

HOSPITALITY INVESTMENT AND ITS ECONOMIC IMPLICATIONS: FUTURE TRENDS

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Abstract

This research examines the drivers of technology, sustainability, consumer preferences, economics, and legal frameworks that shape the venture's future. Artificial intelligence, the Internet of Things, and blockchain improve visitor personalization through predictive analytics and operational efficiency. However, high capital costs, interoperability issues, and limited accessibility impede adoption, particularly for SMEs. Data analytics can boost customer segmentation and product needs. Environmental regulations and customer preferences for sustainability projects have placed sustainability high in hosting cost considerations. Sustainable practices, including waste reduction and energy efficiency, go hand-in-hand with these environmental goals, thus increasing brand equity and customer loyalty. Execution demands human training, but delivers economic gain, even with questionable sustainability(return) on investment and steep costs. Regulatory systems promote sustainability through environmental and competitive factors. Investors make decisions based on macroeconomic conditions such as exchange rates, inflation, and geopolitical uncertainty. Risk management uses diversification and forecasting to reduce risk and establish partnerships for scalability. Strategic management of cultural disparities and goal misalignments. Statistical analysis showed The analysis shows that while sustainability and consumer preferences are strong predictors, other factors, such as digital marketing and partnerships, show limited or negligible influence, with green investments linked to compliance. These findings provide a framework for stakeholders to foster innovation, resilience, and sustainable growth

Keywords: *Innovation, Investment, Regulations, Sustainability, Technology*

1. Introduction

Hotels have also enhanced the global economy. The hospitality industry is dynamic because of evolving consumer tastes, technological advancements, regulatory regulations, and socioeconomic factors (Tanrikulu, 2021). Globalization, environmental awareness, and technological innovation have recently transformed the hotel sector. A confluence of causes precipitated these alterations. Transforming operational strategies and investment decisions offers stakeholders new opportunities and challenges (Brunetti et al., 2020). Consequently, the operational strategies have evolved.

This study seeks to forecast future hotel investment trends and their economic implications. This area's future will be examined. To navigate this rapidly expanding market, investors, policymakers, and industry professionals must understand these trends (Debrah et al., 2023). This made the company dependent on these developments. Although this study investigates nine predictors, their relative contributions may vary, with some exerting stronger effects than others. These elements are considered. Technology integration, sustainability, consumer preferences, economic impact, government regulations, market segmentation, partnerships, digital marketing, and workforce development are these frameworks. (Birkel et al., 2019). All compounds had structures. These constructs provide a comprehensive framework for studying the interactions of many hotel industry factors that may affect its future.

Technological Integration in Hospitality Investments

The hospitality industry has become even more dependent on technology because it has transformed how services are delivered and consumed. Technological advancements have transformed revenue management, visitor behavior, and operational efficiency. (Gajić et al., 2024). AI, IoT, blockchain, and contactless solutions are advanced technologies. Investors prioritize technology solutions to stay competitive in a constantly evolving industry. For instance, AI-based technology offers customized experiences for visitors (Florido-Benítez & del Alcázar Martínez, 2024). New room systems and predictive maintenance can reduce costs by leveraging IoT technology. However, the implementation of modern technology is challenging. High upfront costs, concerns with integration, and the continuous improvement of technology make it impossible for smaller firms to adopt it. Because of this (Attaran & Woods, 2019). Widespread Technology Adoption: The hotel business is replacing outdated operational techniques with technologically advanced ones. These benefits include increased productivity, decreased costs, and improved customer experience.

Sustainability and Green Investments in Hospitality

The world is aware of climate change and environmental sustainability, and the hotel industry is scrutinized to implement ecological practices in daily operations. More investors understand that sustainability contributes to profitability rather than simply being a moral imperative (Hoque et al., 2018). This is good to know. The adoption of energy-efficient systems, waste reduction initiatives, and sustainable buying are models of environmental policies that can increase customer satisfaction and loyalty. This ties closely with energy-efficient investments, as government incentives and regulations for carbon reduction go hand-in-hand with energy-efficient investments. This correlation appeared to be strong. However, it is difficult to apply environmentally friendly business practices in hotels (Rehman et al., 2023). This includes high costs of implementation, access to sustainable technology, and staff training. Sustainability return on investment (ROI) is a touchstone for connecting sustainability with anticipated financial returns (Allioui & Mourdi, 2023). Return on investment (ROI) is a key measure of the success of greening efforts.

Shifting Consumer Preferences and Their Impact

Pressure mounts in the hotel sector in response to the growing recognition of climate change and environmental sustainability. Investors are now more likely to see sustainability as a business imperative than a moral one. Recognizing this helps (Mehta et al., 2020). From energy-saving technology and waste reduction to responsibly sourced ingredients, sustainability can strengthen customer loyalty. Furthermore, political action promotes investment in sustainable practices through government carbon reduction incentives and legislation. This association appears to be strong. However, implementing green business practices can be challenging for hotels (Buffa et al., 2018). However, high implementation costs, restricted green technology, and staff training can be used to address the joint implementation difficulties. ROI connects ecological and financial viability. Environmental programs suffer from a lack of a (ROI) return on investment metrics.

Economic Factors Influencing Hospitality Investment

The investment character in the hotel area must be mindful of the economic interplay and corruption control. Global economic challenges, such as inflation, exchange rate fluctuations, and

geopolitical tensions, are keenly felt in investment decisions (Desalegn et al., 2022). This anxiety is of some significance. Recently, there have been a variety of talks. Maintaining earnings through diversification is critical to risk reduction. Investors are urged to reset economic and investment biases. When it comes to playing your cards wisely, consider competitive soil, consumer spending patterns, and regional economic conditions. Objectivity is the decision-making process. Hotel projects may also require substantial cash contributions during their early stages (Nhamo et al., 2020). More importantly, winning in this space is a comprehensive financial forecasting and risk adjustment method.

Government Policies and Regulatory Influence

Home government regulations and rules primarily govern hotel investment. The government also considers itself a law-enforcement agency. Incentives, including tax credits, subsidies, and grants, can reduce investment decisions, which are even more pressing for developing nations (Yan et al., 2023). Local governments, in the form of zoning laws, environmental regulations, and labour laws, are hurdles for investors. Mobility and visa processes are significant issues that need to be addressed. All of these factors directly affect tourism and the number of accommodations required. Environmental organizations, for example, emulate government sustainability policies and achieve planetary goals through congruent practices and traditions (Melnyk et al., 2024). Investors all have core levers to keep track of public policy changes and stakeholder engagement. Thus, there is a strong need for compliance and profit maximization.

Market Segmentation and New Investment Opportunities

In the hotel sector, investment requires identifying and targeting certain customer segments. Hotel business investment relies heavily on market segmentation. Introduction: Wellness tourism is a special study area that has garnered the attention of tourism practitioners (Dillette et al., 2021). Both cultural and adventurous travel were included. These niche markets provide unique advantages for differentiation and higher ROI. Global investors may capitalize on the growing middle class in developing nations in Asia, Africa, and the Middle East. The growing middle-class population in these regions was the reason for this. This is significant, considering the growth of tourism in underdeveloped nations. To fully benefit from these issues, one must understand the cultural, economic, and legal aspects of the society (Vago & Barkan, 2021). This strategy enables them to fulfil diverse consumer needs. Thus, market segmentation enables this possibility. Growth in market share and profitability follows.

Partnerships and Collaborations in Hospitality

Hotel businesses increasingly rely on strategic partnerships and co-operation. This worries me. To grow and improve operations, consider cooperative partnerships with regional enterprises, Internet corporations, and airlines (Florido-Benítez, 2023). Several disciplines have provided such opportunities. Investment partnerships allow investors to share risk, combine resources, and use complementary expertise. While partnerships provide benefits, they also have drawbacks. Potential negative aspects include cultural differences, interpersonal management, and goal-setting challenges. Effective communication, good contracts, and common business goals are the key to successful relationships (Melander, 2018). As businesses grow increasingly interconnected, partnerships become crucial for innovation and competitiveness.

Digital Marketing and Online Presence in Hospitality

New digital marketing technologies have changed the acquisition and engagement of hotels. This is due to industrial advancements. Social media, online registration, and influencers are essential components of the current marketing strategies (Kilgour et al., 2015). These three components are not the only important factors to be considered. Using these technologies may boost organizations' exposure, facilitate direct bookings, and broaden their audiences. All of these are possible advantages. Investors clearly understand the advantages of digital platform investment. Digital media is cost-effective. After proving the utility of these channels, their usage was authorized as evidence of their efficacy. Rapidly changing digital trends have raised several concerns (Dwivedi et al., 2022). Adapting to limited resources requires solutions to address these difficulties. Understanding the ROI of digital marketing campaigns is crucial for achieving desired results and improving strategies.

Workforce Development and Automation Trends

As automation and AI grow, the hotel business relies on human resources. Thus, human resources are becoming increasingly important. Innovative automation solutions, such as self-check-in kiosks and robotic concierges, enhance operational efficiency while reducing personnel costs (Zhang et al., 2023). These technologies showcase the advancements in automation. They believe that labor displacement has occurred and human involvement in guest services is hindered. Both of these have received attention. Workers must be ready to adapt to technology-driven jobs in evolving workplaces. Educational needs justify the workforce growth. Building an inclusive work environment is crucial because studies indicate that diverse teams are more effective in fostering innovation and increasing customer experience (Bogilović et al., 2021). The increasing prominence of these concepts supports this notion. A competitive and sustainable hospitality environment requires employee expectations and operational automation. This is necessary for a workplace balance.

2. Literature Review

Research shows that the integration of hospitality technology improves online marketing and exposure. AI, the Internet of Things, and blockchain collectively increase operational efficiency and user experience in digital marketing. These technologies enhance the online presence and competitiveness of the hotel sector by enabling them to improve service efficiency and tailor guest experience according to their preferences (Ciasullo et al., 2024). Below, we discover the many ways in which technology impacts the digital presence and online promotion of hospitality.

Improved Customer Experience and Operational Efficiency with Technology in Hospitality

Artificial intelligence (AI) and the Internet of Things (IoT) have revolutionized the hotel industry by creating smart solutions that enhance digital marketing strategies and strengthen customer loyalty. With the incorporation of smart hotel technology, tourists will have a better experience, while remaining satisfied with better ratings online (Gaur et al., 2021). Such technologies allow hotels to improve their functioning through better resource utilization, lower operational costs, and more efficient online marketing strategies. On one hand, it enhances the company's image while giving it a competitive edge in attracting an eco-conscious clientele with sustainable technologies.

Market Strategy, Competitive Advantage, and Sustainability

Marketing methods are changing, and hotels are becoming increasingly competitive owing to customer loyalty algorithms and data analytics. Digital advertising allows hotels to customize marketing to meet customer needs. (Ciasullo et al., 2024). Because these technologies meet their full potential, data security and privacy issues must be addressed. Some hotels may hesitate to embrace Technologies 4.0 fully for fear that it will restrict their ability to leverage digital marketing cost-effectively. Green investments that improve sustainability affect paper initiatives and government strategies. Green Key is a sustainable certification system that helps businesses reduce their environmental impact and comply with legislation to improve energy efficiency and limit resource use (Velaoras et al., 2025). By implementing training programs on sustainable practices in its workforce, the hotel business can set up a long-term sustainability model.

Government Policies and Green Investments

Further government incentives and promotion of environmental standards will be needed in the hotel sector's focus on sustainability. Countries like Saudi Arabia are adopting renewable energy and energy efficiency with the help of Vision 2030, inspiring the process in other countries (Shehri et al., 2023). In Serbia, green investment in hotels may impact government policies that improve market positions and promote corporate environmental stewardship. Bali's hotel sector prioritizes energy accounting, human resource management, and green governance, illustrating how stakeholder pressure informs legal frameworks and fosters sustainability. This sounds like the ecological policies enforced by the government, which again create more trust in the community and customers (Kiss et al., 2022). On the one hand, green practices may be subject to the imposition of potential drawbacks such as the high cost of implementation, limited resources, and opposition from management. Conversely, extensive evaluations like greenwashing can hinder the achievement of certification at the highest level.

Consumer Preferences and Market Adaptation

Elective activism predominantly influences the purchasing behavior of generations Y and Z. Engaging with ethically and socially conscious consumers can enhance brand loyalty and foster growth as the demand for ethical and sustainable purchasing increases. (Chen, 2024). The strategic advantages of market segmentation and investment have been enhanced owing to advancements in digital platforms, big data, artificial intelligence, and machine learning, allowing companies to more effectively adapt to evolving customer preferences. They must confront emerging ethical, security, and privacy issues. Strategic Customization of Hotel Market Segmentation Research within the hotel sector seeks to fulfill customer requirements, resulting in enhanced revenue and equitable pricing. Hotel proprietors cultivate robust relationships and allocate investments based on travel expenditures and resource optimization. (Akbar & Tracogna, 2018). Alongside enhancing service quality and profitability, these factors also draw investors and augment market power.

Financial Management and Cost Optimization

Financial processes are being formalized to enhance technology return on investment, sustainability, and campaign financing. Innovative design is essential to meet consumers' demands for ethical, sustainable, and resource-efficient fashion. (Khandual & Pradhan, 2019). Efficiently overseeing personnel training and technology implementation costs is essential for enduring sustainability and competitiveness. Companies can achieve early detection and resolution of issues.

(Aharoni, 2015). They may also evolve over time in response to customer and market demands. The emphasis is on a more inclusive and sustainable future of work. Hoteliers must prioritize cost management strategies that enhance occupancy rates and return on assets to augment profits. Enhanced margins and pricing strategies may be beneficial; however, quality must remain uncompromised. (Danzon et al., 2015). Resource optimization in operational cost management can mitigate these challenges. Efficient cost management can result in financial stability, strategic partnerships, and industry cooperation. Efficient cash flow management is essential for sustaining consistent liquidity in industries such as hospitality that depend on human labor. The demand for this niche may fluctuate due to global events or seasonal variations. (Suryani et al., 2024). A stable currency flow enables organizations to prioritize innovation, fulfill operational requirements, and swiftly adapt to market fluctuations. Financial stability is maintained to support hospitality firms as reliable partners and maintain operations. Robust liquidity and transparent financial planning empower companies to cultivate relationships, secure funding, and pursue growth opportunities, resulting in a more dynamic and comprehensive hotel landscape.

Economic Benefits of Tourism

Tourism stimulates hotel development by generating employment, foreign exchange, and liquidity, thereby enhancing service quality and revenue for the enterprise. It further promotes cooperation among the private sector, minimizes government monopolies, and develops a more competitive market (Zhang et al., 2024). Enhancing the competitiveness of hospitality businesses: Management of internal resources can lead to cost savings and higher profits (Pfister & Lehmann, 2023). Moreover, focusing on enhancing service quality and managing escalatory customer expectations can lead to significant corporate partnerships, thereby reinforcing the long-term viability and growth of hospitality businesses.

Investor Appeal

A favorable profitability outlook and a stable political and economic environment are key to improving collaboration and supporting tourism-related investments in the hotel sector. The availability of economic stability and the growing infrastructure drive growth further, thereby enhancing the attractiveness of destinations for investors and partners (Moskalenko et al., 2021). While they show significant potential, the complex legal systems and limited access to reliable information that are often tied up with such economic conditions can help stand in the way of providing investment. Secondly, remove all obstacles to collaboration within the hotel industry. (Gast et al., 2015). Initially, these trends suggest a correlation among governmental policies, automation, and the demand for skilled labor. Moreover, enhanced policies could facilitate technological progress and employment generation. (Kolade & Owoseni, 2022). This enhances employment and economic autonomy. The forthcoming segments will analyze the impact of government intervention on the evolving hotel industry.

Regulations, Innovation

Public regulations for the AI sector must equilibrate innovation and risk mitigation. Fundamental regulatory principles such as safety, data stewardship, and transparency are crucial for the responsible design and deployment of AI systems. (Lund et al., 2025). This equilibrium may require an extended duration to attain. This enables entrepreneurs to evaluate and enhance AI-driven solutions in regulated settings, lowering entry barriers and ensuring adherence to regulations. (Bickley et al., 2025). Regulation sandboxes may facilitate the early identification of problems,

promote the development of innovative technologies, and produce more agile regulatory frameworks.

Employment Laws and Automation: Impact on Labour and Workforce Dynamics

Labour market restrictions that increase employer non-wage labor costs may delay the adoption of labour-saving technologies such as automation. Such policies may determine the course of innovation in skill-biased technologies and, consequently, influence global employment and labor market trends. In some sectors, notably among low-skilled workers, automation may lead to lower job reallocation and increased unemployment (Krenz et al., 2021). Taxation and basic income are important solutions to this problem through resource redistribution. Moreover, public subsidies can mitigate the adverse effects of boosting business investment and labor market participation. Reduces socioeconomic inequality and promotes job mobility (Lopes & Carreira, 2020). Governments should focus on reducing socioeconomic inequality and promoting job mobility to strengthen workers' resilience. Changing the job landscape optimizes mobility, collaboration, and skill building. Some of these problems have never been fully addressed by the government in automating manual labor and developing the workforce. The challenge is that the effectiveness of rules depends on their ability to adapt to rapid technological developments, deployment, and use (Mackey et al., 2019). Uniform processes and practices are extremely important in the international technological landscape. One of the most important trends in hospitality is internal cross-brand competition to shape automation projects and talent development. This could also involve lessons from robotic and automation technology, and cooperation tool partnerships (Hentout et al., 2019). Yes, working with hotels could improve services, ease staffing shortages, and offer work opportunities. The following sections analyze the effect of cooperation on workforce growth and automation. The following sections examine how collaboration influences workforce growth and automation:

Workforce Development

Businesses and universities can collaborate to develop a robust hospitality workforce. Collaborations between education and industry can enhance curriculum and work-integrated learning to bolster employability and practical skills. (Chigbu & Makapela, 2025). Strategic research collaborations (SRC) within the tourism sector transform human resource practices to foster adaptable organizational cultures, influencing employee engagement. Collaborations facilitate innovative talent development initiatives, enabling human resource management to adjust to technological advancements. These partnerships provide the technology and ecosystem needed for hospital service robots in front-desk and in-room assistance. This alleviates labor shortages and enhances guest experience through automation. (Alahmari et al., 2023). Post-pandemic, more hotels are using self-service to satisfy customers' desire for minimal staff interaction. Collaborations like this can balance automation's pros and cons. The advancement of technology must not hinder professional growth and employment. All aspects focus on a sustainable, inclusive workplace.

Challenges and Chances

Pros and Cons of Hotel Industry Alliances and Joint Ventures. Enhanced automation may shake up corporate structures and HR practices. To develop flexibility, the staff would need to be trained to think up new workspaces, come up with better options, develop new skills, and further their careers (Bhatnagar & Grosse, 2019). The use of electronic technology in customer experience may impact investment opportunities and market structures. Predictive analytics, AI-enhanced support, and personalized digital marketing campaigns help companies improve customer

experiences and efficiency by reducing consumer behavior unpredictability. (Kumar et al., 2024). The digital age has led to new investment opportunities and a need to adapt to changing consumer demands. Effective SEO and social media marketing can boost hotel revenue by reaching a wider audience.

New Investment Options

Digital marketing enables market segmentation based on shifting consumer trends and investment. Interactive and personalized digital platforms can powerfully impact investment choices and fulfill customer needs. This means that as businesses focus on digital marketing, they also need to ensure that their customer data is protected and integrated with the systems they are using (Pandey et al., 2020). Modern digital strategies are essential to remain competitive in hospitality and meet customer expectations. Hospitality investment technology is analyzed in light of automation and labor changes. This is driven by operational efficiency, labor shortages, and customer satisfaction. Automation and artificial intelligence have revolutionized hotel management, logistics, and strategic planning (Gajić et al., 2024). The following sections investigate how the sector has adjusted to these transitions:

Automation in Hospitality

In the hospitality and hotel industries, robots are increasingly found in front desk assistance, customer service, room service, order processing, internal package delivery, cleaning, etc. This reduces the load on human workers, allows for better output, and enhances customer satisfaction (Hsu & Lin, 2023). Robotization and automation are increasingly shaping hospitality research and development, particularly in terms of empirical investigation. This creates a shift toward solving issues that visitors and employees face, and that is why ICT and machine learning innovations that prioritize workers' needs are there. People-centric approaches increase transparency, appropriateness, and acceptability when algorithms take primary responsibility for the services. The introduction of artificial intelligence in the hospitality sector raises ethical concerns regarding cultural preservation and employment security (Koo et al., 2021). Only through a balanced approach, which includes technological innovation, ethical governance, and active stakeholder engagement can we maximize the benefits of automation and artificial intelligence while minimizing risks such as job displacement, leading to sustainable and socially responsible hospitality practices.

Research Gap

Although previous studies have examined the individual elements of technology incorporation, sustainable benchmarks, and consumer choices, studies on the interplay of these processes in making investment decisions within the hospitality industry are limited. Traditionally, digital marketing functions as an intermediate phenomenon between market segmentation and technical integration; however, there are insufficient studies on this role. Most emphasized the impact of staff development on operational efficiency and acceptance of automation. Using partial least squares structural equation modeling to examine constructs related to investment attraction and innovation in the hotel industry, this study delivers a comprehensive description of the respective influences, thus correcting for weaknesses.

Research Objective

1. To examine how technological integration, sustainability initiatives, and changing consumer preferences together influence hospitality investment decisions.
2. To evaluate the direct and indirect relationships between digital marketing, market segmentation, and shifting consumer preferences in creating new investment opportunities.
3. To assess how sustainable and green investments shape government policies and regulatory frameworks in the hospitality sector.
4. To analyze how workforce development and automation support technological integration and improve operational efficiency in hospitality firms.
5. To investigate how macroeconomic factors such as inflation, exchange rate fluctuations, and geopolitical risks affect partnerships and investment strategies in hospitality.
6. To determine how government policies and regulations influence workforce automation and long-term industry competitiveness.
7. To develop and validate a structural model using Partial Least Squares Structural Equation Modeling to identify the key drivers of sustainable growth and innovation in the hospitality industry.

Technological integration in hospitality sector.

H1: Technological Integration in Hospitality Investments positively impacts Digital Marketing and Online Presence in Hospitality.

Sustainability and Green Investments in Hospitality

H2: Sustainability and Green Investments in Hospitality positively influence Government Policies and Regulatory Influence.

Shifting Consumer Preferences and Their Impact

H3: Shifting Consumer Preferences and Their Impact positively affect Market Segmentation and New Investment Opportunities.

Economic Factors Influencing Hospitality Investment

H4: Economic Factors Influencing Hospitality Investment positively impact Partnerships and Collaborations in Hospitality.

Government Policies and Regulatory Influence

H5: Government Policies and Regulatory Influence positively affect Workforce Development and Automation Trends.

Market Segmentation and New Investment Opportunities

H6: Market Segmentation and New Investment Opportunities positively impact Technological Integration in Hospitality Investments.

Partnerships and Collaborations in Hospitality

H7: Partnerships and Collaborations in Hospitality positively influence Workforce Development and Automation Trends.

Digital Marketing and Online Presence in Hospitality

H8^a: Digital Marketing and Online Presence in Hospitality positively impact Market Segmentation and New Investment Opportunities.

H8^b: Digital Marketing and Online Presence in hospitality mediate the relationship between Market Segmentation and New Investment Opportunities Vis-à-vis Shifting Consumer Preferences.

Workforce Development and Automation Trends

H9: Workforce Development and Automation Trends positively influence Technological Integration in Hospitality Investments.

3. Research Methodology

This study adopts a **quantitative research approach** utilizing **Partial Least Squares Structural Equation Modeling (PLS-SEM)** to test the direct and mediated relationships between constructs in the hospitality sector. **Smart PLS 4** was used for data analysis. The target population of this study comprised professionals, stakeholders, and investors in the hospitality industry, including IT specialists, marketing professionals, operations managers, sustainability experts, and investors. The sample size included **871 respondents** from a population of **900**, representing a **96.7% response rate**.

This exceeded the minimum threshold for PLS-SEM analysis for models with high complexity (10 constructs and multiple paths).

A **census sampling approach** was used, given the moderately high but manageable population size. A structured questionnaire was designed using the validated scales for the constructs. Surveys were distributed electronically using platforms such as Google Forms and via direct email to identified respondents. All participants were informed of the purpose of the study and provided consent before participation. Data were anonymized and stored securely to ensure confidentiality.

Model Development:

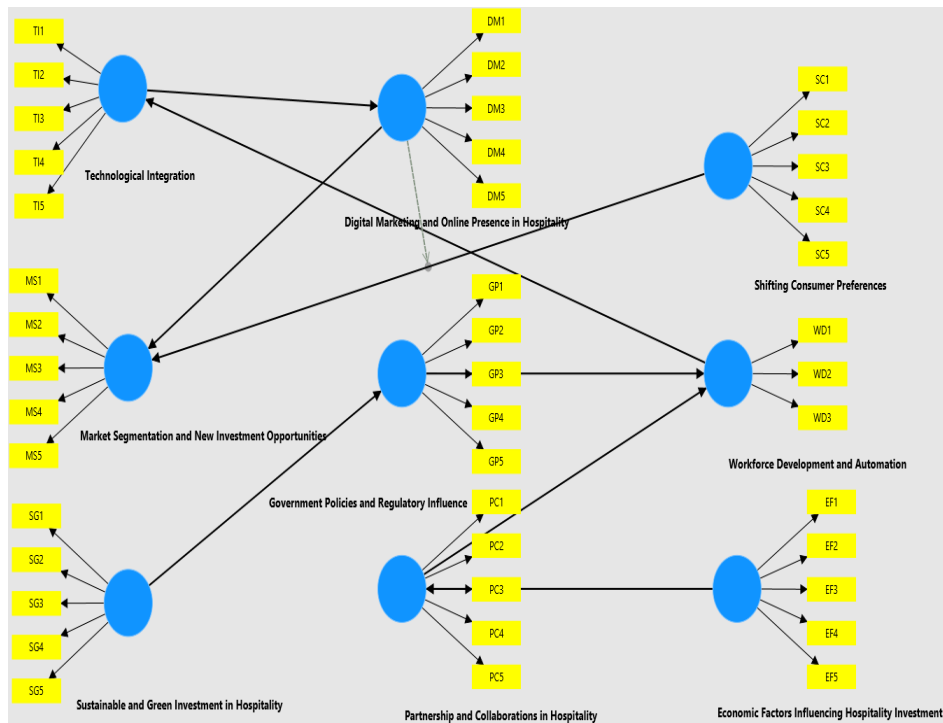


Figure 1: Key Factors Influencing Hospitality Industry Trends and Investment

Figure 1 depicts the intricate interconnections among the key factors shaping the hospitality industry's evolution. where the blue nodes signify major thematic areas and the yellow nodes represent specific sub-factors. These themes include Technological Integration (TI), encompassing digital tools, automation, and technology adaptation; Digital Marketing and Online Presence (DM), focusing on online visibility, social media, and digital strategies; Shifting Consumer Preferences (SC), reflecting trends in personalization and sustainability; and Market Segmentation and New Investment Opportunities (MS), identifying diverse segments and investment areas to expand reach. Additionally, Government Policies and Regulatory Influence (GP) highlight the effects of regulations, incentives, and initiatives, while Sustainable and Green Investment (SG) emphasizes eco-friendly practices. Partnerships and Collaborations (PC) stress the value of strategic alliances, Workforce Development and Automation (WD) addresses skills training and workforce automation, and Economic Factors (EF) analyze macro- and microeconomic influences on investment decisions. Collectively, these interrelated themes illustrate the complexity of the forces that drive industry growth and transformation.

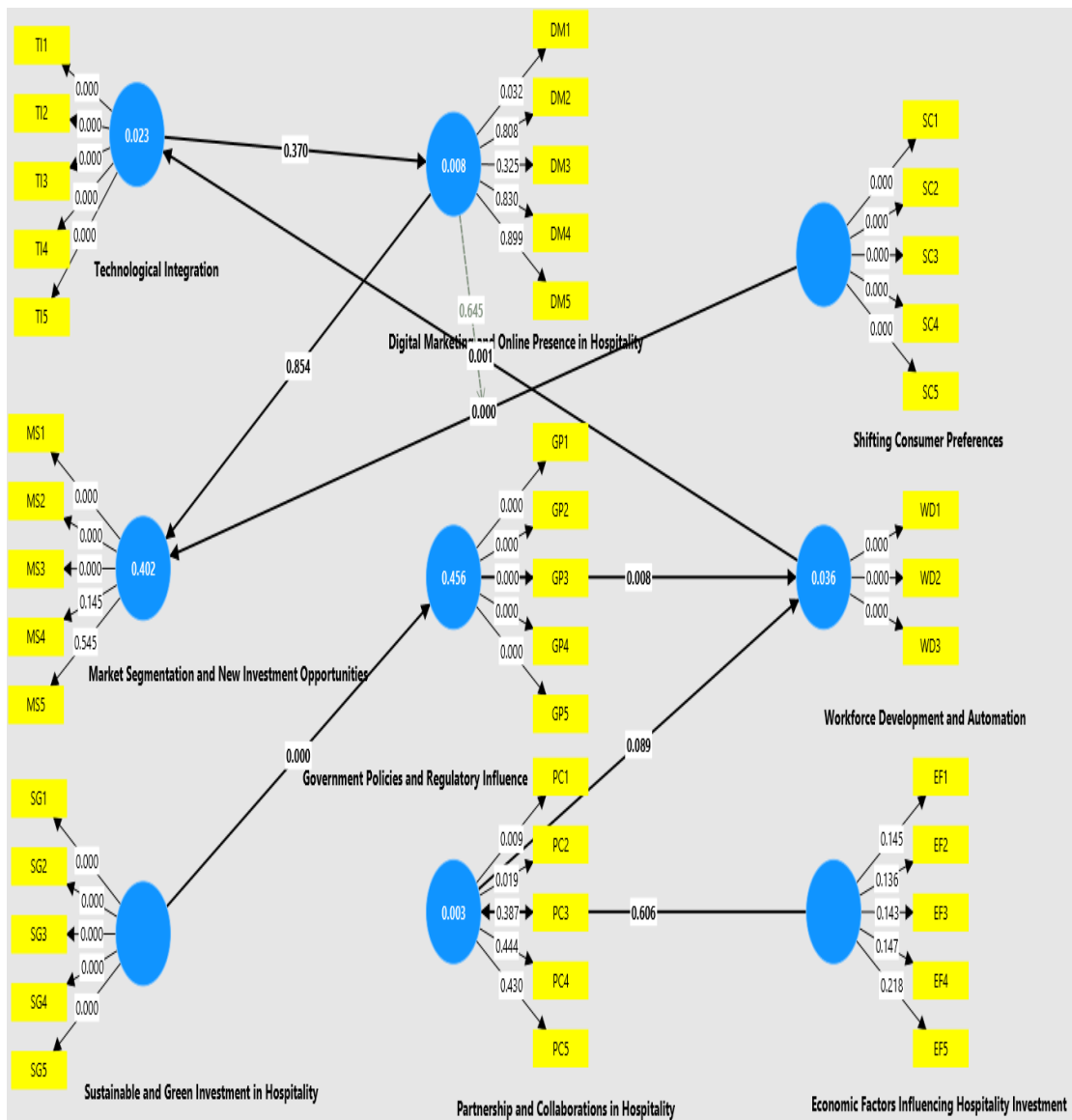


Figure 2: Weighted Analysis of Factors Influencing the Hospitality Industry

Weighted analysis is derived from Figure 2 through the color nodes, blue represents major themes, and yellow represents sub-factors. In contrast, numeric values represent the influence scores of relationships. Technological Integration (TI) underlines the importance of automation, digitalization, and innovation. However, TI2, TI4, and TI5 have adverse but negligible impacts. High weights for DM4 and DM5 Digital Marketing and Online Presence (DM) highlight the attributes that increase the product's visibility in the online marketplace. Shifting Consumer Preferences (SC): None of the sub-factors play a significant role, so the weights are very low with new investment opportunities (MS) focusing more on MS3, MS4, and MS5, as these variables are significant for market segmentation and negotiating newer investments. Government Policies and Regulatory Influence (GP) also registered a weak correlation towards some influence (GP3), but the general theme was very low activity. SG shows that Sprout Sustainable indicates zero weights for all subfactors, which implies no effect. Partnerships and Collaborations (PC) have very high weights for PC3, PC4, and PC5, indicating the importance of such collaborations related to efficiency and growth within the market. WD → no influence WD1, WD2, WD3, WD4, WD5, all weights = 0 EF → EF4, and EF5 are important determinants of investment decisions, which means that Economic Factors (EF) influence these investment decisions. This retrievable analysis provides insight into a data-driven lens for the points of intersection and focus in the industry.

4. Data Analysis

Table1: Statistical Analysis of Interrelationships Among Key Factors in the Hospitality Industry

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Digital Marketing and Online Presence in Hospitality -> Market Segmentation and New Investment Opportunities	0.011	0.011	0.057	0.185	0.854
Economic Factors Influencing Hospitality Investment -> Partnership and Collaborations in Hospitality	0.054	0.03	0.105	0.516	0.606
Government Policies and Regulatory Influence -> Workforce Development and Automation	0.111	0.116	0.042	2.64	0.008
Partnership and Collaborations in Hospitality -> Workforce Development and Automation	0.151	0.17	0.089	1.7	0.089
Shifting Consumer Preferences -> Market Segmentation and New Investment Opportunities	0.632	0.633	0.038	16.683	0
Sustainable and Green Investment in Hospitality -> Government Policies and Regulatory Influence	0.675	0.678	0.035	19.282	0
Technological Integration -> Digital Marketing and Online	0.088	0.05	0.098	0.896	0.37

Presence in Hospitality					
Workforce Development and Automation -> Technological Integration	0.152	0.161	0.045	3.403	0.001
Digital Marketing and Online Presence in Hospitality x Shifting Consumer Preferences -> Market Segmentation and New Investment Opportunities	0.028	0.01	0.061	0.46	0.645

Table 1 depicts the analysis, which provides full details of the relationships between the various factors affecting the hospitality industry, outlining the original sample data (O), sample means (M), standard deviations (STDEV), T statistics ($|O/STDEV|$), and P values. The relationship between Digital Marketing and Online Presence and Market Segmentation and New Investment Opportunities exhibits a low influence, with a T statistic of 0.185 and a P value of 0.854. Similarly, Economic Factors impacting Partnership and Collaborations show limited significance, with a T-statistic of 0.516 and a P-value of 0.606. In contrast, Government Policies and Regulatory Influence significantly affect Workforce Development and Automation (T-statistic: 2.64, P-value: 0.008), while Partnership and Collaborations moderately impact Workforce Development and Automation (T-statistic: 1.7, P-value: 0.089). Shifting Consumer Preferences strongly influence Market Segmentation and New Investment Opportunities (T statistic: 16.683, P value: 0), and Sustainable and Green Investment has a substantial effect on Government Policies and Regulatory Influence (T statistic: 19.282, P value: 0). The link between Technological Integration and Digital Marketing shows a weaker association (T-statistic: 0.896, P-value: 0.37), whereas Workforce Development significantly impacts Technological Integration (T-statistic: 3.403, P-value: 0.001). Finally, the combined effect of Digital Marketing and Shifting Consumer Preferences on Market Segmentation is minimal (T-statistic: 0.46, P value: 0.645).

Table 2: R-Square and Adjusted R-Square Values for Influencing Factors in the Hospitality Industry

	R-square	R-square adjusted
Digital Marketing and Online Presence in Hospitality	0.008	0.006
Government Policies and Regulatory Influence	0.456	0.455
Market Segmentation and New Investment Opportunities	0.402	0.398
Partnership and Collaborations in Hospitality	0.003	0.001
Technological Integration	0.023	0.021
Workforce Development and Automation	0.036	0.032

Table 2 presents the R-squared and adjusted R-squared values for various factors influencing the hospitality industry, reflecting their explanatory power in predicting outcomes. Digital Marketing and Online Presence in Hospitality show minimal explanatory strength, with R-squared and adjusted R-squared values of 0.008 and 0.006, respectively. Government Policies and Regulatory Influence demonstrated significant predictive capability, with values of 0.456 and 0.455, respectively. Market Segmentation and New Investment Opportunities also show substantial explanatory power, with R-squared and adjusted R-squared values of 0.402 and 0.398, respectively. In contrast, partnerships and collaborations in hospitality exhibit negligible influence, with values of 0.003 and 0.001, respectively. Technological Integration and Workforce Development and Automation revealed

modest predictive capabilities, with R-square values of 0.023 and 0.036 and adjusted R-square values of 0.021 and 0.032, respectively, indicating varying levels of impact among these factors.

Table 3: Path Coefficients of Influencing Relationships in the Hospitality Industry

	Path coefficients
Digital Marketing and Online Presence in Hospitality -> Market Segmentation and New Investment Opportunities	0.011
Economic Factors Influencing Hospitality Investment -> Partnership and Collaborations in Hospitality	0.054
Government Policies and Regulatory Influence -> Workforce Development and Automation	0.111
Partnership and Collaborations in Hospitality -> Workforce Development and Automation	0.151
Shifting Consumer Preferences -> Market Segmentation and New Investment Opportunities	0.632
Sustainable and Green Investment in Hospitality -> Government Policies and Regulatory Influence	0.675
Technological Integration -> Digital Marketing and Online Presence in Hospitality	0.088
Workforce Development and Automation -> Technological Integration	0.152
Digital Marketing and Online Presence in Hospitality x Shifting Consumer Preferences -> Market Segmentation and New Investment Opportunities	0.028

Table 3 provides the path coefficients, which quantify the strength and direction of the relationships between the key factors in the hospitality industry. The most substantial relationship is seen between Sustainable and Green Investment in Hospitality and Government Policies and Regulatory Influence (0.675), indicating that investments in sustainability strongly shape regulatory policies. Shifting Consumer Preferences significantly affect Market Segmentation and New Investment Opportunities (0.632), reflecting the power of changing consumer demands, such as sustainability and personalization, in driving new market strategies and investment areas. This emphasizes how shifts in consumer behavior create opportunities for businesses to strategically adapt and invest.

Moderate path coefficients are found in the relationships between Partnership and Collaborations in Hospitality and Workforce Development and Automation (0.151) and between Workforce Development and Automation and Technological Integration (0.152). These connections highlight the importance of partnerships in enhancing workforce development and the integration of automation. They suggest that businesses in the hospitality industry increasingly recognize the need for collaboration and workforce optimization to improve efficiency and adapt to technological advancements. Both relationships indicate the central role of human resources in facilitating technological growth and enhancing operational effectiveness.

Government policies and regulatory influence, workforce development and automation (0.111), and technological integration in hospitality digital marketing and online presence (0.088) are interconnected. These connections are less robust yet remain significant. Despite being lower, these coefficients continue to exert substantial influence on industry evolution. Additionally, the coefficients for Economic Factors Influencing Hospitality Investment and Partnership and Collaborations (0.054), Digital Marketing and Online Presence and Market Segmentation and New Investment Opportunities (0.011), and the combined influence of Digital Marketing and Shifting

Consumer Preferences on Market Segmentation (0.028) suggest that these factors, while having less individual impact, still play a role in shaping industry trends and decision-making. Together, these path coefficients illustrate the complex and varied interplay of influences within the hospitality sector, highlighting both the significant and moderate forces driving change and development.

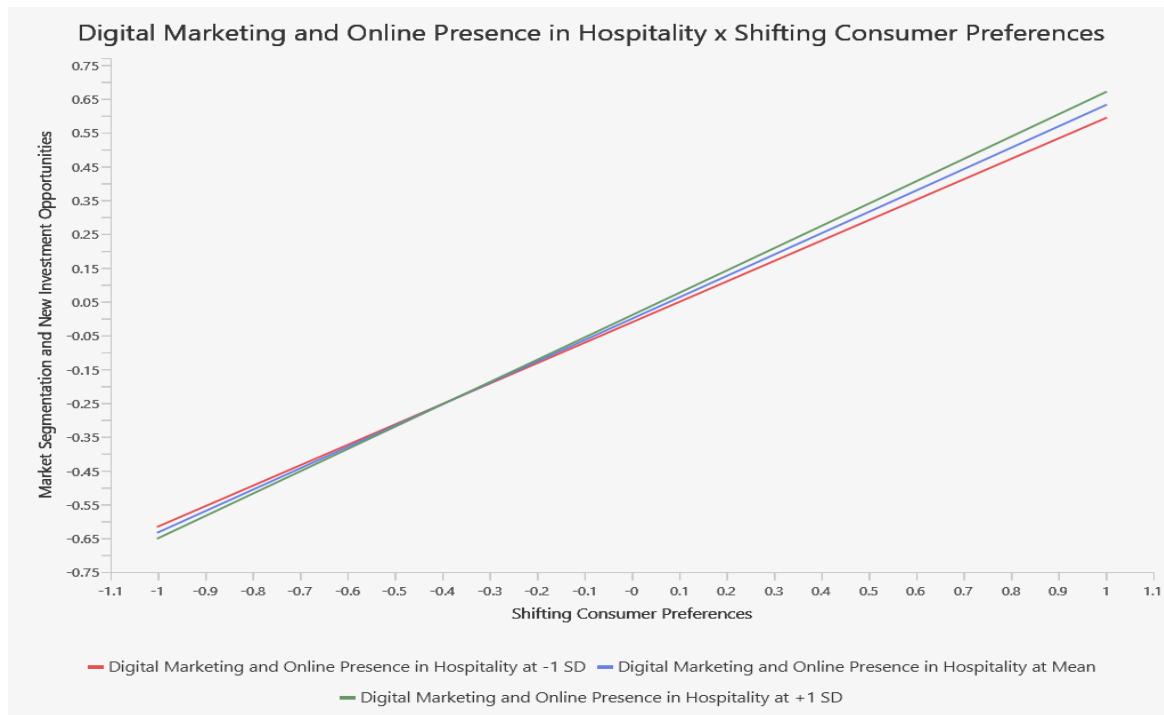


Figure 3. Interaction of Digital Marketing and Consumer Preferences on Market Opportunities in Hospitality

Figure 3 shows how "Digital Marketing and Online Presence in Hospitality" and "Shifting Consumer Preferences" affect "Market Segmentation and New Investment Opportunities." Three lines demonstrate the relationship at different digital marketing success levels.

- **Red Line:** Digital marketing at one standard deviation below the mean (-1 SD).
- **Blue Line:** Digital marketing at the mean.
- **Green Line:** Digital marketing at one standard deviation above the mean (+1 SD).

Market opportunities increase as consumer preferences change, as all lines slope positively. Both lines overlap less, suggesting that investing in digital marketing has a greater impact on market opportunities due to changing tastes.

Discussion

Technology integration, sustainability, consumer behavior, financial metrics, and hospitality regulatory policies affect investment trends and operations. AI, IoT, and blockchain are revolutionizing service delivery with predictive analytics, personalized guest experiences, and operational optimization. SMEs can benefit most from a variety of opportunities with the right technology partner by addressing these barriers. Tech integration by a digital marketing pioneer targets market segments for optimal social media and influencer campaign engagement on the best platforms. The hotel investment market values sustainability. Focus has been on changing legal restrictions and customer preferences. System efficiency, waste management, and sustainable procurement can reduce environmental impact and increase brand equity and consumer loyalty.

However, expanding these green initiatives involves difficulties, including increased initial investments, skill deficiencies within the labor force, and a lack of common metrics to measure sustainability Return on Investment (ROI). The strategic orientation of hospitality investment is significantly influenced to a great extent by macroeconomic variables. The need for agile risk management frameworks, from multifactor and quant- or heuristic-based approaches to predictive financial modeling, is driven by risk-taking against the backdrop of currency risk exchange volatilities, inflationist tensions, and geopolitical uncertainties. This study identifies strategic partnerships and collaborations as mechanisms to overcome economic vulnerabilities. Such partnerships allow access to larger markets and scaled operations by sharing resources and expertise in mutually beneficial ways. Nonetheless, the effectiveness of such arrangements rests on reconciling the challenges related to cultural disparity, goal alignment, and contractual clarity.

The statistical analyses demonstrate a nuanced hierarchy of influences between the investigated constructs, with sustainability investments and consumer-driven market segmentation showing the strongest effect. The path coefficients confirm a strong positive relationship between green investment and regulatory frameworks, emphasizing the reinforcing effect of both constructs on fostering a pro-sustainability-oriented business environment. Figures in the first eight months of November also suggest that personalization and wellness tourism, which are increasingly favored by consumers, will be vital in driving market opportunities, and this will only be achieved through adaptive strategies. Moderate relations, on the other hand, including linking workforce automation with technological integration, indicate the potential for augmented productivity from automated routines, albeit within the confines of system cohesion. However, indirect relationships, such as digital marketing's impact on technological investment, highlight shortcomings in current methods and the need for channel synergies. The findings show a dynamic analytical framework showing how hospitality industry factors affect innovation and resilience. Understanding sustainability, technological innovation, and economic strategies helps investors make adaptive and anticipatory decisions. This would help investors compete in a changing global market.

5. Conclusion

The analysis shows how technology, sustainability, market dynamics, economists, and regulators affect hospitality. AI, IoT, and blockchain improve financial services. Recent advances include predictive analytics, cost optimization, and advanced customer personalization. Despite their potential, these technologies pose capital, interoperability, and accessibility challenges for small businesses. Consumer behaviors are being altered as a result of digital technology's application of technology and engagement. By using data analytics, consumers are categorized. The concept of sustainability has an effect on investment, regulation, and the eco-consciousness of consumers. Increasing brand loyalty and profitability can be accomplished through environmentally sustainable initiatives such as energy-efficient systems and waste management. These initiatives, in addition to ethical considerations, can take place. It is possible to strike a balance between ambitious goals, high implementation costs, and workforce skill gaps by employing a structured approach to embed sustainability into the fundamental paradigm of operations. The fact that there is a strong correlation between green investment and regulatory pressure demonstrates that thinking green is not only a requirement for regulatory compliance but also a business advantage. On the other hand, decisions regarding investments in the hospitality industry are influenced by macroeconomic factors such as changes in exchange rates at the item level, inflation, and exposure to geopolitical risk. They must assess risks, diversify investments, and budget long-term. Complex economies require strategic partnerships and collaboration, says the report. Companies innovate, optimize resources, and enter

markets by partnering. Contracts, operations, and culture must be managed. Technology and human-centered structures must be balanced with automation to boost productivity and engagement. Sustainability-focused market segmentation and consumer behavior are essential. Hospitality regulation should promote holistic decision-making. As digital marketing and technology merge, marketing and technical strategies must collaborate. Understanding hospitality assets' scope helps talent be creative, flexible, and resilient in competitive environments.

Declaration

The author used SmartPLS for data results, Grammarly, and Paperpal (an AI-assisted language editing tool), to improve the manuscript's clarity and readability. No content, data, or analyses were generated using this tool. The responsibility for content and conclusions remains with the author

Reference

- Aharoni, Y. (2015). The foreign investment decision process. In *International Business Strategy* (pp. 10-20). Routledge.
- Akbar, Y. H., & Tracogna, A. (2018). The sharing economy and the future of the hotel industry: Transaction cost theory and platform economics. *International Journal of Hospitality Management, 71*, 91-101.
- Alahmari, N., Mehmood, R., Alzahrani, A., Yigitcanlar, T., & Corchado, J. M. (2023). Autonomous and Sustainable Service economies: Data-Driven optimization of Design and Operations through Discovery of Multi-perspective parameters. *Sustainability, 15*(22), 16003.
- Allioui, H., & Mourdi, Y. (2023). Exploring the full potentials of IoT for better financial growth and stability: A comprehensive survey. *Sensors, 23*(19), 8015.
- Attaran, M., & Woods, J. (2019). Cloud computing technology: improving small business performance using the Internet. *Journal of Small Business & Entrepreneurship, 31*(6), 495-519.
- Bhatnagar, S., & Grosse, M. (2019). Future workplace organisation: how digitisation affects employees' job satisfaction in agile workplaces. *International Journal of Product Development, 23*(4), 264-291.
- Bickley, S. J., Macintyre, A., & Torgler, B. (2025). Artificial intelligence and big data in sustainable entrepreneurship. *Journal of Economic Surveys, 39*(1), 103-145.
- Birkel, H. S., Veile, J. W., Müller, J. M., Hartmann, E., & Voigt, K.-I. (2019). Development of a risk framework for Industry 4.0 in the context of sustainability for established manufacturers. *Sustainability, 11*(2), 384.
- Bogilović, S., Bortoluzzi, G., Černe, M., Ghasemzadeh, K., & Žnidaršič, J. (2021). Diversity, climate and innovative work behavior. *European Journal of Innovation Management, 24*(5), 1502-1524.
- Brunetti, F., Matt, D. T., Bonfanti, A., De Longhi, A., Pedrini, G., & Orzes, G. (2020). Digital transformation challenges: strategies emerging from a multi-stakeholder approach. *The TQM Journal, 32*(4), 697-724.
- Buffa, F., Franch, M., & Rizio, D. (2018). Environmental management practices for sustainable business models in small and medium sized hotel enterprises. *Journal of cleaner production, 194*, 656-664.
- Chen, C.-W. (2024). Utilizing a hybrid approach to identify the importance of factors that influence consumer decision-making behavior in purchasing sustainable products. *Sustainability, 16*(11), 4432.
- Chigbu, B. I., & Makapela, S. L. (2025). Data-Driven Leadership in Higher Education: Advancing Sustainable Development Goals and Inclusive Transformation. *Sustainability, 17*(7), 3116.
- Ciasullo, M. V., Montera, R., & Palumbo, R. (2024). Online content responsiveness strategies in the hospitality context: exploratory insights and a research agenda. *The TQM Journal, 36*(9), 234-254.

- Danzon, P. M., Mulcahy, A. W., & Towse, A. K. (2015). Pharmaceutical pricing in emerging markets: effects of income, competition, and procurement. *Health economics*, 24(2), 238-252.
- Debrah, C., Darko, A., & Chan, A. P. C. (2023). A bibliometric-qualitative literature review of green finance gap and future research directions. *Climate and development*, 15(5), 432-455.
- Desalegn, G., Tangl, A., & Fekete-Farkas, M. (2022). From short-term risk to long-term strategic challenges: Reviewing the consequences of geopolitics and COVID-19 on economic performance. *Sustainability*, 14(21), 14455.
- Dillette, A. K., Douglas, A. C., & Andrzejewski, C. (2021). Dimensions of holistic wellness as a result of international wellness tourism experiences. *Current Issues in Tourism*, 24(6), 794-810.
- Dwivedi, Y. K., Hughes, L., Kar, A. K., Baabdullah, A. M., Grover, P., Abbas, R., Andreini, D., Abumoghli, I., Barlette, Y., & Bunker, D. (2022). Climate change and COP26: Are digital technologies and information management part of the problem or the solution? An editorial reflection and call to action. *International journal of information management*, 63, 102456.
- Florido-Benítez, L. (2023). The Role of the Top 50 US cargo airports and 25 air cargo airlines in the logistics of e-commerce companies. *Logistics*, 7(1), 8.
- Florido-Benítez, L., & del Alcázar Martínez, B. (2024). How artificial intelligence (ai) is powering new tourism marketing and the future agenda for smart tourist destinations. *Electronics*, 13(21), 4151.
- Gajić, T., Petrović, M. D., Pešić, A. M., Conić, M., & Gligorijević, N. (2024). Innovative Approaches in Hotel Management: Integrating Artificial Intelligence (AI) and the Internet of Things (IoT) to Enhance Operational Efficiency and Sustainability. *Sustainability*, 16(17), 7279.
- Gast, J., Filser, M., Gundolf, K., & Kraus, S. (2015). Coopetition research: towards a better understanding of past trends and future directions. *International Journal of Entrepreneurship and Small Business*, 24(4), 492-521.
- Gaur, L., Afaq, A., Solanki, A., Singh, G., Sharma, S., Jhanjhi, N., My, H. T., & Le, D.-N. (2021). Capitalizing on big data and revolutionary 5G technology: Extracting and visualizing ratings and reviews of global chain hotels. *Computers and Electrical Engineering*, 95, 107374.
- Hentout, A., Aouache, M., Maoudj, A., & Akli, I. (2019). Human–robot interaction in industrial collaborative robotics: a literature review of the decade 2008–2017. *Advanced Robotics*, 33(15-16), 764-799.
- Hoque, N., Rahman, A. R. A., Molla, R. I., Noman, A. H. M., & Bhuiyan, M. Z. H. (2018). Is corporate social responsibility pursuing pristine business goals for sustainable development? *Corporate Social Responsibility and Environmental Management*, 25(6), 1130-1142.
- Hsu, C.-L., & Lin, J. C.-C. (2023). Understanding the user satisfaction and loyalty of customer service chatbots. *Journal of Retailing and Consumer Services*, 71, 103211.
- Khandual, A., & Pradhan, S. (2019). Fashion brands and consumers approach towards sustainable fashion. *Fast fashion, fashion brands and sustainable consumption*, 37-54.
- Kilgour, M., Sasser, S. L., & Larke, R. (2015). The social media transformation process: curating content into strategy. *Corporate Communications: An International Journal*, 20(3), 326-343.
- Kiss, B., Sekulova, F., Hörschelmann, K., Salk, C. F., Takahashi, W., & Wamsler, C. (2022). Citizen participation in the governance of nature-based solutions. *Environmental Policy and Governance*, 32(3), 247-272.
- Kolade, O., & Owoseni, A. (2022). Employment 5.0: The work of the future and the future of work. *Technology in Society*, 71, 102086.
- Koo, B., Curtis, C., & Ryan, B. (2021). Examining the impact of artificial intelligence on hotel employees through job insecurity perspectives. *International Journal of Hospitality Management*, 95, 102763.
- Krenz, A., Prettnner, K., & Strulik, H. (2021). Robots, reshoring, and the lot of low-skilled workers. *European Economic Review*, 136, 103744.

- Kumar, V., Ashraf, A. R., & Nadeem, W. (2024). AI-powered marketing: What, where, and how? *International Journal of Information Management*, 77, 102783.
- Lopes, A. S. P. P., & Carreira, P. M. R. (2020). Adult workers in higher education: Enhancing social mobility. *Education+ Training*, 62(9), 1101-1117.
- Lund, B., Orhan, Z., Mannuru, N. R., Bevara, R. V. K., Porter, B., Vinaih, M. K., & Bhaskara, P. (2025). Standards, frameworks, and legislation for artificial intelligence (AI) transparency. *AI and Ethics*, 1-17.
- Mackey, T. K., Kuo, T.-T., Gummadi, B., Clauson, K. A., Church, G., Grishin, D., Obbad, K., Barkovich, R., & Palombini, M. (2019). 'Fit-for-purpose?'—challenges and opportunities for applications of blockchain technology in the future of healthcare. *BMC medicine*, 17, 1-17.
- Mehta, P., Singh, M., & Mittal, M. (2020). It is not an investment if it is destroying the planet: A literature review of socially responsible investments and proposed conceptual framework. *Management of Environmental Quality: An International Journal*, 31(2), 307-329.
- Melander, L. (2018). Customer and supplier collaboration in green product innovation: External and internal capabilities. *Business Strategy and the Environment*, 27(6), 677-693.
- Melnyk, L., Koblianska, I., Dehtyarova, I., & Kubatko, O. (2024). Navigating Sustainability and Ecosystem Management Through a Systemic Lens: Core Principles. *Ecosystem Management: Climate Change and Sustainability*, 353-396.
- Moskalenko, B., Lyulyov, O., Pimonenko, T., Kwilinski, A., & Dzwigol, H. (2021). Investment attractiveness of the country: Social, ecological, economic dimension. *International Journal of Environment and Pollution*, 69(1-2), 80-98.
- Nhamo, G., Dube, K., Chikodzi, D., Nhamo, G., Dube, K., & Chikodzi, D. (2020). Impacts and implications of COVID-19 on the global hotel industry and Airbnb. *Counting the Cost of COVID-19 on the global tourism industry*, 183-204.
- Pandey, N., Nayal, P., & Rathore, A. S. (2020). Digital marketing for B2B organizations: structured literature review and future research directions. *Journal of Business & Industrial Marketing*, 35(7), 1191-1204.
- Pfister, P., & Lehmann, C. (2023). Returns on digitisation in SMEs—a systematic literature review. *Journal of Small Business & Entrepreneurship*, 35(4), 574-598.
- Rehman, S. U., Elrehail, H., Alshwayat, D., Ibrahim, B., & Alami, R. (2023). Linking hotel environmental management initiatives and sustainable hotel performance through employees' eco-friendly behaviour and environmental strategies: a moderated-mediated model. *European Business Review*, 35(2), 184-201.
- Shehri, T. A., Braun, J. F., Howarth, N., Lanza, A., & Luomi, M. (2023). Saudi Arabia's climate change policy and the circular carbon economy approach. *Climate Policy*, 23(2), 151-167.
- Suryani, A. W., Helliari, C., & Carter, A. (2024). Ecological underpinnings of niche identity and diversity within the profession. *Journal of Accounting in Emerging Economies*, 14(4), 791-818.
- Tanrikulu, C. (2021). Theory of consumption values in consumer behaviour research: A review and future research agenda. *International Journal of Consumer Studies*, 45(6), 1176-1197.
- Vago, S., & Barkan, S. E. (2021). *Law and society*. Routledge.
- Velaoras, K., Menegaki, A. N., Polyzos, S., & Gotzamani, K. (2025). The role of environmental certification in the hospitality industry: Assessing sustainability, consumer preferences, and the economic impact. *Sustainability*, 17(2), 650.
- Yan, H., Qamruzzaman, M., & Kor, S. (2023). Nexus between green investment, fiscal policy, environmental tax, energy price, natural resources, and clean energy—a step towards sustainable development by fostering clean energy inclusion. *Sustainability*, 15(18), 13591.
- Zhang, G., Chen, S., & Yan, H. (2024). Balancing Innovation and Efficiency: The Impact of Mixed Ownership Reform on Total Factor Productivity in Monopolized and Competitive Industries. *Journal of the Knowledge Economy*, 1-35.

Zhang, X., Tavitiyaman, P., & Tsang, W. Y. (2023). Preferences of technology amenities, satisfaction and behavioral intention: The perspective of hotel guests in Hong Kong. *Journal of Quality Assurance in Hospitality & Tourism*, 24(5), 545-575.