



Artificial intelligence through the lens of hospitality employees: A systematic review

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ABSTRACT

The hospitality industry has undergone a comprehensive transformation with the infusion of artificial intelligence into its processes, but the employees' adoption of artificial intelligence has been scantily studied. This systematic review comprises 80 empirical articles listed in the Scopus database that study hospitality employees as key participants, which were selected using the PRISMA approach. We used bibliometric analysis to identify the most prominent countries, journals, authors, and keywords and then applied the TCCM framework to gain a deeper understanding. The synthesis draws upon various theories, characteristics, contexts, and methodologies. The prominent antecedents, outcomes, mediators, and moderators are identified while highlighting their linkage. This study will help managers, policymakers, and owners comprehensively understand AI adoption and its impact on hospitality employees. The future research agenda provides theoretical, contextual, empirical, and methodological directions paving the way for hospitality to move toward the achievement of Sustainable Development Goals (SDGs).

1. Introduction

The advent of the digital era has led to rapid technological development and advancement. Technology has redefined the way people perceive things and has made everything easily accessible (Buhalis et al., 2019). Artificial intelligence is one such aspect that has transformed the way businesses operate lately. The hospitality industry is no stranger to this mammoth invention that has taken our lives over (Chi et al., 2020; Lv et al., 2022; Yin et al., 2023).

Artificial intelligence is a collection of multiple technologies that bestows machines with the ability to analyze, sense, comprehend, learn, act, and perform human-like tasks to successfully enable problem-solving (Bowen and Morosan, 2018). It is often called a 'Family of Technologies' ranging from 'Low AI' like chatbots on the website to

'Fully Functional Human-like Robots' that can even detect emotions from the data sets available (Chi et al., 2020). Considered to be a new technology, the theoretical framework of AI traces its roots back over 70 years (Bainbridge et al., 1994). But it was characterized by a limited processing speed and was then considered unrealistic, impractical, and ambiguous.

But recent times have seen a shift in the trends, and now AI isn't just enhancing a product; it's also becoming a 'Product' or rather, a 'Smart Product' (Law et al., 2024). With its prolific use and the current progression of technology, AI can be conceptualized as artificial social intelligence since it allows machines to apply intelligence techniques to social phenomena (Cain et al., 2019). This social phenomenon falls into the hospitality sector, which is often characterized as a people-dependent and labor-intensive industry (Acharya and Datta,

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2023a), making it ideal for tech innovation. The conventional hospitality mode has always been prone to human errors and would often push people to labor for hours, even for tasks that could now easily be automated. With so many doors open for errors, the hospitality sector is indeed one of the prime foci for AI intervention that could enhance the guest experience and put people and their capabilities to better use (Gursoy and Cai, 2024).

The hospitality industry is an umbrella term that encompasses various services that focus on providing not just customer satisfaction but also creating a memorable experience while fulfilling their needs and expectations (Law et al., 2024; Salazar, 2018). (Lashley and Morrison, 2000), in their work, explored the concept of hospitality in the three domains of social, private, and commercial environments. The primary services included are accommodation, lodging, food and beverage, and recreational activities, leading to the focus of this study primarily on hotels and restaurants. Owing to the people-oriented nature of the hospitality industry, the interaction between workers, managers, and customers is very high, and the infusion of AI in such a dynamic work environment calls for special attention on how the key actors, i.e., the employees, perceive the AI tools (Datta, 2022; Huang et al., 2022; Limna, 2023). A large share of hospitality employees' tasks and services are gradually being taken over by AI. For starters, in hotels, visitors may use voice-activated AI assistants for room service and AI-driven robots for cleaning and maintenance. AI platforms simplify reservations and check-outs, while AI-driven service robots assist in kitchen and table service. Moreover, domains like front office, house-keeping, marketing, HR, or strategic decision-making are not untouched by AI tools. Owing to this fact, the determination of the impact on hospitality employees through an investigation of the perspective of hospitality workers has been prioritized in this research.

Accordingly, employee AI perception has recently received significant attention in hospitality research. Studies have examined various antecedents (Kuo et al., 2017; Pillai and Sivathanu, 2020) and positive and negative outcomes with several mediators. Studies highlight both positive and negative attitudes of hospitality employees (Acharya and Datta, 2023b). While some employees perceive AI as a boon that eliminates redundant and repetitive tasks, creating space for more cognitive tasks, others have negative feelings towards AI, such as job burnout, turnover intention, and job insecurity. However, current industry trends show that the road ahead is only uphill from here, as AI and big data analysis are taking over the industry (Choudhary and Datta, 2023, 2024).

There are quite a few studies that focus on AI adoption in the hospitality industry, with the majority of them falling into the categories of theoretical and prospective studies; however, there are very few studies that adopt empirical approaches, although they rarely touch on employee perspectives as the majority of them focus on the customers and their experiences. Most of the previous review studies are mainly descriptive and conceptual and focused on a general overview of AI in the hospitality industry (Bowen and Morosan, 2018; Cain et al., 2019; Chi et al., 2020; Dobarjeh et al., 2022; Gursoy and Cai, 2024; Ivanov and Webster, 2019; Kong et al., 2023; Lv et al., 2022). There are very scant reviews that focus solely on either the demand or supply side of the hospitality industry, even though a few reviews that are customer-centric or employee-centric are coming up, though none of them focus solely on the empirical studies (De Keyser and Kunz, 2022; Goel et al., 2022; Gursoy et al., 2019; Rasheed et al., 2024; J. Xu et al., 2023).

These gaps reflect the need for a clearer understanding and a comprehensive review that will provide relevant information on the matter and are expected to develop exponentially in the future. As a result, a thorough review of empirical research on the subject matter will pave the way for future research while also highlighting the current state, major theoretical backgrounds, and contextual and methodological characteristics of the existing literature.

2. Methodology

The systematic review is used to provide a comprehensive view of artificial intelligence studies related to employees in the hospitality industry (Pahlevan Sharif et al., 2019). Systematic review is predominantly used in medical and scientific research, but it has lately gained the scholar's attention in the social sciences as it provides "objective, replicable, systematic, and comprehensive coverage of a defined area" (Pahlevan-Sharif et al., 2019). Recently, many studies in the hospitality and tourism sectors have used a systematic review to trace the existing knowledge, focusing on topics as dynamic as blockchain (Frizzo-Barker et al., 2020), sustainability (Choudhary and Datta, 2024), entrepreneurship on the island (Booth et al., 2020), netnography (Tavakoli and Wijesinghe, 2019), and consumer adoption (Goel et al., 2022).

The 'Preferred Reporting Items for Systematic Review and Meta-Analyses' (PRISMA) is a methodology that provides extensive guidelines to help authors synthesize transparent and trustworthy data. The PRISMA 2020 statement includes an evidence-based checklist of 27 items that sets out a step that, when followed, would yield a reproducible study by other authors. For conducting a systematic review, PRISMA maps out the process of selecting and analyzing the records based on the inclusion and exclusion criteria and their reasons, which helps in the scientific selection of the past research (Pahlevan-Sharif et al., 2019). Although the PRISMA Checklist has various items that are only concerned with medical and pure science research, the methodology has been improvised over time and is adapted to various service industries, including hospitality and tourism. It also addresses the various sections of the study introduction, methods, discussion, etc., and provides a flow diagram that has a different template depending on the nature of the study and provides an overview of the selection procedure for publications. Using the PRISMA method for selecting the studies to be included in this review makes it unique in the profusion of studies related to the use and adoption of artificial intelligence in the hospitality industry.

To gain a deeper exploration of existing literature concerning artificial intelligence Among hospitality employees, the studies were searched using Elsevier's Scopus database. Scopus is a widely used and comprehensive database of research publications. Its extensive coverage and emphasis on quality citation analysis capabilities and search functionalities make it a widely used and indispensable resource for researchers in multiple disciplines (Chen et al., 2023; Sharma et al., 2022; Shen and Lai, 2022).

A series of keywords was used in combination to search the database keywords title abstract. To capture hospitality and tourism-related literature, keywords like "hospitality," "hotel," "restaurant," "smart hotel," and "smart room" were used. On the other hand, to capture literature related to artificial intelligence keywords such as 'artificial intelligence', 'AI', and 'robo*' 'Chatbots' were used. Based on the above keywords, the following search string is defined:

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TITLE-ABS-KEY
("ARTIFICIAL INTELLIGENCE" OR "ROBO*" OR "AI" OR
"CHATBOTS"
AND "HOSPITALITY" OR "HOTEL" OR "RESTAURANT" OR "SMART
HOTEL" OR "SMART ROOM")
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Alternative keywords such as "technology," "innovation," and "machine learning" were also considered at the early stage but were rejected as they generated too many results that did not relate to artificial intelligence but rather were related to basic automation or led to technical papers.

The search was carried out in April 2024, though the review is not limited by any time frame or country but is restricted to the 'English' language and source as "Journal." After applying these criteria, a total of 1022 remained out of 2331 initial studies. These 1022 studies were later screened based on title, abstract, and keywords. A comprehensive list of the identified records was exported to an MS Excel spreadsheet. Two independent reviewers screened the titles and abstracts of the records independently, and papers that were not related to the use of AI in

hospitality were discarded. At this stage, a total of 561 papers were rejected as they were either not related to hospitality or talked about the basic automation and technical aspects of AI rather than the managerial dimension. These papers were mostly related to the use of AI in agriculture, marine, sports, or space tourism. Additionally, the rejected papers included those related to the health care, e-commerce, or transportation industries.

Among these 561 studies, the abstract was again gone through, and during the second screening, the qualitative judgment of the reviewers played a major role as the exclusion criteria were subjective to the research objective of the review. However, to avoid any biases the authors conducted the screening individually, and in case of a clash between the reviewer's selection, the same was discussed and resolved by consensus. If no agreement could be reached, the views of a third reviewer was taken into consideration throughout the screening process. The exclusion criteria that were used to reject the studies are elaborated below:

EC1. The paper used AI, big data, and machine learning tools and techniques to forecast demand or supply in the hospitality industry rather than studying the impact of AI on human resources.

EC2. Papers that focused on multiple service industries like hotels and manufacturing firm together rather than exclusively focusing on the

hospitality industry.

EC3. Papers that focused on customers, hospitality students, or some other participants were excluded. However, studies that studied employees with other stakeholders were included.

EC4. Also, review, perspective, or conceptual papers were excluded from the study. The review focuses primarily on empirical research, to achieve this we looked for explicitly mentioned data collection and analysis approaches.

After the second screening, a total of 111 papers were found suitable for the full-text screening.

Later, the full text of these 111 studies was downloaded and studied in depth to identify the themes and contexts of the paper. After the in-depth analysis of these papers, a further 31 papers were rejected as they did not meet the requirements of the study. The included studies were those that followed an empirical approach and focused on hospitality industry employees and their interaction with AI tools that were considered relevant to the research question.

As a result, this study consists of 80 papers that relate to and discuss how employees react to and are impacted by artificial intelligence entering the hospitality industry. The full process is outlined in Fig. 1, which uses the standard diagram by PRISMA and explains the inclusion

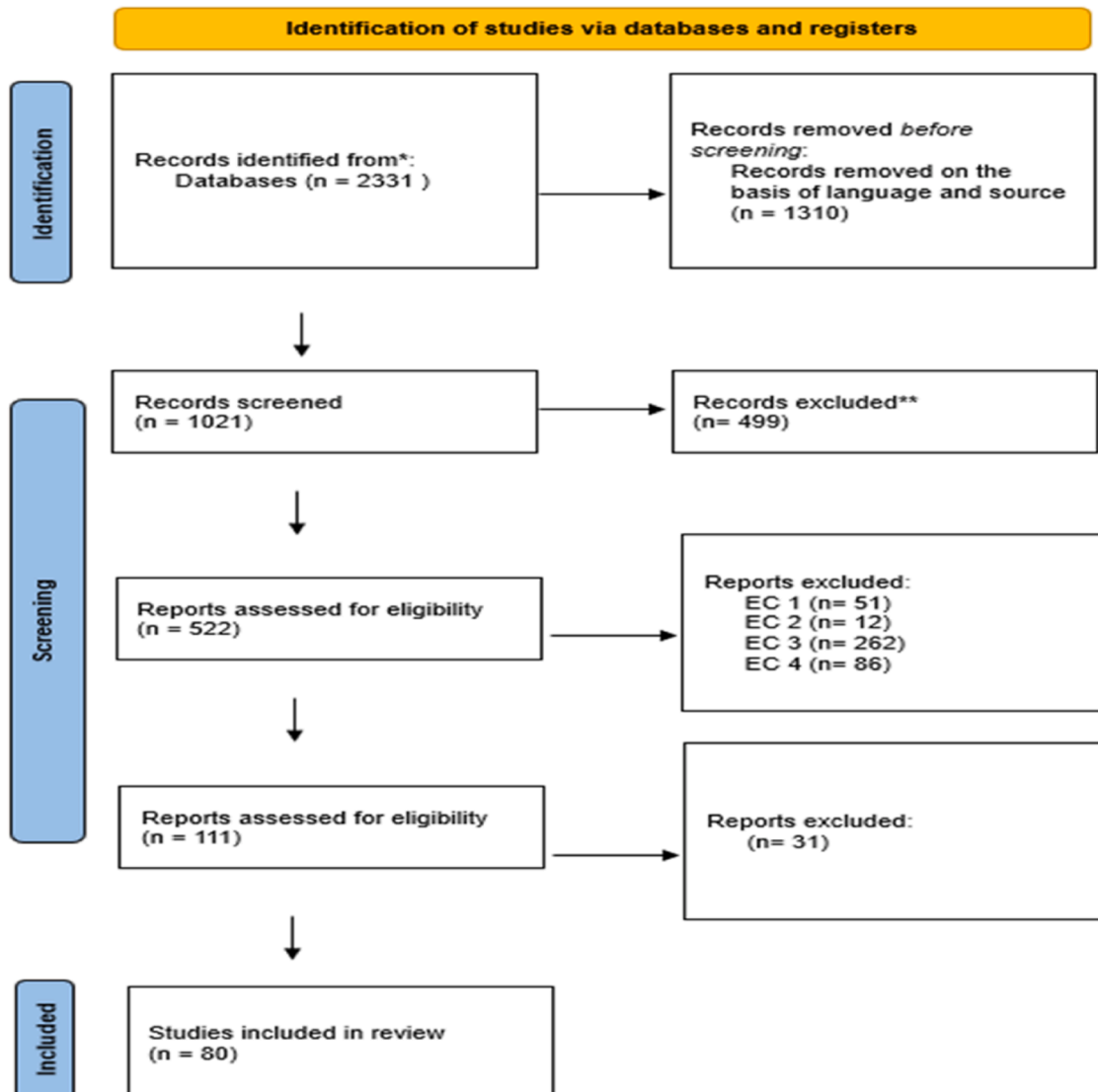


Fig. 1. PRISMA flowchart.

and exclusion of publications in this research.

3. Results

3.1. Bibliometric analysis

The 80 publications were all read and then imported into Vos Viewer for the bibliometric analysis (Choudhary and Datta, 2024). The publications were coded using the following standard categories: year of publication, journal, geographical region keywords used, and author.

3.1.1. By year

Even though the review has no time constraint, the earliest paper included is from the year 2017 (Kuo et al., 2017). Even though artificial intelligence was coined back in 1984, the interest and usage of AI in hospitality is a recent phenomenon, and studies on employees are sparse (Table 1). The research soared dramatically after the COVID-19 pandemic hit the world, that is, after the year 2020, which is evidenced by the more than 80 % rise in the publication every year since 2020. The picture has changed significantly with the number of publications increasing from 11 articles in the early 4 years to 69 articles (almost 86 % of the total publication) published in the last 4 years (Fig. 2), as the hospitality industry opens its door for AI intending to improve efficiency and enhance customer experience.

3.1.2. By Geographic focus

The geographical focus of the research conducted in the domain is majorly concentrated in the two countries, China and the US, which contribute to almost 45 % of all publications owing to technological advancement and widespread acceptance of new technology in these countries, followed by the UK, Turkey, and Thailand. However, the dominance of research in these two countries may lead to the overrepresentation of context-specific issues and perspectives which limit the generalization of these findings, calling for diversified future research. Both developed and developing countries are examining the impact of AI on hospitality employees. The highest concentration of research is in Asia, with almost 77 % of studies based in this region. Table 2 summarizes the country-wise distribution of studies conducted across the globe, followed by Fig. 3 highlighting the country-wise mapping of articles published (minimum 2 per country).

3.1.3. By Journal

Table 3 provides the details of publications of empirical research on AI in hospitality that focuses on the supply side of the industry. Publications are spread in various journals to specify 46 with a variety of focus on different interdisciplinary approaches. However, the journals that have published more than two articles count to only 11 in number, led by the International Journal for Contemporary Hospitality Management with a total of 9 articles and maximum citation, followed by the International Journal of Hospitality Management with 8 publications. The topic is majorly addressed by hospitality and tourism journals except Technology and Society (4), European Journal of Innovation Management (3), Electronic Markets (2), and International Journal of Human-Computer Interaction (2) publications. The average citation is

also highest for the International Journal of Contemporary Hospitality Management, followed by the Journal of Hospitality Marketing and Management and Electronic Markets.

3.1.4. By co-occurrence of keywords

Using the VOS viewer, Fig. 3 shows a network diagram of the co-occurrence of all keywords. The keyword occurrence set to 2 resulted in a threshold of 63 keywords; prominent among them were artificial intelligence, service robots, hotel industry, and robotics. The keywords that are recently trending are automation, work autonomy, and perception, whereas the ones that have been well-researched in the previous years are service robots, hotel employees, and turnover intention.

3.1.5. By author

The hospitality industry is a high-touch industry, and the adoption of AI by hospitality employees was scantily researched in the past. It is the last decade that has gained the attention of research scholars as to how hospitality employees react to AI tools. The pioneers of this field are Stanislav Ivanov, Faruk Seyitoglu, and Catherine Prentice. Fig. 6 displays the authors who have published two or more studies on the topic, as well as their total citations. As the topic gains traction among industry and scholars, the number of citations increases.

3.2. TCCM framework

To systematically identify, analyze, and synthesize relevant literature to address specific research questions or objectives, we opted for the TCCM Theory-Context-Characteristic-Methodology framework, which is a structured approach used in systematic literature reviews (SLRs) to organize and conduct research (De Keyser and Kunz, 2022; Sharma et al., 2022).

3.2.1. Theory

We identified 30 theories and models used in the article set, while 23 articles did not specify a distinct theory or model as their foundation.

Among the most used theories and frameworks are the technology acceptance model (7), self-determination theory (6), the technology-organization-environment (TOE) framework (6), and the conversation of resource theory (5). (Table 4)

Articles using the Technology Acceptance Model (TAM) as a grounding framework are the highest in number, as it is the most influential technology acceptance model and gives the flexibility of studying external factors with the primary factors: perceived ease of use and perceived usefulness to determine the intention to use new technology. Studies that are included in this review use the TAM original and extended (Davis, 1989; Venkatesh and Davis, 2000) with various variables such as trust, attitude, anthropomorphism, robotic awareness, perceived risk, etc.

Furthermore, self-determination theory is a motivation theory that draws upon the satisfaction of three “basic psychological needs”: the need for autonomy, competence, and relatedness for effective functioning and welfare (Ryan and Deci, 2000). According to Self-Determination Theory (SDT), intrinsically motivating things are inherently engaging, delightful, and pursued by humans without external prompting. Autonomous and self-determined motivation is experienced in such a way (Deci and Ryan, 2008). Extrinsically motivated tasks, on the other hand, are undertaken due to external factors, but their perceived level of control or autonomy depends on how much the individual has internalized these external factors.

Other theories like UTAUT 1 & 2, social exchange theory, uncanny valley theory, disruption theory, stimulus organ response (SOR-SR), cognitive appraisal theory, etc. are used across the different studies individually as well as in groups. Almost 23 articles didn't mention in clear terms the theoretical base used by them and the theories they built upon.

Table 1
Year-wise publication.

Year	Publication
2017	1
2018	1
2019	3
2020	6
2021	11
2022	24
2023	26
2024	8

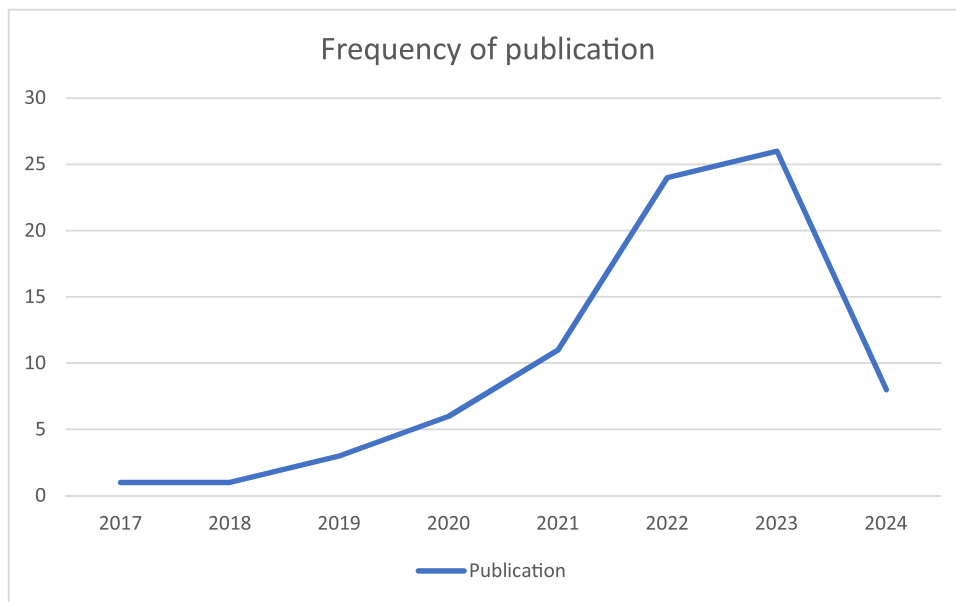


Fig. 2. Trend of publications per year.

Table 2
Geographical focus of publication.

Country	Publication
China	25
United States	12
United Kingdom	11
Turkey	9
Thailand	7
Australia	7
Malaysia	6
Hongkong	6
Taiwan	5
India	4

These theories present a diverse array of frameworks and factors that help to understand not just technology adoption, but human behavior and organizational dynamics. These theories are interrelated as they share a common ground in exploring technology acceptance but at the same time diverge in their focus, constructs, and underlying assumptions. TAM is an extension of TRA, focusing on behavioral intention while TAM focuses on technology use. Further, UTAUT integrates both TAM and TRA to provide a more comprehensive understanding while acknowledging the importance of external factors and social dynamics in shaping user behavior. TOE, in contrast, takes a broader perspective by considering organizational characteristics and external pressures rather than just being user-centric. Theories like CoR and uncanny valley theory focus on the emotional and psychological aspects instead of the cognitive evaluation of technology, which is focused on stimulus-organization-response (SOR) theory. The uniqueness of each theory

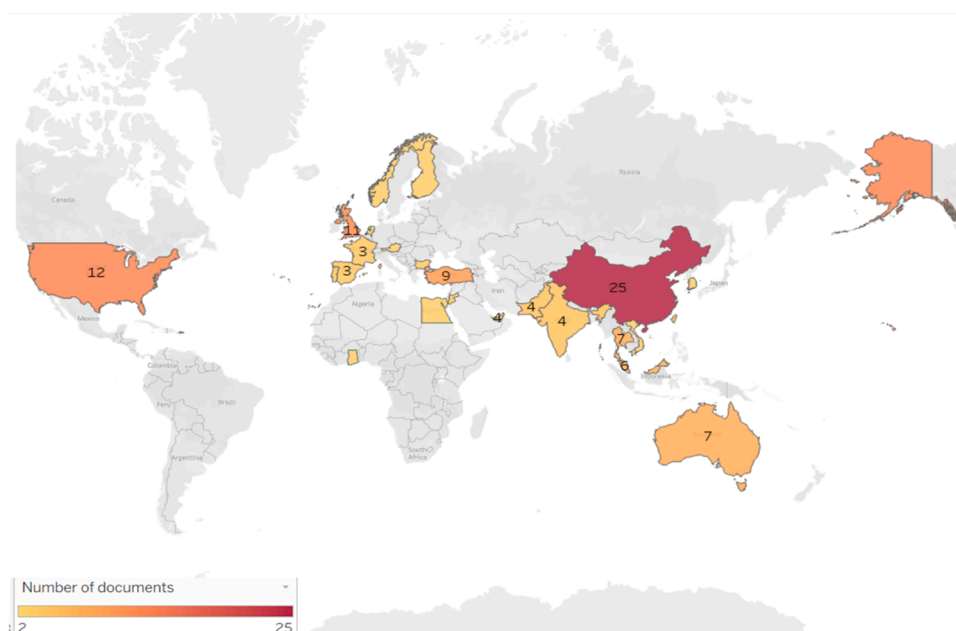


Fig. 3. Global concentration of publications.

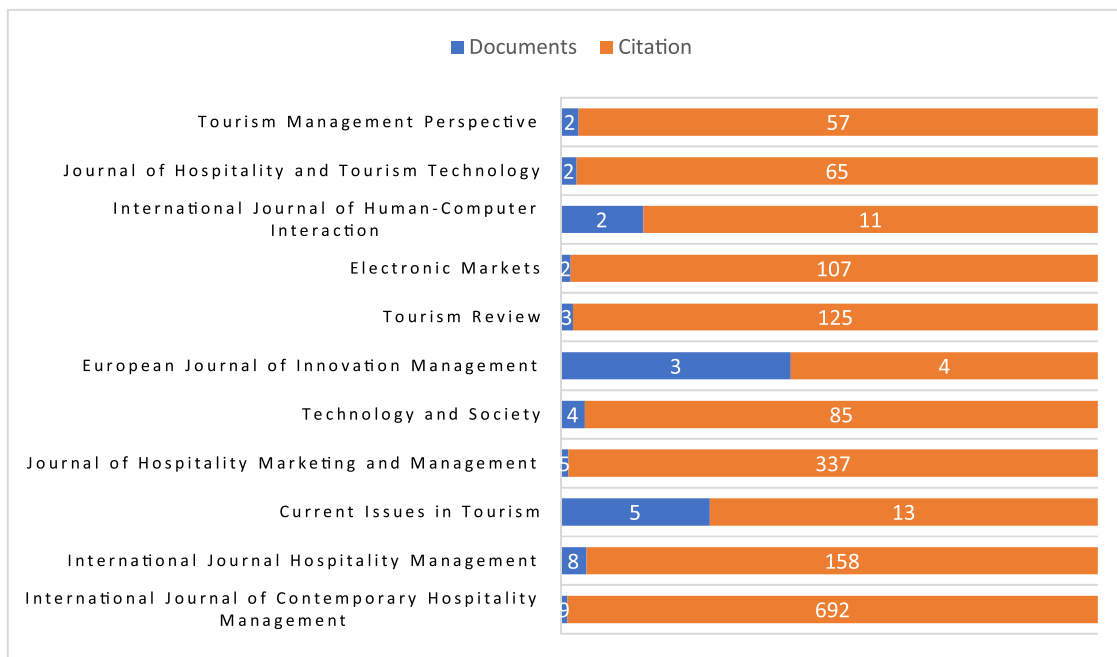


Fig. 4. Number of publications with source and citation.

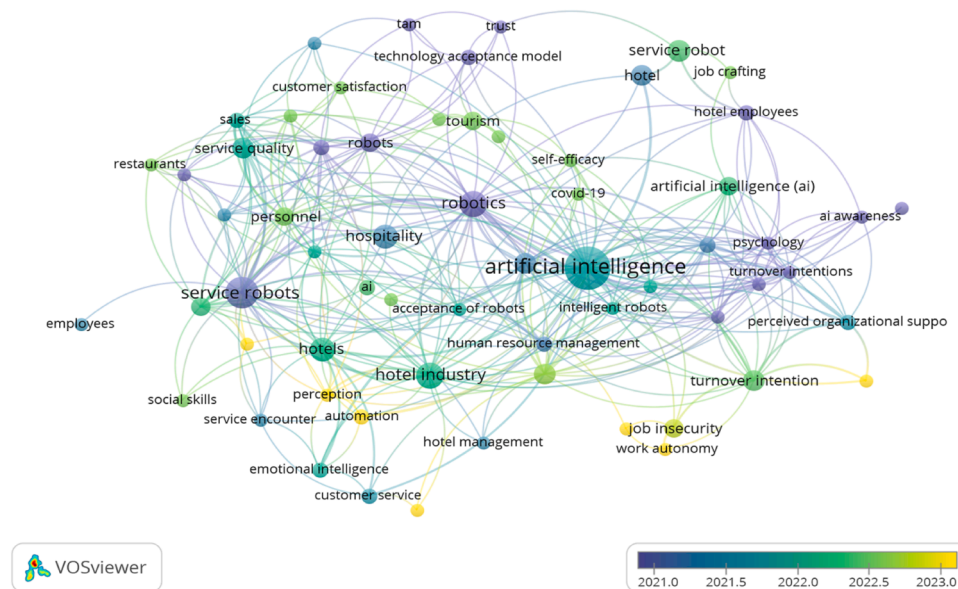


Fig. 5. Co-citation analysis of keywords.

calls for an integration of these frameworks for a more in-depth analysis.

3.2.2. Context

This section provides a summary of the contextual factors identified in the featured research, which examines professionals in the hotel industry and their interactions with AI tools.

The review especially concentrates on the hospitality business as a common theme in all the research. However, the settings vary, with some studies focusing solely on 5-star and luxury hotels (Hussein Al-shami et al., 2022; Kim, 2023; J. (Justin) Li et al., 2019; Lin et al., 2024), while others examine all-star category hotels (Khaliq et al., 2022; Kong et al., 2021; Prentice et al., 2020). Focusing on the unexplored (Teng et al., 2024), even investigated budget hotels. In addition to full-service hotels, personnel from fast-food restaurants, franchise

restaurants, and other accommodation establishments are also examined (Ivanov and Webster, 2024; Lee et al., 2018; Odekerken-Schröder et al., 2022; Qu, 2024).

These 80 studies specifically examined a wide range of AI technologies, including all the important ones. Approximately 73 % of the studies primarily discuss the implementation of service robots in the hotel industry. Authors examined robots as flexible labor entities, whereas studies concentrate on the routine duties that robots are capable of assuming. Currently, there is a growing emphasis on human-robot collaboration to improve the customer experience and increase work efficiency (Kim, 2023; Parvez, Arasli, et al., 2022; Sadangharn, 2022; Song et al., 2022). In addition to robots, chatbots (Calvaresi et al., 2023; Pillai and Sivathanu, 2020), virtual assistants (Al-Hyari et al., 2023), voice assistants and AI as enhancers are also examined from the

Table 3
List of Journals with the highest number of employee-centric AI studies.

Source	Documents	Citation	Average citation
International Journal of Contemporary Hospitality Management	9	692	76.89
International Journal Hospitality Management	8	158	19.75
Current Issues in Tourism	5	13	2.6
Journal of Hospitality Marketing and Management	5	337	67.4
Technology and Society	4	85	21.25
European Journal of Innovation Management	3	4	1.33
Tourism Review	3	125	41.67
Electronic Markets	2	107	53.5
International Journal of Human-Computer Interaction	2	11	5.5
Journal of Hospitality and Tourism Technology	2	65	32.5
Tourism Management Perspective	2	57	28.5

firm’s point of view.

Geographical studies primarily focus on the Asian region because of the quick adoption of modern technologies in the hospitality business in these nations. However, our study collection lacks research on African and South American regions. In addition, cross-cultural studies have been performed but are relatively few, thus requiring greater academic emphasis in the future (Abdelhakim et al., 2023).

Finally, we discover that the majority of the studies focus exclusively on employees as the primary participants, whereas only a small number of studies consider multiple perspectives. To expand the study, researchers researched employees and managers, employees and technology suppliers, and employees and customers. Recent studies have also, concentrated and targeted all the stakeholders in one study to provide a comprehensive assessment of the AI experience. Amongst the unique studies are (Gupta et al., 2022; Pillai and Sivathanu, 2020), which takes into account the employees as participants but attempts to understand customer satisfaction and experience with the view that employees are the ones who are in direct contact with the consumers and Wei and Prentice (2022) which treats employees as an internal customer.

3.2.3. Characteristics

To study the characteristics, we focus on the various AI tools, various

departments impacted, study variables, and outcomes of the study. In the reviewed studies, we saw a dominant interest in service robots as almost 87 % of studies are focused on service robots as robots are the most commonly used and accepted AI technology in the hospitality front office, performing routine tasks and taking over other mundane jobs (Abdelhakim et al., 2023; Lin et al., 2024; Odekerken-Schröder et al., 2022; Qiu et al., 2020; Song et al., 2022). As the industry is becoming more accepting of newer technology researchers have also shifted their focus to chatbots, virtual assistants, voice assistants, etc (Al-Hyari et al., 2023; Pillai and Sivathanu, 2020).

The studies highlight all the departments that are using or planning to adapt AI tools in their day-to-day operations. The major studies though are focused on the front office (Odekerken-Schröder et al., 2022) but housekeeping, finance, HR (Pandya and Al Janahi, 2021), marketing (Bulchand-Gidumal et al., 2024), and management (Ivanov and Webster, 2024) are not untouched. Even the security and supply chain (Jermisittiparsert and Panichayakorn, 2019) are the niche segments that are using AI to improve their efficiency.

The past literature focuses majorly on the employee’s perspective and explores various variables that are antecedents, mediators, moderators for the AI adoption, and intention to use. Variables like Perceived ease of use, perceived usefulness, AI awareness, perceived risk, and organizational support are the major antecedents (Alzoubi and Al Zoubi, 2023; Pillai and Sivathanu, 2020). Prominent outcomes in past studies of AI adoption are AI acceptance, job satisfaction, turnover intention, and AI readiness (Datta, 2020; J. (Justin) Li et al., 2019; Li, 2023). The major findings of the reviewed studies have been summarised in Table 5 highlighting the variables and focus point of these studies and how the employees interact with the AI tools and its impact on their perception,

Table 4
Key theories in publication.

Name of theory	Frequency
Technology Acceptance Model (TAM)	7
Self-determination theory	6
Technology-Organization-Environment (TOE) framework	6
Conservation of Resources (COR) Theory	5
Unified theory of acceptance and use of technology (UTAUT)	3
Social exchange theory	3
Uncanny valley theory	2
Resource-based view	2
Theory of Reasoned Action (TRA)	2
Stimulus-organism-response (SOR) theory	2

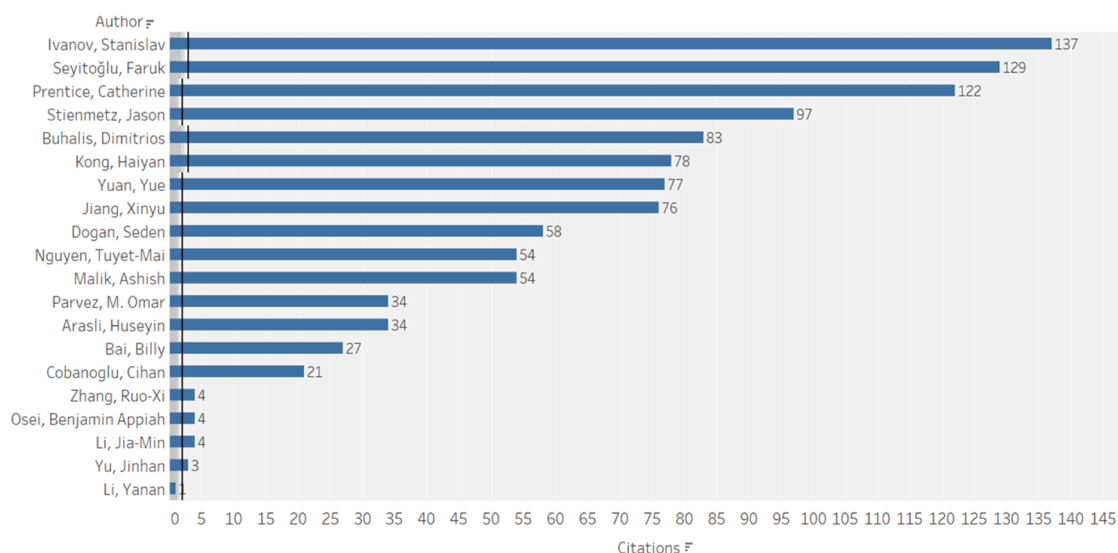


Fig. 6. Major authors and their total citations.

Table 5
Major findings of reviewed studies.

Study	Findings
Abdelhakim et al. (2023)	Findings highlight significant influences of PE, EE, SI, and FC, as well as cultural moderators like UA, masculinity, and long-term orientation on adoption behavior
Al-Hyari et al. (2023)	Findings highlight that AI improves satisfaction through personalized experiences, chatbots, and predictive maintenance.
Ali et al. (2023)	The study found that hedonic motivations, utilitarian motivations, and social skills toward service robots positively influence Gen Z's intentions to work with them, while insecurity and technical and interactional barriers have a negative impact
Alzoubi and Al Zoubi (2023)	Empathy, perceived trust, value, utility, and ease of use positively impact older guests' inclination to use robots. Perceived trust indirectly enhances usefulness and ease of use, which further influences the intention to use robots.
Aqaba and Jawabreh (2021)	AI significantly correlates with improved integration of accounting systems in financial data quality, underscoring AI's potential to enhance managerial decision-making and reduce information risks in hotel operations.
Buhalis and Moldavska (2022)	Key findings include facilitating communication and personalization, though challenges such as accent recognition and privacy concerns remain.
Bulchand-Gidumal et al. (2024)	Key findings include AI's role in enhancing competitiveness through data-driven processes, improving stakeholder engagement via ROI and sustainability measures, and transforming customer interactions with predictive services
Çalışkan et al. (2023)	Key findings show AR technologies enhance tourist satisfaction, increase sales, and improve promotional activities
Calvaresi et al. (2023)	Key findings underscore the rapid evolution and the critical need for ongoing investment in chatbot capabilities to address emerging challenges and foster personalized interactions.
Chen et al. (2023)	The study reveals that perceived AI risk negatively affects adoption performance, while management support, innovativeness, regulatory backing, and competitive pressures enhance it. However, the expected influence of AI system quality was found insignificant, possibly due to its adoption primarily for pandemic prevention rather than performance enhancement.
Choi et al. (2020)	It finds human staff are perceived better in interaction quality and physical service environment, but no significant outcome quality difference exists
Díaz et al. (2021)	The findings reveal Broader SCM practices lead to better outcomes and identify five clusters of SCM practice among 146 hotels.
Ding (2021)	Key findings indicate that challenge appraisal towards STARA awareness significantly enhances work engagement and positively influences ICP, whereas hindrance appraisal shows no significant impact on these factors.
Fan et al. (2022)	The key findings reveal that an imbalanced strategy focusing on either customer or employee acceptance of robots results in better service quality than a balanced approach.
Fu et al. (2022)	Findings reveal that technological characteristics and psychological stimuli contribute significantly to employee resistance to service robot continuous usage
Ghazy and Fedorova (2022)	The study found that the introduction of collaborative robots partially reduced the number of hotel workers and caused employees to feel threatened about job security. There were no significant gender differences in attitudes, but younger employees were more positive about robots than older ones.

Table 5 (continued)

Study	Findings
Gupta et al. (2022)	The study identifies that AI robots can automate tasks like information gathering and personalization, enhancing service quality in smart city hotels.
Ho et al. (2022)	The research found significant impacts of perceived usefulness, ease of use, attitude, cost, and technological knowledge on behavioral intention. Notably, perceived ease of use did not significantly influence attitude. thus, offering a robust framework for understanding AI adoption in hospitality.
Hui et al. (2023)	The study found significant direct and indirect effects of anthropomorphism and responsiveness on AI service quality, mediated by psychological safety and AI empathy. it also showed that AI service quality positively influences customer engagement and satisfaction, with AI usability moderating these relationships.
(Hussein Al-shami et al., 2022)	Findings reveal motivations including infrastructure flexibility and resource alignment, enhancing service quality and efficiency. AI usage spans trip planning, reception services, and room management, demonstrating potential savings and service enhancements.
Ivanov and Webster (2024)	Key findings show that neither managerial demographics nor hotel characteristics significantly influence these preferences.
Ivanov et al. (2020)	Managers view robots as suitable for repetitive, dirty, dull, and dangerous tasks but prefer human employees for roles requiring social skills and emotional intelligence. Gender influences perceptions, with male managers more receptive to robots than females. Larger hotels are more skeptical about robots affecting service quality.
Jabeen et al. (2022)	Human knowledge, services, and robotics applications were identified as the most significant factors influencing AI and automation implementation. The study proposed a framework that is useful for developing sustainable strategies for managing automation and AI in the industry.
Jermittiparsert and Panichayakorn (2019)	Findings included significant positive impacts of AIRA on EP, ELP, and OP, mediated by Supply Chain Agility
Kapoor and Kapoor, (2021)	The study highlights how digital marketing enhances efficiency and reduces costs while meeting guest demands more effectively.
Khaliq et al. (2022)	It finds a positive association between AI/robotics awareness and TI, moderated significantly by MT but not by CPC
Kim (2023)	Positive perceptions of FLE's service competence decrease perceived risks and increase willingness to collaborate, highlighting the importance of perceived usefulness (PU) and perceived ease of use (PEU).
Kong et al. (2024)	Key findings highlight that perceived AI-supported autonomy enhances innovation through increased work exploration. The positive relationship between AI-supported autonomy and innovation is stronger in employees with high AI trust and proactive personalities.
Kong et al.(2021)	This research found AI awareness increases job burnout and reduces organizational commitment but does not directly affect career competencies. AI's potential to replace jobs leads to employee exhaustion and anxiety, highlighting the need for effective management strategies to mitigate these negative outcomes.
Kong, Jiang, et al. (2024)	Key findings indicate positive relationships among AI perception, career resilience, and informal learning, emphasizing the benefits of AI in enhancing employees' capabilities and coping mechanisms.
Kong, Yin, et al. (2023)	Key findings reveal that negative STAARA awareness increases job insecurity and mobility, especially among employees with low career

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Table 5 (continued)

Study	Findings
	progression. High career progression mitigates these effects
Koo et al. (2021)	AI-induced job insecurity affects employees' job engagement and turnover intentions, with threats increasing engagement and powerlessness decreasing it. Job engagement, in turn, reduces turnover intentions.
Kuo et al. (2017)	Key findings highlight the necessity for new organizational structures, diverse skill sets, and specialized training to leverage robotics for competitive advantage.
Lee et al. (2018)	Findings highlight that positive attitudes and perceived usefulness significantly influence acceptance, emphasizing the need for user-friendly designs and trust-building measures.
Li (2023)	The study establishes that the perceived threat of AI directly correlates with higher turnover intentions. It also reveals that perceived organizational support influences both the perceived value of AI and turnover intentions, with the perceived value of AI acting as a significant mediator in this relationship
Li et al. (2019)	Higher AI awareness is associated with increased turnover intentions, especially in highly competitive environments, but POS can mitigate this effect.
Li et al. (2023)	Key findings indicate that task-oriented leadership (TOL) and high-performance work systems (HPWS) play significant roles in mediating and moderating the relationship between resistance to change (RTC) and AI readiness
Li et al. (2024)	The study identifies significant impacts on employee attitudes and behaviors due to robot use in hotels, underscoring the need for nuanced approaches to mitigate job insecurity and enhance employee health in human-robot collaborative environments
Limna and Kraiwani (2023)	Key findings indicate that ChatGPT enhances worker skills, bridges language barriers, and provides personalized travel advice.
Lin et al. (2024)	Key findings emphasize that robot attributes like advantages, functions, and appearance significantly impact employee willingness, highlighting the role of perceived job performance and emotional benefits.
Mingotto et al. (2021)	The proposed framework is useful for developing sustainable strategies for managing automation and AI in the industry.
Nam et al. (2021)	The findings expose the factors that influence the adoption of AI and robotics in hotels highlighting Market position and customer influence as pivotal
Nguyen and Malik (2022a)	It identifies AI empathy as significantly impacting AI satisfaction, while AI responsiveness, empathy, and assurance affect job satisfaction. The study also highlights that AI reliability does not influence either AI satisfaction or job satisfaction
Nguyen and Malik (2022b)	Key findings show that knowledge sharing directly enhances employee service quality, which in turn boosts customer satisfaction, with AI quality positively moderating these effects.
Odekerken-Schröder et al. (2022)	Anthropomorphized service robots enhance customer patronage by providing utilitarian value, which FLE interaction can augment or substitute depending on the robot's performance.
Oliinyk et al. (2022)	Key findings highlight improved efficiency, transparency, and customer service across diverse hotel operations
Osei and Cheng (2023)	Key findings include hotels' inclination towards advanced technologies like IoT, Big Data, Cloud Computing, and AI, whereas, advanced robots are least preferred due to employee fears of job displacement
Osei et al. (2024)	Hotel managers are ready to adopt new technologies but face barriers like preference for cheap labor, budget constraints, and security

Table 5 (continued)

Study	Findings
Ozekici et al. (2024)	concerns. COVID-19 has highlighted the necessity for high-tech solutions in the industry. The study found that negative perceptions slightly outnumber positive ones, with eight themes influencing perceptions. Positive perceptions are driven by expectations of easier work, neutral perceptions by doubts about robots replacing employees, and negative perceptions by insecurity and discomfort with technology.
P. Q. Wang (2024)	Findings indicate limited use beyond chatbots, highlighting the potential in multimedia content creation and operational efficiency through AI-driven analytics.
Pandya and Al Janahi (2021)	The findings emphasize the need for a balance between AI use and human oversight, noting that critical functions still rely on human judgment.
Parvez, Arasli, et al. (2022)	The study reveals that employees' perceptions of robot benefits and motivations significantly influence their readiness for HRC, enhancing workplace efficiency and reducing psychological stress.
Parvez, Öztüren, et al. (2022)	Robots can improve efficiency and service quality but pose challenges like high maintenance costs, potential service failures, and job insecurity among employees. They are suitable for tasks requiring less human interaction and can complement human roles in customer service.
Pillai and Sivathanu, (2020)	The study underscores the pivotal role of chatbots in enhancing travel efficiency through real-time solutions, validated by empirical data on adoption predictors and managerial perspectives.
Pizam et al. (2022)	Relative advantage, complexity, top management support, and competitive pressure significantly influence the intention to adopt robotic technologies. Compatibility, perceived cost, and organizational readiness were not significant predictors.
Prentice et al. (2020)	It explores how EI influences employee behaviors and customer interactions, while AI moderates the relationship between EI and organizational outcomes.
Qiu et al. (2022)	AI attributes significantly reduce physical and mental fatigue and increase positive emotions. They also Improve physical, cognitive, and emotional states and enhance service hospitableness.
Qu (2024)	Key findings highlight consumer responsiveness to AI's novelty, emphasizing concerns over impersonal service and job displacement.
R. Leung (2019)	Key findings include stakeholders' views that smart hotels enhance efficiency, reduce costs, and improve revenue through customer-centric, employee-centric, and revenue-centric approaches.
S. Xu et al. (2020)	Strategic HR is crucial for implementing service robots, emphasizing the need for employees to develop soft skills, and effective leadership to facilitate change. The study highlights the importance of training, guest feedback, and balancing efficiency gains with potential downsides such as job redundancy.
Sadangharn (2022)	The findings show the complex dynamics influencing robot acceptance in hotel settings, revealing nuanced relationships between human factors, robot capabilities, and organizational contexts.
Seyitoğlu et al. (2021)	Findings indicate robots are favored for tasks like cleaning and repetitive duties, with customers showing positive attitudes towards enhanced service quality via robots. Managers express concerns, However, concerns among employees about job displacement and preferences for human-robot collaboration
Seyitoğlu et al. (2023)	Findings revealed that COVID-19 caused practical skill degradation, workforce shortages, and difficulty attracting labor back to the sector and identified the need to include new working models,

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Table 5 (continued)

Study	Findings
	digitization, robotization, and skills in management, analytics, digital marketing, and customer behavior analysis.
Song et al. (2022)	Key findings reveal that perceived risk and perceived playfulness significantly influence employees' performance expectancy and effort expectancy regarding employee-robot collaboration enhancing operational efficiency and employee satisfaction.
Tan et al. (2024)	It found that appraisal of STARA impacts the needs for relatedness and competency, which positively influence ICP.
Teng et al. (2024)	Findings highlight a positive relationship between AI awareness and work withdrawal, mediated sequentially by negative rumination and emotional exhaustion.
Tuomi et al. (2020)	To explore the impact of service robots on employee roles in US and Japanese restaurants, identifying five distinct roles (enabler, coordinator, differentiator, educator, innovator) shaped by cultural context.
van Doorn et al., (2023)	Introducing the Consumer–Autonomous Technology–Worker (CAW) framework, it examines how AT influences consumer–worker relationships, emphasizing augmentation over replacement of workers
Vatan and Dogan (2021)	Key findings indicate that while robots might reduce workloads and operational costs, and enhance hotel attractiveness, they also evoke negative emotions due to fears of increased unemployment and communication issues
Wang et al. (2022)	The key findings reveal that AIRA positively impacts employee creativity through active learning and task crafting, with the moderating effect of an employee's locus of control
Wei and Prentice, (2022)	It finds that AI service quality positively influences both internal and external customer satisfaction and engagement, with customer engagement mediating the relationship between service quality and customer loyalty.
X. Y. Leung et al. (2023)	Employees prefer room service robots (physical affordance) over concierge robots (cognitive affordance) due to higher perceived usefulness and efficiency.
Xiao et al. (2023)	Key findings include the positive association between AI-enabled HR analytics and employee resilience mediated by job crafting, emphasizing the role of HRM system strength in enhancing this relationship
Xu et al. (2023)	It finds that AI surveillance moderates the relationship between social support and job engagement via self-efficacy and self-esteem, with stronger effects observed under low job control conditions
Y. Li and Khan (2023)	Key findings reveal that POS significantly reduces turnover intention, and this effect is enhanced by a high perceived value of AI.
Yang and Gao (2023)	Findings reveal that Co-creation with service robots enhances employee autonomy and the relationship between co-creation and employee wellbeing is mediated by the need for competence and relatedness, through the need for autonomy.
Youssofi et al. (2024)	Key findings emphasize the importance of affective and sensory dimensions in guest experiences, identify digital value-creation sources, uncover psychological mechanisms, and outline critical contingency factors
Yu et al. (2022)	Studies reveal that tech-savviness and social skills significantly reduce Service Robot Risk Awareness (SRRA) and subsequent turnover intentions. Transformational leadership was found to moderate these effects indirectly
Zhang et al. (2023)	Conscientiousness moderates the impact of robot usage: increasing work autonomy but also job insecurity, with significant implications for employee turnover

Table 5 (continued)

Study	Findings
Zhong et al. (2022)	Guests valued functional and social-emotional benefits, while managers and financial officers focused on financial gains. Staff expressed concerns about increased workload and the learning curve associated with robot usage

attitude, and behaviour.

The authors studied the relationship of employees with AI tools as a collaboration approach where Human-robot collaboration was the focal point (Kim, 2023; Sadangharn, 2022; Song et al., 2022). In contrast, studies that perceive AI as a threat and focus on negative outcomes also exist such as burnout (Cheng and O-Yang, 2018), turnover intention (J. (Justin) Li et al., 2019; Li, 2023), job insecurity (Koo et al., 2021) and job performance (Koo et al., 2021). Fig. 7 illustrates the variables used in the reviewed studies and are categorized into antecedents, outcomes, mediators, and moderators. The overlapping variables are the ones that are used in multiple roles in different studies.

3.2.4. Methodology

Focusing on the methodological point of view, we code the methodology used in the studies targeting the employees of the hospitality industry and the way they indulge with the AI tools. The studies can be classified among qualitative, quantitative, and mixed approaches (Table 6).

The quantitative method was dominated majorly by the survey as a data collection method, which took place both online modes using MTurk and another platform (Pizam et al., 2022) and offline modes by sending the moderators or the self-administered questionnaires (Lee et al., 2018; Parvez et al., 2022) filled out by the employees. Further to analyze the complicated data, more advanced analytical techniques like hierarchical linear & econometric models, Haye's process macros (Teng et al., 2024), allow researchers to move beyond the current dominance of ANOVAs, structural equation modeling (SEM), and moderated regression models, software like SPSS, AMOS, and Smart PLS are prevalent to perform such analysis. In addition to this time-lagged analysis took place to provide a comprehensive view of the variables over the period (Nguyen and Malik, 2022b,a; Xiao et al., 2023; Zhang et al., 2023). Furthermore, the cross-level analysis also took place to highlight the multi-level differences among the employee's perceptions (Yu et al., 2022). Also, a cross-sectional analysis took place to include a variety of opinions at the same time (Ho et al., 2022; J. M. Li et al., 2024). The dominance of the quantitative method points out the advantages that it offers such as objectivity, reliability, and scope of easy reproduction to different scenarios. Quantitative research also helps in trend identification and forecasting, which is the major concern given the dynamism of the impact of AI in the hospitality industry.

Qualitative research is also equally popular in the above context as it provides a deeper understanding of human interaction with artificial intelligence (Hussein Al-shami et al., 2022; Youssofi et al., 2024). The authors considered in-depth interviews both structured and semi-structured, observation, ethnography (Tuomi et al., 2020) Delphi (S. Xu et al., 2020) and case study (Osei et al., 2024). Some studies also use grounded theory to capture the complexity and nuances of this social interaction between humans and AI tools and build theories upon the same.

Both qualitative and quantitative researchers have their drawbacks and to mitigate these shortcomings researchers often adopt mixed methodologies to provide a deeper insight. Researchers most commonly used interviews and survey methods together (Ivanov et al., 2020; Osei and Cheng, 2023; Pillai and Sivathanu, 2020; Sadangharn, 2022) but some studies like (Fan et al., 2022; Koo et al., 2021; Odekerken-Schröder et al., 2022) included case studies, field experiments and focus group interviews along with the surveys. Studies like

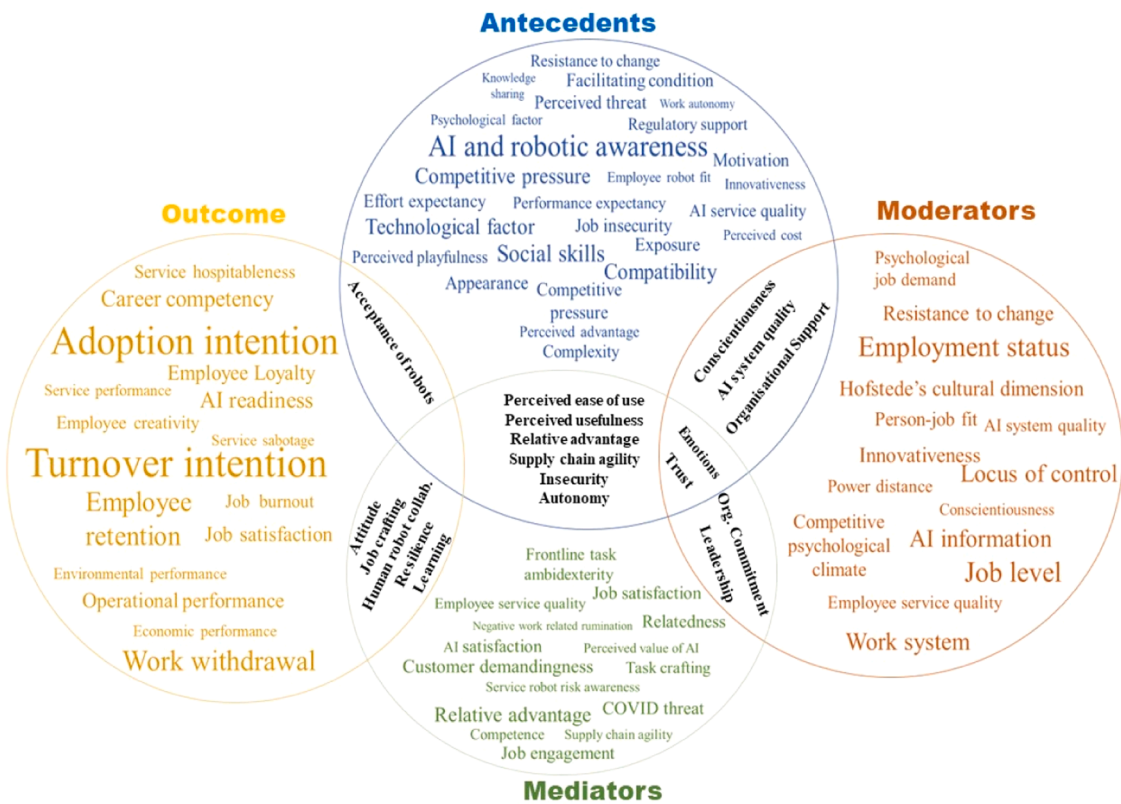


Fig. 7. Venn diagram showing variables of AI adoption from employees' perspective.

Table 6

Methodology used in employee-centric AI studies.

Methodology	Studies	%studies
Qualitative	22	27.5 %
Quantitative	38	47.5 %
Mixed	20	25 %

(Kuo et al., 2017) also used just a combination of different qualitative techniques i.e. expert panels and semi-structured interviews to widen the scope of the research.

4. Discussion

This paper systematically maps the existing research on the interaction between AI tools and employees in the hospitality industry. 80 empirical peer-reviewed articles from the Scopus database were reviewed for descriptive characteristics. The TCCM framework was used to analyze these studies and show the theory, context, characteristics, and methodology of the studies that were studied. The studies are summarized in the sections below:

4.1. Theoretical implications

Theoretically, this study adds to the body of knowledge of hospitality management literature on the effects of AI on employees by analyzing the empirical studies that focus on employee adoption of artificial intelligence in the hospitality industry. The major reviews that were conducted in the past either focused on the customer side or were conceptual and theoretical; only a few reviews have attempted to study the supply side of the hospitality industry; thus, this review focuses on adding to the literature by exploring the employee's behavioral and attitudinal aspects. The review highlights the major theories, characteristics, context, and methodologies used in previous research; by doing

so, it lays a strong foundation for AI-related research on employees in the hospitality context. Additionally, the review highlights past research findings and their importance, providing a comprehensive overview of the current state of AI in hospitality from an employee perspective.

The review introduces the interlinkage of the variables/factors that have been studied in depth in various studies and their nature as dependent, independent, mediator, and moderator, which consequently enriches the literature as the framework highlights the dynamism of variables and the future scope of studying these variables in different roles.

Furthermore, the review discusses the limitations and future scope of research, which may promote the expansion of existing knowledge and bridge the gap between the existing theoretical and practical knowledge of AI in the hospitality industry.

4.2. Practical implications

First, the hospitality industry is a labor-intensive and high-touch industry, and the infusion of AI tools in such a work environment requires managerial attention before its introduction. Because of its empirical nature, this review provides a realistic picture of how hospitality employees perceive AI, which could assist managers in navigating the transition from traditional service methods to AI-assisted services. We recommend fostering open communication and transparency about the benefits and implications of AI adoption while ensuring a simultaneous involvement of employees which will help in creating a more supportive environment for AI integration.

Second, the adoption of AI leads to far-reaching consequences in the attitudes, intentions, and behaviors of hospitality employees. Various factors like AI awareness, perceived ease of use, perceived usefulness, perceived risk, and social skills act as major antecedents of the outcome that may lead to AI adoption, like actual usage, adoption intention, behavioral intention, and willingness to collaborate. Other variables, such as trust, uncertainty, perceived organizational support, and job

level, act as mediators and moderators in the relationship between these outcomes and antecedents. Therefore, this study's findings help managers to map the antecedents, mediators, moderators, and outcomes of AI adoption in the hospitality industry fostering a positive attitude for smooth change management.

Third, emphasizing the importance of continuous training and development, we suggest that managers should invest in comprehensive AI training programs to help employees develop the necessary skills and confidence to work with AI technologies. This aligns with findings that highlight the need for effective management of employees' AI adoption intention and the need to enhance employees' familiarity with AI tools.

Finally, the review provides managers with future direction and guidance on how to use AI tools, which will enhance their competitive advantage and achieve other benefits such as customer satisfaction, and environmental, financial, and operational outcomes.

5. Future Research direction

Based on the findings the author offers a detailed section-wise future direction as follows:

5.1. Theoretical direction

The section describes how the various theories can be expanded and integrated to provide a deeper insight and a broader perspective on AI adoption in the hospitality industry. The review highlights major theories such as the technology acceptance model (TAM), self-determination theory, the technology-organization-environment (TOE) framework, the conversation of resource theory (CoR), the Unified theory of acceptance and use of technology (UTAUT), and so on. Future researchers should incorporate additional constructs from the existing technological adoption theories, such as trust, security, cultural, technological, and data-related factors. Factors that expose the dark side of AI, like erosion of privacy, perceived unemployment, job displacement risk, and resistance to change, can be used to provide a more comprehensive understanding of acceptance of AI.

Researchers must consider integrating the customer and employee acceptance models to provide a comprehensive understanding of the triadic relationship between customers, employees, and various AI tools. This could help bridge the gap between separate studies on customer and employee acceptance of robots, as well as enhance theoretical frameworks such as the Resource-Based View (RBV) and Information Processing Theory (IPT) in this context. Theories like TAM, TOE, UTAUT, CoR, and DoI can also be integrated to study the interplay of various factors and their impact on AI adoption, and AI-specific frameworks like artificially intelligent (AI) device use acceptance (AIDUA) should be used to study AI adoption by hospitality employees.

AI adoption is affected by a lot of interdisciplinary approaches like psychology, management, social, and behavioral sciences; thus, incorporating frameworks from these disciplines could provide additional insights. New theories could be developed and tested that incorporate emotional and cognitive dimensions of technology acceptance like emotional intelligence, employee well-being, and social support in a dynamic tech-driven environment.

Exploration of various job dimensions like tasks, roles, and positions offers a promising research direction as researchers can investigate the theoretical boundaries of which tasks are deemed appropriate for automation versus human performance; the evolving roles of front-line employees (FLEs) in the context of AI and robotics; a new role, "AI supervisor," which is not well-documented in existing literature; and inconsistent findings about the moderating effects of position types call for further research that could refine the theoretical understanding of job role dynamics in the context of AI.

5.2. Contextual direction

This section highlights how contextual factors could broaden the AI adoption literature in the hospitality industry. Academicians should compare AI readiness and resistance to change in various geographical contexts. Existing research could be extended to different countries to analyze cultural orientation and dimension. Employee perceptions vary by region or country, particularly in diverse markets like the tourism and hospitality sectors. Comparative and collaborative findings across different cultural and economic contexts, like developing and developed regions, would help to identify universal versus context-specific factors.

Within the hospitality industry, sector-specific research could be conducted. Targeting various segments of the hospitality industry, such as luxury hotels, budget accommodations, and various service levels, to provide sector-specific recommendations. And in the hospitality and tourism industry, tourism and airline as a separate sector could be studied in detail. Cross-industry analysis in sectors like healthcare, manufacturing, retail consulting, etc. can be explored to broaden the scope of the study.

Future research can study how COVID-19 has accelerated specific AI trends in hospitality and tourism, such as mass personalization, predictive customer ratings, and AI for sustainability. The employee readiness and acceptance of AI substantially influence the adoption of sustainable development goals (SDGs) and favorably affect measures like employee optimism, happiness, and engagement (SDG 8), as well as the contribution of robots in attaining the SDGs. Thus, the forthcoming studies may investigate the synergistic impact of AI and SDGs implementation within the hospitality sector.

5.3. Empirical direction

This review highlights the major antecedents, mediators, moderators, and consequences of AI adoption by hospitality employees. Future studies must interact with these variables and conduct in-depth analyses of specific variables for further empirical advancement.

The majority of empirical studies focused on service robots; further investigation of various robot characteristics may add to the research pool. Study on various other AI tools like virtual assistants, voice assistants, chatbots, virtual reality, augmented reality, etc. Their capabilities and quality pave a promising research direction. Studies that highlight the dark side of AI are also very scant; thus, studies highlighting the concerns related to AI can be taken up.

Research that assesses the implications for education and training programs to prepare future hospitality professionals for AI-integrated roles, reduces the knowledge gap, and provides practical insights to use AI for the existing workforce can be conducted.

Studies with multiple participants from the industry should be undertaken to facilitate collaboration between different stakeholders by addressing their concerns and perspectives to build trust and support for AI adoption.

5.4. Methodological direction

The review highlights that the literature is dominated by the quantitative studies. Future research can focus either on a quantitative approach, which provides an in-depth analysis of perceptions and understanding of the behavioral aspects, or on a mixed-methods approach, which combines quantitative (surveys) with qualitative (interviews, focus groups) to gain a comprehensive understanding of the nuanced effects of AI on employee attitudes and behaviors. Researchers must also use diverse data collection methods (focus groups, case studies) and analysis tools to enhance the robustness and comparability of the findings.

Diverse research approaches, like experimental designs to simulate real-world conditions and observe employee interactions with AI tools in controlled settings to understand their impact on work processes and

outcomes, can provide managers with useful insights. Field studies in diverse hotel settings to gather real-world data and creative data collection methods to beat the unresponsiveness of the industry can benefit future studies.

Following the research gap, future researchers should conduct longitudinal studies to track changes in employee attitudes, skills, and performance over time as they adapt to working with AI tools and how it wanes over time. This would help to develop strategies to maintain interest and positive attitudes toward AI tools after the novelty wears off, as well as help to understand the sustainability and track the long-term impact of AI on hospitality employees and organizational outcomes.

6. Conclusion

This study aims to review existing empirical studies in the context of artificial intelligence and its impact on hospitality employees, highlighting the theories, context, characteristics, and methodologies used in the past. The review identifies the variables that were focused on by authors in their studies and their importance to the decision-makers in strategizing the introduction of AI and its outcomes.

The limitation of this systematic review lies in its scope and selection of research terminology. The scope of the review is confined to the Scopus database and the articles published in journals in the English language, which limits the breadth of the study and may have missed out on some of the relevant studies that were either published in another language or as a book chapter or conference proceedings. Moreover, while completing the research for the review, the author concentrated solely on empirical studies targeting the supply side of the hospitality business and their interaction with AI technologies, which weeds out any conceptual or perspective studies that might be relevant. Nonetheless, the review provides a detailed future direction that would enrich the existing research pool and advance the hospitality literature.

CRedit authorship contribution statement

Ekta Kumawat: Writing – original draft, Software, Formal analysis, Data curation, Conceptualization. **Amit Datta:** Writing – review & editing, Validation, Supervision, Methodology. **Catherine Prentice:** Supervision, Writing – review & editing, Methodology, Validation. **Rosanna Leung:** Supervision, Validation, Writing – review & editing.

Declaration of Competing Interest

The authors hereby declare that they have no known conflict of interest and no AI tools have been used to analyse and draw insights from data as part of the research process.

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Data Availability

Data will be made available on request.

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