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ARTIFICIAL INTELLIGENCE INTEGRATION AND JOB INSECURITY AMONG HOTEL EMPLOYEES IN KUALA LUMPUR

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Abstract:

The current hotel industry is undergoing a profound digital transformation, with artificial intelligence and service automation spreading rapidly. However, AI-induced job insecurity is a strong psychosocial stressor in the contemporary workplace that impacts employees with burnout, low morale, high turnover intentions, and psychological contract violations. This study aims to examine the current penetration of AI and automation technology in the Malaysian hospitality industry and examine the direct impact of AI-driven task substitution on hotel workers' job insecurity. A quantitative survey was conducted among 414 among hotel workers in Malaysia. Data were

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analysed using the Statistical Package for the Social Sciences (SPSS) version 29.0. The results revealed that the higher the visibility of automated systems being implemented in hotels, the stronger the employees' job insecurity. While AI replacement is a core driver of workplace anxiety, employees who personally experience their daily work being taken over by AI report the strongest levels of anxiety. The findings highlight that this technological shift has imposed high psychological costs on workers. AI automation, job displacement and job-related insecurity show a strong positive correlation, and workers universally have concerns about being phased out. The study provides useful insights for industry stakeholders, policymakers, and hotel senior executives to ensure that intelligent technology empowers rather than replaces the core humanistic values of the hospitality industry.

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Keyword:

Artificial Intelligence, AI Integration, Job Insecurity, Job Demands, Task Replacement, Hotel Industry



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Introduction

The hotel sector is experiencing a major digital transition due to service automation and artificial intelligence (Jabeen et al., 2022). Chatbots and predictive analytics are examples of technologies that can improve visitor satisfaction, increase productivity, and save operating costs (Buhalis et al., 2023; Kim et al., 2024). Despite these advantages, workers frequently view these tools as threats to their job security, which exacerbates perceptions of job insecurity (Brougham & Haar, 2018; Qu et al., 2025). According to Hussain et al. (2026), job instability brought on by AI is a significant psychological stressor in the contemporary workplace. Additionally, four negative organizational consequences are linked to this perceived technological disruption by Koo et al. (2021), Ersoy & Ehtiyar (2023), and Salama et al. (2025), which are job burnout, low morale, higher intention to leave, and breaches. Wong et al. (2023) and Huang & Zheng (2023) stated that the majority of existing hospitality research emphasizes customer acceptance and operational performance.

The experiences of customers are the main focus of most AI applications in the hospitality sector. In order to demonstrate how AI may change the service environment into a customer-centric, responsive, and flexible setting that promotes long-term customer loyalty and happiness, research by Patil (2025) looks at existing trends, case studies, and upcoming advances. In the meantime, a study by Acharya & Mahapatra (2024) looked at how AI may increase productivity and client happiness in the hospitality sector. Additionally, Ali et al. (2025) investigated the connections between customer satisfaction, process task efficiency,

organizational preparedness, and artificial intelligence (AI) integration in the hospitality and tourism industry, elucidating their combined impact on business performance. Anwar et al. (2024) studied how the hospitality industry's use of digital technologies affected both visitor happiness and operational performance. Additionally, as part of the digital business transformation, Bharatkumar (2024) carried out a study to look into how artificial intelligence (AI) enhances customer experience. Additionally, a study by Jasrotia et al. (2024) examined how AI-powered tools and technology affected hotel marketing strategies aimed at boosting customer satisfaction and engagement. However, studies on the use of AI are scarce and hardly address the viewpoint of employees.

The direct psychological effects of AI on hotel employees continue to be a crucial study gap in the context of Malaysia's quickly evolving hospitality industry. Zhong et al. (2022) caution that the industry will see significant employee turnover, and the vital "human care" that is the foundation of the hospitality sector would be undermined if it just pushes for technology adoption without addressing the expenses it imposes on its workers. Thus, this study pursues two objectives: firstly, to assess the current level of AI technology adoption within the Malaysian hospitality industry; and second, to examine hotel employees' perceptions of job security concerning the increased integration of AI within the Malaysian hotel industry. This study will shift the focus of analysis from customer satisfaction or experience with the use of AI technology to examining how the use of AI technology affects hotel employees' perceptions of job security. This approach addresses a research gap, as previous studies have largely focused on customer satisfaction and experiences regarding AI technology in hotels, rather than examining employee satisfaction with the technology. This study will provide an empirical framework for the management of 4- and 5-star hotels in Kuala Lumpur to facilitate appropriate training and re-evaluate the use of AI technology, positioning it as a support tool for employees rather than a threat to the human workforce.

Literature Review

Revolution of AI in Hospitality Industry

The sophistication of AI has brought about drastic changes in the hospitality sector encompassing accommodation facilities, food service establishments, travel agencies, and related industries thereby creating both challenges and opportunities regarding its implementation. According to Chi et al. (2020) and Guo et al. (2024), AI has driven positive change by accelerating economic growth and enhancing consumer satisfaction through the streamlining of various processes. The adoption of AI technology has significantly enhanced various aspects of customer satisfaction, enabling visitors to personalize their experiences, facilitating accurate and rapid demand forecasting through advanced analytics systems, and streamlining "back-of-house" operations for greater speed and efficiency (Zahidi et al., 2024). However, alongside the sophistication and excitement surrounding AI technology, several issues require attention, such as guest privacy and security, workforce displacement resulting from the shift to AI, and ethical concerns regarding algorithmic decision-making (Rehan & Guibas, 2024).

AI technologies are being quickly adopted by the hospitality industry, which is indicative of their growing significance and disruptive potential (Abdelfattah et al., 2023; Fakfare et al., 2025). AI integration in the hospitality industry has been thoroughly studied in recent years, with a focus on how it affects both operational and customer-facing domains. Natural language processing (NLP) and machine learning (ML) are examples of technologies that improve

service delivery, automate repetitive operations, and offer data-driven insights for strategic decision-making (Kumar et al., 2026). AI-driven chatbots and virtual assistants have revolutionized consumer interactions by providing ongoing, individualized help, speeding up response times, and raising customer happiness (Hibban, 2025). AI-powered predictive analytics help competitiveness in erratic markets by enabling precise demand forecasting, dynamic pricing, and resource allocation (Prabu, 2023).

Furthermore, AI technology can address various workplace challenges, including labor shortages and the need for consistently high work quality. AI technologies frequently employed in hotels include robotics for automated check-in systems, cleaning operations, and food preparation (Ivanov & Webster, 2019; Thaichon et al., 2024; Venkateswaran et al., 2024; Zahidi et al., 2024). The sophistication of AI not only streamlines and accelerates processes for guests and staff but also enhances customer satisfaction. However, alongside these technological advancements, hotels must be prepared to manage high implementation costs, address potential workforce displacement, and mitigate risks regarding the leakage of employee information and critical organizational data. Therefore, to position the sector for long-term growth in the digital era, this dual approach aims to ensure that AI enhances operational efficiency while simultaneously improving the user experience (Busulwa, 2020; Nam et al., 2021; Said, 2023; Zirar et al., 2023).

The Degree of Automation in Hotel Operations

The core definition of hotel operation automation refers to the degree to which operational tasks are performed with minimal human intervention, and it relies centrally on five categories of technology, which are robotics, artificial intelligence, service automation, intelligent technologies, and algorithms (Saraswati et al., 2025). This technology has enabled the creation of a system capable of simultaneously performing tasks requiring both cognitive and physical capabilities, effectively managing nearly every aspect of hotel operations (Pericleous & Liasidou, 2025). Meanwhile, on the front-of-house side, AI self-check-in kiosks, hotel mobile applications, and virtual concierges reduce guest wait times and independently handle routine interactions, whereas on the back-of-house side, four types of standardized, data-intensive work, including inventory management and accounting, are highly suitable for automation deployment (Amila et al., 2026). Only complex tasks that require high adaptability, such as advanced room cleaning and high-end maintenance, can still not achieve full robotic automation (Ivanov et al., 2023).

The feasibility of operational automation is determined by three core factors, namely task complexity, occurrence frequency, and standardization level (Braganza et al., 2021). AI substitution risks are divided into three categories. Routine repetitive tasks carry the highest substitution risk, and hospitality industry chatbots relying on NLP can process guests' standard inquiries, which highlights the prominent potential for AI substitution of cognitive tasks (McClure, 2018; Kumar et al., 2026; Pericleous & Liasidou, 2025). Interpersonal tasks that require high emotional intelligence carry an extremely low substitution risk, as machines lack empathy. Overall, AI substitution risk is stratified according to task attributes rather than being applied uniformly across all work domains.

A study by Ivanov et al. (2023) points out that the integration of automation technologies reshapes hotel operations through three core types of mechanisms. The first is the enhancement effect namely AI tools, serving as supports for human workers, can anticipate guest needs ahead of time using predictive analytics and increase employees' service productivity. Furthermore,

AI technologies such as robots can take over specific human tasks, thereby enhancing a hotel's capacity to accommodate a large volume of guests despite having a smaller workforce. Finally, this shift from traditional systems to technology-driven applications enables the integration of two distinct service ecosystems: one focused on technical operations and the other on human-centric service.

Although the hotel industry is moving from traditional automation to intelligent technologies, Amila et al. (2026) note that while data-driven personalisation increases productivity, it also hides a basic contradiction. According to Brochado et al. (2018), excessive automation could jeopardise hotels' most valuable asset called as the "human touch" which consists of customised, compassionate interactions. A balanced strategy is put up by Chathoth et al. (2016) in which AI manages repetitive cognitive data chores, freeing up human workers to focus on complex emotional labour and providing worthwhile, authentic visitor experiences.

Influence on Task Replacement in the Hotel Sector

Artificial intelligence has a profound effect on work duties, drastically changing the hospitality industry and radically changing traditional work practices (Brynjolfsson et al., 2023). According to Makridakis (2023), AI mimics human decision-making and completes complex tasks with remarkable accuracy, surpassing human performance in several domains. Meanwhile, Zheng et al. (2023) confirm that this type of automation significantly increases productivity in data-intensive, repetitive tasks in the hospitality sector. Furthermore, Roy et al. (2020), Granström et al. (2023), and Astuti et al. (2024) draw attention to the current state of the sector, where experts have personally witnessed the replacement of conventional human-delivered services by AI technologies and service robots.

According to Pericleous and Liasidou (2025), robots and AI may efficiently carry out a wide range of regular duties in the hotel business and can replace several types of human employees, including concierges, room service personnel, cleaners, and uniformed service workers. Overall, the implementation of self-service check-in kiosks at the front desk represents a hotel initiative aimed at enhancing customer satisfaction and alleviating the burden on hotels frequently facing staffing shortages (Wu et al., 2023). Meanwhile, according to Kumar et al. (2023), chatbots have taken over front-office tasks; this method has been adopted by nearly all hotels, resulting in a reduction of staff in this department. According to Yang et al. (2023), advancements in natural language processing (NLP) technology enable AI to effectively manage guest interactions, thereby reducing the need for human labor to handle routine customer inquiries. Ivanov et al. (2023) note that AI is capable of replicating and automating repetitive cognitive functions within hotel operations. However, AI cannot replace tasks involving emotion, and employee involvement remains necessary to handle such issues (Pericleous & Liasidou, 2025). A previous study by Koo et al. (2021) anticipates that the use of robotic automation will continue to expand in the hospitality sector, despite ongoing debate. Groover (2023) and Brynjolfsson et al. (2023) state that AI will fundamentally transform the hospitality sector landscape, potentially impacting workforce placement issues.

Employee Job Insecurity in the Hotel Sector

Chung et al. (2025) defined job insecurity in the hotel sector as a situation where employees cannot be certain of the permanence of their employment due to external influences threatening their positions. Khalifa & Shehata (2025) categorized this perception into two dimensions: first, quantitative job insecurity, which reflects the fear of the actual risk of job loss; and second,

qualitative job insecurity, which refers to concerns that key job characteristics and working conditions will be adversely affected. Koo et al. (2021) point out that the rapid integration of AI and service automation in the hotel industry is the core trigger of this insecurity. This trend has given rise to the Perceived Threat of Technological Disruption (PTTD), which captures employees' worry that machine intelligence will replace human labor and human intelligence (Yu & Xiao, 2025).

Drawing on classic workplace psychology theories, this analysis first cites the Conservation of Resources (COR) theory perceived threats stemming from AI adoption continuously deplete employees' psychological and cognitive resources, triggering stress caused by the anticipated loss of employment stability (Cheng & Jiang 2026; Liu & Ye, 2026). Meanwhile, the Job Demands-Resources (JD-R) model highlight the stress of adapting to complex AI functions as an added high-intensity job demand that worsens employees' psychological burden (Koo et al., 2021). For frontline hotel employees, the psychological depletion caused by this type of uncertainty manifests as elevated levels of anxiety, depression, and emotional exhaustion (Saraswati et al. 2025; Yu & Xiao, 2025). Finally, job insecurity induced by AI is a core antecedent of occupational burnout, which features three core characteristics such as emotional fatigue, depersonalization, and reduced personal accomplishment (Hussain et al., 2026).

Numerous existing academic studies in the tourism hospitality sector have pointed out that if a hotel deploys artificial intelligence technologies without providing sufficient transparency or carrying out adequate communication, it will first trigger employees' perception of a breached psychological contract, leading them to conclude that management has violated implicit commitments related to job security, fair treatment, and career development (Salama et al., 2025). The cognitive load brought on by job insecurity will harm employees' ability to concentrate, lower their task performance, and reduce overall operational productivity (Chung et al., 2025). Employees are likely to exhibit behavioral issues stemming from uncertainty regarding job stability specifically the fear of being replaced by technology as well as the intention to quit and seek more stable employment elsewhere. (Khalifa & Shehata, 2025; Salama et al., 2025).

The JD-R Model, COR Theory, and Displacement

This study conducts a systematic assessment of the link between hotel AI technology adoption and employee attitudes, and bases its analysis on multiple foundational theoretical frameworks. First, it applies the Job Demands-Resources (JD-R) model offers a comprehensive framework for understanding how job demands and job resources affect employee well-being and performance (Bakker & Demerouti, 2023). It is particularly useful for exploring the impact of organizational factors, such as resources and support, on employee experiences in facing challenges such as the use of artificial intelligence (AI) technologies (Bakker & Demerouti, 2023). In contexts such as the use of AI, the JD-R Model can help understand how the demands introduced by technological change can cause job strain, while organizational resources, such as training, social support, and job autonomy, can reduce feelings of insecurity and enhance employees' coping abilities (Pereira et al., 2022).

The second theory is the Conservation of Resources (COR) Theory introduced by Hobfoll (1989) which states that each individual strives to obtain resources such as jobs, skills, time and energy. However, according to Hobfoll (2001) stress can occur when individuals lose their resources, are threatened by their existing resources and fail in their efforts to obtain new resources. Therefore, it can be concluded that in the workplace, employees' perceptions of the

shocks driven by AI and the implementation of smart technologies will deplete their core work resources that they usually carry out. This situation triggers psychological fatigue in employees (Lei & Kuok, 2025; Griffin et al., 2009).

Displacement theory states that hotel workers' job demands that exceed available resources, coupled with the constant presence of unavoidable insecurity, will drive employee behavior (Johnson et al., 2024). This can be attributed to the negative emotional state of employees when they perceive the widespread use of AI in hotel work operations as threatening their job insecurity. Therefore, in the study context, these three theories have been used to support the construction of a conceptual framework and hypotheses whereby JD-R Model was used to measure the integration of AI in influencing work engagement and job insecurity. Then, COR Theory was used to measure the state of employees who feel a loss of resources, for example, losing resources will experience job insecurity. Finally, the Displacement Theory tool was used to measure how AI can raise concerns that human workers will be replaced.

Methodology

Research Design

This study employs a quantitative, cross-sectional research design to test the relationship between AI integration and job insecurity among hotel employees in four- and five-star hotels in Kuala Lumpur. A quantitative approach is highly appropriate for examining correlations between specific variables and identifying behavioral patterns within large datasets. The constructs in this study were operationalised using validated measurement scales adapted from prior research. These constructs were conceptually aligned with the Job Demands-Resources (JD-R) Model, Conservation of Resources (COR) Theory, and Displacement Theory, which formed the theoretical foundation for the hypothesized relationships. Grounded in this comprehensive theoretical framework, the research design offered a systematic approach to empirically examine the psychological effects of technology use on hotel employees.

Population and Sampling

Hotel operations employees consisting of front office, housekeeping, and food and beverage departments were selected because according to Högberg (2021) and Castaneda et al. (2025) stated that hotel operations workers who are frontline workers work directly using AI technology. Although AI technology is implemented differently according to operational needs, this group of workers was selected because the study examined employees' overall perceptions of the integration of AI into hotel operations and its impact on job insecurity across departments. Smith (2023) stated that the initial cost of using advanced AI is very high, therefore only high-end hotels have sufficient financial capacity to implement such technology, while small, medium and low-end hotels cannot afford to use these tools due to funding constraints, therefore this study focuses on four and five-star rated hotels in Kuala Lumpur because there are 437 four and five-star rated hotels in Kuala Lumpur which is higher than in other states in Malaysia (Malaysia Association of Hotel, 2026). The study further narrowed its research population to front office workers, the housekeeping department, and the food and beverage department. Referencing the total of 178,260 hospitality industry employees in Kuala Lumpur recorded by the Malaysian Hotel Association (2020) and applying the classic sample size calculation criteria developed by Krejcie and Morgan (1970), this study is required to collect a minimum of 377 valid samples. The study adopts a dual non-probability sampling method that combines purposive sampling and snowball sampling, whereby this approach both

enforces the inclusion criteria that respondents must work in the target departments and have direct daily contact with AI, and addresses the sensitive nature of this study's focus on employees' job insecurity, using snowball sampling to reduce respondents' reluctance to participate.

Instrument Development

The researchers developed the instrument based on existing questions from previous studies, adapting them to suit the context of the current research. The instrument is divided into four sections: Section A covers respondent demographics, including age, gender, job position, industry tenure, and education level, to assess how these characteristics influence respondents' perceptions regarding AI usage in their daily work. Section B (Level of Automation in Operations) was designed to gauge the extent of familiarity or frequency with which respondents utilize AI technology in their daily work routines. Section C (AI's Influence on Task Displacement) evaluates respondents' views on the extent to which their previous work tasks in the hotel sector, performed prior to the advent of AI, have been reduced or taken over by AI. Finally, Section D (Employee Job Insecurity) measures psychological responses, specifically anxiety, regarding long-term job security in the face of potential displacement by AI technology. A standard 5-point Likert scale (ranging from 1 = Strongly Disagree to 5 = Strongly Agree) was used to record respondents' answers.

Reliability Analysis

Prior to conducting the actual study, the researcher carried out a pilot study involving 30 staff members from 4- and 5-star hotels in the Kuala Lumpur area who met the required criteria specifically, using AI technology in their daily work tasks. This feedback was crucial for verifying the face validity, relevance, and clarity of the developed instrument. Internal consistency was assessed using Cronbach's alpha. All constructs produced coefficients substantially above the acceptable 0.70 threshold in the pilot and major research analyses that followed (Degree of Automation = 0.957; Influence of AI on Task Replacement = 0.950; Employee Job Insecurity = 0.951). The pilot test's reliability analysis and Cronbach's Alpha scores are displayed in Table 1.

Table 1: Reliability Analysis and Cronbach's Alpha Results for the Pilot Test

Section	Classification	No. of Item	Cronbach's Alpha
B	Degree of Automation in Operations	5	0.957
C	Influence of AI on Task Replacement	5	0.950
D	Employee Job Insecurity	5	0.951

Data Collection and Ethical Considerations

In an effort to allow a more effective and fast dissemination, the final questionnaire was entered in a Google Form and sent through electronic channels, such as email and WhatsApp. The whole research was performed in accordance with stringent ethical guidelines. Prior to participating in the study, all respondents were briefed on the research objectives and clearly informed of their rights, specifically feedback would remain confidential, identities would not

be disclosed, participation was voluntary and withdraw at any time without penalty is permitted. Furthermore, the developed instrument was reviewed and approved by the UiTM Ethics Committee (approval number 100-UiTMCTKD (PJI.23/4) JPN).

Findings

Demographic Profile of Respondents

Section A, covering the demographic profile, provides information on the respondents' backgrounds. A total of 414 responses were received from participants in this study. Data analysis reveals that the majority of respondents were female (62.3% of the sample), while males accounted for 37.7%. Regarding age, most respondents were aged between 18 and 24 (47.6%), followed by those aged 25 to 34 (30.4%), 35 to 44 (14.5%), and 45 to 54 (31.5%), indicating that the respondent pool consisted largely of young people. Most respondents were from the Housekeeping Department (44.4%), followed by the Food and Beverage Department (28.02%) and the Front Office Department (27.54%). In terms of employment duration, the breakdown was: less than 5 years (44%), more than 5 years (20.5%), and less than 1 year (16.2%). The demographic profile of the study is presented in Table 2.

Table 2 Demographic Profile

Classification	Items	Frequency	Percentage (%)
Age	18-24	197	47.6
	25-34	126	30.4
	35-44	60	14.5
	45-54	31	7.5
Gender	Male	156	37.7
	Female	258	62.3
Job Position	Food and Beverages Department	116	28.02
	Front Office Department	114	27.54
	Housekeeping Department	184	44.44
How Many Years Have Worked	Less than 1 year	67	16.2
	Less than 5 years	182	44.0
	More than 5 years	85	20.5

Descriptive Statistics

In this study, descriptive analysis was employed to measure hotel employees' perceptions regarding the use of AI technology in the workplace. The findings indicate that levels of agreement ranged from moderate to high; these results are presented below. The level of automation in hotel operations and staff assessment of AI technology integration served as the first set of independent variables; findings revealed a moderate level of agreement regarding workplace AI usage, with mean scores ranging from 3.64 to 3.80. The highest mean score was recorded for the use of chatbots for guest inquiries ($M = 3.80$, $SD = 1.33$). This was followed

by AI communication with employees during daily tasks ($M = 3.78$, $SD = 1.322$) and self-service check-in kiosks ($M = 3.71$, $SD = 1.464$). The use of departmental AI tools recorded a mean score of 3.67 ($SD = 1.465$). However, plans for future AI expansion recorded the lowest mean ($M = 3.64$, $SD = 1.409$), indicating a lack of certainty regarding the long-term technological direction. Table 3 displays the level of automation in operations.

Table 3 Mean and Standard Deviation scores for Degree of Automation in Operations

Code	Item	Mean	Std. deviation
DA1	My hotel has implemented AI-driven self-service check-in kiosks for quests	3.71	1.464
DA2.	AI-powered chatbots are actively used in my hotel to respond to guest inquiries.	3.80	1.333
DA3	My daily work tasks require me to interact with AI systems (e.g., booking systems, data analytics, service automation).	3.78	1.322
DA4	I am aware of the different AI tools currently used within my department.	3.67	1.465
DA5	My hotel has plans to increase or expand the use of AI technologies in the near future.	3.64	1.409

The second independent variable examines the influence of AI on task replacement, specifically regarding the modification of personnel duties. Results indicate a moderate to high level of agreement that AI is assuming various tasks (means: 3.62–3.81). The highest mean ($M = 3.81$, $SD = 1.341$) suggests that while efficiency gains are acknowledged, there is a perceived reduction in role significance.

Furthermore, findings indicate a decrease in routine tasks ($M = 3.80$, $SD = 1.347$) and overall responsibilities ($M = 3.78$, $SD = 1.336$). While task transition to AI ($M = 3.62$, $SD = 1.424$) and role reshaping ($M = 3.62$, $SD = 1.407$) are evident, the extent of these changes may vary across departments. Table 4 shows the Influence of AI on Task Replacement.

Table 4 Mean and Standard Deviation scores for Influence of AI on Task Replacement

Code	Item	Mean	Std. deviation
IA1	Some of the tasks I used to perform are now handled by AI technologies.	3.62	1.424
IA2	I feel that AI systems have reduced the number of routine tasks I am required to do.	3.80	1.347
IA3	My role has been reshaped due to the integration of AI into hotel operations.	3.62	1.407
IA4	The use of AI has led to a decrease in the number of responsibilities assigned to me.	3.78	1.336
IA5	AI technologies have improved efficiency but made my job feel less essential.	3.81	1.341

The dependent variable of job insecurity examines employee concerns regarding job stability and role changes following AI integration. Study findings reveal significant levels of anxiety,

with mean scores (3.62 to 3.80) reflecting widespread concern that AI threatens job security. Notably, the highest mean score ($M = 3.80$, $SD = 1.328$) highlights deep-seated apprehension regarding long-term prospects. Although some respondents anticipate role evolution rather than role elimination ($M = 3.72$, $SD = 1.309$), significant concerns persist regarding complete replacement ($M = 3.65$, $SD = 1.247$) and the possibility of departmental downsizing ($M = 3.65$, $SD = 1.237$). General concerns regarding job security remain significant ($M = 3.62$, $SD = 1.409$). Table 5 shows the Employee Job Insecurity.

Table 5 Mean and Standard Deviation scores for Employee Job Insecurity

Code	Item	Mean	Std. deviation
EJ1	I feel uncertain about my job security due to the increasing use of AI in hotel operations.	3.62	1.409
EJ2	The integration of AI in my hotel has made me feel less secure about my long term job prospects.	3.80	1.328
EJ3	I am worried that AI will reduce the need for staff in my department.	3.65	1.237
EJ4	I am concerned that AI may eventually replace my position	3.65	1.247
EJ5	I believe my job will continue to exist, but with new responsibilities due to AI integration.	3.72	1.309

Correlation Analysis

A Pearson correlation analysis was conducted to examine the strength and direction of linear correlations between the independent parameters (degree of automation in operations and influence of AI on task replacement) and the dependent variable (employee job insecurity). The full statistical results are reported in Table 6. All two independent variables exhibit significant, positive correlations with the major dependent variable. Influence of AI on task replacement exhibits the strongest linear correlation with pleasure ($r = 0.964$, $p < 0.001$), followed by degree of automation in operations ($r = 0.945$, $p < 0.001$). All significance values are substantially below the baseline criterion ($p = 0.000$), hence validating the research hypotheses: Degree of automation in operations and influence of AI on task replacement variables significantly effect employee job insecurity.

Table 6 Pearson Correlation Coefficients Matrix among Study Variables

		Degree of Automation in Operations	Influence of AI on Task Replacement	Employee Job Insecurity
Degree of Automation in Operations	Pearson Correlation	1	.666**	.945**
	Sig. (2-tailed)		.000	.000
	N	414	414	414
Influence of AI on Task Replacement	Pearson Correlation	.666**	1	.964**
	Sig. (2-tailed)	.000		.000

	N	414	414	414
Employee Job Insecurity	Pearson Correlation	.945**	.964**	1
	Sig. (2-tailed)	.000	.000	
	N	414	414	414

Multiple Regression Analysis

To evaluate the combined predictive capability of the independent Degree of Automation in Operations, Influence of AI on Task Replacement parameters on the dependent variable, a multiple linear regression analysis was conducted. Tables 7 display the Regression Model Summary respectively.

Table 7 Regression Model Summary for Degree of Automation in Operations and Influence of AI on Task Replacement Predictors

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.731 ^a	.534	.530	.51473
a. Predictors: (Constant), Degree of Automation in Operations, Influence of AI on Task Replacement				
b. Dependent Variable: Employee Job Insecurity				

As displayed in Table7, the multiple correlation coefficient ($R = 0.731$) indicates a strong, positive linear relationship between the combined degree of automation in operations and influence of AI on task replacement predictors and employee job insecurity. The coefficient of determination ($R^2 = 0.534$) reveals that the two predictors in this model explain 53.4% of the total variance in overall employee job insecurity.

Table 8 Regression Coefficients Matrix for Employee Job Insecurity Predictors

Item	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant: DV)	0.261	0.049		5.311	0.000
Degree of Automation in Operations	0.118	0.053	0.128	2.231	0.026
Influence of AI on Task Replacement	0.802	0.055	0.839	14.678	0.000

Table 8 indicates the influence of employee job insecurity parameters. The multiple linear regression analysis confirms that both predictors significantly influence employee job insecurity within the hotel setting (F -test implications). The Degree of Automation in Operations (IV1) yielded an unstandardized coefficient of $B=0.118$ ($t=2.231, p=0.026$), indicating a statistically significant positive relationship. However, the Influence of AI on Task Replacement (IV2) demonstrated a much more substantial impact, with $B=0.802$ and a high t -value of 14.678 ($p<0.001$).

Crucially, the standardized coefficients (β) reveal the relative importance of these variables: AI task replacement ($\beta=0.839$) is a far more potent predictor of job insecurity than general operational automation ($\beta=0.128$). This indicates that AI is a primary source of anxiety among hotel workers, as it is capable of replacing specific tasks previously performed by humans; indeed, the AI revolution has led to AI taking over many of the daily duties of hotel staff. These findings highlight the need for management to focus not only on AI sophistication but also on valuing the expertise of the hotel workforce.

Based on the combined results of the Pearson correlation and multiple linear regression analyses, the structural relationships hypothesised at the outset of this study were systematically evaluated. Table 9 summarises the hypothesis-testing outcome

Table 9 Summary of Hypotheses Testing Results

Hypothesis	Structural Path	Correlation (r)	Standardized Beta (β)	Sig. (p)	Outcome
H1	Degree of Automation in Operations towards Employee Job Insecurity	0.945	0.128	< 0.001	Accepted
H2	Influence of AI on Task Replacemen towards Employee Job Insecurity	0.964	0.839	< 0.001	Accepted

The statistical analysis confirms that both hypotheses are supported, as the Degree of Automation in Operations and the Influence of AI on Task Replacement each maintain a significant, positive relationship with Employee Job Insecurity. Among these variables, the Influence of AI on Task Replacement emerged as the primary determinant of workplace anxiety.

Hypothesis 1, examined within the hotel industry context, is empirically supported ($r=0.945$, $p<0.001$), indicating that increased visibility of automated systems correlates with heightened job insecurity. Similarly, Hypothesis 2 is supported by the data ($r=0.964$, $p<0.001$), demonstrating that AI-driven task substitution serves as a critical driver of insecurity. Specifically, employees experiencing the direct displacement of their professional duties by AI technology report the most profound levels of anxiety.

Discussion

The primary objective of this study was to examine the relationship between the use of AI and job insecurity among front-line hotel employees in Kuala Lumpur. The degree of automation and the perceived effect of AI on job substitution were the two factors used to evaluate AI integration. Increased AI integration is linked to higher degrees of work insecurity, according to the data, which show that both aspects have a significant and positive correlate with employees' sentiments of job insecurity.

The findings support Hypothesis H1 and demonstrate a strong beneficial relationship between operational automation and uncertainty about employment ($r = 0.945$, $p < 0.001$). Consistent with other studies (Kaur, 2023; Tan & Wong, 2023), employees who appreciate the operational benefits of AI frequently exhibit more concerns about the future importance of their duties. Similarly, Hypothesis H2 was supported, with the strongest association between job instability

and perceived AI task substitution ($r = 0.964$, $p < 0.001$). This finding is consistent with past research suggesting that automating routine service tasks may raise employees' concerns about job security (Shoss, 2022; Zhou et al., 2023).

However, the integration of AI technology into the daily tasks of hotel employees should not be viewed as the primary cause of job insecurity among employees. This is because other factors also influence the situation, such as organizational stability, economic downturns, labor market conditions, and management's response during the technological transition. Furthermore, employee reactions and sentiments regarding technology adoption may be influenced by demographic characteristics such as age, gender, education level, technical proficiency, and length of service. These potential factors need to be examined for further research

The findings provide more theoretical support for the Job Demands–Resources (JD-R) Model and Displacement Theory in the context of hospitality. AI integration can be viewed as an increasingly important job necessity that requires employees to learn new digital skills and adapt to technology-driven work practices. According to the JD-R Model, employees' emotions of job insecurity may be exacerbated by a lack of organisational resources, such as training, managerial assistance, and effective communication. The findings also corroborate Displacement Theory by showing that workers' opinions about task replacement are relevant even in situations where AI enhances rather than entirely replaces human labour, highlighting the importance of perceived technology changes in affecting job insecurity.

Research findings also indicate that employees' perceptions of AI as a threat can be mitigated through prudent management actions specifically by handling AI integration transparently and by providing training to enhance employees' digital skills. Furthermore, involving employees in the adoption of technology helps alleviate ongoing concerns by reassuring them that technology is intended to facilitate their daily tasks, rather than serving as the primary driver for executing every aspect of their work.

Conclusion

An analysis of four- and five-star hotels in Kuala Lumpur indicates that the use of AI by these premises has revolutionized the hospitality industry in recent years. There are only four and five hotels in Kuala Lumpur that are mentioned in this article. The findings of the study may not apply to hotels in other parts of Malaysia or hotels with different star ratings; instead, the premises are determined by the degree to which they use AI technology. As a result, the selected samples were collected to determine the study findings. In order to increase the generalization of findings and provide more comprehensive information on the use of AI in Malaysia's hospitality industry, future studies should include hotels with various geographic locations and star ratings. Even if the use of AI has led to a significant increase in operational efficiency and guest experience, this study's findings indicate that the technological change in question has resulted in a significant increase in psychological traits related to staff. There is a strong positive correlation between AI automation, work-related tasks, and work-related risks that will be mitigated by technology. For the sake of sustainable industry growth, stakeholders, policymakers, and hotel management must mitigate this concern by enhancing digital skills, facilitating long-term communication, and putting forth strong efforts to ensure that advanced technology supports and does not replace basic human values in the hospitality industry.

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References

- Abdou, A. H., & Shehata, H. S. (2026). Digital synergy for hospitality sustainability: A moderated mediation model of IoT, data-driven decision-making, AI, and hotel sustainable performance. *Frontiers in Sustainability*, 6, 1727952. <https://doi.org/10.3389/frsus.2025.1727952>
- Acharya, P., & Mahapatra, S. S. (2024). Exploring the Impact of Artificial Intelligence Integration on Guest Experience in the Hotel Industry. *Geo Journal of Tourism and Geo sites*, 54(2 supplement), 802–810. <https://doi.org/10.30892/gtg.542spl04-1255>
- Ali, B. J., Gardi, B., Othman, B. J., Ahmed, S. A., Ismael, N. B., Hamza, P. A., Aziz, H. M., Sabir, B. Y., Sorguli, S., & Anwar, G. (2021). Hotel service quality: The impact of service quality on customer satisfaction in hospitality. *International Journal of Engineering, Business and Management*, 5(3), 14–28. <https://doi.org/10.22161/ijebm.5.3.2>
- Ali, M., Khan, T. I., & Şener, İ. (2025). Transforming hospitality: The dynamics of AI integration, customer satisfaction, and organizational readiness in enhancing firm performance. *Journal of Hospitality and Tourism Technology*. <https://doi.org/10.1108/JHTT-04-2024-0261>
- Amila Ishanthi, H. M., Jain, N., & Kaur, M. (2026). AI-powered mobile applications in hotels: Guest personalization, operational efficiency, and sustainability. *International Journal of Interactive Mobile Technologies (iJIM)*, 20(7), 71–83. <https://doi.org/10.3991/ijim.v20i07.61081>
- Anwar, F. A., Deliana, D., & Suyamto, S. (2024). Digital Transformation in the Hospitality Industry: Improving Efficiency and Guest Experience. *International Journal of Management, Science and Information Technology*, 4(2), Article 2. <https://doi.org/10.35870/ijmsit.v4i2.3201>
- Astuti, E., Harsono, I., Uhai, S., Muthmainah, H. N., & Vandika, A. Y. (2024). Application of artificial intelligence technology in customer service in the hospitality industry in Indonesia: A literature review on improving efficiency and user experience. *Sciences Du Nord Nature Science and Technology*, 1(1), 28–36. <https://doi.org/10.1444/ocp0002356>
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
- Bharatkumar, S. R. (2024). Digital Transformation In Business: The Impact of AI In Enhancing Customer Experience. *IOSR Journal of Business and Management*, 26(10), 53–58. <https://doi.org/10.9790/487X-2610145358>
- Bhargava, A., Bester, M., & Bolton, L. (2021). Employees' perceptions of the implementation of robotics, artificial intelligence, and automation (RAIA) on job satisfaction, job security, and employability. *Journal of Technology in Behavioral Science*, 6(1), 106–113. <https://doi.org/10.1007/s41347-020-00153-8>
- Brochado, A., Morgado, E., & Vilares, M. J. (2018). The role of AI and human interaction in the hospitality industry. *Tourism Management*, 69, 73–86.
- Brougham, D., & Haar, J. (2018). Smart technology, artificial intelligence, robotics, and algorithms (STARA): Employees' perceptions of our future workplace. *Journal of Management & Organization*, 24(2), 239–257. <https://doi.org/10.1017/jmo.2016.55>
- Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton & Company.
- Brynjolfsson, E., Li, D., & Raymond, L. (2023). *Generative AI at work* (NBER Working Paper No. 31161). National Bureau of Economic Research. <https://doi.org/10.3386/w31161>

- Buhalis, D., O'Connor, P., & Leung, R. (2023). Smart hospitality: From smart cities and smart tourism towards agile business ecosystems in networked destinations. *International Journal of Contemporary Hospitality Management*, 35(1), 369–393. <https://doi.org/10.1108/IJCHM-04-2022-0497>
- Castaneda, A. R., Surachartkumtonkun, J., Maseeh, H. I., Thaichon, P., & Shao, W. (2025). Frontline employees in an AI-integrated workplace: Current perspectives and future research landscapes. *Journal of Service Theory and Practice* (2025) 35 (7): 30–60. <https://doi.org/10.1108/JSTP-04-2024-0099>
- Chathoth, P. K., Altintas, M., & Lutz, E. (2016). Technologies in hospitality: Are hotels ready for digital disruption? *International Journal of Hospitality Management*, 56, 12–21.
- Cheng, J., & Jiang, J. (2026). Customer mistreatment and venting to conversational AI:
- Chung, Y. W., Im, S., Kim, J. E., & Yun, J. K. (2025). Artificial intelligence awareness, career resilience, job insecurity and behavioural outcomes. *Australian Journal of Psychology*, 77(1), 2559910. <https://doi.org/10.1080/00049530.2025.2559910>
- Cozzio, C., Santos Arteaga, F. J., & Maurer, O. (2026). Artificial intelligence adoption in hospitality: Challenges and opportunities across hierarchical levels. *Tourism Review*, 81(2), 613–630. <https://doi.org/10.1108/TR-10-2024-0913>
- Demerouti, E., Bakker, A. B., de Jonge, J., Janssen, P. P. M., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work, Environment & Health*, 27, 279–286. <https://doi.org/10.5271/sjweh.616>
- Emotional exhaustion as mediator and trust in conversational AI as moderator. *Behavioral Sciences*, 16, 520. <https://doi.org/10.3390/bs16040520>
- Ersoy, A., & Ehtiyar, R. (2023). The impact of artificial intelligence on hospitality employees' work outcomes. *Advances in Hospitality and Tourism Research*, 11(4), 505–526. <https://doi.org/10.30519/ahtr.1264966>
- Freud, S. (1911). Formulations on the two principles of mental functioning. *International Journal of Psycho-Analysis*, 1, 52–58.
- Granström, D. E. A. S., Pronk, A. M., & Criscione-Naylor, N. (2023). Robotic services in the hotel industry: An examination of Henn Na hotels. *International Journal of Gaming, Hospitality and Tourism*, 3(1).
- Hibban, M. (2025). AI-Powered Chatbots: Revolutionizing Customer Service in the Digital Era. *Jurnal Ekonomi Kreatif Dan Manajemen Bisnis Digital*. 4. 282–288. <https://doi.org/10.55047/jekombital.v4i2.1030>
- Hobfoll, S. E. (1989). Conservation of Resources: A New Attempt at Conceptualizing Stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Hobfoll, S.E. (2001), The Influence of Culture, Community, and the Nested-Self in the Stress Process: Advancing Conservation of Resources Theory. *Applied Psychology*, 50: 337–421. <https://doi.org/10.1111/1464-0597.00062>
- Högborg, K. (2021). Techno Stress among Hotel Employees - a Longitudinal Study of Social Media as Digital Service Encounters. W. Wörndl et al. (Eds.): *Information and Communication Technologies in Tourism 2021*, pp. 70–82, 2021. https://doi.org/10.1007/978-3-030-65785-7_6
- Huang, L., & Zheng, W. (2023). Hotel demand forecasting: A comprehensive literature review. *Tourism Review*, 78(1), 218–244. <https://doi.org/10.1108/TR-07-2022-0367>
- Hussain, K., Ahmed, I., Altıntaş, M., Altıntaş, B., Amin, L., Taj, S., Waheed, K. J., Naureen, S., & Metwally, N. (2026). From job insecurity to burnout in the age of artificial intelligence: The mediating role of work engagement and the moderating role of artificial intelligence self-efficacy. *International Review of Management and Marketing*, 16(4), 711–723. <https://doi.org/10.32479/irmm.23807>

- Ivanov, S., Seyitoglu, F., & Webster, C. (2023). AI and robotics in the lodging industry. In R. Fu (Ed.), *Artificial intelligence, machine learning and robot applications in hospitality business* (pp. 163–180). Kendall Hunt.
- Jabeen, F., Al Zaidi, S., & Al Dhaheri, M. H. (2022). Automation and artificial intelligence in hospitality and tourism. *Tourism Review*, 77(4), 1043–1061. <https://doi.org/10.1108/TR-09-2021-0413>
- Jasrotia, A., Banerjee, S., & Shukla, R. (2024). AI-Powered Customer Engagement: Changing Marketing Strategies in the Hotel Industry. In V. Nadda, P. K. Tyagi, A. Singh, & V. Singh (Eds.), *Advances in Marketing, Customer Relationship Management, and E-Services* (pp. 105–114). IGI Global. <https://doi.org/10.4018/979-8-3693-7122-0.ch006>
- Johnson, A., & Lee, D. (2024). Managing employee frustration: The role of displacement in organizational conflict. *Journal of Management Studies*, 41(3), 235–247.
- Johnson, M., & Carter, B. (2024). Organizational behavior and the impact of emotional displacement: A comprehensive review. *Journal of Organizational Psychology*, 30(4), 495–512.
- Khalifa, M. H., & Shehata, G. M. (2025). Threat of technological disruption and turnover intention in Egypt: A moderated mediation model. *SA Journal of Human Resource Management*, 23, a3061. <https://doi.org/10.4102/sajhrm.v23i0.3061>
- Kim, H., So, K. K. F., Shin, S., & Li, J. (2024). Artificial intelligence in hospitality and tourism: Insights from industry practices, research literature, and expert opinions. *Journal of Hospitality & Tourism Research*, 49(2), 366–385. <https://doi.org/10.1177/10963480241229235>
- Koo, B., Curtis, C., & Ryan, B. (2021). Examining the impact of artificial intelligence on hotel employees through job insecurity perspectives. *International Journal of Hospitality Management*, 95, 102763. <https://doi.org/10.1016/j.ijhm.2020.102763>
- Lei, B. C., & Kuok, A. C. (2025). How emotional labor predicts burnout and work engagement in the differentiated job demands-resources model: The moderating effect of emotional intelligence in hotels in Macau. *Journal of Human Resources in Hospitality & Tourism*, 24(3), 393–417. <https://doi.org/10.1080/15332845.2024.2425964>
- Li, X., Gong, Z., Choi, H. C., & Kang, S.-W. (2026). AI self-efficacy and innovative work behavior in hospitality and tourism: A job demands–resources perspective on work engagement and schedule I-deals. *Behavioral Sciences*, 16(3), 431. <https://doi.org/10.3390/bs16030431>
- Liu, X., & Ye, Z. (2026). The forgotten middle: How moderate self-efficacy amplifies the threat of AI through job insecurity. *Frontiers in Psychology*, 16, 1734254. <https://doi.org/10.3389/fpsyg.2025.1734254>
- Makridakis, S. (2023). Artificial intelligence and the future of work: Implications for business and society. *Futures*, 144, 103040. <https://doi.org/10.1016/j.futures.2022.103040>
- Malaysia Association of Hotel (2026). Membership Directory four and Five star Hotels in Kuala Lumpur. Retrived 28 Jun 2026 at <https://www.hotels.org.my/members>
- McClure, P. K. (2018). “You’re fired,” says the robot: The rise of automation in the workplace, technophobes, and fears of unemployment. *Social Science Computer Review*, 36(2), 139–156. <https://doi.org/10.1177/0894439317698637>
- Nguyen, A., & Lee, C. (2024). Employee responses to stress in the hospitality industry: Analyzing the role of displacement. *Journal of Hospitality Management*, 36(2), 134–142.
- Patil, D. (2025). Artificial Intelligence-Driven Customer Service: Enhancing Personalization, Loyalty, and Customer Satisfaction. SSRN. <https://doi.org/10.2139/ssrn.5057432>

- Pericleous, K., Liasidou, S., & Dyankov, T. (2025). AI and hotel employees' coexistence: A helpful tool or a threat to job loss? *Worldwide Hospitality and Tourism Themes*, 17(1), 132–143. <https://doi.org/10.1108/WHATT-10-2024-0132>
- Prabu, V. P. (2023). AI-Powered Predictive Analytics for Retail Demand Forecasting. *International Journal of Innovative Research in Engineering & Multidisciplinary Physical Sciences*, 11 (10).
- Rehaman, R. & Guibas, L. (2024). Ethical Implications of Artificial Intelligence in Enhancing Human Resources Job Performance. 10.13140/RG.2.2.28859.22569.
- Roy, P., Ramaprasad, B. S., Chakraborty, M., Prabhu, N., & Rao, S. (2020). Customer acceptance of use of artificial intelligence in hospitality services: An Indian hospitality sector perspective. *Global Business Review*. <https://doi.org/10.1177/0972150920907008>
- Salama, W. M. E., Khairy, H. A., Mansour, A. A., Alrefae, W. M., Afify, S. M., & Shehadat, A. T. A. (2025). How AI awareness drives employee intention to leave in hotels: The mediating roles of job burnout and psychological contract breach. *GeoJournal of Tourism and Geosites*, 60(2spl), 1206–1220. <https://doi.org/10.30892/gtg.602spl12-1433>
- Saraswati, K. D. H., Fajrianthi, F., & Sami'an, S. (2025). Employee well-being in robot, artificial intelligence and service automation-integrated workplace: A scoping review. *SA Journal of Industrial Psychology*, 51, a2323. <https://doi.org/10.4102/sajip.v51i0.2323>
- Shabankareh, M., Ranjbaran, A., Lim, W. M., Daronkola, H. K., & Nazarian, A. (2025). Artificial intelligence on social media and revisit behavior: Evidence from the hotel industry. *International Journal of Advertising*, 44(8), 1523–1562. <https://doi.org/10.1080/02650487.2025.2478398>
- Sharma, A., Kumar, S., & Singh, P. (2024). Emotional intelligence and organizational behavior in the hotel industry: A case study. *International Journal of Hospitality Management*, 68(2), 12–23.
- Smith, D., & Wills, T. (2023). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357.
- Tan, Y., & Lim, H. (2023). The impact of stress on hotel employees in Malaysia: Exploring emotional displacement. *Tourism and Hospitality Research*, 28(1), 51–62.
- Watson, K., & Miller, R. (2023). Managing customer dissatisfaction and emotional displacement in service industries. *Journal of Service Management*, 33(4), 485–497.
- Wong, I. A., Chau, K. F., & Chan, H. U. (2023). An empirical study on customers' gambling intention in AI supported casinos. *Journal of Hospitality and Tourism Technology*, 14(2), 121–136. <https://doi.org/10.1108/JHTT-07-2021-0197>
- Wu, F., Sorokina, N., & Putra, E. G. S. (2023). Customers satisfaction on robots, artificial intelligence and service automation (RAISA) in the hotel industry: A comprehensive review. *Open Journal of Business and Management*, 11, 1227–1247. <https://doi.org/10.4236/ojbm.2023.113069>
- Yu, S., & Xiao, L. (2025). The impact of artificial intelligence shock awareness on workplace anxiety. *Proceedings of the 15th International Workshop on Computer Science and Engineering (WCSE 2025)*. <https://doi.org/10.18178/wcse.2025.06.001>
- Zahidi, F., Kaluvilla, B. B. & Mulla, T. Embracing the New Era: Artificial Intelligence and its Multifaceted Impact on the Hospitality Industry. *Journal of Open Innovation: Technology, Market, and Complexity*, Volume 10, Issue 4. <https://doi.org/10.1016/j.joitmc.2024.100390>

- Zhang, Y., Liu, X., Yan, Q., & Na, M. (2025). Empowering workforces in AI-driven environments: Co-skilling, organizational support, and mitigating job insecurity. *Frontiers in Psychology, 16*, 1700129. <https://doi.org/10.3389/fpsyg.2025.1700129>
- Zhong, L., Coca-Stefaniak, J. A., Morrison, A. M., Yang, L., & Deng, B. (2022). Technology acceptance before and after COVID-19: No-touch service from hotel robots. *Tourism Review, 77*(4), 1062–1080. <https://doi.org/10.1108/TR-06-2021-0276>