sustainable development. By analyzing examples of heritage-inspired crafts, architectural design, festivals, and public art projects, the paper demonstrates how creativity contributes to place-making and destination branding. It highlights the role of artists and designers in curating unique experiences that enrich tourists' understanding of local traditions while offering platforms for intercultural dialogue. Moreover, the study explores how art and design can bridge global and local narratives, making destinations more competitive in an increasingly experience-driven tourism industry. The findings suggest that investing in creative industries can not only boost tourism revenues but also preserve cultural heritage, empower local communities, and create sustainable development pathways. Ultimately, art and design emerge as vital engines of cultural tourism and identity-building.

Keywords: cultural identity, sustainable development

Exploitative Leadership and Employee Well-being: The Dual Role of Hindrance and Challenge Stressors

 $Natasha\ Saman\ Elahi^1,\ Ayesha\ Sajjad^2$ $Superior\ University\ Lahore^1,\ Kinnard\ College\ for\ Women\ University^2$

Abstract

Based on the theoretical reasoning of the challenge stressor framework, this study examines how exploitative leadership indirectly affects the employees' workplace well-being through challenge and hindrance stressors. A sample of 278 employees was collected to test the proposed model using AMOS (24). Time-lagged data analysis reveals that exploitative leadership is positively associated with hindrance stressors and challenge stressors, which subsequently influence employees' workplace well-being. It also shows that hindrance and challenge stressors are the intermediary mechanism that links exploitative leadership to workplace well-being. This study contributes to existing literature by providing a more nuanced understanding of the unexplored relationship between exploitative leadership and workplace well-being by explaining the mediating role of hindrance and challenge stressors. Policymakers and human resource practitioners may design training and development programs to promote morality, ethical behaviours, and to reduce exploitative behaviours and their subsequent effects on well-being. It will help to improve employees' well-being and contribute to SDG 3's goal of ensuring healthy lives and promoting well-being for all.

Keywords: exploitative leadership, challenge stressors, hindrance stressors, workplace well-being, challenge stressor framework

Leveraging Emerging Technologies for Sustainable Tourism Entrepreneurship in Developing Economies: Insights from Nepal and Pakistan

Tooba Javaid Virtual University, Pakistan

Abstract

The tourism sector, across developing economies, faces the dual challenge of achieving economic vitality while safeguarding natural and cultural heritage. Technological advances— including IoT-enabled resource management, smart destination systems, immersive media storytelling, mobile-based financial transactions, and digitally networked entrepreneurship platforms—are reshaping tourism business models. In Nepal and Pakistan, these innovations are elevating service quality while addressing sustainability concerns through resource optimization, heritage conservation, and enhanced market reach. Yet, the mechanisms through which such technologies enable sustainable entrepreneurial practices remain underexplored. Adopting a grounded theory design with purposive and theoretical sampling, this study conducted in-depth semi-structured interviews with 24 stakeholders—comprising tourism entrepreneurs, tech developers, and policymakers from both Nepal and Pakistan. Conversations investigated integration processes, operational impacts, and systemic factors influencing adoption. Findings reveal that IoT applications improve energy and water efficiency in hospitality operations. Smart tourism solutions—ranging from interactive navigation to integrated digital payments—enhance visitor satisfaction and strengthen operational resilience. Immersive technologies, including virtual and augmented reality, foster cultural connection and participatory tourism. Digital platforms act as entrepreneurial enablers, supporting innovation and adaptability. However, infrastructure gaps, low digital competencies, and fragmented institutional support continue to obstruct adoption. Tourism SMEs are encouraged to begin with accessible, high-impact technologies such as mobile payments before advancing to IoT or immersive systems. Policymakers should prioritize broadband expansion, targeted digital training, and supportive regulatory frameworks. Meanwhile, technology designers must focus on affordability, cultural relevance, and scalability to enable sustainable adoption among SMEs in developing regions. Keywords: Sustainable tourism, emerging technologies, IoT, smart destinations, entrepreneurial resilience, Nepal, Pakistan.

Keywords: emerging technologies, sustainable tourism, entrepreneurship, developing economies

Session 3

AI, Innovation and Smart Tourism

Disaster-Management Crisis: A Barrier to Sustainable Tourism in Pakistan: A Qualitative Synthesis Study

Madiha Iqbal Superior University

Abstract

Tourism in Pakistan possesses vast economic and cultural potential, yet its development remains fragile due to recurrent natural disasters and weak disaster management mechanisms. This qualitative study explores how disaster management crises—manifested through governance gaps, inadequate infrastructure, and insufficient preparedness—create significant barriers to sustainable tourism in Pakistan. Data were synthesized from policy documents, previous research, and thematic insights from recent qualitative studies to capture the multidimensional impacts of disasters on tourism systems. Findings reveal that disasters not only cause direct physical damage to infrastructure and heritage sites but also lead to indirect consequences, including livelihood loss, reputational decline, and reduced foreign investment. Moreover, disaster management failures exacerbate the vulnerability of local communities and prolong recovery periods, undermining resilience. Linking these findings to the Sustainable Development Goals (SDGs), the study highlights how ineffective disaster risk management impedes progress toward SDG 8 (Decent Work and Economic Growth), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action). This research contributes to the growing discourse on tourism resilience by emphasizing the urgent need for integrated disaster risk management in tourism planning and policy. The paper concludes that sustainable tourism in Pakistan cannot be realized without embedding disaster resilience into governance structures, community preparedness, and long-term development strategies.

Keywords: disaster management, sustainable tourism, Pakistan, resilience, SDGs

Unleashing Youth Entrepreneurship in Tourism: Barriers, Enablers, and Policy Pathways in Pakistan

Dr. Asghar Ali Virtual University of Pakistan

Abstract

Tourism entrepreneurship has gained more recognition as a driver of economic diversification, cultural promotion and sustainable development in emerging economies. Within the framework of Pakistan, the entrepreneurial activity of the youth in the tourism industry can be considered particularly promising, considering the rich cultural heritage of the country, a variety of natural scenery, and a rapidly developing digital environment. However, these young entrepreneurs are operating in institutional milieus that both offer opportunities and limit them at the same time. The current study aims to explore the obstacles, facilitators, and policy paths that form youth-led tourism start-ups in Pakistan using the analytical perspective of the institutional theory. The study uses a case-study approach to collect qualitative data through interviews with young entrepreneurs who organize tourism start-ups throughout the country. The institutional theory provides the theoretical framework in questioning the interactions of regulative pressures, such as bureaucratic barriers and funding constraints, normative expectations, such as existing societal views on entrepreneurship and gender roles, and cultural-cognitive factors, including values, customs, and the uptake of digital technologies, to shape the entrepreneurial paths. The empirical findings reveal the presence of long-term barriers, such as limited access to funds, lack of skill sets, and socio-cultural barriers, and at the same time reveal facilitators, such as digital technologies and incubation support that enable new paths of innovation.

The paper highlights the necessity of policy measures that re-calibrate institutional settings, simplify the regulatory framework, inculcate entrepreneurship in the tourism curriculum, diversify financing schemes aimed at youth and promote inclusivity by gender-sensitive programmes. It argues that the public-privacy partnership is essential towards strengthening the institutional framework that connects youth ventures to global markets and sustainable tourism value chains. This study is an addition to the literature in the field of sustainable tourism management in the digital age by integrating institutional theory and empirical evidence based on Pakistan. It provides useful policy implications to policymakers, the education sector, and industry stakeholders to leverage the youth as drivers of innovation, inclusivity, and resilience in the tourism sector in Pakistan.

Keywords: youth entrepreneurship, Pakistan, institutional theory, tourism start-ups, qualitative interviews, policy pathways

The Double-Edged Sword of AI: Digital Overload, Psychological Safety, and Employee Mental Health

Sundas Azeem^{1,} Sidra Azim²,
National University of Modern Languages, Islamabad, Pakistan¹, SZABIST University, Islamabad, Pakistan²

Abstract

The rapidly expanding use of artificial intelligence (AI) at work is raising concerns for employee well-being owing to a digital overload. Drawing on Conservation of Resources (COR) theory, this study investigates how AI-enabled task support and digital overload influence employee mental health outcomes through psychological safety. Our survey based on established measures, reports results from 135 professionals in Pakistan. Specifically, our results show that digital overload increases burnout. On the other hand, AI task-support acts as a resource gain that enhances employees' psychological wellbeing. Further, employees who perceive AI as supportive are more likely to preserve resources, and consequently, experience reduced burnout and better wellbeing. The study contributes to organizational behavior literature by highlighting the dual role of AI in shaping employee mental health and well-being outcomes. It underscores the importance of psychological safety as a mechanism that determines whether AI adoption functions as a stressor or a resource. Implications for organizations adopting AI-driven practices are discussed, particularly regarding the design of environments that safeguard employees' mental health.

Keywords: digital overload, AI task-support, AI at work, psychological safety, employee burnout, employee well-being.

The Impact of Marketing Cues on Impulsive Buying Behavior: Mediating Effects of Emotional Arousal Product Involvement as a Moderator

Rabia Kanwal Lahore Institute of Science and Technology

Abstract

Impulsive buying behavior has become a defining trend in e-commerce, particularly in emerging markets such as Pakistan. With the rise of online platforms like Daraz, consumers are increasingly influenced by marketing tactics that trigger immediate purchase decisions. While traditional cues such as pop-up ads create urgency, sustainability messaging has emerged as a modern appeal that not only addresses ethical consumption but also stimulates impulsive buying by evoking positive emotions. This study investigates the influence of pop-up advertisements and sustainability messaging on impulsive buying behavior, with emotional arousal as a mediator and product involvement moderating the relationship between emotional arousal and purchase behavior. Adopting a quantitative, positivist design, the study employs validated measurement scales and survey-based data collection from e-commerce consumers. The findings reveal that both pop-up ads and sustainability messaging significantly enhance emotional arousal, which in turn increases impulsive buying tendencies. Product involvement further strengthens this mediated relationship, indicating that highly involved consumers are more responsive to emotionally charged marketing cues. The study contributes to theory by integrating sustainability into the impulsive buying framework and to practice by offering insights for marketers to design campaigns that balance sales effectiveness with responsible consumption. Implications extend to aligning e-commerce strategies with Sustainable Development Goal 12 while addressing future directions in cross-cultural and longitudinal research.

Keywords: impulsive buying behaviour, emotional arousal, Pop-up ads, sustainability messaging

Antecedents of Marketing Agility in the Textile Sector of Pakistan: A Qualitative Inquiry

Qurat ul Ain¹, Muhammad Sajid², Shehroz Sohail³, Amina Shehroz⁴ Bahria University, Department of Management Sciences

Abstract

In an era defined by volatility, uncertainty, complexity, and ambiguity (VUCA), marketing agility has become a vital dynamic capability that enables firms to sense and respond to rapid environmental, technological, and consumer shifts. While research on marketing agility is expanding in developed economies, its antecedents remain underexplored in emerging markets, particularly in labor-intensive sectors such as Pakistan's textile industry, which contributes over 60% of national exports yet faces significant challenges from globalization, compliance pressures, and shifting consumer preferences. This study addresses this gap by investigating the antecedents of marketing agility in the textile sector of Pakistan. Adopting a qualitative research design grounded in a constructivist paradigm, semi-structured interviews were conducted with senior managers from leading textile firms across Punjab. Thematic analysis revealed ten antecedents that collectively underpin marketing agility in this context: agile leadership, agile organization, agile teams, learning organization, learning teams, organizational connectivity, resource fluidity, sustainable organization, workforce agility, and transformational leadership. Findings suggest that these antecedents are interdependent and context-sensitive, reflecting the unique socio-economic, regulatory, and cultural environment of Pakistan's textile sector. The study makes three key contributions. First, it extends dynamic capability theory by conceptualizing how multiple antecedents converge to build marketing agility in an emerging economy. Second, it offers an empirically grounded framework that integrates leadership, organizational, team, and workforce dimensions of agility. Third, it provides practical insights for managers and policymakers seeking to enhance competitiveness and sustainability in Pakistan's textile industry. By advancing understanding the drivers of marketing agility, the study highlights pathways for firms in emerging economies to strengthen resilience and thrive under global uncertainty.

Keywords: marketing agility, dynamic capabilities, textile sector, Pakistan, qualitative research, antecedents

Session 4

Tourism, Hospitality & Digital Transformation

Bridging Sustainability and Knowledge: Investigating the Influence of Green Intellectual Capital on Green Innovation Performance within SME's

Asma Parveen
University of Gujarat

Abstract

This investigation examines the complex nexus between Green Intellectual Capital (GIC) and an organization's Green Innovation Performance (GIP), considering the mediating function of Green Absorptive Capacity (GAC) and the moderating effect of Environmental Performance (EP). The research utilized Partial Least Squares-Structural Equation Modelling (PLS-SEM) to evaluate data gathered from Pakistani SMEs that have implemented green practices. After thorough scrutiny, 330 valid responses were included in the analysis. The results validate the positive influence of GIC on GIP, accentuating that environmental knowledge and motivation enhance an organization's green reputation. Moreover, GIC considerably augments GAC, underlining its significance as a fundamental resource for green knowledge assimilation. Additionally, GAC assumes a critical role in moulding GIP by converting environmental knowledge into heightened green image performance. The interaction between EP and GAC significantly impacts GIP, emphasizing the necessity of harmonizing absorptive capacity with tangible environmental performance. Furthermore, GAC mediates the connection between GIC and GIP, highlighting its function as an intermediary between intellectual capital and environmental consequences. These insights offer invaluable guidance for organizations aiming to excel in environmental performance and cultivate a green image. Strategically investing in GIC and managing GAC can fortify sustainable competitive advantages and foster positive environmental reputations, thereby enabling organizations to traverse the dynamic terrain of green innovation while engendering stakeholder backing.

Keywords: green intellectual capital, green innovation performance, green absorptive capacity, environmental performance

Trends, Themes, and Networks in Sustainable Tourism Research: A Bibliometric Perspective

Dr Madiha Rehman Farooqi¹, Muhammad Asif², Dr Noreen Zahra³ University of Education^{1,2}, Virtual University of Pakistan³

Abstract

Sustainable tourism is often defined by the balance between environmental preservation, economic viability, and socio-cultural compatibility. Sustainability has emerged as a crucial component for achieving triple bottom line approach in the tourism industry over the past few decades. During 20th Century sustainability is a hyphenated notion in the tourism industry. Consequently, Pakistan started incorporating eco-friendly initiatives and community-based tourism projects in regions like Khyber Pakhtunkhwa, Gilgit-Baltistan, and Balochistan. In order to map the intellectual landscape, research trends, and thematic evolution of academic work on sustainable practices in the tourism industry, this study employed a thorough bibliometric analysis based on research of last 20 years pertaining to following research questions: How has publication volume on tourism sustainability evolved over time, who are the leading authors, countries, and journals, what are the main research themes and their co-occurrence structure? and how have themes evolved over time.

Data were retrieved from Web of Science Collection, covering peer-reviewed articles only published between 2020 and 2025 as very few researches have been done before 2020. The researcher used the *bibliometrix* R package and VOSviewer, to examine publication trends, leading authors, influential journals, key institutions, and global collaboration networks. Co-authorship, cocitation, and keyword co-occurrence analyses were performed to identify research clusters and thematic structures. The findings reveal a significant increase in scholarly attention over the last decade and the most notable countries in sustainable tourism research are Australia, China, UK and USA, with research hotspots including sustainable tourism policy, community-based tourism, eco-certification in hospitality, and the integration of Sustainable Development Goals (SDGs) into tourism planning. This study contributes to both academia and practice by offering an insight into the growing body of literature in sustainable tourism practices. The emerging themes identified from the thematic map is governance, policy and stakeholders whereas most basic themes identified are sustainable tourism as also depicted from word cloud results and word frequency over the last 10 years. This can be verified from VOS viewer output of co-occurrence network. There are 5 major themes of the data: governance & participation, marketing and consumer behaviour, sustainability & biodiversity, climate change adaptation & resilience, community-based tourism & empowerment. The paper identified the emerging themes which can be further explored through multi-method research. Moreover, the seminal work forming the basis of this tourism and sustainability is by Yu (2011), which is mostly cited in the following research.

Keywords: sustainable tourism, green practices, bibliometric analysis, co-citation network, thematic mapping, hospitality industry

IoT Domain Model Usage for Tourism Industry: Technical Aspects and Developer Perception

Fatima Sabir University of the Punjab, Lahore

Abstract

The Internet of Things (IoT) is gaining significant popularity as it enables industries to monitor daily operations and manage data more intelligently. IoT solutions are now being applied across diverse domains, including healthcare, digital banking, agriculture, and the tourism sector. In tourism, the integration of smart systems and their underlying information models plays a vital role in enabling the industry to participate in the digital ecosystem through interoperable and replicable IoT-enabled solutions. These models also facilitate standardized communication across different tourism sectors worldwide, ensuring seamless data exchange without barriers. For the tourism industry, reliance on well-structured data models is essential, as they provide harmonized representation formats and semantics. Such models allow end users to publish relevant data while offering tourists timely access to updates. In this study, we examine the key challenges associated with various IoT data models employed in tourism. Specifically, we analyze five distinct models designed to deliver travel-related information and weather forecasts, as well as their capacity to support smart destination features such as time, temperature, and available attractions. Implemented in Python, these models share a common functionality: predicting weather forecasts. We reviewed their source code to identify recurring bugs and errors and mapped these findings to evaluate their impact on application usability for tourists. Our results indicate that user ratings are strongly correlated with the technical quality of applications, which in turn influences their overall adoption and usage.

Keywords: IoT, data model, tourism, user behavior, application management

Role of Digital Content Marketing in Fostering Eco-Conscious Behavior Among Tourists

Sadaf Choudhary Virtual University of Pakistan

Abstract

We are living in the era of technology where it has become mandatory to adopt the technology either for official or personal use. Technology usage has made our jobs efficient and relatively easy. This study has selected technology to investigate its role in developing eco-conscious behavior among tourists. Environment is a major concern for everyone as it has massive effect on everyone. Therefore, being eco-conscious is not a choice anymore. Combining the two inevitable dimensions of this era, this study will empirically investigate how digital content marketing shape the individual's care for environmental well-being in displaying eco-conscious behavior specifically during their visits to tourists' spots. People having extensive formal digital experience will be interviewed in a focus group to indicate their general awareness for environmental well-being and whether they utilize the technology beside official use to adopt it for their recreational activities like travelling and tours. Moreover, this study will explore how their usage of smart devices is shaping their eco-conscious behavior. This study will help in identifying the use of technology in promoting eco-conscious behaviours. Open ended discussions with respondents will help in identifying the other dimensions of technology that could facilitate the eco-conscious behaviours which is the need of time. This study will have implications for service providers (tourism and IT industry) to facilitate digital engagement of tourists.

Keywords: eco-conscious behaviour, care for environmental well-being, digital content marketing, tourism industry