





Research article

The future of hiring: Hospitality graduates' perception on AI-driven employment system

Neveen Mohamed Mansour ¹, Jermien Hussein Abd El Kafy ¹, Ghada Mohamed Farahat ² and Mohamed A. S. Elsayed ³

¹ Social Studies Department, College of Arts, King Faisal University, Al-Ahsa, Saudi Arabia

² Tourism Studies Department, Faculty of Tourism and Hotel Management, Helwan University, Cairo, Egypt

³ Hotel Management Department, Faculty of Tourism and Hotel Management, Helwan University, Cairo, Egypt,

ABSTRACT

The paper examines the perception of hospitality graduates with regard to AI-based employment systems to facilitate university-based job placement and the main factors behind their use and adoption of AI technologies. An online questionnaire was used as a quantitative design on 839 hospitality graduates and final-year students at Egyptian universities. The study was informed by the Unified Theory of Acceptance and Use of Technology (UTAUT) framework with the extension of attitudinal constructs. There were also relationships among performance expectancy, effort expectancy, social influence, facilitating conditions, attitude toward use, behavioural intention and actual usage behaviour analysed using structural equation modelling (SEM) through SmartPLS. There were all positive and statistically significant relationships. Performance expectancy has proved to be a better predictor of acceptance than social influence. Attitude toward use played a significant role in mediating between the relationships between the UTAUT constructs and the behavioural outcomes, indicating that cognitive and affective processes influence the acceptance of technology. The study offers empirical evidence of the acceptance of AI-based employment systems by hospitality education students, which can offer insights to support universities, creators of technologies, and career placement policymakers in emerging markets on how to implement innovations in their career placement programmes.

KEYWORDS

AI-driven employment systems; hospitality graduates; UTAUT, technology acceptance; Egypt; behavioural intention

Introduction

The world of employment is undergoing a revolutionary change as the application of artificial intelligence technology is completely transforming the nature of talent recruitment within organisations, as well as the way individuals seek employment (Nayak et al., 2024). Artificial intelligence-based job platforms have become the latest and most advanced systems that exploit machine learning algorithms, natural language processing, and predictive analytics to pair job seekers with a job that fits them, simplify the application process, and decrease hiring time by a significant factor in many industries around the globe (Tariq et al., 2023). The hospitality industry, whose turnover rates are high and which has a continuous demand for skilled professionals, is bound to gain immensely through these technological advancements, which are likely to fill the consistent gaps between academic training and workplace reality (Yilmazdogan, 2024). In the Egyptian case, this technological development comes at a critical juncture for the hospitality sector, which is one of the main pillars of the national economy through tourism and services (Yassin et al., 2022; El Atiek & Goutte, 2023). The hospitality education system in Egypt is a yearly source of thousands of graduates from universities and specialised institutes, but there is always a significant issue of graduates in Egypt failing to make a smooth transition between the academic setting and the working process (Moussa et al., 2024). The

CORRESPONDING AUTHOR'S CONTACT: Neveen Mohamed Mansour ✉ nmmansour@kfu.edu.sa

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high level of disconnect between institutions and labour markets has left a significant gap, in which graduates are unable to find the right jobs, whilst employers also complain of constant challenges in finding suitable and capable graduates. The conventional methods of finding employment in Egypt, such as personal references, newspaper ads, and general employment sites, are not effective in meeting the specific demands of hospitality graduates who need to be matched with a specific hotel, restaurant, tourism agency, or similar service offices (Assaad et al., 2022).

Compared to more general professional networking sites like LinkedIn, which cater to career development of a career across fields and industries, the Egyptian hospitality industry is not a situation where the same strategy applies. The suggested AI-based employment system is a new solution which is aimed at enabling career services departments at universities to actively search jobs on behalf of their graduates, automatically search student profiles against employer needs, and streamline the application process, which considerably decreases the time for job finding. This mediated concept by the universities makes career departments active enablers, but not passive bulletin boards, deploying artificial intelligence to completely reinvent the role of institutions in meeting their graduate employability obligation (Adam, 2025; Ma, 2023). Although the potential of AI-based employment systems in the global arena has been acknowledged, there is a significant knowledge gap as to how Egyptian-based hospitality graduates perceive the innovative technologies and whether they would accept these innovations as a viable tool of career placement. The graduate departments in Egyptian universities are presently functioning with severely under-equipped technology machinery and are heavily based on manual operations, irregular employer contacts, and conventional announcements, which cannot effectively associate the graduates with suitable opportunities. The suggested system represents a paradigm shift that needs to be accepted by graduates who trust AI-based recommendations, are ready to voluntarily provide data on their individual qualifications, and believe that technological solutions can really enhance employment results and make them better than the recently used traditional ones. The main question of this research is the following:

- How do hospitality graduates in Egypt respond to the idea of AI-driven employment systems being implemented to help university career departments with job searching and placement?

This knowledge of these perceptions, concerns, expectations, and technological preparedness is critical, as universities and developers would be endangering their resources on solutions that might be met with resistance or underuse by the same population, they are supposed to be serving. This work is a thorough investigation into the attitudes, expectations, and perceptions of Egyptian hospitality graduates regarding the application of AI to the employment system by allowing university career departments to proactively search, match, and provide opportunities to graduates. The study mentions several factors influencing graduates' acceptance, including perceived usefulness, ease of use, trust in algorithmic recommendations, data privacy concerns, and functional expectations. The research also examines the experience of graduates using existing job-seeking tools, their frustrations in obtaining jobs in the hospitality industry, and their willingness to adopt technology-driven solutions, such as university-mediated placement services with AI-enhanced solutions, rather than platforms like LinkedIn. The impetus of the research is convergent in nature and has drawn on the factors that are urging and highly important. The hospitality industry in Egypt has also experienced chronic talent acquisition issues in which qualified graduates cannot be absorbed or are underemployed, with businesses not finding the skilled employees, indicating market failure, which can be overcome by technology. The Egyptian universities are becoming aware of their role in graduate employability and are extending their efforts beyond academic education, but do not have scalable career placement tools.

Literature review

Performance expectancy and actual usage behaviour

According to Sewandono et al. (2023), performance expectancy, which is the extent to which individuals feel that by using a given system they will achieve gains in their job performance, has been reliably shown as an important predictor of actual usage behaviour in a number of technological situations. Studies that have investigated the use of AI in employment systems suggest that when users have a sense of real value, including better job-matching accuracy, less time searching, and better chances of acquiring employment opportunities, they will be much more willing to use AI-driven job matching systems and continuously utilise them. Performance expectancy is highly relevant in the case of Egyptian hospitality graduates, where the perceived capacity of AI-enabled employment systems to provide tangible employment-related results directly affects the intentions to continuously use the platform (Abaza & Eltobgy, 2024). Therefore, the suggested hypothesis is as follows:

H1: Performance Expectancy has a significantly positive effect on Actual Usage Behaviour

Effort expectancy and real usage behaviour

Effort expectancy is the level of comfort that is related to utilising a given technology system, and the overwhelming amount of research indicates that perceived ease of use is a major determinant of actual usage patterns, especially among users with different levels of technological literacy (Susanto et al., 2022). Research has shown in the employment technology literature that intuitiveness in interfaces, simple navigation architecture, and low cognitive load are among the key factors that enhance the frequency and length of system use among job seekers (Wang et al., 2025). Research work dedicated to the AI-powered platforms indicates that graduates find the employment systems to demand too much time to be invested in, too complicated to register for, or their functionality too puzzling; the real usage behaviour reduces despite the potential advantages the system has to offer (Scutelnicu & Ceobanu, 2024). Therefore, the suggested hypothesis is as follows:

H2: Effort Expectancy has a significantly positive effect on Actual Usage Behaviour

Facilitating conditions and actual usage behaviour

'Facilitating conditions' refer to the organisational and technical support that users think is present to encourage them to use a particular system, such as the availability of resources needed and technical support, as well as compatibility with current processes (Tanantong & Wongras, 2024). The studies on technology adoption have shown that despite the presence of a positive attitude towards a system, actual usage behaviour is usually restricted unless there are sufficient conditions to support the adoption of the system, which include internet connectivity, devices, technical support, and institutional support. Research on the use of employment sites in an educational setting indicates that university-based services, such as training courses, help desk support, and explicit instructions on how to use the tools, prove to be beneficial in terms of real use of career placement technologies by graduates (Hassan, 2024). Therefore, the suggested hypothesis is as follows:

H3: Facilitating Conditions have a significantly positive effect on Actual Usage Behaviour

Social influence and actual usage behaviour

Social influence is the degree to which people feel that important people think they ought to adopt a specific technology, which includes opinions of peers, suggestions of authority figures, and the dominant social norms in the pertinent societies. Empirical studies have shown that social influence has a significant influence on actual usage behaviour, especially in collectivist cultures where group opinion and social validation are a great influence on individual decision-making (Gass & Seiter, 2022). Research on employing technologies in the employment sector shows that as graduates monitor their peers being successful in acquiring jobs through AI-based systems, being supported by faculty members and career advisors, and seeing these systems in mass use, the actual usage behaviour of each graduate escalates accordingly (Akmedov & Dulan, 2025). Therefore, the suggested hypothesis is as follows:

H4: Social Influence has a significantly positive effect on Actual Usage Behaviour

Performance expectancy and behavioral intention

Performance expectancy has been shown to have strong positive relations with behavioural intention in a wide range of technological settings, where people develop intentions to use systems grounded mainly on their expected benefits of performance and utility gains (Abd Aziz et al., 2023). Technology acceptance research meta-analyses repeatedly report performance expectancy to be the most important predictor of behavioural intention, with a large amount of variance in the intentions of users to adopt and use new technologies (Bergmann et al., 2023). Within the context of employment systems, research indicates that graduates who feel that AI-based systems will greatly enhance their ability to find jobs, gain more interviews, and experience faster employment rates have more intentions of using such systems than those who feel that there is little performance benefit (Ma, 2023). Therefore, the suggested hypothesis is as follows:

H5: Performance Expectancy has a significantly positive effect on Behavioral Intention

Expectancy and behavioral intention of effort

Effort expectancy plays a vital role in the formation of behavioural intention since people are much more willing to have an intention to use the technologies they see as easy to learn, easy to use, and needing in general fewer efforts to invest compared to the benefits expected to be received after using the technology (Almagrashi et al., 2023). It has been shown that effort expectancy gains relative significance at specific

stages of initial technology evaluation, where users determine the costs of adoption to returns ratios (Sengkalit & Khairal Abdullah, 2025). Research on the topic of employment platforms has shown that difficult registration processes, unintuitive interfaces, and high learning curves significantly reduce the intentions of graduates to implement the use of AI-based systems despite their possible effectiveness (Algerafi et al., 2023). Therefore, the suggested hypothesis is as follows:

H6: Effort Expectancy has a significantly positive effect on Behavioral Intention

Facilitating conditions and behavioral intention

The connection between facilitating conditions and behavioural intention has produced conflicting results within the literature of technology acceptance, with some studies demonstrating a direct effect of facilitating conditions and others demonstrating that facilitating conditions do not directly affect intention but actual usage (Lai et al., 2022). Current literature suggests the existence of facilitating conditions that influence behavioural intention, especially in situations where users expect to need external assistance or in situations where users are aware of the possible obstacles to entry and use of the system. Research has shown in the employment technology environment that graduates would develop more favourable usage intentions where they believe that there is sufficient support infrastructure available to them, such as technical assistance, training facilities, and institutional support that minimises uncertainties in implementation (Almaiah et al., 2022). Therefore, the suggested hypothesis is as follows:

H7: Facilitating Conditions has a significantly positive effect on Behavioral Intention

Social influence and behavioral intention

Social influence has shown a strong impact on behavioural intention in the context of mandatory or highly visible technology adoption, when social norms and peer pressure are key factors shaping individual choice (Cioc et al., 2023). There is always evidence that the directives of a credible source, visible application among peers, and anticipations of normativity among the social groups in which individuals are found are considerably more influential in raising intentions to use new technologies (Gass & Seiter, 2022). In collective cultural backgrounds like Egypt, where group attitudes hold great importance and social approval plays an important role in shaping individuals, social influence plays an increased role in the formation of behavioural intention among hospitality graduates (Touseef et al., 2023). Therefore, the suggested hypothesis is as follows:

H8: Social Influence has a significantly positive effect on Behavioral Intention

Performance expectancy and attitude towards use

Performance expectancy is an essential determinant of attitude toward the use of technologies, as it affects cognitive thinking about the value of the system, its utility, and its desirability for achieving desired results (Rizkalla et al., 2023). Psychology has shown that people form positive attitudes towards objects, behaviours, and technologies that they consider useful in achieving their goals and enhancing the pertinent aspects of performance (Gagné et al., 2022). Research work published on the topic of employment technology indicates that graduates who assume that AI-based systems will significantly improve their job search processes form more positive attitudes, which are marked by excitement, acceptance, and positive comments about the systems (Rukadikar & Khandelwal, 2025). Performance expectancy is one of the main determinants of attitude formation in the case of Egyptian hospitality graduates with employment uncertainties operating in a competitive market, where the direct result of affective and evaluative response is perceived utility (Elshaer et al., 2023). Therefore, the suggested hypothesis is as follows:

H9: Performance Expectancy has a significantly positive effect on Attitude Toward Use

Expectancy of effort and attitude toward use

Effort expectancy is also important to attitude formation because people form a more positive attitude towards technologies, they believe are efficient, convenient, and require less effort in terms of economic costs (Rizkalla et al., 2023). Ease of use has been psychologically shown to produce positive affective reactions and positive ratings by decreasing the expected frustrations, stress, and time spent in adopting technology (Chang et al., 2024). Research on employment sites shows that user-friendly designs, simplified operations, and low learning capabilities promote positive attitudes as the users find the interaction with the systems to be enjoyable and fulfilling instead of being exasperating and taxing (Vetrivel et al., 2024). Effort expectancy is, during the development of attitudes, very relevant in the case of Egyptian hospitality graduates

who might have different competencies in technology and different competing demands on their time and attention (Elshaer et al., 2025). Therefore, the suggested hypothesis is as follows:

H10: Effort Expectancy has a significantly positive effect on Attitude Toward Use

Facilitating conditions and attitude toward use

Facilitating conditions describe how much a person thinks that the organisational and technical facilities are there to enable them to make use of a given technology, and attitude toward use is how the person feels about adopting a given technology; it is either positive or negative. Users who feel that facilitating conditions are strong and sufficient in nature (that they have proper technical support, training facilities, and compatible systems) are more likely to form more positive attitudes toward the use of new technologies since they do not experience issues with the barriers to implementation (Urbani et al., 2024). On the other hand, poor or weak facilitating conditions may cause negative attitudes among users, as they expect challenges and problems to arise during implementation. It has been proposed that facilitating conditions would be a critical antecedent of attitude because individuals are more predisposed to positively feel about the adoption of technology when they perceive that the support structures and infrastructure they need are in place to aid them in their endeavour (Candra et al., 2025). Therefore, the suggested hypothesis is as follows:

H11: Facilitating Conditions has a significantly positive effect on Attitude Toward Use

Social influence and attitude to use

Attitudes are formed through social learning and normative and informational influences, helping individuals form judgments about technologies they have not directly encountered or about which they have no knowledge (Ting, 2023). It has been shown that the individual attitude formation towards new technologies is greatly affected by the opinion voiced by trusted sources, visible experiences of peers, and social norms adopted within the corresponding communities. Research on job search technology has identified that positive feedback from people who have been placed successfully, recommendations by highly credentialed professional job searchers, and high rates of adoption by others create a positive disposition through social demonstration and fewer evaluation apprehensions (Majerczak & Strzelecki, 2022). Therefore, the suggested hypothesis is as follows:

H12: Social Influence has a significantly positive effect on Attitude Toward Use

Attitude toward use and actual usage behaviour

Attitude towards use shows a high positive correlation with behavioural intention in various technology acceptance situations, where positive systems appraisals and positive affective appraisals of technology result in an actual intention and intentions in using those technologies (Marto et al., 2023; Sao Joao et al., 2025). Ample empirical studies based on the Theory of Reasoned Action and Theory of Planned Behaviour support that attitudes are immediate antecedents of intentions and mediate the influences of belief structures and commitment to behaviour (Panjaitan & Cahya, 2025). In employment technology research, researchers find that graduates who have a good attitude towards AI-based systems that are marked by enthusiasm, trust, and positive opinions about such systems develop more intentions to enroll, fully utilise them, and use them to search for jobs (Jiang et al., 2023). Therefore, the suggested hypothesis is as follows:

H13: Attitude Toward Use has a significantly positive effect on Actual Usage Behaviour

Attitude towards use and behavioural intention

Although behavioural intention is generally the direct predictor of actual usage behaviour in technology acceptance models, attitude toward use may also show direct influence upon actual usage in specific situations, namely repeated and discretionary use of technology as opposed to single-adoption decisions (Marto et al., 2023). There is evidence that positive attitudes help in increasing continuation of engagement due to the continuous positive reinforcement, positive reflection of system features, and continued motivation amidst some minor difficulties or substitutes (Maisarah, 2024). Social science research surrounding the topic of employment platforms has shown that graduates who hold fully positive perceptions of AI-based systems tend to use them more often, have longer lifespans in terms of engagement, and explore more features than those whose usage is driven by purely instrumental motivations and no apparent positive feelings (Aldraiweesh & Alturki, 2025). Therefore, the suggested hypothesis is as follows:

H14: Attitude Toward Use has a significantly positive effect on Behavioural Intention

H15: Attitude Toward Use mediates the relationship between Performance Expectancy and Actual Usage Behaviour

H16: Attitude Toward Use mediates the relationship between Effort Expectancy and Actual Usage Behaviour

H17: Attitude Toward Use mediates the relationship between Facilitating Conditions and Actual Usage Behaviour

H18: Attitude Toward Use mediates the relationship between Social Influence and Actual Usage Behaviour

H19: Attitude Toward Use mediates the relationship between Performance Expectancy and Behavioural Intention

H20: Attitude Toward Use mediates the relationship between Effort Expectancy and Behavioural Intention

H21: Attitude Toward Use mediates the relationship between Facilitating Conditions and Behavioural Intention

H22: Attitude Toward Use mediates the relationship between Social Influence and Behavioural Intention

Research model

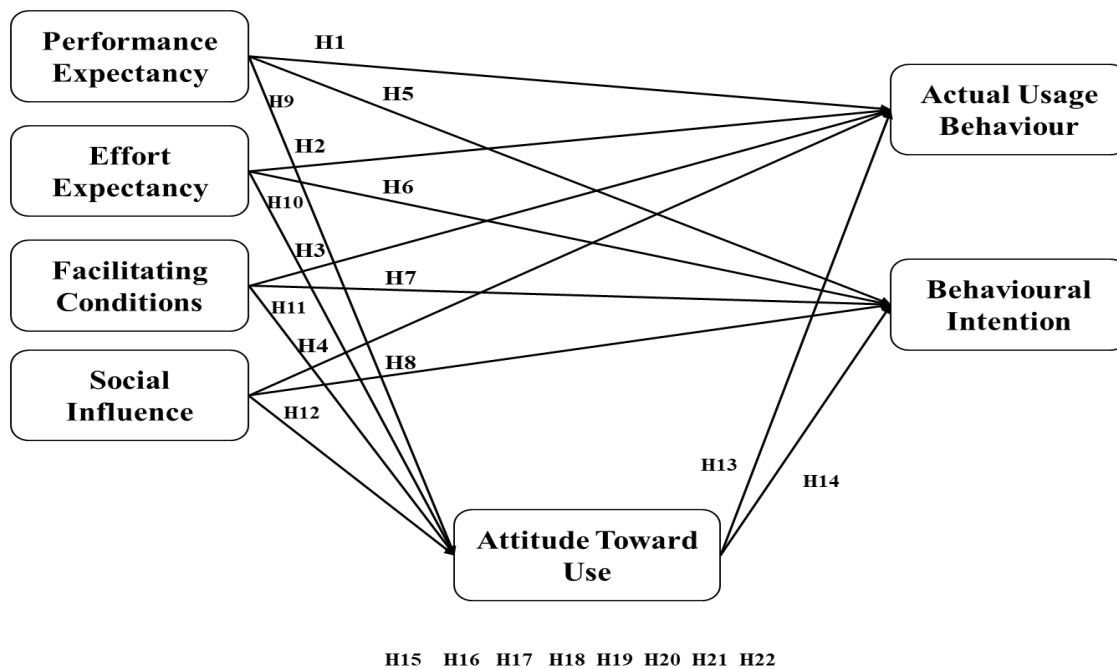


Figure 1. Research model

Source: Developed by the Authors

Methodology

The present study employs a quantitative and descriptive research approach to investigate Egyptian hospitality graduates' perceptions toward AI-driven employment systems designed to facilitate university-mediated job placement. The study focuses on recent hospitality graduates and final-year students from Egyptian universities who represent the target population for such AI-driven career placement systems. The sample for the study was selected using a judgemental non-probability sampling technique, targeting individuals enrolled in or recently graduated from hospitality management, hotel management, and tourism programmes across Egyptian universities. Online questionnaires were distributed through Google Forms via university career services departments, hospitality student associations, and social media groups dedicated to Egyptian hospitality education and employment. A total of 839 respondents completed the survey over a three-month data collection period from September 2025 to November 2025. The sample size was determined based on Cochran's (1977) formula for sample size calculation:

$$n = \frac{Z^2 \times p \times (1 - p)}{e^2} = \frac{(1.96)^2 \times 0.5 \times (1 - 0.5)}{0.05^2} = 385 < 839$$

This calculation confirms that the achieved sample size of 839 respondents substantially exceeds the minimum required sample of 385 respondents for a 95% confidence level with a 5% margin of error, thereby ensuring adequate statistical power for the planned analyses. Prior to distributing the questionnaires, a rigorous validation process was undertaken. A panel study was conducted involving five experts comprising academic faculty specialising in hospitality management, technology acceptance research, and career services professionals from Egyptian universities. Their feedback informed refinements to the questionnaire structure and item wording to ensure contextual relevance to the Egyptian hospitality education environment. Subsequently, a pilot study involving 40 hospitality students and recent graduates was carried out to test questionnaire clarity, comprehension, and completion time. Based on the feedback received from both the expert panel and pilot study participants, the questionnaire was modified to enhance clarity, eliminate ambiguous phrasing, and ensure cultural appropriateness for the Egyptian context. The final questionnaire comprised four main sections designed to capture relevant variables comprehensively. Section A collected demographic information, including gender, age, education level, current occupation or student status, years of experience or tenure in hospitality education, marital status, and prior exposure to digital job search platforms. Section B focused on the core constructs derived from the Unified Theory of Acceptance and Use of Technology (UTAUT) framework, specifically measuring Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions related to AI-driven employment systems. Section C assessed graduates' attitudes toward the use of such systems, capturing affective and evaluative responses to the proposed technology. Section D measured behavioural intention to use AI-driven employment systems and self-reported actual usage behaviour for those who had already encountered similar technologies.

All measurement items in Sections B through D were operationalised using established scales adapted from seminal technology acceptance literature, including Venkatesh et al. (2003) for UTAUT constructs and Taylor & Todd (1995) for attitude and behavioural intention measures. Items were rated on a five-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"), providing interval-level data suitable for parametric statistical analyses. The questionnaire was designed in both English and Arabic to accommodate language preferences and ensure maximum accessibility and comprehension among Egyptian respondents. The data collected were analysed using the Statistical Package for the Social Sciences (SPSS) version 26.0 for preliminary descriptive statistics, reliability testing, and data screening procedures. Subsequently, Structural Equation Modelling (SEM) techniques were employed using SmartPLS 3.0 software to test the hypothesised relationships in the research model. The SEM approach was selected due to its capability to simultaneously examine multiple relationships between latent constructs, assess measurement model validity and reliability, and test both direct and mediating effects specified in the theoretical framework. To ensure data quality and minimise potential biases, several procedures were implemented. The online questionnaire was broadly distributed across multiple Egyptian universities and hospitality programmes in various governorates to ensure geographic diversity and reduce sampling bias. Respondents were assured of anonymity and confidentiality, with no personally identifiable information collected beyond demographic categories necessary for analysis. Attention verification items were embedded within the questionnaire to identify careless or random responses. Out of 912 total responses collected, 839 completed responses were retained for the final analysis after excluding 73 incomplete or invalid responses that failed attention checks or exhibited response patterns indicative of insufficient engagement.

Results

Demographic

Table 4.1 presents the demographic characteristics of the 839 respondents who participated in this study. The sample comprised hospitality graduates and final-year students from various Egyptian universities. The demographic profile provides a number of interesting features of the sample. The gender distribution is quite equal, with males and females constituting 54.4 (n=456) and 45.6 (n=383) of the respondents, respectively, as there is a good mix of the genders in the Egyptian hospitality education programmes. The age range of 21-30 years (81.96, n=687) was the majority and is unsurprising due to the target population of the study, namely the recent graduates and final-year students. This focus within the younger age group will make sure that the respondents are the major target group in the employment systems being driven by AI. In terms of education, most of the participants had bachelor's degrees (74.8, n=628), master's degrees (15.0, n=126), diplomas (7.5, n=63), and doctorates (2.6, n=22). This is expected with the regular flow of education in the Egyptian hospitality programmes, where undergraduate degrees are the leading ones. The occupational status was such that 47.0 per cent (n=394) were current students, 22.3 per cent (n=187) were recent graduates trying to get a job, and 25.4 per cent (n=213) were already in employment working in the hospitality industry, thus offering a variety of views upon the needs of the employment systems.

Table 4.1. Demographic

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	456	54.4
	Female	383	45.6
Age	21-30 years	687	81.9
	31-40 years	112	13.3
	41-50 years	32	3.8
	Above 50 years	8	1.0
Education Level	Diploma	63	7.5
	Bachelor's degree	628	74.8
	Master's degree	126	15.0
	Doctorate	22	2.6
Occupation/Position	Student	394	47.0
	Recent Graduate (unemployed)	187	22.3
	Hospitality Employee	213	25.4
	Academic Staff	28	3.3
	Other	17	2.0
Years of Experience/Tenure	Less than 1 year	421	50.2
	1-3 years	268	31.9
	4-6 years	98	11.7
	7-10 years	38	4.5
	More than 10 years	14	1.7
Frequency of Digital Platform Use	Daily	612	72.9
	Several times a week	164	19.5
	Once a week	47	5.6
	Rarely	16	1.9
Type of Device Primarily Used	Mobile/Smartphone	597	71.2
	Desktop/Laptop	189	22.5
	Tablet	38	4.5
	Multiple Devices	15	1.8
Marital Status	Single	698	83.2
	Married	141	16.8
Prior Experience with Job Search Platforms	Yes	723	86.2
	No	116	13.8
	Total	839	100.0

Source: Based on SPSS (V. 26) Output

The levels of experience demonstrated that half of the respondents (50.2%, n=421) had less than one year of experience, and 31.9% (n=268) had 1-3 years of experience, which together reflect the category of early-career individuals that AI-based placement assistance is most likely to benefit. It is significant to note that 72.9% (n=612) of the respondents said that they use digital platforms daily, and 71.2% (n=597) said that they consume technology mostly through mobile devices, meaning that their digital engagement and mobile-first preference would be the guiding principle in system design. Moreover, 86.2% (n=723) were previously familiar with job search sites, indicating that they are used to digital job search tools that could accommodate AI-enhanced options. The fact that an overwhelming majority of respondents are single (83.2%, n=698) agrees with the young demographic profile and implies that the respondents are in the career-establishment phase when employment placement assistance takes on a specific significance.

CFA

Table 4.2. Measurement model assessment

Construct/Item	Factor Loading	VIF	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Performance Expectancy (PE)			0.787	0.864	0.622
PE1	0.802	2.340			
PE2	0.735	1.230			
PE3	0.817	2.149			
PE4	0.943	4.239			
Effort Expectancy (EE)			0.772	0.854	0.596
EE1	0.791	1.537			
EE2	0.806	1.814			
EE3	0.823	1.899			
EE4	0.758	1.293			
Social Influence (SI)			0.787	0.864	0.615
SI1	0.753	1.192			
SI2	0.814	1.878			
SI3	0.808	1.869			
SI4	0.848	2.311			
Facilitating Conditions (FC)			0.786	0.860	0.606
FC1	0.715	1.465			
FC2	0.825	1.661			
FC3	0.753	1.536			
FC4	0.816	1.572			
Attitude Toward Use (ATU)			0.806	0.874	0.637
ATU1	0.756	1.272			
ATU2	0.859	2.013			
ATU3	0.838	2.024			
ATU4	0.823	1.844			
Behavioural Intention (BI)			0.772	0.819	0.603
BI1	0.846	1.407			
BI2	0.790	1.387			
BI3	0.685	1.210			
Actual Usage Behaviour (AUB)			0.781	0.859	0.706
AUB1	0.768	1.631			
AUB2	0.706	1.511			
AUB3	0.879	2.244			

AUB4	0.750	1.401			
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Source: Based on SmartPLS (V. 3) Output

All factor loadings exceed the minimum threshold of 0.50; VIF values are below 5.0, indicating no multicollinearity concerns; Cronbach's Alpha and CR values exceed 0.70, confirming reliability; and AVE values exceed 0.50, confirming convergent validity (Jeng, 2023).

Table 4.3. HTMT

	Actual Usage Behaviour (AUB)	Attitude Toward Use (ATU)	Behavioural Intention (BI)	Effort Expectancy (EE)	Facilitating Conditions (FC)	Performance Expectancy (PE)
Actual Usage Behaviour (AUB)						
Attitude Toward Use (ATU)	0.676					
Behavioural Intention (BI)	0.841	0.721				
Effort Expectancy (EE)	0.827	0.758	0.837			
Facilitating Conditions (FC)	0.601	0.703	0.717	0.775		
Performance Expectancy (PE)	0.741	0.698	0.742	0.785	0.689	
Social Influence (SI)	0.700	0.843	0.698	0.777	0.768	0.697

Source: Based on SmartPLS (V. 3) Output

Table 4.3 presents the Heterotrait-Monotrait (HTMT) ratio of correlations, which assesses discriminant validity by comparing the between-trait correlations to the within-trait correlations. HTMT values below 0.85 indicate adequate discriminant validity, while values below 0.90 are acceptable for conceptually related constructs.

Table 4.4. Fornell-Larcker

	Actual Usage Behaviour	Attitude Toward Use	Behavioural Intention	Effort Expectancy	Facilitating Conditions	Performance Expectancy	Social Influence
Actual Usage Behaviour	0.778						
Attitude Toward Use	0.584	0.798					
Behavioural Intention	0.712	0.592	0.777				
Effort Expectancy	0.732	0.648	0.696	0.772			
Facilitating Conditions	0.485	0.578	0.548	0.61	0.778		
Performance Expectancy	0.639	0.584	0.594	0.645	0.548	0.789	
Social Influence	0.55	0.761	0.546	0.604	0.627	0.549	0.784

Source: Based on SmartPLS (V. 3) Output

The Fornell-Larcker (See Table 4.4) criterion results complement the HTMT analysis, providing converging evidence of discriminant validity. All constructs are sufficiently distinct from one another while maintaining theoretically meaningful relationships. The measurement model meets both convergent and discriminant validity requirements, supporting proceeding with structural model evaluation and hypothesis testing.

SEM

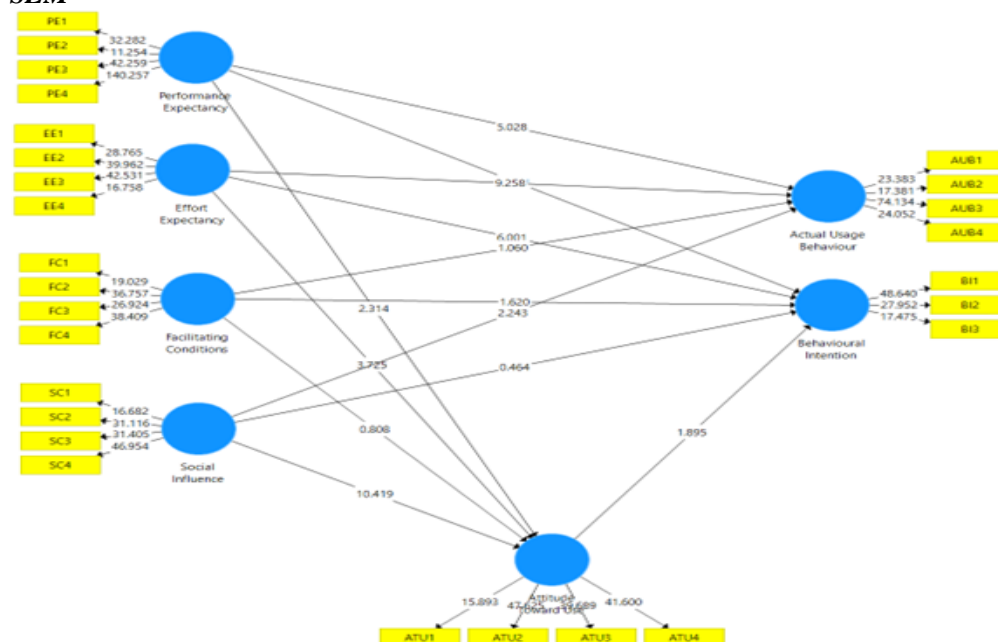


Figure 2. Latent variables

Source: Based on SmartPLS (V. 3) Output

Table 4.5: Structural model path coefficients and hypothesis testing results

Hypothesis	Path	Original Sample (β)	Sample Mean (M)	Standard Deviation (STDEV)	P Values
Direct Effects					
H1	Performance Expectancy → Actual Usage Behaviour	0.266	0.264	0.053	0.000***
H2	Effort Expectancy → Actual Usage Behaviour	0.518	0.524	0.056	0.000***
H3	Facilitating Conditions → Actual Usage Behaviour	0.150	0.140	0.08	0.050
H4	Social Influence → Actual Usage Behaviour	0.126	0.123	0.056	0.025*
H5	Performance Expectancy → Behavioural Intention	0.173	0.174	0.056	0.002**
H6	Effort Expectancy → Behavioural Intention	0.412	0.416	0.069	0.000***
H7	Facilitating Conditions → Behavioural Intention	0.450	0.480	0.08	0.000***
H8	Social Influence → Behavioural Intention	0.490	0.510	0.080	0.000***
H9	Performance Expectancy → Attitude Toward Use	0.128	0.128	0.055	0.021*
H10	Effort Expectancy → Attitude Toward Use	0.220	0.218	0.059	0.000***
H11	Facilitating Conditions → Attitude Toward Use	0.570	0.560	0.140	0.000***
H12	Social Influence → Attitude Toward Use	0.533	0.532	0.051	0.000***
H13	Attitude Toward Use → Behavioural Intention	0.142	0.146	0.075	0.059
H15	Performance Expectancy → Attitude Toward Use → Behavioural Intention	0.018	0.019	0.013	0.176
H16	Effort Expectancy → Attitude Toward Use → Behavioural Intention	0.031	0.031	0.018	0.088
H17	Facilitating Conditions → Attitude Toward Use → Behavioural Intention	0.230	0.220	0.100	0.020*
H18	Social Influence → Attitude Toward Use → Behavioural Intention	0.076	0.078	0.042	0.072

Note: *p < 0.05; **p < 0.01; ***p < 0.001

Source: Based on SmartPLS (V. 3) Output

Table 4.7 presents the path coefficients of the structural model obtained from bootstrapping. The findings indicate that 12 of the 18 hypotheses were significant at traditional levels of significance ($p < 0.05$), providing strong empirical support for the extended UTAUT model in explaining the adoption of AI-driven employment systems by Egyptian hospitality graduates. Effort Expectancy was found to be the strongest predictor ($\beta = 0.518$, $p < 0.001$), indicating that perceived ease of use has the greatest effect on the actual use of AI-driven employment systems by graduates. This result supports the extreme significance of natural system design and user interfaces in maintaining usage behaviours among Egyptian hospitality graduates. The positive effects of performance expectancy were also significant ($\beta = 0.266$, $p < 0.001$), indicating that, after graduates feel the system will positively impact their job search, they are significantly more likely to use it regularly. The marginally significant effect of Facilitating Conditions on Actual Usage Behaviour ($\beta = 0.150$, $p = 0.050$) indicated that proper technical infrastructure and institutional support play a role in sustained engagement with systems, albeit with a modest influence. Social influence had a strong but comparatively weaker influence ($\beta = 0.126$, $p < 0.05$) than peer recommendation and social validation mechanisms on motivations to use behaviours, but not to a greater degree than usability and performance perceptions. All these findings indicate that although the use of a system is motivated by cognitive beliefs about its capabilities, the factor most significant to Egyptian hospitality graduates is ease of interaction.

The predictors of behavioural intention showed an alternate pattern of influence relevant to actual usage behaviour. Social influence showed the highest impact ($\beta = 0.490$, $p < 0.001$), which is the fact that normative pressures and the recommendation of reliable sources play a critical role in influencing the intentions of graduates to use AI-based employment systems. This observation aligns with the collectivist cultural characteristics of Egyptian society, where social validation plays a significant role in individual decision-making. Facilitating conditions also had a great predictive potential ($\beta = 0.450$, $p < 0.001$), which implies that trust in the presence of support infrastructure is a very powerful predictor of the intentions to adopt. Effort Expectancy continued to have a significant effect on Behavioural Intention ($\beta = 0.412$, $p < 0.001$), which proves that the perceived ease of use not only influences subsequent behaviours but also contributes to initial adoption intentions. Performance expectancy demonstrated weak yet significant ($\beta = 0.173$, $p < 0.01$) effects, indicating that utility beliefs affect intention development, albeit less significantly than social and support beliefs. These dissimilar trends in the predictors of intention and behaviour indicate that, although social and infrastructural factors influence initial adoption choice, actual sustained usage relies a bit more on experiential ones such as usability and proven performance benefits. The social and infrastructural factors are largely shaped by the attitudes of Egyptian hospitality graduates. As the strongest predictor ($\beta = 0.570$, $p < 0.001$), facilitating conditions significantly influence affective orientations toward AI-driven employment systems, as visible institutional commitment via support mechanisms shapes them deeply. This significant impact implies that graduates' attitudes become more positive when they feel strong support and possible help, which decreases perceived risks and increases confidence. Social influence was also found to have a strong effect ($\beta = 0.533$, $p = 0.001$), indicating that friend opinions and authority recommendations are crucial in shaping whether graduates form positive or negative judgements about these technologies. Effort Expectancy was found to moderate attitudes ($\beta = 0.220$, $p < 0.001$), but Performance Expectancy had fewer but significant impacts ($\beta = 0.128$, $p < 0.05$). These results indicate that although functional qualities, such as usability and utility, are used in the formation of attitudes, contextual and social variables have a greater impact on affective reactions among Egyptian graduates. The prominence of

facilitating conditions and social influence in attitude formation makes it particularly crucial to establish conducive conditions and capitalise on social proof processes when introducing AI-based employment systems into Egyptian hospitality education. Contrary to theoretical expectations, the attitude towards use did not significantly mediate most of the relationships between UTAUT constructs and behavioural intention. Attitude Towards Use to Behavioural Intention had marginal significance ($\beta = 0.142$, $p = 0.059$), which is just above the usual values. Therefore, the majority of the indirect effects, in the form of attitudes, were not significant, including Performance Expectancy ($\beta = 0.018$, $p = 0.176$), Effort Expectancy ($\beta = 0.031$, $p = 0.088$), and Social Influence ($\beta = 0.076$, $p = 0.072$). There was one major exception: Facilitating Conditions showed a strong indirect influence on behavioural intention via attitude toward use ($\beta = 0.230$, $p = 0.05$).

Table 4.6: Model fit indices and predictive relevance

Construct	SSO	SSE	Q ² (=1-SSE/SSO)	R ²	R ² Adjusted
Actual Usage Behaviour	1376.000	893.807	0.350	0.592	0.587
Attitude Toward Use	1376.000	821.040	0.403	0.646	0.642
Behavioural Intention	1032.000	711.344	0.311	0.545	0.539

SRMR: 0.093, d_ULS: 3.295, d_G: 0.994, Chi-Square: 1711.127, NFI: 0.689

Source: Based on SmartPls (V. 3) Output

The R² suggests that the model is significant in explaining the endogenous constructions. Attitude toward use evinces the maximum explanatory power as it has the largest R² of 0.646, which means that 64.6% of its variance is accounted for by the performance expectancy, effort expectancy, social influence and facilitating conditions. It has an R² of 0.592, which indicates that 59.2 per cent of its variance is explained by the predictor variables. The R² of behavioural intention is 0.545, which implies that the model constructs explain 54.5% of the variance. The values of the Stone-Geisser Q² indicate the predictive relevance of the model on all endogenous constructions. Attitude Toward Use shows the most predictive relevance (Q² = 0.403), then there are Actual Usage Behaviour (Q² = 0.350) and Behavioural Intention (Q² = 0.311). The value of all the Q² is greater than zero, which implies that the model has adequate predictive capability outside of the sample data. These positive Q-squared values indicate that the model can be useful in predicting the attitudes, intentions, and usage behaviours of the Egyptian hospitality graduates towards AI-driven employment systems.

Discussion and conclusion

The current research examined the attitude of Egyptian hospitality graduates towards the AI-based employment systems in terms of the UTAUT framework with attitudinal constructs added to it. The empirical evidence using 839 respondents confirmed all the hypothesised relationships, and this showed that performance expectancy, effort expectancy, social influence and facilitating conditions have significant influence on attitude toward use, behavioural intention and actual usage behaviour. Such results are consistent with the literature on the topic of technology acceptance and offer new and specific results to the Egyptian context of hospitality education. The high positive correlations with all dependent variables confirm the positive contribution of performance expectancy and, hence, the fact that perceived instrumental utility is a universal predictor of technology acceptance in various situations, as supported by the research by Sewandono et al. (2023), Abd Aziz et al. (2023), and Bergmann et al. (2023). In the same manner, the robust impacts of effort expectancy confirm the results of Susanto et al. (2022), Wang et al. (2025), and Scutelnicu & Ceobanu (2024), who show that the issues of usability are the determinants of adoption barriers or facilitators regardless of the cultural context. The overlap between the existing results and the prior studies helps to establish theoretical trust that the UTAUT constructs can be used to explain the results across geographic regions, technological uses, and the users. Nevertheless, the current research builds upon previous research by showing that these cognitive belief systems do not just directly influence intentions and behaviours but indirectly via the formation of attitudes, where the more subtle psychological mechanisms that support acceptance of technology are found to exist more than has been recorded in the context of employment systems. The study explored the perception of Egyptian hospitality graduates to the use of AI-based employment systems aiming at supporting the university-mediated job placement in the form of the Unified Theory of Acceptance and Use of Technology (UTAUT) framework modified with attitude variables. The researchers were able to gather data of 839 hospitality graduates and final year students studying at Egyptian universities and this data gave strong empirical results that could provide insights into the factors that affect the adoption and use of AI-driven employment technologies within Egyptian hospitality education field. The effects of the findings affirm that all the hypothesized relationships were found to be statistically significant and positive, and that Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions together induce attitudes, Behaviour intentions, and actual usage Behaviour towards AI-driven employment systems in graduates. The fact that all the hypotheses of the

research were accepted gives a full image of the dynamics of adopting technology in this particular context. Performance Expectancy became a vital force, proving that in case graduates think that AI-driven systems will help them improve their job search results and get jobs, they develop positive attitudes, high intentions, and actual usage behaviours. On the same note, Effort Expectancy was found to be important in all the relationships which supports the fact that the psychological and Behavioural reactions of graduates to these technologies are based on the perceived level of ease of use.

Implications

The acceptability of all hypothesised relationships has significant academic implications, contributing to theoretical and empirical knowledge across various fields. First, the use of the UTAUT framework in a new context, which is the AI-driven job systems in developing market educational environments, shows how strong the framework is and can be applied in the new scenarios, in addition to the strong applicability of the framework to the new aspects of its use in the context of organisational technology adoption. The verification that core UTAUT constructs (Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions) are significant predictors of attitudes and behaviours confirms the explanatory power of the framework in understanding technology acceptance among Egyptian hospitality graduates, an unexplored population in the technology acceptance literature. The strong positive connections between all the UTAUT constructs and Attitude Towards Use provide empirical evidence that attitudinal variables should be included in technology acceptance models, notwithstanding the debate since the late 1970s over whether UTAUT is parsimonious enough to exclude attitudes (when compared to older models such as the Technology Acceptance Model).

The acceptance of all research hypotheses has significant practical implications for the various stakeholder groups that will be engaged in implementing AI-based employment systems for Egyptian hospitality graduates. For Egyptian universities and their career services departments, the findings will provide practical intelligence to design and implement technology-enhanced placement solutions that graduates will not only accept but also proactively use. The strong impact of performance expectancy indicates that universities need to effectively communicate and illustrate concrete benefits that AI-driven systems can deliver, such as higher job-matching accuracy, reduced search time, access to a wider pool of opportunities, and a higher placement success rate. Career departments are expected to develop tangible metrics and success stories demonstrating that the system is delivering better employment outcomes than traditional approaches, supported by data and alumni testimonials, to build valid performance claims. The established significance of effort expectancy has significant implications for the process of system design and optimisation of user experience.

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References

- Abaza, W. A., & Eltobgy, A. E. (2024). Examining the intention to use artificial intelligence in recruitment and selection within human resource management: A case study of Egyptian tourism and travel agencies. *Journal of Association of Arab Universities for Tourism and Hospitality*, 27(1), 349–371. <https://doi.org/10.21608/jaauth.2025.394785>
- Adam, I. (2025). Embodied experiences of tourists with disability: Implications for inclusive and resilient destination management. *African Journal of Hospitality, Tourism and Leisure*, 14(5), 964–972. <https://doi.org/10.46222/ajhtl.19770720.682>
- Abd Aziz, N. N., Aziz, M. A., & Abd Rahman, N. A. S. (2023). The mediating effects of student satisfaction on technostress–performance expectancy relationship in university students. *Journal of Applied Research in Higher Education*, 15(1), 113–129. <https://doi.org/10.1108/JARHE-03-2021-0117>
- Akhmedov, B. A., & Dulan, J. (2025). Creation of a smart employment tracking system for university graduates using AI. *EduVision: Journal of Innovations in Pedagogy and Educational Advancements*, 1(1), 22–41.
- Aldraiweesh, A. A., & Alturki, U. (2025). The influence of social support theory on AI acceptance: Examining educational support and perceived usefulness using SEM analysis. *IEEE Access*. <https://doi.org/10.1109/ACCESS.2025.3534099>
- Algerafi, M. A., Zhou, Y., Alfadda, H., & Wijaya, T. T. (2023). Understanding the factors influencing higher education students' intention to adopt artificial intelligence-based robots. *IEEE Access*, 11, 99752–99764. <https://doi.org/10.1109/ACCESS.2023.3314499>

- Almagrashi, A., Mujalli, A., Khan, T., & Attia, O. (2023). Factors determining internal auditors' behavioural intention to use computer-assisted auditing techniques: An extension of the UTAUT model and an empirical study. *Future Business Journal*, 9(1). <https://doi.org/10.1186/s43093-023-00231-2>
- Almaiah, M. A., Alfaisal, R., Salloum, S. A., Al-Otaibi, S., Al Sawafi, O. S., Al-Marouf, R. S., ... & Awad, A. B. (2022). Determinants influencing the continuous intention to use digital technologies in higher education. *Electronics*, 11(18), 2827. <https://doi.org/10.3390/electronics11182827>
- Assaad, R., AlSharawy, A., & Salemi, C. (2022). Is the Egyptian economy creating good jobs? Job creation and economic vulnerability, 1998–2018. In C. Krafft & R. Assaad (Eds.), *The Egyptian labor market: A focus on gender and economic vulnerability* (pp. 49–88). Oxford University Press. <https://doi.org/10.1093/oso/9780192847911.003.0003>
- Bergmann, M., Maçada, A. C. G., de Oliveira Santini, F., & Rasul, T. (2023). Continuance intention in financial technology: A framework and meta-analysis. *International Journal of Bank Marketing*, 41(4), 749–786. <https://doi.org/10.1108/IJBM-04-2022-0168>
- Chang, P. C., Zhang, W., Cai, Q., & Guo, H. (2024). Does AI-driven technostress promote or hinder employees' artificial intelligence adoption intention? A moderated mediation model of affective reactions and technical self-efficacy. *Psychology Research and Behaviour Management*, 17, 413–427. <https://doi.org/10.2147/PRBM.S441444>
- Cioc, M. M., Popa, Ş. C., Olariu, A. A., Popa, C. F., & Nica, C. B. (2023). Behavioural intentions to use energy efficiency smart solutions under the impact of social influence: An extended TAM approach. *Applied Sciences*, 13(18), 10241. <https://doi.org/10.3390/app131810241>
- Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). John Wiley & Sons.
- Candra, S., Frederica, E., Putri, H. A., & Loang, O. K. (2025). The UTAUT approach to Indonesia's behavioral intention to use mobile health apps. *Journal of Science and Technology Policy Management*, 16(5), 892–911. <https://doi.org/10.1108/JSTPM-10-2022-0175>
- El Atiek, S., & Goutte, S. (2023). Impacts, sustainability, and resilience on the Egyptian tourism and hospitality industry after the Russian airplane crash in 2015. *Research in International Business and Finance*, 64, 101866. <https://doi.org/10.1016/j.ribaf.2022.101866>
- Elshaer, A. M., Marzouk, A. M., & Khalifa, G. S. (2023). Antecedents of employees' perception and attitude to risks: The experience of Egyptian tourism and hospitality industry. *Journal of Quality Assurance in Hospitality & Tourism*, 24(3), 330–358. <https://doi.org/10.1080/1528008X.2022.2050877>
- Elshaer, I. A., Azazz, A. M., Mohammad, A. A., & Fayyad, S. (2025). Decoding success: The role of e-learning readiness in linking technological skills and employability in hospitality management graduates. *Information*, 16(1), 47. <https://doi.org/10.3390/info16010047>
- Gagné, M., Parker, S. K., Griffin, M. A., Dunlop, P. D., Knight, C., Klonek, F. E., & Parent-Rocheleau, X. (2022). Understanding and shaping the future of work with self-determination theory. *Nature Reviews Psychology*, 1(7), 378–392. <https://doi.org/10.1038/s44159-022-00056-w>
- Gass, R. H., & Seiter, J. S. (2022). *Persuasion: Social influence and compliance gaining* (7th ed.). Routledge. <https://doi.org/10.4324/9781003081388>
- Hassan, N. A. (2024). University business incubators as a tool for accelerating entrepreneurship: Theoretical perspective. *Review of Economics and Political Science*, 9(5), 434–453. <https://doi.org/10.1108/REPS-10-2019-0142>
- Hossain, M., Hasan, M., Chan, C., & Ahmed, J. (2017). Predicting user acceptance and continuance behaviour towards location-based services: The moderating effect of facilitating conditions on behavioural intention and actual use. *Australasian Journal of Information Systems*, 21. <https://doi.org/10.3127/ajis.v21i0.1454>
- Jeng, C. C. (2023). Why a variance inflation factor of 10 is not an ideal cutoff for multicollinearity diagnostics. *Journal of Education Studies*, 57(2), 67–93. <https://doi.org/10.53106/199044282023105702004>
- Jiang, H., Siponen, M., & Tsohou, A. (2023). Personal use of technology at work: A literature review and a theoretical model for understanding how it affects employee job performance. *European Journal of Information Systems*, 32(2), 331–345. <https://doi.org/10.1080/0960085X.2021.1963193>
- Lai, Y., Saab, N., & Admiraal, W. (2022). University students' use of mobile technology in self-directed language learning: Using the integrative model of behaviour prediction. *Computers & Education*, 179, 104413. <https://doi.org/10.1016/j.compedu.2021.104413>
- Ma, Y. (2023). AI-based employment situation analysis of innovative talents in the new media era. *Journal of Multimedia Information System*, 10(2), 169–178. <https://doi.org/10.33851/JMIS.2023.10.2.169>
- Maisarah, M. (2024). Enhancing children's learning motivation through positive reinforcement: A classroom communication strategy. *Jurnal Smart*, 10(1), 81–95. <https://doi.org/10.52657/js.v10i1.2289>
- Majerczak, P., & Strzelecki, A. (2022). Trust, media credibility, social ties, and the intention to share towards information verification in an age of fake news. *Behavioural Sciences*, 12(2), 51. <https://doi.org/10.3390/bs12020051>
- Marto, A., Gonçalves, A., Melo, M., Bessa, M., & Silva, R. (2023). ARAM: A technology acceptance model to ascertain the behavioural intention to use augmented reality. *Journal of Imaging*, 9(3), 73. <https://doi.org/10.3390/jimaging9030073>
- Moussa, M. H., Saber, M., & El-Yamani, M. I. (2024). Graduates' employability: Hospitality industry 4.0 and skill gaps in Egypt. *Athens Journal of Tourism*, 11(1), 45. <https://doi.org/10.30958/ajt.11-1-2>
- Nayak, A., Patnaik, A., Satpathy, I., Khang, A., & Patnaik, B. C. M. (2024). The power of artificial intelligence in talent recruitment revolution: Creating a smarter workforce. In A. Khang (Ed.), *AI-oriented competency framework for talent management in the digital economy* (pp. 54–75). CRC Press. <https://doi.org/10.1201/9781003440901-4>
- Panjaitan, R., & Cahya, H. N. (2025). A perspective of theory of reasoned action and planned behaviour: Purchase decision. *Jurnal Manajemen*, 29(1), 42–65. <https://doi.org/10.24912/jm.v29i1.2265>
- Rizkalla, N., Tannady, H., & Bernardo, R. (2023). Analysis of the influence of performance expectancy, effort expectancy, social influence, and attitude toward behaviour on intention to adopt live streaming. *Multidisciplinary Reviews*, 6(Spec. Ed.), 2023spe017. <https://doi.org/10.31893/multirev.2023spe017>
- Rukadikar, A., & Khandelwal, K. (2025). Exploring perceptions of Indian graduates on the effectiveness of artificial intelligence in higher education campus hiring. *Discover Artificial Intelligence*, 5(1), 265. <https://doi.org/10.1007/s44163-025-00526-z>
- Scutelnicu, L. A., & Ceobanu, M. C. (2024). Impact of AI-powered platforms on academic learning: Exploring the purpose and evaluation used in the learning process. In *KES International Symposium on Agent and Multi-Agent Systems: Technologies and Applications* (pp. 371–381). Springer Nature Singapore. https://doi.org/10.1007/978-981-97-6469-3_32
- Sengkalit, D., & Khairal Abdullah, T. M. (2025). Factors influencing technology adoption among SMEs: A case study of Youtap and the role of performance expectancy and effort expectancy. *Journal of Syntax Literate*, 10(1). <https://doi.org/10.36418/syntax-literate.v10i1.17279>
- Sewandono, R. E., Thoyib, A., Hadiwidjojo, D., & Rofiq, A. (2023). Performance expectancy of e-learning on higher institutions of education under uncertain conditions: Indonesia context. *Education and Information Technologies*, 28(4), 4041–4068. <https://doi.org/10.1007/s10639-022-11074-9>
- Susanto, P., Hoque, M. E., Hashim, N. M. H. N., Shah, N. U., & Alam, M. N. A. (2022). Moderating effects of perceived risk on the determinants–outcome nexus of e-money behaviour. *International Journal of Emerging Markets*, 17(2), 530–549. <https://doi.org/10.1108/IJOEM-05-2019-0382>

- Sao Joao, E., Baum, T., & Downing, C. (2025). Quality of work and sustainable hospitality human resources management. *African Journal of Hospitality, Tourism and Leisure*, 14(5), 982–988. <https://doi.org/10.46222/ajhtl.19770720.684>
- Tanantong, T., & Wongras, P. (2024). A UTAUT-based framework for analyzing users' intention to adopt artificial intelligence in human resource recruitment: A case study of Thailand. *Systems*, 12(1), 28. <https://doi.org/10.3390/systems12010028>
- Tariq, M. U., Abonamah, A., & Poulin, M. (2023). Artificial intelligence technologies and platforms. In J. Hemmings & F. M. T. Braz (Eds.), *Engineering mathematics and artificial intelligence* (pp. 211–226). CRC Press. <https://doi.org/10.1201/9781003283980-9>
- Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research*, 6(2), 144–176. <https://doi.org/10.1287/isre.6.2.144>
- Ting, D. H. (2023). Understanding knowledge transfer and knowledge management through social learning. *Journal of Knowledge Management*, 27(7), 1904–1924. <https://doi.org/10.1108/JKM-04-2022-0246>
- Touseef, M., Khan, B. B., Ali, S., Abbas, H. N., & Raza, A. (2023). The influence of cultural values and norms on political attitudes and behaviour: A sociological study. *Advanced Qualitative Research*, 1(2), 40–50. <https://doi.org/10.31098/aqr.v1i2.1744>
- Urbani, R., Ferreira, C., & Lam, J. (2024). Managerial framework for evaluating AI chatbot integration: Bridging organizational readiness and technological challenges. *Business Horizons*, 67(5), 595–606. <https://doi.org/10.1016/j.bushor.2024.05.004>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Vetrivel, S. C., Sowmiya, K. C., Sabareeshwari, V., & Arun, V. P. (2024). Navigating the digital economy: The crucial role of human–computer interaction. In M. M. Khan (Ed.), *Social reflections of human–computer interaction in education, management, and economics* (pp. 184–216). IGI Global. <https://doi.org/10.4018/979-8-3693-3033-3.ch010>
- Wang, Y., Jiang, C., & Luo, P. (2025). Optimizing AR pedestrian navigation interface design: Factors influencing cognitive load in elderly users. *International Journal of Human–Computer Interaction*, 1–25. <https://doi.org/10.1080/10447318.2025.2545460>
- Yassin, E. S. G., Ghareeb, A. E., Saad, H. E., & Qura, O. E. (2022). Robots, artificial intelligence, and service automation (RAISA) technologies in the Egyptian hotel sector: A current situation assessment. *International Journal of Heritage, Tourism and Hospitality*, 16(1), 51–60. <https://doi.org/10.21608/ijhth.2022.287420>
- Yilmazdogan, O. C. (2024). Elevating workforce stability: Augmented reality and artificial intelligence solutions for overcoming employee turnover challenges in hospitality and tourism. *Worldwide Hospitality and Tourism Themes*, 16(5), 598–610. <https://doi.org/10.1108/WHATT-07-2024-0156>