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Exploring the Hotel Management Systems in China: A Systematic Literature Review

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A B S T R A C T

This paper examines the advancement of hotel management systems in China, propelled by technical innovations, sustainability efforts, and changing consumer demands. The researcher intends to investigate the effect of digital technology on operational efficiency and visitor satisfaction in hotel management as well as to investigate the relationship between staff well-being and hotel service quality. Employing a systematic literature review methodology, this study examines 101 peer-reviewed articles from 2020 to 2024, predominantly sourced from Scopus, concentrating on hotel management systems, technology adoption, sustainability practices, and service quality in China's hotels. The research delineates five essential management systems that enhance hotel quality: The establishment of effective hotel management systems, the promotion of employee well-being, the maintenance of energy efficiency and sustainability, the implementation of digital transformation, and the optimization of overbooking management. The results offer practical suggestions for hotels to enhance operational strategies, for the government to endorse digitalization and sustainability policies, and for future research to investigate AI-driven guest experiences, the effects of sustainability initiatives, and digital innovations in the hospitality sector.

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INTRODUCTION

In China, hotel proliferation has been remarkable during the past two decades, mainly since the modern period commenced in the late 1970s due to the country's reforms and the adoption of its Open Door policy (Kong & Cheung, 2009). During this time, a novel information management system emerged, characterized by enhanced functionality and progressively improved stability and security (F. Gao, 2020). Moreover, the hotels in China have experienced significant transformations, propelled by a rise in local demand and a growing influx of international tourists (Hughes, 2015). The hotel business has become vital to the economy as China solidifies its position as a global leader in tourism and commerce.

Indeed, the management development in China is a testament to the nation's profound cultural legacy and global trends (Xu et al., 2023). Hotels and other lodging establishments have adapted to the global demand for technology-oriented solutions, ostentatious amenities, and superior service while maintaining their commitment to China's distinctive cultural traditions. Besides, hotels in China increasingly incorporate sustainable practices into their operations, following international standardized hotels (Xie & Chen, 2019). Lagun (2023) argues that the operational frameworks of both luxury and budget hotels have been integrated with green initiatives, such as the use of eco-friendly materials, waste management systems, and energy-efficient architectural designs. Likewise, sustainability has become an integral component of hospitality in China, as evidenced by the widespread adoption of green human resource management (HRM) strategies that encourage employees to engage in sustainability initiatives (Martínez-Falcó et al., 2024). This transition to sustainability is in response to the growing demand from eco-conscious clients who demand sustainable options in their accommodation choices and address environmental issues.

Furthermore, technology integration is a critical factor that significantly impacts the management system in China. As a technologically evolved nation, China has rapidly integrated smart technology into its management system, including intelligent room functionalities, robotics, and artificial intelligence (AI) (Yang et al., 2015). China's hotels have implemented technology to enhance the visitor experience, optimize operations, and improve service performance. In this instance, mobile applications and self-service kiosks for accommodation reservations, check-ins, and personalized visitor services have become increasingly common. Through state-of-the-art facilities, personalization, and convenience, these technological advancements improve operational efficiency and elevate the passenger experience. Similarly, hotels use modern digital technology such as customer care chatbots, mobile guest applications, and property management systems to improve operations, give more customized service, automate procedures, and gather input for continuing growth (Shi and Zhong, 2025).

Moreover, perceptions of eco-friendly hotels and sustainable practices positively influence client satisfaction concerning environmental management systems, as indicated by J. Yang et al. (2024). The investigation reveals that

ecological management system certification primarily mitigates the risk of stock price decline by enhancing corporate environmental performance and the transparency of corporate information. This indicates that such certification functions as both an "environmental governance tool" to prevent stock price collapse and an "information transfer tool" to augment corporate transparency, thereby reducing the risk of stock price decline (H. Liu et al., 2024).

Furthermore, it is essential to tailor foreign professional training experiences to national practices to equip the hotel industry with proficient individuals, considering company demands and international standards (Roman, 2020). The enhanced quality will improve a hotel's competitiveness and profitability, achievable through establishing a quality management system that entails effective corporate governance rooted in marketing. This approach fosters essential conditions for the production and sale of goods and services, cultivates an appropriate corporate culture, implements standards for technical service quality, applies standards for functional service quality, conducts initial quality control of supplier products and services, and performs final quality control of services rendered in a hotel and sold by intermediaries (Nikolaskaya et al., 2020).

In addition, a comprehensive understanding of customer loyalty concepts and theories provides a solid framework for analyzing the various elements influencing guests' long-term commitment to a hotel chain. The brand image is crucial for comprehending consumer behavior in the hotel sector, as it impacts client perceptions and preferences, hence influencing their decisions and cultivating loyalty (Yu & Rojniruttikul, 2025). In this vein, practical Corporate Social Responsibility (CSR) initiatives can augment customer loyalty in the hotel industry. Performance across the three CSR dimensions positively influenced consumer behavioral loyalty to varying extents. The effect of CSR on customers exerted the most significant influence on the behavioral loyalty of Chinese consumers among the three CSR domains: customer, employee, and society. Brand image and customer trust were identified as mediators between CSR performance and consumer behavioral loyalty (M. T. Liu et al., 2020). The appeal of alternatives is a significant precursor to client loyalty toward guest homes. This aspect is influenced by the extent of a guest house's uniqueness and the potential for its services to be replaced by those of competitors (S. Wang, 2020).

Considering the background, the researcher aims to explore Hotel Management Systems in China by raising two primary objectives such as to analyze the relationship between staff well-being (mental and physical health) and hotel service quality and to investigate the impact of digital technology on operational efficiency and visitor satisfaction in hotel management.

LITERATURE REVIEW

In hotel management, ensuring high standards is a prominent aspect to consider, resulting in great customer experiences and keeping the business successful and ahead of the competition. The ideas that Juran, J. M., Godfrey, A. B. (1999) put forward, especially his Juran Trilogy, can

help us understand how to handle quality in a structured way that can be used in hotel operations. Juran's Trilogy, which includes quality planning, quality control, and quality growth, is a complete way for an organization to deal with and improve quality in every part. This literature study examines Juran's quality management principles in the context of hotel management systems. The principles are used to improve operational efficiency, customer satisfaction, and the long-term viability of the business.

Quality Planning

Quality Planning is a critical phase in Juran's Trilogy, which is dedicated to establishing the groundwork for attaining desirable quality outcomes in any organization, including the hospitality industry. Effective quality planning guarantees that the products or services satisfy customer expectations and meet established quality standards (Matzler & Hinterhuber, 1998). This procedure encompasses numerous critical elements and is multifaceted. Initially, it is imperative to identify customer needs, as organizations can customize their offerings by discovering what customers genuinely value. Subsequently, the development of products and processes necessitates the development of systems that effectively fulfill consumer needs while simultaneously providing high-quality services. Thirdly, it is essential to identify and manage risks to prevent prospective issues or challenges from affecting quality. It is imperative to establish distinct benchmarks against which performance can be measured to ensure consistency and continuous alignment with customer expectations.

a. Identifying Customer Needs

Effective quality planning is predicated on the identification and comprehension of consumer requirements. This process encompasses a comprehensive examination of customer expectations, desires, and latent needs that may not be explicitly articulated. In this vein, it is essential to implement strategies that involve a wide range of customers, including those who may remain silent on specific topics but whose feedback could substantially impact the product's success (Kuncoro & Kusumawati, 2021). Customer journey mapping is a tool that can be employed to identify unmet requirements or pain points and to visualize how customers interact with the product. In this matter, organizations must anticipate the latent requirements of their customers, which may not be readily apparent or articulated. One approach to identifying these requirements is to employ predictive analytics or market trends to ascertain the direction of consumer preferences (Zakhidov, 2024). Companies can enhance these insights by creating customer personas, which are detailed profiles that represent typical consumers (Sinansari et al., 2023).

b. Designing Products and Processes

The subsequent stage of quality planning is the development of products and processes that will satisfy or surpass the customer's requirements once they have been accurately identified. Effective product design necessitates collaboration among engineering, marketing, and other departments to guarantee that the final product aligns with customer expectations in all

pertinent areas, including functionality, aesthetics, and usability (Kamrani & Nasr, 2008). The product design process commences with understanding customer requirements and putting them into specific, quantifiable features that the product must possess. This process considers customer expectations and practical factors such as cost, material selection, and technological constraints. This phase is crucial because design decisions have a long-term effect on the quality of the final product, and a subpar design can result in quality issues that are difficult or expensive to resolve in the future. Organizations must design their production processes to guarantee the efficient production of high-quality products in conjunction with product design (Valamede et al., 2020).

c. *Identifying and Controlling Risks*

Risk identification and control are essential elements of quality planning that assist organizations in preventing costly issues and ensuring the quality of their products throughout the lifecycle (Bevilacqua et al., 2020). The organization systematically identifies potential hazards that could impact the product or service quality during this stage (Nancu et al., 2020). These risks may originate from various sources, such as manufacturing defects, design faults, supply chain interruptions, or external factors, such as regulation changes or market conditions. Companies frequently use risk assessments to assess the likelihood and impact of various risks and identify risks effectively. Organizations must implement mitigation strategies to reduce the potential impact of identified risks (Argaw et al., 2020). For instance, organizations may implement automated systems to mitigate human error, implement more frequent inspections, or invest in sophisticated quality control tools to reduce the risk of defects in a manufacturing process.

d. *Defining Quality Standards*

Quality standards are critical to quality planning, as they provide explicit guidelines for the product or service to be deemed acceptable (Ali et al., 2021). It is imperative to establish quality standards to establish measurable criteria consistent with regulatory requirements and consumer expectations (Pacana & Siwiec, 2022). These standards are typically established by translating the customer needs identified in earlier phases into specific, quantifiable attributes. For instance, if consumers prioritize durability, the product design may incorporate specifications regarding the materials employed or the product's ability to withstand real-world conditions. Setting quality standards necessitates the establishment of specifications that specify the specific attributes the product must possess (Pacana & Siwiec, 2022). These attributes may encompass dimensions, weight, color, finish, and performance, all of which must be explicitly defined in quantifiable terms to facilitate production and quality control. Hence, it is imperative to establish tolerances denoting the permissible deviation from the ideal specification.

Quality Control

The second phase of the Juran Trilogy is Quality Control, which guarantees that the processes established in the Quality Planning phase are executed

efficiently and that the final output satisfies the established quality standards. This phase is dedicated to the ongoing surveillance of production or service delivery processes, identifying deviations or defects, and implementing corrective measures to prevent or mitigate potential issues that could affect the final quality. The primary goals of Quality Control are to guarantee performance measurement, defect detection, and variation analysis.

a. Performance Measurement

Performance measurement enables organizations to consistently evaluate the efficacy of their processes in meeting established standards and generating consistent outputs (Kamble et al., 2020). It entails systematically collecting data from various production or service delivery stages to compare the results with predetermined benchmarks. Furthermore, performance measurement guarantees that the processes are maintained at a high-efficiency level, reducing waste and resource consumption. In this matter, organizations can ensure their products or services satisfy industry standards and customer expectations by consistently measuring and analyzing process performance (Wulandari, 2022). In addition, performance measurement is a critical element of quality control, as it enables organizations to consistently evaluate the efficacy of their processes in meeting established standards and generating consistent outputs.

b. Defect Detection

Identifying deviations from established quality standards that may jeopardize the final product or service is a fundamental component of quality control, known as defect detection. Early defect detection is crucial for promptly resolving any issues, preventing the spread of defects, or developing more complex and costly fixes later in production (Khanam et al., 2024). To identify potential quality issues at various production or service delivery phases, organizations must establish a clear protocol for defect detection that includes regular inspections, testing, and monitoring (Chukwunweike et al., 2024). The objective is to identify defects early to mitigate their impact, minimize the necessity for revision or scrap, and guarantee that only products that comply with quality specifications are delivered to customers (Soares et al., 2021).

c. Variation Analysis

Variation analysis is a critical aspect of quality control, identifying strategies to reduce undesired fluctuations and comprehending the factors contributing to variations in process performance (Ashraf et al., 2020). Process variations are unavoidable and can result from various sources, such as basic materials, machinery, environmental factors, and human operators. Quality control distinguishes between natural fluctuations and issues originating from unpredictable, abnormal factors. In reality, some degree of variation is inherent in any system. Organizations can enhance their comprehension of the sources of variation, evaluate their influence on the final product or service, and implement proactive measures to mitigate them through comprehensive variation analysis (Sharma et al., 2007). This guarantees that production

processes are as efficient and reliable as possible and that products meet customer specifications consistently.

Quality Improvement

Organizations must consistently assess their performance and identify areas for improvement (Victoria et al., 2021). The fundamental principle of constant improvement is that every process, system, or product can be enhanced or optimized to produce superior results (Firman et al., 2020). Hence, organizations must cultivate a culture of continuous improvement in which all employees, from top management to frontline workers, understand that quality is a perpetual priority. This mentality fosters an environment in which continuous endeavours are made to enhance the quality of products and services by instituting incremental changes, irrespective of their magnitude. Three primary measures can be implemented to sustain quality enhancement: identifying root causes, developing and implementing solutions, and involving all employees.

a. Identifying Root Causes

Beyond the immediate symptoms of a problem, the capacity to investigate the underlying causes is an essential component of quality improvement (Abbas, 2020). Organizations frequently respond to apparent issues, such as defects or inefficiencies, by implementing expedited solutions that fail to address the underlying problems. Besides, organizations must implement structured problem-solving methods to resolve quality issues efficiently and identify the underlying causes of problems rather than merely treating their symptoms (Byrne & Mcdermott, 2021). The essence of this method is acknowledging that the factors that influence quality are frequently multifaceted and necessitate intensive examination to be identified. Hence, it is imperative to identify the underlying cause to implement sustainable, targeted solutions that address the root cause of the issue rather than merely masking its effects.

b. Developing and Implementing Solutions

The subsequent phase in the quality improvement process is to develop and implement effective solutions after the root causes of quality issues have been identified. Various solutions may be implemented, contingent upon the nature of the problem. Process advancements may entail the redesign of workflows and the implementation of new quality control measures (Ani & Augustine, 2024). In some instances, employee skill development may be necessary, mainly when a lack of training or insufficient knowledge in a specific field causes the problem (Undiyaundeye & Otu, 2022). Therefore, providing employees with the requisite tools, techniques, and knowledge is critical in enhancing performance and upholding high standards. Besides, technology updates can be instrumental in quality development by introducing new tools or systems that improve communication, reduce errors, or enhance efficiency (George et al., 2023). To guarantee that the modifications are executed efficiently, a precise action plan must be established to accompany solutions.

c. *Involving All Employees*

The active participation of all organization members is necessary for quality development and is not the exclusive responsibility of a specific department or management team (Abdul et al., 2020). In this case, Chukwu et al. (2024) argue that fostering a collaborative culture in which all employees, from the executive level to frontline workers, are involved in the quality development process ensures everyone shares responsibility for the organization's success. It is essential to involve all employees in the process, as those most closely associated with the processes often possess valuable insights into the challenges and opportunities for improvement. Organizations can access many ideas and perspectives that may otherwise be disregarded by enabling employees at all levels to contribute to quality improvement (Roberson & Perry, 2022). This engagement not only assists in identifying areas for development but also enhances employee buy-in and ownership of the quality goals, resulting in increased motivation and accountability in pursuing these objectives. In addition, organizations may furnish their personnel with the necessary resources and instruction to facilitate their participation in quality improvement initiatives (Knol, 2022).

METHODOLOGY

The study is classified as a systematic review of the paper focusing on the hotel management systems implemented in China, providing empirical insights from recent research. Critical online databases, including Scopus, were utilized to conduct a computer-assisted literature search of online articles. Three primary factors were the basis for selecting Scopus as a database. First and foremost, these databases are the primary sources for identifying publications with the most significant impact due to their international reputation and prestige. Second, its global reputation and the indexing protocol's requirements ensure the sample's representativeness. Thirdly, although there is some overlap in coverage and the persistent bias identified in specific disciplines (Paul-Hus et al., 2016), there is the potential for complementarity. The researcher sought to offer a comprehensive overview of the research conducted in this field. Reference lists of articles discovered electronically were employed to conduct the inquiry. However, the specific limitations of a defined set of search criteria and procedures also ensure it. Third, complementarity is a viable option despite the persistent bias identified in particular disciplines and the fact that there is some overlap in coverage (Paul-Hus et al., 2016). We sought to offer a comprehensive overview of the research conducted in this field. Reference lists of articles discovered electronically were employed to conduct the inquiry published from 2020 to 2024.

Criteria for Inclusion and Exclusion

The articles chosen for this research were selected based on the following criteria: (1) Published in article journals; (2) Published from 2020 to 2024; (3) Specified search descriptors in the title, keywords, and/or abstract; (4) English The articles that were chosen were required to be written in English, to be relevant to the disciplines of hotel management, management, and industry,

and to address the hotel management systems that have been implemented in China, as indicated by the title, abstract, or keywords. Meanwhile, there were three categories of documents excluded from the exclusion criteria: (a) publications not containing the full text; (b) doctoral theses, books, term papers, conference papers, and technical reports; (c) research conducted outside of the hotel tourism and industry sectors.

Study Selection and Data Analysis Procedures

The literature search systematically retrieved and reviewed a total of 101 documents from Scopus, taking into account the inclusion criteria for research published in the field of Social Sciences in the period 2020-2024. The filter only included English-language journal articles. In light of the distinct and diverse evidence bases of the research designs referenced in this paper, it was determined that a narrative analysis or descriptive synthesis would be appropriate for the analysis and interpretation of the developed study on the management of the hotel system in China.

RESEARCH RESULT AND DISCUSSION

Hotel management in China has transformed due to the incorporation of data-driven decision-making. Digitalization, notably through AI, big data, and mobile platforms, facilitates operational efficiency, faster service, and personalized guest experiences, thereby driving customer satisfaction and revenue. Additionally, the issue of overbooking is being addressed by implementing sophisticated predictive algorithms, which enable hotels to more effectively manage room allocation, minimize visitor displacement, and optimize revenue. The interconnected nature of modern hotel operations is underscored by these developments, which emphasize the importance of employee well-being, sustainability, technology, and operational efficiency to maintain competitiveness and achieve long-term success. In this study, the researcher found five primary management systems implemented by Hotels in China that further improve their quality.

Establishing an Effective Hotel Management System

Establishing effective hotel management is crucial for enhancing operations and delivering superior guest experiences. An essential element of effective hotel management is the implementation of data-driven decision-making to improve productivity and minimize expenses (Troisi et al., 2023). Employing cloud-based Property Management Systems (PMS) enables hotels in China to optimize procedures such as reservations, check-ins, and room assignments, thereby enhancing operational efficiency (Moyeenudin & Williams, 2021). Moreover, hotels in China also employ predictive analytics to forecast consumer demand, refine pricing strategies, optimize resource allocation, and improve financial performance (Cinturs & Pereira, 2024).

Alongside technological adoption, efficient personnel management is vital to hotel operations (Agarwal, 2020). Employing data analytics to refine staffing levels according to demand projections guarantees that labour expenses correspond with guest anticipations and hotel requirements. This aligns with

Total Quality Management (TQM) concepts, prioritizing continual improvement and customer satisfaction (Wolniak & Grebski, 2023). Through the continuous analysis of consumer input, hotel management can discern areas requiring service enhancement and execute measures to rectify them (P. Q. Wang, 2025). Minimizing labour expenses while preserving service quality is crucial for enhancing operational efficiency. As stated by Kwan and Tong (2023), hotels that succeed in these domains can provide outstanding guest experiences while maintaining profitability, ensuring sustained success in a competitive sector

Promoting Employee Well-being in Hotels

The well-being of employees is crucial to the success of the hotel sector, directly influencing service quality and organizational performance (Afshari et al., 2023). A key focus is the execution of Corporate Social Responsibility (CSR) initiatives designed to improve employees' emotional and physical well-being. Studies demonstrate that hotels that invest in wellness initiatives, including stress-reduction classes and health perks, experience enhanced employee retention and satisfaction (Kharb, 2023). Besides, a positive work culture correlates with reduced turnover rates, essential in an industry frequently plagued by high employee attrition. Vasantham and Aithal (2022) argue that when staff perceive support, their motivation to deliver outstanding service increases, enhancing customer satisfaction and loyalty.

Moreover, the direct relationship between staff well-being and service quality is evident. Mulyaningsih et al. (2024) argue that hotels prioritizing a friendly work environment enhance team chemistry and communication, facilitating seamless guest experiences. In addition, employees with access to mental health resources, wellness initiatives, and a favourable work-life balance are more inclined to engage in their tasks, decreasing absenteeism and burnout (Shanmugavelu & Student, 2020).

Maintaining Hotel Energy and Sustainability

Sustainability and energy efficiency have emerged as essential components in the contemporary hotel sector in China, motivated by environmental accountability and financial factors. Hotels that use eco-friendly technologies, including energy-efficient cooling systems and LED lighting, can substantially decrease their energy consumption (Kalefa et al., 2024). Moreover, implementing green certifications and sustainability initiatives has emerged as a pivotal marketing approach for hotels aiming to attract environmentally conscious consumers (Cembruch-Nowakowski, 2020). A growing number of tourists actively pursue sustainable accommodations, rendering environmental policies a competitive edge in a saturated industry.

Moreover, decreasing energy use and implementing sustainable practices result in enduring financial savings via reduced utility expenses and improved operational efficiency (Destiny et al., 2024). These programs correspond with overarching corporate social responsibility (CSR) objectives, which are increasingly significant to customers and investors. The increasing consumer demand for sustainable and environmentally responsible operations reinforces

the argument for sustainability since many customers perceive eco-friendly hotels as more congruent with their beliefs. Hence, hotels emphasizing sustainability advance environmental objectives and improve their marketability and brand reputation (Abdou et al., 2020).

Implementing Hotel Digitization

The swift advancement of digital transformation in the hotel sector has created new prospects for improving operational efficiency and customer pleasure. A significant benefit of digitalization is the capacity to customize the guest experience with technologies like artificial intelligence (AI) and big data analytics (Samara et al., 2020). By gathering and examining visitor preferences, hotels can customize services such as room configurations, dining choices, and activity proposals to meet individual requirements. Providing individualized services improves the guest experience and fosters greater customer loyalty.

In addition to customization, digitalization enhances operational efficiency (Alrawadieh & Cetin, 2020). Implementing cloud-based technologies facilitates real-time oversight of reservations, room availability, and guest inquiries, resulting in expedited service delivery and enhanced resource management. Furthermore, digital platforms enhance communication among hotel personnel, ensuring timely replies to guest requirements and improved coordination in daily operations. The growing dependence on mobile applications and self-service kiosks improves the guest experience by facilitating expedited check-ins and offering enhanced flexibility in service choices (C. Liu, 2019). Hence, digitalization allows hotels to maintain competitiveness in a market increasingly influenced by technology and evolving customer expectations.

Optimizing Hotel Overbooking Management System

Overbooking is prevalent in the hotel sector, frequently resulting in visitor discontent when reservations exceed the number of available rooms (Nikola, 2018). Advancements in data analytics and prediction algorithms have allowed hotels to address this issue more efficiently. By analyzing past booking data, hotels in China can forecast the probability of no-shows or cancellations and modify their room allocations accordingly. Besides, research indicates that dynamic pricing systems, which utilize predictive data to alter room rates according to demand trends, enhance financial performance (J. Gao, 2024).

Moreover, hotels in China adeptly handle overbooking and provide affected visitors with options, such as better accommodations, discounts, or reimbursement, to preserve guest pleasure (Phumchusri & Maneesophon, 2014). Using sophisticated data analysis and predictive instruments, hotels can mitigate overbooking occurrences while improving operational efficiency and customer loyalty (António et al., 2019). This strategy optimizes hotel profitability and visitor experiences, fostering long-term success in the competitive hospitality industry.

CONCLUSION AND RECOMMENDATION

Conclusion

Implementing effective hotel management, digital innovation, sustainability efforts, employee welfare, and strategic operational management propel the evolution of hotel management systems in China. Implementing an effective hotel management system is essential since data-driven decision-making and cloud-based Property Management Systems (PMS) enhance reservations, check-ins, and financial planning. Enhancing hotel employee well-being is essential, as CSR programs and workplace enhancements directly boost worker engagement, retention, and overall service quality. Simultaneously, upholding energy efficiency and sustainability in hotels demonstrates the industry's dedication to environmentally conscious practices, with energy-efficient technologies and green certifications providing both ecological and financial advantages. The implementation of hotel digitization is crucial for improving operational efficiency and tailoring guest experiences via AI-driven services and mobile technology. Furthermore, the enhancement of hotel overbooking management systems has been markedly achieved using predictive analytics and dynamic pricing techniques, facilitating revenue maximization while alleviating customer unhappiness. These integrated methodologies highlight the continuous modernization of the Chinese hotel sector, enhancing its worldwide competitiveness through a balance of technical innovation, sustainability, and customer-focused tactics. Going forward, ongoing investment in innovation and human resources will be essential for maintaining the sector's development and resilience.

Recommendation

Hotels ought to implement data-driven decision-making, AI-driven automation, and cloud-based Property Management Systems (PMS) to enhance efficiency, tailor guest experiences, and optimize financial outcomes. Employee well-being must be promoted via CSR activities, mental health programs, and skill development to mitigate attrition and improve service quality. Efforts toward sustainability must also be enhanced by incorporating renewable energy, sustainable infrastructure, and water conservation to comply with global environmental requirements. The government ought to assist hotels by offering incentives for technological adoption, implementing sustainability laws, and increasing subsidies for employee training to enhance industry standards.

ADVANCED RESEARCH

For future studies, research should evaluate the effects of sustainability measures across various hotel categories and investigate changing consumer preferences in digital hospitality services. Executing these measures will improve efficiency, sustainability, and competitiveness within China's hotel sector.

REFERENCES

Abbas, J. (2020). Impact of Total Quality Management on Corporate Green Performance through the Mediating Role of Corporate Social Responsibility. *Journal of Cleaner Production*, *242*, 118458. https://doi.org/10.1016/j.jclepro.2019.118458

Abdou, A. H., Hassan, T. H., Moustafa, M., & Dief, E. (2020). A Description of Green Hotel Practices and Their Role in Achieving Sustainable Development. *Sustainability*, 1–20.

Abdul, N., Saffar, G. A.-, & Mishael, A. (2020). The Effect of Total Quality Management Practices on Employee Performance : The Moderating Role of Knowledge Sharing. *Management Science Letters*, *10*, 77–90. https://doi.org/10.5267/j.msl.2019.8.014

Afshari, L., Hayat, A., & Afshari, L. (2023). CSR and Employee Well-Being in Hospitality Industry : A Mediation Model of Job Satisfaction and Affective Commitment. *Journal of Hospitality and Tourism Management*, *51*(June 2022), 387–396. https://doi.org/10.1016/j.jhtm.2022.04.008

Agarwal, P. (2020). Shattered But Smiling: Human Resource Management and the Wellbeing of Hotel Employees During COVID-19. *International Journal of Hospitality Management*, *January*.

Ali, B. J., Gardi, B., Othman, B. J., Ahmed, S. A., Ismael, B., Hamza, P. A., Aziz, H. M., & Sabir, B. Y. (2021). Hotel Service Quality : The Impact of Service Quality on Customer Satisfaction Hotel Service Quality : The Impact of Service Quality on Customer Satisfaction in Hospitality. *International Journal of Engineering, Business and Management (IJEBM*, *5*(3). https://doi.org/10.22161/ijebm.5.3.2

Alrawadieh, Z., & Cetin, G. (2020). Digital Transformation and Revenue Management : Evidence from the Hotel Industry. *Tourism Economics*. https://doi.org/10.1177/1354816620901928

Ani, O. I., & Augustine, C. E. (2024). Advanced Manufacturing with Machine Learning : Enhancing Predictive Maintenance , Quality Control , and Process Optimization. *Al-Rafidain Journal of Engineering Sciences*, *2*(2), 280–300.

António, N., de Almeida, A., & Nunes, L. (2019). Predictive Models of Hotel Booking Cancellation: A Semi-Automated Analysis of the Literature. *Tourism and Management Studies*, *15*(1), 7–21. https://doi.org/10.18089/tms.2019.15011

Argaw, S. T., Troncoso-pastoriza, J. R., Lacey, D., Florin, M., Calcavecchia, F., Anderson, D., Burleson, W., Vogel, J., Leary, C. O., Eshaya-chauvin, B., & Flahault, A. (2020). Cybersecurity of Hospitals : discussing the challenges and working towards mitigating the risks. *Argaw et Al. BMC Medical Informatics and Decision Making*, *7*, 1–10.

Ashraf, E., Sarwar, A., Junaid, M., Baig, M. B., Shurjeel, H. K., & Barrick, R. K. (2020). An Assessment of In-Service Training Needs for Agricultural Extension Field Staff in the Scenario of Climate Change Using Borich Needs Assessment Model. *Sarhad Journal of Agriculture*, *36*(2), 427–446. https://doi.org/10.17582/JOURNAL.SJA/2020/36.2.427.446

Bevilacqua, M., Bottani, E., Ciarapica, F. E., Costantino, F., Donato, L. Di, Ferraro, A., Mazzuto, G., Monteri, A., Nardini, G., Ortenzi, M., Paroncini, M., Pirozzi, M., Prist, M., Quatrini, E., Tronci, M., & Vignali, G. (2020). Digital Twin Reference Model Development to Prevent Operators ' Risk in Process Plants. *Sustainability*, *12*, 1–17. https://doi.org/doi:10.3390/su12031088

Byrne, B., & Mcdermott, O. (2021). Applying Lean Six Sigma Methodology to a Pharmaceutical Manufacturing Facility : A Case Study. *Processes*.

Cembruch-nowakowski, M. (2020). Labels and Certificates for Green Hotels. *Middle Pomeranian Scientific Society of the Environment Protection*, *22*.

Chukwu, E., Adu-baah, A., Niaz, M., Nwagwu, U., & Uchenna, M. (2024). Navigating Ethical Supply Chains : The Intersection of Diplomatic Management and Theological Ethics. *International Journal of Multidisciplinary Sciences and Arts*, *June 2023*.

Chukwunweike, J. N., Anang, A. N., Adeniran, A. A., & Dike, J. (2024). Enhancing Manufacturing Efficiency and Quality through Automation and Deep Learning : Addressing Redundancy, Defects, Vibration Analysis , and Material Strength Optimization. *Wolrd Journal of Advanced Research and Reviews*, *Ml*.

Cinturs, W., & Pereira, L. N. (2024). Hotel Demand Forecasting Models and Methods Using Artificial Intelligence : A Systematic Literature Review. *Tourism & Management Studies*, *20*(3), 39–51.

Destiny, K., Onyeka, O., Michael, I., Onyemaechi, C., & Chinenye, S. (2024). Exploring the Impacts of Sustainable Design Practices on Construction Cost. *International Journal of Progressive Research in Engineering Management and Science*, *June*. https://doi.org/10.58257/IJPREMS35033

Firman, A., Mustapa, Z., & Ilyas, G. B. (2020). *Relationship of TQM on Managerial Perfomance : Evidence From Property Sector in Indonesia*. *1*, 47–57. https://doi.org/http://dx.doi.org/10.15722/jds.18.1.202001.47

Gao, F. (2020). Optimization Layout of Marketing Management Information System of Hotel and Restaurant Based on B / S Mode. *Journal of Physics: Conference Series*, *1578*(1), 1–6. https://doi.org/10.1088/1742-6596/1578/1/012158

Gao, J. (2024). Optimizing Hotel Revenue Management Through Dynamic Pricing Algorithms and Data Analysis. *Journal of Computational Methods in Science and Engineering*, *0*(506), 1–10. https://doi.org/10.1177/14727978241298467

George, A. S., George, A. S. H., & Martin, A. S. G. (2023). PA Review of ChatGPT AI ' s Impact on Several Business Sectors. *Partners Universal International Innovation Journal*, *February*, 9–23. https://doi.org/10.5281/zenodo.7644359

Hughes, J. H. (2015). Clouds over China. *Journal of Social, Political, and Economic Studies*, *40*(3), 161–230.

Juran, J. M., Godfrey, A. B. (1999). Juran's Quality Handbook. United States: McGraw-Hill Education.

Kalefa, H. A., Gado, S. S., Building, E., Design, E., Management, H., Systems, S.,

& Facilities, H. (2024). Enhancing Hotel Sustainability Through Ecological and Technological Integration. *Journal of Engineering Sciences*, *52*(1). https://doi.org/10.21608/JESAUN.2024.251412.1290

Kamble, S. S., Gunasekaran, A., Ghadge, A., & Raut, R. (2020). A performance Measurement System for Industry 4.0 Rnabled Dmart Manufacturing System in SMMEs- A Review and Empirical Investigation. *International Journal of Production Economics*, *229*.

Kamrani, A. K., & Nasr, E. S. . A. (2008). Product Design and Development Framework in Collaborative Engineering Environment Product Design and Development Framework in Collaborative Engineering Environment. *Int. J. Computer Applications in Technology*, *32*(2). https://doi.org/10.1504/IJCAT.2008.020333

Khanam, R., Hussain, M., Hill, R., & Allen, P. (2024). A Comprehensive Review of Convolutional Neural Networks for Defect Detection in Industrial Applications. *IEEE Access*, *12*(July), 94250–94295. https://doi.org/10.1109/ACCESS.2024.3425166

Kharb, P. (2023). Strategies for Mitigating Job Stress and Improving Job Satisfaction in the Hotel Industry : A Multidimensional Approach with Reference to Delhi-NCR. *International Journal of Hospitality, Management and Sciences*, *1*(2).

Knol, W. H. (2022). Establishing the Interplay between Lean Operating and Continuous Improvement Routines : A Process View. *International Journal of Operations & Production Managemen*, *42*(13), 243–273. https://doi.org/10.1108/IJOPM-06-2020-0334

Kong, H., & Cheung, C. (2009). Hotel Development in China: A Review of the English Language Literature. *International Journal of Contemporary Hospitality Management*, *21*(3), 341–355. https://doi.org/10.1108/09596110910948332

Kuncoro, H. A. D. P., & Kusumawati, N. (2021). A Study of Customer Preference, Customer Perceived Value, Sales Promotion, and Social Media Marketing Towards Purchase Decision of Sleeping Product in Generation Z. *Advanced International Journal of Business, Entrepreneurship and SMEs*, *3*(9), 265–276. https://doi.org/10.35631/aijbes.39018

Kwan, M., & Tong, L. (2023). Examplyfing Exceptional Hospitality: Creating Unforgetable Home Away from Home Experiences for A Diverse Range of Dicerning Guests. *Gulf Journal of Advance Business Research*, 44–59.

Lagun, K. (2023). The Role of Eco-Friendly Hotels Towards Sustainability-an Initiative From the Hospitality Sector. *International Journal of Emerging Knowledge Studies*.

Liu, C. (2019). Customer Expericence with the Application of Self-servcie Technology in Hotels in China: A high-tech or high-Touch Debate. In *The Hong Kong Polytechnic University*.

Liu, H., Binbin, Q., & Qiao, P. (2024). Does Environmental Management System Certification Keep Enterprises Out of Trouble? Evidence from Stock Price Crash Risk. *PLoS ONE*, *19*(12 December), 1–22. https://doi.org/10.1371/journal.pone.0311740

Liu, M. T., Liu, Y., Mo, Z., Zhao, Z., & Zhu, Z. (2020). How CSR Influences Customer Behavioural Loyalty in the Chinese Hotel Industry. *Asia Pacific Journal of Marketing and Logistics*, *32*(1), 1–22. https://doi.org/10.1108/APJML-04-2018-0160

Martínez-Falcó, J., Sánchez-García, E., Marco-Lajara, B., Professor, F., & Millán-Tudela, L. A. (2024). Enhancing Employee Wellbeing and Happiness Management in the Wine Industry: Unveiling the Role of Green Human Resource Management. *BMC Psychology*, *12*(1), 1–17. https://doi.org/10.1186/s40359-024-01703-y

Matzler, K., & Hinterhuber, H. H. (1998). How to Make Product Development Projects More Successful by Integrating Kano's Model of Customer Satisfaction into Quality Function Deployment. *Technovation*, *18*(1), 25–38. https://doi.org/10.1016/S0166-4972(97)00072-2

Moyeenudin, H. M., & Williams, J. (2021). Cloud Based Property Management System in Integration with IoT Cloud Based Property Management System in Integration with IoT. *Turkish Journal of Computer and Mathematics Education*, *12*(9).

Mulyaningsih, S. P., Riyanto, A., & Silitonga, P. (2024). Work Environment , Work Discipline , and Interpersonal Communication to Improve Hotel Employee Performance : The Mediating Role of Sustainable Collaboration Sebagai Mediator. *Majalah Ilmiah Bijak*, *21*(1), 103–115.

Nancu, D., Sima, V., & Gheorghe, I. G. (2020). Influences of the Industry 4 . 0 Revolution on the Human Capital Development and Consumer Behavior : A Systematic Review. *Sustainability*.

Nikola, A. (2018). *Customers' Reaction to Overbooking Failures in Hospitality Industry*. Aalto University School of Business.

Nikolaskaya, E. Y., Lepeshkin, V. A., Kulgachev, I. P., Matveev, A. A., & Lebedeva, O. Y. (2020). Perfection of Quality Management of Hotel Services. *Journal of Environmental Management and Tourism*, *VI*(4).

Pacana, A., & Siwiec, D. (2022). Model to Predict Quality of Photovoltaic Panels Considering. *Energies*.

Paul-Hus, A., Mongeon, P., & Shu, F. (2016). Portraying the Landscape of Canadian Library and Information Science Research. *Canadian Journal of Information and Library Science*, *40*(4), 332–346. https://muse.jhu.edu/article/649274

Phumchusri, N., & Maneesophon, P. (2014). Optimal Overbooking Decision for Hotel Rooms Revenue Management. *Journal of Hospitality and Tourism Technology*, *5*(3), 261–277. https://doi.org/10.1108/JHTT-03-2014-0006

Roberson, Q., & Perry, J. L. (2022). Inclusive Leadership in Thought and Action : A Thematic Analysis. *Group & Organization Management*, *47*(4). https://doi.org/10.1177/10596011211013161

Roman, E. of H. M. T. of S. in H. I. F. (2020). Efficiency of Hotel Management. Training of Specialists in Hotel Industry Field Roman. *Journal of Environmental Management and Tourism*, *XI*(4).