PROJECTED DESTINATION IMAGE THROUGH AI APPLICATION FOR AYURVEDIC MEDICAL TOURISM DEVELOPMENT IN KERALA: A COMPREHENSIVE ANALYSIS

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Abstract

Health and wellness tourism has become a popular kind of leisure that now encompasses a wide spectrum of medical treatments. The activities blend relaxation, leisure, and tranquillity with wellness and healthcare. Exorbitant wellness and medical facility costs in developed countries, the convenience and cost-effectiveness of traveling abroad, favorable currency investments exchange costs in the worldwide marketplace, continually upgrading technological advances, and extremely high requirements in health services in emerging nations all have contributed to medical tourism's swift development. In addition, productive communication across the travel, hotel, and healthcare industries is necessary for the company's long-term success. The usage of artificial intelligence (AI) technology has increased dramatically in recent years across a variety of industries, including healthcare. AI has enormous potential to transform the healthcare industry by allowing predictive analytics, tailored treatment, remote patient monitoring, and clinical decision support systems. AI integration allows healthcare practitioners to increase diagnosis accuracy, optimize treatment procedures, and improve patient outcomes. Despite the rising popularity of Ayurvedic medical tourism in Kerala, the business faces a number of obstacles, including the need for quality assurance, practice standardization, and the use of new technology. This project aims to investigate the relationship between AI technologies and Ayurvedic healthcare delivery in Kerala, with an emphasis on discovering potential for innovation, improving patient experiences, and supporting sustainable tourist growth. This research intends to give significant insights for policymakers, healthcare practitioners, and industry stakeholders by forecasting future trends.

Keywords: Ayurvedic Medical Tourism, Kerala Healthcare, Destination image, ICT, AI Technologies

Kerala'da Ayurveda Medikal Turizmin Geliştirilmesi İçin AI Uygulaması Yoluyla Öngörülen Destasyon Analizi

Özet

Sağlık ve sağlıklı yaşam turizmi artık geniş bir tıbbi tedavi yelpazesini kapsayan popüler bir eğlence türü haline geldi. Etkinlikler rahatlama, boş zaman ve huzuru sağlıklı yaşam ve sağlık hizmetleriyle harmanlıyor. Gelişmiş ülkelerdeki fahiş sağlık ve tıbbi tesis maliyetleri, yurtdışına seyahat etmenin rahatlığı ve maliyet etkinliği, dünya çapındaki pazardaki uygun döviz yatırımları döviz maliyetleri, sürekli olarak iyileştirilen teknolojik gelişmeler ve gelişmekte olan ülkelerdeki sağlık hizmetlerine yönelik son derece yüksek gereksinimler. medikal turizmin hızlı gelişmesine katkıda bulunmuştur. Ayrıca şirketin uzun vadeli başarısı için seyahat, otel ve sağlık sektörleri arasında verimli iletişim gereklidir. Yapay zeka (AI) teknolojisinin kullanımı son yıllarda sağlık hizmetleri de dâhil olmak üzere çeşitli sektörlerde önemli ölçüde arttı. Yapay zeka, tahmine dayalı analizlere, kişiye özel tedaviye, uzaktan hasta izleme ve klinik karar destek sistemlerine olanak tanıyarak sağlık sektörünü dönüştürme konusunda muazzam bir potansiyele sahiptir. Yapay zeka entegrasyonu, sağlık hizmeti uygulayıcılarının tanı doğruluğunu artırmasına, tedavi prosedürlerini optimize etmesine ve hasta sonuçlarını iyileştirmesine olanak tanır. Kerala'da Ayurveda medikal turizminin artan popülaritesine rağmen işletme, kalite güvencesi ihtiyacı, uygulama standardizasyonu ve yeni teknolojinin kullanımı da dahil olmak üzere bir dizi engelle karşı karşıyadır. Bu proje, inovasyon potansiyelinin keşfedilmesine, hasta deneyimlerinin iyileştirilmesine ve sürdürülebilir turist büyümesinin desteklenmesine vurgu yaparak yapay zeka teknolojileri ile Kerala'da Ayurveda sağlık hizmeti sunumu arasındaki ilişkiyi araştırmayı amaçlıyor. Bu araştırma, gelecekteki eğilimleri tahmin ederek politika yapıcılara, sağlık uygulayıcılarına ve sektör paydaşlarına önemli bilgiler sağlamayı amaçlamaktadır.

Anahtar Kelimeler: Ayurveda Medikal Turizmi, Kerala Sağlık Hizmeti, Destinasyon imajı, BİT, Yapay Zeka Teknolojileri

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Introduction

Over the last decade, the rise of social media, smartphones, and ecommerce has radically changed the tourist industry. To succeed in this digital environment, a marketer must comprehend the new dynamics and underlying technologies that are reshaping business by radically changing how people connect, create, collaborate, share information, purchase, and perform other activities. Considering the growth of digital marketing, the newest technology is being used, such as multilingual audio tours, trained tour guides, relevant sign boards, and thorough (genuine) tales about the principal asset. Easy-to-use websites (and a mobile app) will be created to provide all information, including links to locations and entities, addresses, booking capabilities, clusters, roadside stops, and safety. This would include multimedia digital interpretation centres at significant cultural and natural heritage sites. These can also be made available in schools, libraries, and bookshops alongside other books and periodicals.

According to Grant's (1996) information-driven approach to the business itself, an enterprise's worth is constrained by the quantity of information it contains. Knowledge is connected to data, information, and wisdom, with information defined as relevant and valuable material that, as a result of a learning process, leads to understanding of information structures. This, in turn, fosters the development of knowledge, which is described as a clear comprehension of information (Bierly, Kessler, and Christensen, 2000). Tourists may also be viewed as being proactive catalysts of innovation due to their potential to co-create tourism offerings. As such, they are an essential source of information that may flow into innovation processes, particularly if company and destination managers develop ways to harness visitors' tacit knowledge. One technique is to gather knowledge through networking, discussion groups, and in-depth interviews (Hall and Williams, 2008). Another interesting approach is to use Internet-based sources such as online forums, review websites, and micro-blog and blog material.

The most prevalent issues of hotel and restaurant visitors have been identified through the content review of assessments and critiques (Stringam and Gerdes, 2010). Research on social media material has also identified difficulties of quality and relevancy (Chen and Tseng, 2011), as well as a wide range of functionality from phenomenal to inappropriate use and unwanted messages. In an upcoming tourism analysis that combines client evaluations with remark descriptions, Bender Stringam and Gerdes (2010) discovered that the most often mentioned words in Expedia.com reviews were cleanliness, location, food and beverage, breakfast, workers and top management, and paying close attention to customer service, with varying effects on ratings.

Recent Developments in AI technology have transformed the healthcare business, creating new potential avenues to enhance treatments for patients, increase precision of diagnosis, and optimise the results of treatments. Incorporating AI into Ayurvedic treatments has the potential to significantly improve the quality of care and services provided to medical tourists in Kerala. This research investigates the possible uses of artificial intelligence in Ayurvedic medical tourism, as well as the consequences for the growth of the Kerala healthcare business.

1. Background of Ayurvedic Medical Tourism in Kerala

Kerala, an Indian state in southern region, is well-known for its Ayurvedic traditions and practices, which attract travelers from all over the world looking for natural treatment and rejuvenation. The state's lush vegetation, calm backwaters, and peaceful ambiance make it an excellent backdrop for Ayurvedic therapies, which are firmly ingrained in Kerala's culture and history. Ayurveda, or "the science of life," is an ancient holistic treatment method that originated in India over 5,000 years ago (Mishra et al., 2001). It highlights the importance of maintaining a healthy body, mind, and spirit in order to achieve total wellness. Kerala has long been a powerhouse for Ayurvedic treatments, with several prominent Ayurvedic facilities, hospitals, and resorts providing a variety of therapies and treatments.

Kerala, frequently described as the "God's Own Country" (Dhanesh et al., 2010), is famous for its stunning landscapes, abundant ethnic backgrounds, historical context, and ancient Ayurvedic medical techniques. Ayurveda, an ancient Indian medical system, stresses overall wellbeing and individualized therapies based on individual requirements. Kerala has evolved as a top destination for Ayurvedic medical tourism, with a regular stream of local and foreign visitors looking for rejuvenation, relaxation, and therapeutic treatments. Kerala has many ancient Ayurvedic centers called "Kerala Ayurveda Panchakarma Centers" or "Kerala Ayurveda Hospitals." These clinics provide a variety of treatments, including as therapeutic massages, herbal therapies, detoxification (Panchakarma), yoga, and nutritional guidance, all adapted to individual health needs (Vinjamury et al., 2011). The Kerala government has been aggressive in developing quality standards and regulations to assure the legitimacy and secure use of Ayurvedic therapies in the state. This comprises practitioner certification programs as well as accreditation of Ayurvedic establishments.

The Kerala Tourism Development Corporation (KTDC) and different commercial organizations aggressively market Ayurvedic tourism through customized packages (Baker, 2008) that integrate rejuvenation therapies with vacations in tranquil locations such as backwater resorts and coastal retreats. Kerala's Ayurvedic therapies have gained international renown, attracting people from the United States, the United Kingdom, the Middle East, and neighbouring Asian countries. Kerala's reputation for genuine Ayurvedic procedures and experienced practitioners has added to its attractiveness as a medical tourism destination (George & Jiang, 2018). Ayurvedic medical tourism in Kerala delivers many more benefits than merely physical therapies; it takes a comprehensive approach to healing, addressing the mind, body, and soul (Kannan & Frenz, 2019). Visitors are frequently immersed in a peaceful setting that promotes healing and renewal. Kerala's Ayurvedic tourism also provides opportunities for cultural immersion, encouraging tourists to participate in the conventional Ayurvedic traditions. cuisine, and daily life habits (KR, M. K., 2024).

2. Current Technological Trends in Ayurvedic Medical Tourism in Kerala

Tourism has seen substantial developments since Information and Communication Technologies (ICTs) in all of its forms began to permeate the industry and market. In the last decade,

an intriguing idea accomplished the consciousness of both researchers and practitioners: the Digital Business Ecosystem (DBE), which is defined as a network of technologies intended for establishing a digital atmosphere in order that will facilitate and strengthen collaboration between companies and interested parties functioning within a sector (Suuronen et al., 2022). In recent years, the number of visitors searching for Ayurvedic treatments in Kerala has risen dramatically. The state government has vigorously promoted Ayurvedic tourism, emphasizing Kerala's ancient medicinal traditions and natural beauty. Tourists go to Kerala not just for Ayurvedic treatments, but also for the tranquil surroundings, revitalizing cures, and holistic lifestyle practices.

Internet connectivity has emerged as a significant component in vacation planning operations. Tourism suppliers have used online platforms to establish relationships, disseminate and deal with their services and offerings to potentially interested clients all over the world in an affordable and time-effective manner (Mupfiga, 2015). Several online sites in Kerala employ ICTs to promote Ayurvedic Medical Tourism both within and outside the state (Devasia & PV, 2022). Ayurvedic medical tourism in Kerala is popular for a number of reasons, including the excellent quality of care provided by qualified practitioners, the accessible nature of legitimate Ayurvedic therapies, and the serene and soothing ambiance of Ayurvedic resorts and retreats. Furthermore, the state's emphasis on sustainable and environmentally friendly methods has increased its attractiveness to health-conscious travellers.

At the operational level, tour companies use e-commerce techniques and ICTs to improve the productivity and efficacy of the travel and tourism sector. According to Mupfiga (2015), at the level of strategic planning, digitized tourism revolutionizes every aspect of business operations, the whole chain of production, and tourism organizations' strategic partnerships with all stakeholders. CRSs frequently impose compatible rate for commissions while allowing for customized rates and inventory changes to match supply to demand swings. Airlines were the first to use this form of computing, however accommodation providers and tour companies eventually followed by establishing centralized reservation systems (Mupfiga, 2015). CRSs may be described as the "circulation system" of a tourism service. KSTDC and other online portals used this technique to market tickets for trips, and the research effort seeks to determine the effectiveness of these methods. GDSs, in comparison, progressively broaden their international reach while simultaneously collaborating seemingly with different travel company platforms and inclined to incorporate a broad spectrum of stakeholders, such as accommodation, car rentals, train and ferry ticketing, entertainment, and other services.

ICTs are extremely important resources for travel agencies since they deliver accurate data and booking services along with facilitating the liaison between customers and suppliers. Travel agencies use a variety of reservation systems, which allow them to verify availability and book tourist items. Until a while back, GDSs were crucial for corporate travel firms to obtain information and make bookings on scheduled flights, hotel chains, car rentals, and other supplemental amenities. GDSs assist in the creation of complex travel plans while also providing proficient plans, rates, and booking insights, as well as an efficient the reservation process (Mupfiga, 2015).

All of he aforementioned web data sources about the current state of Ayurvedic Medical Tourism in Kerala clearly demonstrate the influence of technology developments on various services. It appears that the prospective visitors by area have not yet been researched, which represents a study gap that may be filled. The literature research revealed that a variety of factors influence technology adoption. These include organizational preparedness, external demands, internal expertise, owner or management support, user involvement, and a productive and successful application of any additional information.

3. Challenges in Kerala's Ayurvedic Medical Tourism Development

Kerala has grown into a popular destination for medical tourism, notably in the field of Ayurveda. Despite its fast expansion, Ayurvedic medical tourism in Kerala confronts a number of limitations that limit its full potential. One of the most significant issues is the absence of established standards and accreditation. While Ayurveda is a traditional medical system, standardization is required in terms of treatment protocols, medicinal quality, and cleanliness standards. Accreditation from reputable agencies can assist overseas visitors trust that their Ayurvedic treatments are legitimate and of good quality (Garg & Bhardwaj, 2012).

Another obstacle is a lack of infrastructure improvements and amenities. While Kerala has a strong Ayurvedic legacy, many Ayurvedic establishments and resorts need innovative infrastructure and recreational opportunities to meet the expectations of international tourists. In order to lure more medical tourists, it is critical to have world-class facilities with cutting-edge equipment and excellent accommodations. Furthermore, communication and advertising are essential for the expansion of Ayurvedic medical tourism in Kerala. While Kerala is well-known for its natural beauty and Ayurvedic legacy, greater efforts are necessary to encourage these features throughout the world. Partnership with tour operators, attendance at international healthcare conferences, and online promotional initiatives can all serve to raise knowledge of Ayurvedic medical tourism in Kerala (Raj & Krishna, 2010).

There is also a demand for competent workers in the field of Ayurveda. Training programs and courses should be implemented to improve the abilities of Ayurvedic practitioners, therapists, and support personnel in order to give better services to medical tourists (Medhekar et al., 2020). Furthermore, language difficulties can be difficult for international travelers, so having bilingual personnel might improve their entire experience. Regulatory problems and government policies are important factors in the growth of Ayurvedic medical tourism (John & Chelat, 2013). Streamlining laws, offering incentives to investors, and establishing a suitable climate for the expansion of Ayurvedic tourism can all assist the business overcome some of its problems.

4.The Role of AI in Kerala's Ayurvedic Medical Tourism

As automation pervades multiple industries, notably healthcare, the use of Artificial Intelligence (AI) has enormous potential for improving the profitability, efficacy, and affordability of Ayurvedic medical tourism in Kerala:

- **Harnessing AI for Ayurvedic Medical Diagnosis**: AI technology, such as machine learning algorithms and natural language processing, can significantly improve the efficiency of Ayurvedic medical diagnosis. AI systems can help Ayurvedic practitioners reliably diagnose health issues and offer individualized treatment strategies by assessing patient symptoms, medical histories, and diagnostic results (Ranade, 2024). Furthermore, AI-powered diagnostic tools can enable virtual consultations, allowing people all over the world to get access to Ayurvedic knowledge without regard for location.

- **Optimizing Treatment Protocols with AI**: Ayurvedic therapeutic procedures are adapted to each person's body composition (prakriti) and irregularities (vikriti) in the human system (Walkikar & Rai, 2023). AI algorithms can scan large volumes of medical data to uncover patterns and connections, assisting practitioners in developing the best treatment procedures for patients. Furthermore, AI-powered predictive modeling may forecast the success of various Ayurvedic medicines based on patient demographics, lifestyle behaviors, and environmental variables, resulting in more focused and individualized interventions (Agarwal, 2023).

- **Enhancing Wellness Tourism Experiences**: Ayurvedic therapeutic procedures are adapted to each person's body composition (prakriti) and irregularities (vikriti) in the human system (Walkikar & Rai, 2023). AI algorithms can scan large volumes of medical data to uncover patterns and connections, assisting practitioners in developing the best treatment procedures for patients. Furthermore, AI-powered predictive modeling may forecast the success of various Ayurvedic medicines based on patient profile information, lifestyle behaviors, and environmental variables, resulting in more focused and tailored treatments (Agarwal, 2023).

- **Facilitating Research and Development in Ayurveda**: AI-powered research projects can hasten improvements in Ayurvedic medicine by fostering information-driven conclusions and inventiveness. AI algorithms can uncover novel medicinal substances, validate ancient cures, and understand the underlying processes of Ayurvedic therapies by analyzing clinical data, scientific literature, and conventional scientific archives. Furthermore, AI-powered drug discovery platforms can accelerate the research and development of novel medicinal compositions, expanding patients' access to Ayurvedic medicines.

- **Addressing Healthcare Accessibility Challenges**: In Kerala, a varied and geographically scattered state, maintaining fair access to healthcare services remains a serious concern. AI-powered telemedicine networks can connect urban and rural locations, allowing marginalized communities to get Ayurvedic medical consultations and treatments (Raina & Gupta, 2021). Furthermore, AI-driven healthcare analytics may give policymakers and healthcare practitioners with information on current health patterns, resource allocation tactics, and preventative actions, boosting public health and well-being throughout the state.

The use of AI technology has enormous potential for enhancing Kerala's Ayurvedic medical tourism business. Kerala may strengthen its position as a global destination for holistic healing and

wellness tourism by using the potential of AI for medical diagnosis, treatment optimization, wellness promotion, research innovation, and healthcare accessibility (Crooks et al., 2011). However, it is critical to guarantee that AI application in Ayurveda is guided by ethical standards, cultural sensitivity, and evidence-based methods, in order to maintain the integrity and efficacy of this ancient therapeutic system in the modern world.

5. AI Applications in Kerala's Ayurvedic Medical Tourism: Synergistic Approach

During the last two decades, adding the inclusion of Artificial Intelligence (AI) into Kerala's Ayurvedic medical tourism business has resulted in dramatic improvements, increasing service quality, improving patient results, and broadening Ayurveda's worldwide reach. The notion of merging traditional knowledge with modern technology underpins the collaboration between AI and Ayurveda in Kerala's medical tourism business. AI algorithms are being used to evaluate huge volumes of medical data, including medical record submissions, appearances, and therapeutic results, in order to gain substantial knowledge and improve the clinical effectiveness of Ayurvedic therapies. Machine learning algorithms are being programmed to adapt strategies for treatment with regard to specific details about patients, improving the effectiveness of therapy.

Furthermore, AI-powered predictive analytics are transforming how Ayurvedic healthcare professionals diagnose illnesses and anticipate health hazards. Using AI techniques, practitioners may find patterns and correlations within patient data, allowing for early diagnosis of diseases and preventive therapies to prevent disease development (Rath et al., 2024). This preventative plan not only strengthens the way patients are treated, but it also helps Kerala's Ayurvedic medical tourism business establish itself as a revolutionary healthcare destination. AI technologies are boosting not just therapeutic results, but also the client's entire experience within Kerala's Ayurvedic medical tourism business. Virtual assistants powered by AI chatbots give patients with round-the-clock care, delivering information on treatment procedures, answering questions, and resolving issues in real time. This rapid access increases patient involvement and happiness, building long-term partnerships between healthcare practitioners and patients.

Additionally, guided by AI systems for referrals happen to be leveraged for customizing the complete medical tourism encounters for patients visiting Kerala (Chander et al., 2024). These technologies assess patient choices, such as lodging, food, and leisure activities, to create personalized itineraries that cater to individual preferences and cultural sensitivity. Kerala's medical tourism business might distinguish itself in an increasingly saturated across globe market by creating comprehensive adventures that supplement Ayurvedic treatments, attracting discriminating visitors looking for holistic health solutions.

Making use of AI technology not only benefits patients, but also empowers Ayurvedic practitioners in Kerala. Powered by machine learning decision support systems give practitioners with immediate understanding and based on empirical evidence suggestions, supplementing their clinical knowledge and allowing for more informed decision-making (Dutta, 2023). Furthermore, AI-enabled

telemedicine platforms provide remote consultations (Sharma et al., 2023), allowing practitioners to access patients across geographical borders and provide personalised treatment regardless of their location.

Added to that, AI-powered research networks are expediting Ayurvedic medicine innovation by evaluating massive databases of traditional knowledge, scientific literature, and clinical trial data (Chelishcheva, 2023). AI is propelling Ayurveda's progress as a fluctuating, a evidence-based medical discipline by finding innovative formulations, treatment procedures, and therapeutic interventions. This fusion of traditional knowledge and modern science not only maintains Ayurveda's rich legacy, but also establishes Kerala as a prominent holistic healthcare center.

Considering AI's enormous promise in Kerala's Ayurvedic medical tourism business, a number of difficulties must be overcome before it can fully reap its advantages. These include protecting data privacy and security, resolving regulatory issues, and bridging the digital gap to enable equal access to AI-powered healthcare solutions (Tripathi & Siddiqui, 2018). Looking ahead, continuous investment in R&D, multidisciplinary partnerships, and capacity building programs will be critical for realizing AI's revolutionary potential in Kerala's Ayurvedic medical tourism business. By embracing innovation while remaining loyal to its cultural history, Kerala has the chance to reshape the future of healthcare by providing tailored wellness solutions that combine old knowledge with cutting-edge technology.

The concurrent application of AI with Ayurveda in Kerala's medical tourism sector indicates a paradigm change in the way healthcare is provided. Kerala is on track to cement its position as the global market leader in Ayurvedic medical tourism by embracing AI technology to improve patient care, tailor treatments, and empower practitioners. Kerala can embrace the revolutionary power of AI to promote holistic wellbeing, enhance cultural interchange, and contribute to global well-being via collaborative initiatives and creative leadership. To leverage the benefits of AI in Ayurvedic medical tourism, a harmonious approach is required, focusing on the following key areas:

- **Data-driven medical care Procedures:** Create AI algorithms that assess patient data such as medical history, familial traits, and lifestyle variables (Basu et al., 2024) to build tailored therapy protocols based on Ayurvedic principles**.**

- **Predictive Analytics for Wellness Tourism:** Use predictive analytics to estimate requirements for Ayurvedic therapies (Jansen et al., 2021), streamline resource allocation, and improve tourists' overall wellness tourism experiences**.**

- **Virtual Health Assistants**: Implement AI-powered virtual health assistants (Arora & Goenka, 2023) that give personalised health advice, treatment reminders, and lifestyle suggestions based on Ayurvedic principles, hence increasing patient involvement and adherence to treatment plans**.**

- **Quality Assurance and Certification:** Create AI-powered systems that assist with tracking the results of treatments, verifying compliance with quality guidelines, and getting certification for

Ayurvedic health services (Ghia & Rambhad, 2023), hence increasing medical tourists' confidence and legitimacy**.**

Conclusion and Suggestions

The research effort will contribute in the analysis of established as well as untapped Ayurvedic medical tourism opportunities in Kerala. The findings from this investigation is going to assist various tourism stakeholders, both public and private, in improving and organizing Ayurvedic Medical tourism operations in various resorts in Kerala, as well as increasing tourist traffic and earning capacity by increasing awareness of the attraction for visitors on optimistic observations. According to Mupfiga (2015), Information Communication Technologies (ICTs) have changed the tourism business over the previous several decades. As expected, eTourism represents the digitization of every operation and merchandise networks in the tourism, travel, hospitality, and catering industries. It develops as a phrase that encompasses the whole spectrum of ICT applications in tourism, as well as the consequences for the tourist value chain. Major possibilities and difficulties have developed, which must be handled by all industry actors. The net effect of using such networks is that future visitors to Kerala would have a clear plan of travel inside the state.

The use of artificial intelligence into Ayurvedic medical tourism has the capacity to transform the healthcare business in Kerala. By integrating AI-powered technology, Ayurvedic practitioners may increase the standard of service, therapeutic results, and entice more foreign visitors to Kerala for Ayurvedic treatments. For optimal use of the numerous advantages of AI in Ayurvedic medical tourism, problems such as consistency, compliance with standards, and consumer knowledge must be addressed. With the proper regulations and strategies in place, Kerala can become a worldwide leader in AI-driven Ayurvedic medical tourism, providing world-class healthcare services in appealing and naturalistic surroundings.

Despite the widespread acceptance of ICTs is an increasingly prevalent notion in Kerala tourism, it is increasing rapidly, as evidenced by beneficiary readiness to leverage it. Kerala has the ability to attract foreign and domestic tourists and raise earnings but this requires the government to implement various technical upgrades. An upgrade in service offering by means of the implementation of e-commerce, as well as frequent website updates, is required, and the study shows that this is being done at a modest rate. The senior management of Ayurvedic resorts and rejuvenation centers is relatively literate, which would accelerate the adoption of ICT compared to conventional connection (Nayar and Manoj, 2018). ICTs have the potential to change the destination image, hence increasing Kerala's tourism business, as well as upgrading the different services available to tourists.

Prospective studies in this particular domain might embrace reviewing the implications of AI on Ayurvedic medicinal product development, creating AI-powered medical devices for Ayurvedic respiration treatment, and determining the long-term viability of AI-driven interventions in the Ayurvedic wellness services ecosystem (Bishnoi et al., 2023). The convergence of artificial intelligence (AI) with ancestral medical techniques such as Ayurveda offers great promise for changing healthcare

delivery. However, in order to achieve significant and sustained effect, it is critical to assess the long-term viability of AI-driven therapies within the Ayurvedic healthcare ecosystem.

Collaboration is required involving software developers, medical specialists, politicians, and community stakeholders are required to fully realize the promise of AI while adhering to Ayurvedic principles. We can create a future in which AI complements and supports Ayurvedic healthcare, subsequently enhancing health outcomes and expanding wellness for all, by encouraging innovation, protecting data security and safeguard their confidentiality, and supporting inclusiveness.

References

Agarwal, L. (2023). Building a Resilient Digital Health Ecosystem in India. *Accelerating Global Health*, *82*.

Agichtein, E., Castillo, C., Donato, D., Gionis, A., & Mishne, G. (2008, February). Finding High-Quality Content in Social Media. In *Proceedings of the 2008 international conference on web search and data mining* (pp. 183-194).

Arora, M., & Goenka, S. (Eds.). (2023). *Public Health Approaches to Health Promotion*. CRC Press.

Baker, K. (2008). Kerala's Strategy For Tourism Growth: A Southern Approach to Development and Poverty Alleviation. In *Tourism development: growth, myths and inequalities* (pp. 192-216). Wallingford UK: CABI.

Basu, A., Aggarwal, P., Banerjee, S., Samanta, A., & Panda, S. (2024). Personalized Healthcare: Advances and Avenues.

In *Advances in Drug Delivery Systems for Healthcare: From concept to clinic* (pp. 6-1). Bristol, UK: IOP Publishing.

Bierly III, P. E., Kessler, E. H., & Christensen, E. W. (2000). Organizational Learning, Knowledge and Wisdom. *Journal of organizational change management*, *13*(6), 595-618.

Bishnoi, M. M., Ramakrishnan, S., Suraj, S., & Dwivedi, A. (2023). Impact of AI and COVID-19 on Manufacturing Systems: An Asia Pacific Perspective on the two Competing Exigencies. *Production & Manufacturing Research*, *11*(1), 2236684.

Buhalis, D., & Law, R. (2008). Progress in Information Technology and Tourism Management: 20 Years on and 10 Years After the Internet—The State of e Tourism Research. *Tourism Management*, *29*(4), 609-623.

Chander, B., Guravaiah, K., Anoop, B., & Kumaravelan, G. (Eds.). (2024). *Handbook of AI-based Models in Health and Medicine: Approaches, Theories, and Applications*. CRC Press.

Chelishcheva, E. (2023). Innovation in the Yoga and Ayurveda Industry: Exploring the role of Technology and Entrepreneurship.

Chen, C. C., & Tseng, Y. D. (2011). Quality evaluation of product reviews using an information quality Framework. *Decision Support Systems*, *50*(4), 755-768.

Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Crooks, V. A., Turner, L., Snyder, J., Johnston, R., & Kingsbury, P. (2011). Promoting Medical Tourism to India: Messages, Images, and the Marketing of International Patient Travel. *Social Science & Medicine*, *72*(5), 726-732.

Devasia, D., & PV, S. K. (2022). Promotion of Tourism Using Digital Technology: An Analysis of Kerala Tourism In *Handbook of technology application in tourism in Asia* (pp. 403-422). Singapore: Springer Nature Singapore.

Dhanesh, G., Moss, D., Powell, M., & De Santo, B. (2010). Kerala: God's Own Country. *Public relations cases: International perspectives*.

Dickinger, A., Költringer, C., & Körbitz, W. (2011). Comparing Online Destination Image With Conventional Image Measurement—The Case of Tallinn. In *Information and communication technologies in tourism 2011* (pp. 165-177). Springer, Vienna.

Dutta, A. (2023). Unlocking the Power of Artificial Intelligence: Revolutionising Clinical Medicine for a Healthier Future. *Journal of Medical Evidence*, *4*(3), 271-273.

Garg, S. R., & Bhardwaj, A. (2012). Indian Medical Tourism Industry: Growth Opportunities and Challenges. *Multi Disciplinary Edu Global Quest (Quarterly)*, *1*(1), 115-135.

George, A. T., & Jiang, M. (2018). A Case Study on Prospects and Emerging Trends of Ayurvedic Health Tourism with Green Growth in Kerala, India. In *Green Events and Green Tourism* (pp. 103-114). Routledge.

George, R. R., Shanimon, S., Suni, S., & NV, S. R. (2023). The Impact of Covid-19 And the Way Ahead for Kerala in Medical Value Tourism. *International Journal of Health Management and Tourism*, *8*(3), 241258.

Ghia, C., & Rambhad, G. (2023). Implementation of Equity and Access in Indian Healthcare: Current Scenario and Way Forward. *Journal of Market Access & Health Policy*, *11*(1), 2194507.

Grant, R. M. (1996). Toward a Knowledge‐Based Theory of the Firm. *Strategic Management Journal*, *17*(S2), 109-122.

Hall, C. M., & Williams, A. M. (2019). *Tourism and Innovation*. Routledge.

Jansen, C., Baker, J. D., Kodaira, E., Ang, L., Bacani, A. J., Aldan, J. T., ... & Adra, C. N. (2021). Medicine in Motion: Opportunities, Challenges and Data Analytics-Based Solutions for Traditional Medicine Integration Into Western Medical Practice. *Journal of Ethnopharmacology*, *267*, 113477.

John, J., & Chelat, S. (2013). Medical Tourism and Inclusive Growth: Significance of Ayurveda Sector. *Atna Journal of Tourism Studies*, *8*(2), 19-35.

Kannan, S., & Frenz, M. (2019). Seeking Health Under Palm Trees: Ayurveda in Kerala. *Global Public Health*, *14*(3), 351-361.

KR, M. K. (2024). The Role of Technology In Promoting Wellness Tourism: A Case Study Of Thrissur, Kerala. *Journal of Advanced Zoology*, *45*(3).

Kumar, A., Jain, R., Gupta, M., & Islam, S. M. (Eds.). (2023). *6G-enabled IoT and AI for smart healthcare: Challenges impact, and analysis*. CRC Press.

Kumar, A. (2023). Role of information technology in Ayurveda. *International Journal of Ayurveda Research*, *4*(4), 197- 202.

Medhekar, A., Wong, H. Y., & Hall, J. E. (2020). Health-Care Providers Perspective on Value in Medical Travel to India. *Tourism Review*, *75*(4), 717-731.

Mishra, L. C., Singh, B. B., & Dagenais, S. (2001). Ayurveda: A Historical Perspective and Principles of the Traditional Healthcare System in India. *Alternative Therapies in Health and Medicine*, *7*(2), 36-43.

Mupfiga, P. S. (2015). Adoption of ICT in the Tourism and Hospitality Sector in Zimbabwe. *The International Journal ofEngineering and Science*, *4*(12), 72-78.

Nayar, R., & Manoj, P. K. (2018). Role of ict in Promotion of Medical Value Travel in India: A Primer. *International Journal of Trade and Global Business Perspectives*, *7*(02), 3924-3935.

Neuts, B., Romão, J., Nijkamp, P., & van Leeuwen, E. (2013). Digital Destinations in the Tourist Sector: A Path Model for the Impact of E-Services on Tourist Expenditures in Amsterdam. *Letters in Spatial and Resource Sciences*, *6*, 71- 80.

Parviainen, J., & Rantala, J. (2022). Chatbot Breakthrough in the 2020s? An Ethical Reflection on the Trend of Automated Consultations in Health Care. *Medicine, Health Care and Philosophy*, *25*(1), 61-71.

Raina, R., & Gupta, M. (2021). Virtual Health Care in India in the Era of COVID-19 Pandemic. *Journal of Advances in Medicine and Medical Research*, *33*(21), 142-147.

Raj, T. V. R., & Krishna, P. M. (2010). Health tourism in India: Issues, Challenges & Marketing Interventions. *International Journal of Management Prudence*, *1*(2), 79.

Ranade, M. (2024). Artificial intelligence in Ayurveda: Current Concepts and Prospects. *Journal of Indian System of Medicine*, *12*(1), 53-59.

Rath, K. C., Khang, A., Rath, S. K., Satapathy, N., Satapathy, S. K., & Kar, S. (2024). Artificial Intelligence (AI)-Enabled Technology in Medicine-Advancing Holistic Healthcare Monitoring and Control Systems. In *Computer Vision and AI-Integrated IoT Technologies in the Medical Ecosystem* (pp. 87-108). CRC Press.

Sharma, S., Rawal, R., & Shah, D. (2023). Addressing the Challenges of AI-Based Telemedicine: Best Practices and Lessons Learned. *Journal of Education and Health Promotion*, (1), 338.

Stringam, B. B., & Gerdes Jr, J. (2010). An Analysis of Word-of-Mouse Ratings and Guest Comments of Online Hotel Distribution Sites. *Journal of Hospitality Marketing & Management*, *19*(7), 773-796.

Suuronen, S., Ukko, J., Eskola, R., Semken, R. S., & Rantanen, H. (2022). A Systematic Literature Review for Digital Business Ecosystems in the Manufacturing Industry: Prerequisites, Challenges, and Benefits. *CIRP Journal of Manufacturing Science and Technology*, *37*, 414-426.

Tripathi, S. N., & Siddiqui, M. H. (2018). Assessing the Quality of Healthcare Services: A SERVQUAL Approach. *International Journal of Healthcare Management*.

Vinjamury, S. P., Vinjamury, M., Sucharitakul, S., & Ziegler, I. (2011). Panchakarma: Ayurvedic Detoxification and Allied Therapies—is There Any Evidence?. *Evidence-Based Practice in Complementary and Alternative Medicine: Perspectives, Protocols, Problems and Potential in Ayurveda*, 113-137.

Walkikar, S. S., & Rai, A. (2023). Analysis of Prakriti in Ayurvedic Classical Texts. *International Journal of Research in AYUSH and Pharmaceutical Sciences*, 1-7.