Man vs. machine: exploring the impact of artificial intelligence adoption on employees' service quality

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Abstract

Robots (R), Artificial intelligence (AI), and Service Automation (SA) (RAISA) technologies are seriously applied in the tourism and hospitality industry around the globe, this field of study is gaining traction; however, this topic has received little attention in the Egyptian tourism and hospitality industries. This research tries to develop a practical understanding of the positive and adverse employee due to artificial intelligence (AI) adoption in the Egyptian hotel sector. As a result, there is a dearth of research on artificial intelligence and employee performance in the hotel sector; data were gathered from managers and employees working in five-star hotels in greater Cairo, Egypt. While primary data was gathered through an empirical study conducted by questionnaire strategy on a convenience sample of employees and managers in hotels, secondary data was gathered from studies related to artificial intelligence and employee performance, and the data were analyzed using frequencies and descriptive analysis. Finally, using SPSS version 25, simple linear regressions were used to examine the effect. The results indicate that the adoption of AI has significant negative consequences, with information safety, data secrecy, drastic changes caused by digital transformations, and job risk and insecurity brewing in the employee psyche. This is followed by a list of causes that have a positive impact, such as job-related flexibility and autonomy, creativity and innovation, and overall job performance improvement. This research makes the unique contribution of factors constituting unintended consequences, and positive impacts creators (among employees) of AI deployment in the hotel sector. This research may be considered one of the few studies that debate the influence of artificial intelligence on employee performance in the hotel sector.

Keywords: Artificial intelligence, Egyptian hotels, service quality, employee performance

Introduction

Artificial intelligence (AI) gains increasing importance in our lives redesigning our workplaces and increasingly powering things, Pew Research Center showed a survey newly regarding the effect of artificial intelligence on society across 20 global publics, It was shown toward the end of 2019 and the beginning of 2020 spanning 20 places across Asia–the Pacific region, the United States, Europe, Canada, Russia, and Brazil. According to this survey, more than half of those polled (53%) believe the deployment of AI and computer systems has had a positive impact on society, while 33% believe it has had a negative impact. Asians largely harbor a positive opinion of AI. There were also differing views on robotic automation of human jobs. Sizable proportions, 48%, believe that job automation has been a positive innovation. Organizations have helped in multifaceted ways, in terms of improved employee productivity and efficiency (Jonker-Hoffren, 2020) by incorporating and implementing ICTs (Ruiz, 2020).

A clinical psychologist Brod, (1984) suggested the concept of technostress and described it as a modern-day ailment resulting from an individual's inability to handle ICTs healthily. Workplace stress leads to some health issues while influencing the quality of life (Rabenu *et al.,* 2017). A WHO report (WHO, 2005) proposes that employee work patterns have been changed by the

increased use of ICTs, although organizations take cognizance of health hazards prevailing at the workplace, but not of the psychological health hazards certain training and other interventions are however required to take care of the mental health of the employees. Although there have been few studies on the adoption of AI in the hotel sector, there remains a gap in the existing literature. Prior research has observed both the positive and negative effects of AI adoption on human resources, such as the creation of technostress among employees (Moore, 2000; Tarafdar *et al.,* 2007). However, there exists a perceptible gap in the impact of Artificial Intelligence on Employees' Performance. It is vital to change a detailed understanding of negative impacts like technostress along with the positive aspects. As a result, the study's research questions are as follows:

1. How does AI adoption in the hotel sector create consequences and adverse impacts on employees' performance?
2. How does AI adoption in the hotel sector create a positive on employees' performance?

Literature Review
Artificial Intelligence in the hotel sector

Artificial intelligence (AI) is also referred to as machine intelligence. It is exhibited by humanoid or non-humanoid robots that behave like people and can be utilized to increase and enhance operational efficiency in enterprises (Russell and Norvig, 2016). Despite being established as an academic discipline in the 1950s AI has only recently gained prominence in the relevant literature. Artificial intelligence is permeating numerous industries and has the potential to significantly increase financial profitability for enterprises, notably in service industries such as banking, human resource recruitment, healthcare transportation, tourism, and the hotel industry. (e.g. Buhalis and Leung, 2018; Kim, 2011; Yu and Schwartz, 2006). Russell Stuart and Norvig, (2009) have approached AI from several perspectives to operationalize AI: thinking humanly, acting humanly, and thinking rationally. Rijsdijk, Hultink, and Diamantopoulos, (2007) there are six dimensions of AI have been suggested: autonomy, ability to learn, reactivity, ability to cooperate, humanlike interaction, and personality.AI can also be classified based on its development and applications. AI is divided into three categories: artificial narrow intelligence, artificial general intelligence, and artificial superintelligence (Kaplan and Haenlein, 2019) Artificial narrow intelligence is the first generation of AI, and it is used to perform specific tasks. While acknowledging its popularity and influence on improving business efficiency, artificial intelligence (AI) is also causing increasing concern about its replacement for human jobs (Larivière *et al.,* 2017). According to Robinson (2017) the "Momentum Machines Plan" is one step closer to reducing fast-food jobs. In the case of hotels and restaurants, it is expected that AI-related technology can automate approximately 25% of activities (Chui, Manyika, and Miremadi, 2016). According to a 2016 report by the Organization for Economic Cooperation and Development (OECD), 9 percent of jobs in 21 countries could be automated. A 2017 McKinsey report also shows a 5% job loss due to AI (Manyika *et al.,* 2017), and an Oxford University study forecast that 47% of jobs could be automated by 2033 (Ramaswamy, 2017). According to Research Internet (Smith and Anderson, 2017), approximately 72 percent of Americans are worried about the replacement of human jobs by AI.

However, according to (Morikawa, 2017; Smith and Anderson, 2017) AI can only play dominant roles in low-level mundane jobs. Employees' perceptions of AI quality are reflected in the AI dimensions as a whole. Previous research has revealed that these aspects of information and system quality can lead to positive attitudes to technology and increase employees' job-related

outcomes (such as Forsgren, Durcikova, Clay, and Wang, 2016; Wixom and Todd, 2005). AI can help employees by interpreting customer questions (for example, through language translation) searching business knowledge systems, and preparing human-friendly responses (Kirkpatrick, 2017). AI can also provide information such as fee changes and scheduling topics in the travel industry Serbanescu, and Necsulescu, (2013) show that analytical AI can improve tasks; AI has drawn controversy, both among practitioners and among academics. According to Calo, (2015) AI will replace millions of jobs and possibly increase the number of unemployed, posing new challenges such as infrastructure rebuilding, vehicle safety, and law and regulation adaptation. AI can be used to develop HR functions, but there are numerous risks, such as humans being replaced by machines, humans being undervalued, and the system being overly complex (Reilly, 2018). Nilson, (2006) on the other hand, claims that AI can help businesses improve their performance. AI services will be used in 40% of digital transformation initiatives in 2019 and 75% of business applications by 2021 (Crews, 2019). Service quality is normally defined as a discrepancy between the service quality that is delivered by the organization and the service performance that employees expect. Conceptually, service quality is defined as a global judgment or attitude connecting to the overall excellence or superiority of the service (Parasuraman et al., 1988). Teas, (1993) which shows the difference between perceived performance and the ideal amount of a feature is called the Evaluated Performance model (Caro, 2007). Chowdhary and Prakash re-investigated service quality measurements (2007).

Employees' Performance
The term "job performance" refers to the behaviors that employees exhibit at work that result in the achievement of the organization's desired outcomes in terms of quality, quantity, and job time (Na-Nan *et al.,* 2018). According to Peterson and Plowman, (1953) Meeting the set criteria and standards for procurement, production, quality inspection, and delivery of goods and services constitute job quality. Job quantity refers to the output units produced by employees' actions, such as product quantity, and waste quantity. Job time concerns the amount of time required to complete work-related activities about the task's difficulty. Employees meet job-time goals if required tasks are completed accurately and in a reasonable amount of time, and products or services are delivered on time. Employee performance has the same meaning as job performance, According to Kahya's articles; two dimensions of employee behavior in job performance have been identified: task performance and contextual performance (Kahya, 2009).
Employee performance: refers to an employee's ability (both physically and psychologically) to carry out a specific task in a specific manner, Employees performance will be measured in terms of quantity, quality, and speed of work achievements (Mathis and Jackson 2009) the indicator of work size measures the quantity of work, The indicator of meeting or exceeding the standard set by the organization is used to assess work quality, and indicator of the time length of work completed measures the speed of work achievement.
Technological advances in artificial intelligence (AI) and robotics are expected to have a profound impact on many aspects of life (ICAR, 2018), and the use of AI and robots adds to the global concern about job loss (Manyika *et al.,* 2017; UNA-UK, 2018). However, there is a legitimate concern that the use of robots will displace demand for human labor, particularly for low-skilled workers and those performing rote tasks, across a wide range of sectors and industries (Das and Hilgenstock, 2018). Travel and tourism a labor-intensive industry is no exception. According to the World Economic Forum, (2018) over the next five years, 75 million jobs will be lost due to automation, while 133 million new jobs will be created. Quantity of

output, quality of output, timeliness of output, attendance on the job, the efficiency of work, and effectiveness of work completed are all indicators of performance (Mathis and Jackson 2009).AI assists and improves human performance in a variety of aspects of processes management. For example, artificial intelligence (AI) can increase organizational efficiency, quality, customer satisfaction, and return on investment while also allowing employees. Although various applications for AI have been proposed, the underlying assumption is that a symbiotic connection between employees and AI algorithms is essential for its successful implementation.

However, the spread of ICTs has improved employee workload generating a constant need for adaptation to new technological interventions and creating an excessive reliance on them. Employees are experiencing technological stress as a result of all of this (Wang *et al.,* 2008; Tarafdar *et al.,* 2007, 2010, 2011) several researchers have suggested a slew of causes and consequences for technological stress. Information overload and excessive work overload are two important causative factors that lead to angry and demotivated employees and lowly work performance (Rabenu *et al.,* 2017).

According to researchers, technological interventions such as AI have improved employee workload and put them under psychological stress due to the constant need to adapt (Wang *et al.,* 2008; Tarafdar *et al.,* 2010, 2011; Turel *et al.,* 2011). Furthermore, some important contributors to these negative effects are information overload and Work overload cause employees to become frustrated and demotivated, resulting in poor work performance and Efficiency (Ragu-Nathan *et al.,* 2008; Tarafdar *et al.,* 2007, 2010, 2011). The ubiquitous presence of technology has left the employees feeling overwhelmed with the mental and psychological effort required for coping with all this (Tarafdar *et al.,* 2011). Tu *et al.,* (2005) and Wang *et al.,* (2008) It was proposed that the techno-overload factor had a positive influence on productivity (due to cultural differences), and that centralization and innovation had an impact on employee levels of technostress. As a result, another area of investigation that opens up for a more in-depth understanding is how AI applications in the hotel sector cause technostress among employees.
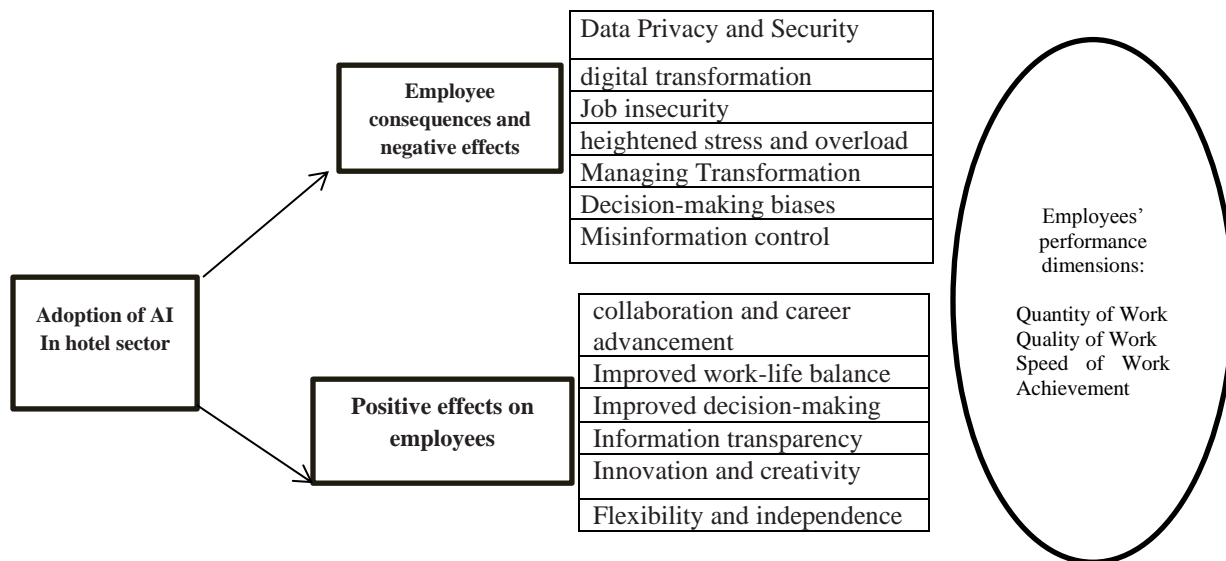

Figure (1): Summary of adoption of AI In the hotel sector

Methodology

The researchers had a thorough discussion with AI experts from many hotels regarding the original questionnaires relating to AI dimensionality before the survey. To approve the validity of the questionnaire (Tabachnick, Fidell, and Ullman, 2007) and confirm a survey completion time of fewer than 15 minutes to minimize respondent fatigue, a pilot test was showed with 20 randomly selected employees who have worked with AI tools in hotels after this testing, the questionnaire was modified based on feedback provided by these participants. Rewording the items to make them clearer was one of the changes, and simplifying difficult sentences to improve face validity and readability. To accomplish the objectives of this research, a quantitative approach was applied; a questionnaire was designed to examine the impact of artificial intelligence dimensions on employees' performance dimensions in the hotel sector. Finn *et al.,* (2000) defined population as the target audience, the group of people that you will ask to respond to your questions. This population must be reasonable in size because if you have a narrow size of the population you will limit your resulting data, and if you have a large size of the population it will cost more money, time, and effort, and to overcome the study of a large population is sampling. This sampling should be the representative and appropriate size of the population. This study population contains managers and employees at five-star hotels in Greater Cairo in Egypt. The sampling strategy should include details on the size of the sample, the structure of the sample, and how the sample will be chosen (Gray, 2013). It was found that the number of five-star hotels in Greater Cairo in Egypt) is 28 hotels, there are 18 hotels in Cairo and 10 hotels in Giza city) *according to the Egyptian hotel Association (the hotel guide) 2020-2021*. The researcher was unable to determine the size of the sample used in the study because there are no statistics on the number of employees who work in five-star hotels in Greater Cairo so; the researchers used a convenience sample. In the current research, only one Arabic copy of the questionnaire was distributed to managers and employees; the total number of forms distributed was 400; from these 400 copies, 380 forms were reached and answered; 20 invalid questionnaires were excluded. researcher investigate to what extent the adoption of AI In the hotel sector creates Consequences adverse impacts on employees' performance and creates a positive on employees' performance.

Results and Discussion

Demographic Analysis

The demographic analysis presented in the below sections is based on the characteristics of the valid respondent i.e. frequency and percentage of participants such as age, gender, educational level, position, and experience. Additionally, how familiar are you with artificial intelligence in the hotel sector. The majority of respondents' ages are between (25-35 years) (43.7%), followed by those less than 25 are (23.2%), and the respondents from (36 to 45), (46 to 55) are the same percentage 16.6%, the highest percentage was(43.7%) were in the group from (25-35), while the lowest was (16.6%) in the group (36-45 and 46-55). The majority of respondents are males, with 395 (94.5%) being males and only 21 (5.5%) being females; the highest percentage of respondents were (94.5%) males, while (5.5%) were females. The majority of respondents hold a university degree, where the majority of 226 (59.5%) have a university degree, 85 (22.4%) have a secondary education, and 42 (11.1%) have basic education, finally, 27(7.1%) are postgraduate, were the highest category was university 59.5%. the highest percentage (59.5%) of

respondents hold a university degree, while the lowest was (7.1%) holds a (postgraduate). The majority of respondents (75.5 percent) were employees, with (24.5 percent) being managers, according to Table (1.4); the highest percentage of respondents (75.5 percent) were employees, (24.5 percent) being managers. The majority of those who have an experience is less than 5 (53.7%), then respondents with experience between (5-11) are (37.1%), Finally, respondents who have (11-15) are (9.2%), the highest percentage of respondents was(53.7%) were in (less than 5), while the lowest was(9.2%) from (11-15). The majority of respondents (69.5 percent) are extremely familiar, followed by (30.5 percent) who are not at all familiar, with the highest category being extremely familiar (69.5 percent).

The weighted average of the sample's responses to questions in the form of a five-point Likert scale to determine the direction of the respondents' opinions (Attitude) is shown in table 1.

Table: (1): AI adoption adverse impacts on employees' performance

Attribute	Attitude	N	Mean	S. D	Percentage				
					SD	D	N	A	SA
Information security and data privacy	agree	380	4.09	1.04	7.1		1.8	45.3	45.8
Changes resulting in digital transformation	strongly agree	380	4.22	1.03	7.1		3.9	27.4	61.6
Job risk (job loss/role loss)	strongly agree	380	4.28	1.07	7.1	2.1	.8	23.4	66.6
Increased stress and overload	strongly agree	380	4.36	1.11	9.2		.8	33.2	56.8
Managing changes	strongly agree	380	4.40	1.15	7.1	2.1	.8	32.1	57.9
Biases in decision making	strongly agree	380	4.28	1.10	7.1	2.1	.8	32.1	57.9
Misinformation management	strongly agree	380	4.31	1.15	9.2		.8	32.1	75.9
mean	agree	380	3.65						

(SD= strongly disagree, D= Disagree, N= Neutral, A= Agree, SA= strongly agree)

Results illustrated that variables' means choice from 4.31 to 4.09; with a grand mean of **3.65** which is near to the choice (4) agrees. This result shows that agreeing with AI adoption in the hotel sector creates consequences and adverse impacts on employee dimensions. Most of the respondents' perceptions of the dimension of AI adoption in the hotel sector creating consequences and adverse impacts on employees dimension were acceptable as the grand mean (**3.65**), which means that respondents agree with the dimension of AI adoption in the hotel sector creates consequences adverse impacts among employees dimension and the standard deviations refer to accepted normality of data distribution, The standard deviation of the previous indicators confirmations that the researcher can rely on the mean to provide a meaningful representation of the data. As a standard deviation from 1.15 to 1.03 is not far off from the mean, indicating that a majority of data points are positioned close to the mean, The closer the standard deviation is to 0, the more reliable the mean is, that though standard deviation values are close to 0 which tells that there is little volatility in the sample. On the other hand, it is also found that the highest indicator for respondents is "managing changes" where its mean value is 4.40 as 94.32 %. These results

agree with (Wang *et al.,* 2008; Tarafdar *et al.,* 2010, 2011; Turel *et al.,* 2011), (Ragu-Nathan *et al.,* 2008; Tarafdar et al., 2007, 2010, 2011), (Tarafdar *et al.,* 2011).

Table: (2.2) AI adoption positive employee experiences

Attribute	Attitude	N	Mean	S. D	Percentage				
					SD	D	N	A	SA
Flexibility and autonomy	agree	380	4.17	.76		7.1	.8	95.2	32.9
Creativity and innovation	strongly agree	380	4.30	.83		7.1	2.9	42.9	47.1
Transparency of information	strongly agree	380	4.25	.87		9.2	.8	45.0	45.0
Enhanced decision making	agree	380	4.13	.77		7.1	2.9	59.2	30.8
Better work-life balance	agree	380	4.15	.75		7.1	.8	61.3	30.8
Collaboration and career progression	strongly agree	380	4.31	1.04		7.1	.8	38.4	53.7
mean	strongly agree	380	4.21						

(SD= strongly disagree, D= Disagree, N= Neutral, A= Agree, SA= strongly agree)

Results illustrated that variables' means choice from 4.31 to 4.13; with a grand mean of **4.21** which is near to the choice (5) "strongly agree", this result specifies that strongly agree that AI adoption in the hotel sector creates positive employee experiences Dimension. It is clear that most of the respondents' perceptions of the dimension of AI adoption in the hotel sector create positive employee experiences dimension, was acceptable as the grand mean (**4.21**), which means that respondents strongly agree with the dimension of AI adoption in hotel sector create positive employee experiences dimension. The standard deviations refer to the accepted normality of data distribution, the standard deviation of the previous indicators illustrates that the researcher can rely on the mean to provide a meaningful representation of the data. A standard deviation from 1.04 to .75 is not far off from the mean, indicating that a majority of data points are positioned close to the mean. The closer the standard deviation is to 0, the more reliable the mean is though standard deviation values are close to 0 which tells that there is little volatility in the sample. On the other hand, it is also found that the highest indicator for respondents is "collaboration and career progression" where its mean value is 4.31 as 94.32 %.

Table: (3): Descriptive Statistics for Quantity of Work

Quantity of Work	Attitude	N	Mean	S.D	Percentage				
					SD	D	N	A	SA
Artificial intelligence aids to achieve a larger number of tasks	strongly agree	380	4.39	1.05	7.1		.8	35.3	56.8

Artificial intelligence helps to reduce workload	strongly agree	380	4.46	1.05	7.1		.8	30.3	61.3
Artificial intelligence helps to save time.	strongly agree	380	4.44	1.05	7.1		.8	23.2	68.9
mean	strongly agree	380	4.43						

(SD= strongly disagree, D= Disagree, N= Neutral, A= Agree, SA= strongly agree)

Results show that variables' means choice from 4.46 to 4.39; with a grand mean of **4.43** which is near to the choice (5) "strongly agree", this result shows that strongly agree with the quantity of work dimension. most of the respondents' perceptions of the dimension of quantity of work dimension were acceptable as the grand mean (4.43), which means that respondents strongly agree with the dimension of quantity of work dimension. The standard deviations refer to the accepted normality of data distribution. The standard deviation of the previous indicators confirmations that the researcher can rely on the mean to provide a meaningful representation of the data. A standard deviation from 1.05 is not far off from the mean, indicating that a majority of data points are positioned close to the mean. The closer the standard deviation is to 0, the more reliable the mean is, though, standard deviation values are close to 0 which tells that there is little volatility in the sample. On the other hand, it is also found that the highest indicator for respondents is "Artificial intelligence helps to reduce workload" where its mean value is 4.46 as 93.82 %. (e.g., Peterson and Plowman, 1953, Breaugh, 1981, Wixom and Todd, 2005, Mathis and Jackson 2009, Forsgren, Durcikova, Clay, and Wang, 2016, Paterson and Maker, 2018).

Table (4): Descriptive Statistics for Quality of Work

Quality of Work	Attitude	N	Mean	S.D	Percentage				
					SD	D	N	A	SA
AI aids to achieve a larger number of tasks.	strongly agree	380	4.26	1.02	7.1			44.7	38.2
AI helps to do the work within the required specifications.	strongly agree	380	4.26	1.02	7.1			44.7	48.2
AI helps to improve work continuously	strongly agree	380	4.28	1.03					
mean	strongly agree	380	4.26						

(SD= strongly disagree, D= Disagree, N= Neutral, A= Agree, SA= strongly agree)

Results declared that variables' means choice from 4.28 to 4.26; with a grand mean of 4.26 which is near to the choice (5) "strongly agree", this result shows that strongly agree with the quality of work dimension. most of the respondents' perceptions of the dimension of quality of work dimension were acceptable as the grand mean (4.26), which means that respondents strongly agree with the dimension quality of work dimension. and the standard deviations refer to the

accepted normality of data distribution. the standard deviation of the previous indicators illustrates that the researcher can rely on the mean to provide a meaningful representation of the data. A standard deviation from 1.03 to 1.02 is not far off from the mean, indicating that a majority of data points are positioned close to the mean. The closer the standard deviation is to 0, the more reliable the mean is, more than that though, standard deviation values are close to 0 which tells that there is little volatility in the sample. On the other hand, it is also found that the highest indicator for respondents is "artificial intelligence helps to improve work continuously" where its mean value is 4.28 as 94.32 %. These results agree with the results of Wixom and Todd, 2005, Forsgren, Durcikova, Clay, and Wang, 2016, Paterson and Maker, 2018.

Table (5): Descriptive Statistics for Speed of Work Achievement

Speed of Work Achievement	Attitude	N	Mean	S.D	Percentage				
					SD	D	N	A	SA
AI helps to save time.	strongly agree	380	4.24	1.02	7.1			46.8	48.1
AI helps to provide effort.	strongly agree	380	4.40	1.04	7.1			30.8	62.1
AI helps to do greater flexibility in work.	strongly agree	380	4.41	1.04	7.1			30.8	62.9
mean	strongly agree	380	4.35						

(SD= strongly disagree, D= Disagree, N= Neutral, A= Agree, SA= strongly agree)

Results declared that variables' means choice from 4.40 to 4.24; with a grand mean of **4.35** which is near to the choice (5) "strongly agree", this result indicates that strongly agree with the Speed of Work Achievement. Most of the respondents' perceptions of the dimension of the speed of work achievement were acceptable as the grand mean (**4.35**), which means that respondents strongly agree with the dimension of the speed of work achievement. The standard deviations refer to the accepted normality of data distribution; the standard deviation of the previous indicators confirms that the researcher can rely on the mean to provide a meaningful representation of the data. A standard deviation from 1.04 to 1.02 is not far off from the mean, indicating that a majority of data points are positioned close to the mean. The closer the standard deviation is to 0, the more reliable the mean is though standard deviation values are close to 0 which tells that there is little volatility in the sample. On the other hand, it is also found that the highest indicator for respondents is "Artificial intelligence helps to achieve greater flexibility in work." where its mean value is 4.41 as 95.12 %. (e.g., Forsgren, Durcikova, Clay, and Wang, 2016; Wixom and Todd, 2005, Paterson and Maker, 2018.

Table (6): Summary of reliability and validity factor

variable	number of phrases	Validity and Reliability
AI adoption in the hotel sector creates consequences and adverse impacts on employees	7 items	98%
AI adoption in the hotel sector creates positive employee experiences	6 items	97%
Quantity of Work	3 items	99%

Quality of Work	3 items	99%
Speed of Work Achievement	3items	99%

Research questions Testing

AI adoptions in the hotel sector create Consequences and adverse impacts on employees' performance dimensions (quantity, quality, and speed of work).

Table (7): Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.850[a]	.722	.722	.553
a. Predictors: (Constant), create consequences				

The result in the table (7) shows that, the R and R-square standards. The R-value is the correlation coefficient between; AI adoptions in the hotel sector creating consequences adverse and employees' performance dimension (quantity of work). (R=.850[a]) It shows a strong positive correlation between AI adoption in the hotel sector creating consequences adverse and employees' performance dimension (quantity of work). The R^2 value denotes the coefficient of determination which indicates how much of the total variation in the dependent variable employees' performance dimension (quantity of work), can be clarified by the independent variables AI adoptions in the hotel sector create consequences adversely. In this case, .722% of the dependent variable employees' performance dimension (quantity of work) can be explained by the AI adoption in the hotel sector creating consequences adverse. This result reflects the good influence of AI adoption in the hotel sector creates consequences adverse to employees' performance dimension (quantity of work). That leads to validate the assumption that employees' performance dimension (quantity of work) is transformed/ affected by the level of changes in AI adoptions in the hotel sector creating consequences adverse as independent variables. To examine the significance of the (linear) connection between AI adoptions in the hotel sector creating consequences adverse as independent variables and employees' performance dimension (quantity of work) as a dependent, F- test can be used as shown in the table (8).

Table (8): The linear connection between AI adoption and the quantity of work

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	300.351	1	300.351	983.846	.000[b]
	Residual	115.397	378	.305		
	Total	415.748	379			
a. Dependent Variable: quantity of work						
b. Predictors: (Constant), create consequences						

The ANOVA illustrates whether the regression model significantly predicts the employees' performance dimension (quantity of work). From table (8) it is clear that F1, 378 = 449.342 and P<0.01, and this means that there is a major relationship between AI adoption in the hotel sector creating consequences adverse, and employees' performance dimension (quantity of work).

Table (9): The Simple linear Regression Analysis for AI adoptions and quantity of work

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.792	.120		6.620	.000
	create consequences	.851	.027	.850	31.366	.000
a. Dependent Variable: quantity of work						

All coefficients are not equal to zero, implying that we can still reject the null hypothesis where t for x1= 31.366, P 0.01 for x variables, It is also clear that =.792 and 1=.851, implying: According to the regression model (2.3), there was a significant effect of AI adoptions in the hotel sector creating consequences as an independent variable on employees' performance dimension (quantity of work) as a dependent variable. Furthermore, the table illuminates why and how AI adoptions in the hotel sector have a negative impact on employee performance (quantity of work). The relations between AI adoptions in the hotel sector create consequences adverse to employees' performance dimensions (quality of work). The R and R-square standards. The R-value is the correlation coefficient between; AI adoptions in the hotel sector creating Consequences adverse and employees' performance dimension (quality of work). (R=.832[a)]) It specifies a strong positive correlation between AI adoption in the hotel sector creating Consequences adverse and employees' performance dimension (quality of work). The result shows that (R=.850[a)]) indicates a strong positive correlation between I adoptions in the hotel sector creating consequences adverse and employees' performance dimension (quality of work). The R^2 value mentions the coefficient of determination which shows how much of the total variation in the dependent variable employees' performance dimension (quality of work), can be explained by the independent variables AI adoptions in the hotel sector create consequences adversely. In this case, .693% of the dependent variable employees' performance dimension (quantity of work) can be explained by the AI adoption in the hotel sector creating consequences adverse. This result reflects the good influence of AI adoption in the hotel sector creates Consequences adverse to employees' performance dimension (quality of work). That leads to validating the assumption that employees' performance dimension (quality of work) is transformed/ affected by the level of changes in AI adoption in the hotel sector creating Consequences adverse as independent variables. To examine the significance of the (linear) relationship between AI adoptions in the hotel sector creating consequences adverse as independent variables and employees' performance dimension (quantity of work) as a dependent, F- test can be used as shown in the table (10).

Table (10): The linear relationship between AI adoptions quantity of work

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	275.753	1	275.753	852.240	.000[b]
	Residual	122.307	378	.324		
	Total	398.060	379			
a. Dependent Variable: quality of work						
b. Predictors: (Constant), create consequences						

The ANOVA illustrates whether the regression model significantly predicts the employees' performance dimension (quality of work). Table (9) it is shown that F1, 378 = 852.240 and P<0.01, and this means that there is a major relationship between AI adoption in the hotel sector

creating Consequences adverse, and employees' performance dimension (quality of work). All coefficients in the table (11) are not equal to zero, implying that we can still reject the null hypothesis where t for x1= 29.193, P 0.01 for x variables, It is also obvious that =.782 and 1=.816, so: According to the regression model (6.3) there was a significant influence of AI adoptions in the hotel sector create consequences as an independent variable on employees' performance dimension (quality of work) as a dependent variable. Furthermore, the table explains why and how AI adoptions in the hotel sector have a negative impact on employee performance (quality of work).

Table (11): Simple linear Regression analyses for AI adoptions and quantity of work

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.782	.123		6.351	.000
	create consequences	.816	.028	.832	29.193	.000
a. Dependent Variable: quality of work						

The relations between AI adoptions in the hotel sector create consequences adverse to employees' performance dimensions (speed of work) as shown in table (12).

Table (12): Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802[a]	.644	.643	.611
a. Predictors: (Constant), create consequences				

The result in table (12) shows that, the R and R-square standards. The R-value is the correlation coefficient between; AI adoptions in the hotel sector creating consequences adverse and employees' performance dimension (speed of work). (R=.802[a]) It points toward a strong positive correlation between I adoptions in the hotel sector creating consequences adverse and employees' performance dimension (speed of work). The R2 value discusses the coefficient of determination which indicates how much of the total variation in the dependent variable employees' performance dimension (speed of work), can be explained by the independent variables AI adoptions in the hotel sector create consequences adversely. In this case, .644% of the dependent variable employees' performance dimension (quantity of work) can be explained by the AI adoption in the hotel sector creating consequences adverse. This result reflects the good effect of AI adoption in the hotel sector creates consequences adverse to employees' performance dimension (speed of work). That leads to validate the assumption that employees' performance dimension (speed of work) is transformed/ affected by the level of changes in AI adoptions in the hotel sector creating consequences adverse as independent variables. To investigate, the significance of the (linear) relationship between AI adoptions in the hotel sector creating consequences adverse as independent variables and employees' performance dimension (speed of work) as a dependent, F- test can be used as revealed in the table (13).

Table (13): The linear relationship between AI adoption and speed of work

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	255.175	1	255.175	683.273	.000[b]
	Residual	141.168	378	.373		
	Total	396.342	379			
a. Dependent Variable: speed of work						
b. Predictors: (Constant), create consequences						

The ANOVA confirmations whether the regression model significantly predicts the employees' performance dimension (speed of work). From table (13) it is clear that F1, 378 = 683.273 and P<0.01 this means that there is a major relationship between AI adoption in the hotel sector creating Consequences adverse, and employees' performance dimension (speed of work). All coefficients are not equal to zero, implying that we can still reject the null hypothesis where t for x1= 26.139, P 0.01 for x variables, It is also obvious that =.997and 1=.785, so: According to the regression model, there was a significant effect of AI adoptions in the hotel sector create Consequences as an independent variable on employees' performance dimension (speed of work) as a dependent variable. Furthermore, the table explains why and how AI adoptions in the hotel sector have a negative impact on employee performance (speed of work).

Discussion

Correlations between the dependent variable (employees' performance dimension) and independent variable (create consequences). the results show that, after studying the previous table, note that the dependent variables, employees' performance dimensions (quantity, quality, and speed of work achievement), and independent variables create consequences, have a very high statistical significance less than or equal to 0.000, note that (quantity of work, speed of work) are strongly correlated and (create consequences) are less correlated then, (quality of work) are less correlated.

Table (14): The Correlations between employees' performance dimension and consequences

		quantity of work	quality of work	speed of work	create consequences
quantity of work	Pearson Correlation	1	.784[**]	.867[**]	.850[**]
	Sig. (2-tailed)		.000	.000	.000
	N	380	380	380	380
quality of work	Pearson Correlation	.784[**]	1	.818[**]	.832[**]
	Sig. (2-tailed)	.000		.000	.000
	N	380	380	380	380
speed of work	Pearson Correlation	.867[**]	.818[**]	1	.802[**]
	Sig. (2-tailed)	.000	.000		.000
	N	380	380	380	380
create consequences	Pearson Correlation	.850[**]	.832[**]	.802[**]	1
	Sig. (2-tailed)	.000	.000	.000	
	N	380	380	380	380
**. Correlation is significant at the 0.01 level (2-tailed)					

After using the correlated the research Using simple linear regression analysis, the data indicated a statistically significant impact of the independent variable (sig = 0.000, P 0.01) AI adoptions in the hotel sector have a negative influence on employee performance dimensions, which means that Artificial AI adoptions in the hotel sector have a negative impact on employee performance dimensions (Quantity of Work, Quality of Work and Speed of Work Achievement). These outcomes are in agreement with existing literature and also extend the boundaries of knowledge. According to researchers, technological interventions such as AI have increased employee workload and put them under psychological stress due to the constant need to adapt (Wang *et al.,* 2008; Tarafdar, 2008).

The results show that, the R and R-square standards. The R-value is the correlation coefficient between; AI adoptions in the hotel sector creating positive and employees' performance dimension (quantity of work). (R= .785[a]). It shows a strong positive correlation between AI adoption in the hotel sector creating positive and employees' performance dimension (quantity of work). The R^2 value discusses the coefficient of determination which indicates how much of the total variation in the dependent variable employees' performance dimension (quantity of work), Can be clarified by the independent variables AI adoptions in the hotel sector create positive. In this case, .617% of the dependent variable employees' performance dimension (quantity of work) can be explained by the AI adoptions in the hotel sector creating positive. This result reflects the good impact of AI adoption in the hotel sector creates a positive on employees' performance dimension (quantity of work). That leads to validating the assumption that employees' performance dimension (quantity of work) is transformed/ affected by the level of changes in AI adoptions in the hotel sector creating positive as independent variables. To check the significance of the (linear) relationship between AI adoptions in the hotel sector creating positive as independent variables and employees' performance dimension (quantity of work) as a dependent, the F- test can be used as shown in table (15).

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	256.513	1	256.513	608.922	.000[b]
	Residual	159.235	378	.421		
	Total	415.748	379			
a. Dependent Variable: quantity of work						
b. Predictors: (Constant), create positive						

The ANOVA illustrates whether the regression model significantly predicts the employees' performance dimension (quantity of work). It is clear that F1, 378 = 608.922 and P<0.01, and this means that there is a significant relationship between AI adoption in the hotel sector creating positive on and employees' performance dimension (quantity of work). All β coefficients are not equal to zero which means we still can reject the null hypothesis were t for x1= 24.676, P<0.01 for x variables. It is observable also that α = .085 and β1= 1.030, so: From the table (8.3) the regression model illustrations that was a significant influence of AI adoption in the hotel sector created positive as an independent variable on employees' performance dimension (quantity of work) as the dependent variable. Also, the table explains why and how AI adoption in the hotel sector creates positive had a positive effect on employees' performance dimension (quantity of work).

The results show that, the R and R-square standards. The R-value is the correlation coefficient between; AI adoptions in the hotel sector creating positive and employees' performance dimension (quality of work). (R= .731[a]). It specifies a strong positive correlation between AI adoption in the hotel sector creating positive and employees' performance dimension (quality of work). The R2 value states the coefficient of determination which indicates how much of the total variation in the dependent variable employees' performance dimension (quality of work), Can be described by the independent variables AI adoptions in the hotel sector create positive. In this case, 617% of the dependent variable employees' performance dimension (quality of work) can be described by the AI adoption in the hotel sector create positive. This result reflects the good influence of AI adoption in the hotel sector creates a positive on employees' performance dimension (quality of work). That leads to validate the assumption that employees' performance dimension (quality of work) is transformed/ affected by the level of changes in AI adoptions in the hotel sector creating positive as independent variables. To examine the significance of the (linear) relationship between AI adoptions in the hotel sector creating positive as independent variables and employees' performance dimension (quantity of work) as a dependent, F-test can be used.

The ANOVA confirmations whether the regression model significantly predicts the employees' performance dimension (quality of work). It is clear that F1, 378 = 433.258 and P<0.01 this means that there is a significant relationship between AI adoption in the hotel sector creating positive on and employees' performance dimension (quality of work). All coefficients are not equal to zero, implying that we can still reject the null hypothesis where t for x1= 20.815, P0.01 for x variables, It is also recognizable that =.313 and 1=.938, so: According to the regression model (9.3) AI adoptions in the hotel sector have a significant positive effect as an independent variable on employees' performance dimensions (quality of work) as a dependent variable. Furthermore, the table explains why and how AI adoptions in the hotel industry have a positive impact on employee performance (quality of work).

The results show that, the R and R-square standards. The R-value is the correlation coefficient between; AI adoptions in the hotel sector creating positive and employees' performance dimension (speed of work). (R= .729[a]). It shows a strong positive correlation between AI adoption in the hotel sector creating positive and employees' performance dimension (speed of work). The R2 value denotes the coefficient of determination which indicates how much of the total variation in the dependent variable employees' performance dimension (speed of work), Can be clarified by the independent variables AI adoptions in the hotel sector create positive. In this case, .532% of the dependent variable employees' performance dimension (speed of work) can be explained by the AI adoptions in the hotel sector creating positive. This result reflects the good influence of AI adoption in the hotel sector creates a positive on employees' performance dimension (speed of work). That leads to validate the assumption where employees' performance dimension (speed of work) is transformed/ affected by the level of changes in AI adoptions in the hotel sector creating positive as independent variables

To examine the significance of the (linear) relationship between AI adoptions in the hotel sector creating positive as independent variables and employees' performance dimension (speed of work) as a dependent, F-test can be used. The ANOVA confirmations whether the regression model significantly predicts the employees' performance dimension (speed of work). It is clear that F1, 378 = 429.399 and P<0.01 this means that there is a significant relationship between AI adoption in the hotel sector creating positive on and employees' performance dimension (speed

of work). All coefficients are not equal to zero, suggesting that we can still reject the null hypothesis where t for x1= 20.722, P0.01 for x variables, It is also obvious that =.412 and 1=.934, so: According to the regression model (10.3) AI adoptions in the hotel sector have a significant positive effect as an independent variable on employees' performance dimension (speed of work) as a dependent variable. Furthermore, the table explains why and how AI adoptions in the hotel industry have a positive impact on employee performance (speed of work).

Conclusion and Future Research

The researcher explores the impacts of AI adoption in the Egyptian hotel sector on employees' performance, specifically focusing on the employees. Prominent adverse impacts of the adoption of AI like the potential risk of data security gaps, drastic organizational changes resulting from digital transformations, and job risk and insecurity often trouble the employees. Concerns surrounding biases in decision-making and misinformation-related challenges were also highlighted. The negative influences accentuate some dysfunctional organizational aspects. This research contributes to the technostress literature and opens up avenues for future research. However, positive effects like work-related flexibility and autonomy, creativity and innovation, and overall enhancement in job performance are also identified. Further factors contributing to technostress among employees including work overload, disruption of work-life balance, job insecurity, and complexity were also identified. Such a study provides a comprehensive understanding adding to the considerable existing literature on technology deployment and the interplay of organizational roles and structure. The research is one of its kinds to focus on the adverse outcomes of AI adoption while focusing on employees, Future Research needs to investigate the impact of technostress on employees' performance.

References

- Bader, V. and Kaiser, S. (2019), "Algorithmic decision-making? The user interface and its role for human involvement in decisions supported by artificial intelligence", Organization, Vol. 26 No. 5, pp. 655-672, DOI: 10.1177/1350508419855714.
- Brod, C. (1984), Technostress: The Human Cost of the Computer Revolution, Addison-Wesley, Reading, MA.
- Buhalis, D., and Leung, R. (2018). International Journal of Hospitality Management Smart hospitality — Interconnectivity and interoperability towards an ecosystem. International Journal of Hospitality Management, 71(December 2017), 41–50.
- Calo, R. (2015), "Robotics and the lessons of cyberlaw", California Law Review, Vol. 103, p. 513.
- Crews, C.J. (2019), "What machine learning can learn from foresight: a human-centered approach: for machine learning-based forecast efforts to succeed, they must embrace lessons from corporate foresight to address human and organizational challenges", Research-Technology Management, Vol. 62 No. 1, pp. 30-33.
- Crews, C.J. (2019), "What machine learning can learn from foresight: a human-centered approach: for machine learning-based forecast efforts to succeed, they must embrace lessons from corporate foresight to address human and organizational challenges", Research-Technology Management, Vol. 62 No. 1, pp. 30-33.

- Das, M., and Hilgenstock, B. (2018). The exposure to routinization: Labor market implications for developed and developing economies. IMF Working Paper (WP/18/135 https://www.imf.org/~/media/Files/Publications/WP/2018/wp18135.ashx.
- Finn, M, Eiliott, M and Walton, M. (2000) Tourism and Leisure Research Methods Data Collection analysis and interpretation, Pearson Education, Malaysia, 2nd Edition.
- Forsgren, N., Durcikova, A., Clay, P. F., and Wang, X. (2016). The integrated user satisfaction model: Assessing information quality and system quality as second-order constructs in system administration. Communications of the Association for Information Systems, 38, 803–839. Doi: 10.17705/1cais.
- International Corporate Accountability Roundtable (ICAR) (2018). G7 and the "future of work": A call for accountable automation. https://www.icar.ngo/news/2018/3/27/g7-and-the-future-of-work-a-call-for-accountable-automation
- Jonker-Hoffren, P. (2020), "What is the employment potential of a lean platform? The case of Dutch self-employed service professionals", International Journal of Manpower, Vol. 42 No. 2, pp. 305-321, DOI: 10.1108/IJM-01-2019-0037.
- Kahya, E. (2009). The effects of job performance on effectiveness. International Journal of Industrial Ergonomics, 39, 96-104.
- Kaplan, A., and Haenlein, M. (2019). Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. Business Horizons, 62(1), 15–25. doi:10.1016/j.bushor.2018.08.004
- Kim, S. Y. (2011). Prediction of hotel bankruptcy using support vector machine, artificial neural network, logistic regression, and multivariate discriminant analysis. The Service Industries Journal, 31(3), 441–468. doi:10.1080/02642060802712848
- Kirkpatrick, K. (2017). AI in Contact Centers. Communications of the ACM, 60(8), 18–19.doi:10.1145/3127343
- Manyika, J., Lund, S., Chui, M., Bughin, J., Woetzel, J., Batra, P., Sanghvi, S. (2017). Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages. https://www.mckinsey. com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean for-jobs-skills-and-wages
- Mathis, R.L. and Jackson, J.H. 2009. Human Resource Management. Mason, OH, USA: South-Western Cengage Learning P: 324
- Moore, J.E. (2000), "One road to turnover: an examination of work exhaustion in technology professionals", MIS Quarterly, Vol. 24 No. 1, pp. 141-168, DOI: 10.2307/3250982.
- Morikawa, M. (2017). Who is afraid of losing their jobs to artificial intelligence and robots? Evidence from a survey. Japan: Research Institute of Economy, Trade, and Industry (RIETI)
- Na-Nan, K., Chaiprasit, K. and Pukkeeree, P. (2018), "Factor analysis-validated comprehensive employee job performance scale", International Journal of Quality and Reliability Management, Vol. 35 No. 10, pp. 2436-2449.
- Nilsson, N.J. (2006), "Human-level artificial intelligence? Be serious", AI Magazine, Vol. 26 No. 4, p. 68.
- Nuefeind, M., O'Reilly, J., and Ranft, F. (2018). Work in the digital age: challenges of the fourth industrial revolution. London: Policy Network.

- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988). "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", Journal of Retailing, 64(5), p. 21- 40
- Peterson, E. and Plowman, G.E. (1953), Business Organization and Management, Irwin, IL.
- Rabenu, E., Tziner, A. and Sharoni, G. (2017), "The relationship between work-family conflict, stress, and work attitudes", International Journal of Manpower, Vol. 38 No. 8, pp. 1143-1156, DOI: 10. 1108/IJM-01-2014-0014.
- Rabenu, E., Tziner, A. and Sharoni, G. (2017), "The relationship between work-family conflict, stress, and work attitudes", International Journal of Manpower, Vol. 38 No. 8, pp. 1143-1156, DOI: 10. 1108/IJM-01-2014-0014.
- Ragu-Nathan, T.S., Tarafdar, M., Ragu-Nathan, B.S. and Tu, Q. (2008), "The consequences of technostress for end users in organizations: conceptual development and empirical validation", Information Systems Research, Vol. 19 No. 4, pp. 417-433, DOI: 10.1287/isre.1070.0165
- Ramaswamy, S. (2017). How companies are already using AI. Harvard Business Review, 14(April), 2017. https://hbr.org/2017/04/how-companies-are-already-using-ai
- Rijsdijk, S. A., Hultink, E. J., and Diamantopoulos, A. (2007). Product intelligence: Its conceptualization, measurement, and impact on consumer satisfaction. Journal of the Academy of Marketing Science, 35, 340–356. doi:10.1007/s11747-007-0040-6
- Robinson, M. (2017, June 13). This robot-powered restaurant is one step closer to putting fast-food workers out of a job. https://www.businessinsider.com.au/momentum-machines-funding-robotburger-restaurant-2017-6
- Ruiz, A.C. (2020), "ICTs usage and skills matching at work: some evidence from Spain", International Journal of Manpower. DOI: 10.1108/IJM-03-2020-0103.
- Russell Stuart, J., and Norvig, P. (2009). Artificial intelligence: A modern approach. USA: Prentice-Hall.
- Russell, S. J., and Norvig, P. (2016). Artificial intelligence: A modern approach. Malaysia: Pearson Education Limited
- Serbanescu, L., and Necsulescu, C. (2013). Improving the performance and efficiency of tavel agencies with IT technology. Lucrări Ştiinţifice, VOL.XV (4), Seria I.
- Smith, A., and Anderson, M. (2017). Automation in everyday life. Pew Research Centre. http://www. pewinternet.org/2017/10/04/automation-in-everyday-life/
- Tarafdar, M., Tu, Q. and Ragu-Nathan, T.S. (2010), "Impact of technostress on end-user satisfaction and performance", Journal of Management Information Systems, Vol. 27 No. 3, pp. 303-334, DOI: 10.2753/MIS0742-1222270311
- Tarafdar, M., Tu, Q., Ragu-Nathan, B.S. and Ragu-Nathan, T.S. (2007), "The impact of technostress on role stress and productivity", Journal of Management Information Systems, Vol. 24 No. 1, pp. 301-328, DOI: 10.2753/MIS0742-1222240109.
- Tarafdar, M., Tu, Q., Ragu-Nathan, T.S. and Ragu-Nathan, B.S. (2011), "Crossing to the dark side: examining creators, outcomes, and inhibitors of technostress", Communications of the ACM, Vol. 54 No. 9, pp. 113-120, DOI: 10.1145/1995376.1995403.
- Teas, R. (1993) "Expectations, performance evaluation, and consumer's perceptions of quality", Journal of Marketing, 57, 18–34.

- Tu, Q., Wang, K. and Shu, Q. (2005), "Computer-related technostress in China", Communications of the ACM, Vol. 48 No. 4, pp. 77-81, DOI: 10.1145/1053291.1053323.
- Turel, O., Serenko, A. and Giles, P. (2011), "Integrating technology addiction and use: an empirical investigation of online auction users", MIS Quarterly, Vol. 35 No. 4, pp. 1043-1061, DOI: 10.2307/ 41409972.
- United Nations Association – UK (UNA-UK) (2018). Decent employment in the fourth industrial revolution. https://www.sustainablegoals.org.uk/decent-employmentfourth-industrial-revolution/.
- Wang, K., Shu, Q. and Tu, Q. (2008), "Technostress under different organizational environments: an empirical investigation", Computers in Human Behavior, Vol. 24 No. 6, pp. 3002-3013, DOI: 10. 1016/j.chb.2008.05.007
- WHO (2005), available at: https://www.who.int/whr/2005/en/.
- Wixom, B. H., and Todd, P. A. (2005). A theoretical integration of user satisfaction and technology acceptance. Information Systems Research, 16(1), 85–102. doi:10.1287/isre.1050.0042
- World Economic Forum (WEF) (2018). The future of jobs reports 2018. http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf.
- Yu, G., and Schwartz, Z. (2006). Forecasting short time-series tourism demand with artificial intelligence models. Journal of Travel Research, 45(2), 194–203. doi:10.1177/0047287506291594

ملخص عربي

البشر أم الآلة: دراسة استكشافية لأثر استخدام تقنيات الذكاء الاصطناعي على جودة الخدمة

يتم تطبيق تقنيات (RAISA) بشكل كبير في صناعة السياحة والضيافة في جميع أنحاء العالم حيث يكتسب هذا المجال من البحث أهمية كبري ؛ ومع ذلك ، لم يحظ هذا الموضوع باهتمام كبير في صناعة السياحة والفندقة المصرية. يحاول هذا البحث تطوير فهم عملي لتجارب العاملين الإيجابية والسلبية بسبب تبني الذكاء الاصطناعي (AI) في قطاع الفنادق المصري، نتيجة لذلك ، هناك قلة في الأبحاث حول الذكاء الاصطناعي وأداء العاملين في قطاع الفنادق ، تم جمع البيانات من المديرين والعاملين في فنادق الخمس نجوم في مدينة القاهرة الكبرى في مصر، بينما تم جمع البيانات الأولية من خلال دراسة تجريبية أجريت بواسطة إستراتيجية الاستبيان على عينة ملائمة للعاملين والمديرين في الفنادق، لتحليل البيانات تم إجراء التحليل و اختبار التأثير من خلال الانحدار الخطي البسيط باستخدام(SPSS25). تشير النتائج إلى أن تبني الذكاء الاصطناعي له عواقب سلبية كبيرة ، بما في ذلك أمن المعلومات ، وخصوصية البيانات ، والتغييرات الجذرية الناجمة عن التحولات الرقمية ، ومخاطر العمل وانعدام الأمن في نفسية الموظف. ويلي ذلك قائمة من العوامل التي لها تأثير إيجابي ، مثل المرونة والاستقلالية المتعلقة بالوظيفة ، والإبداع والابتكار ، وتحسين الأداء الوظيفي بشكل عام. يقدم هذا البحث مساهمة فريدة من العوامل التي تشكل عواقب غير مقصودة ، وتأثيرات إيجابية (بين العاملين) لنشر الذكاء الاصطناعي في قطاع الفنادق ، ويمكن اعتبار هذا البحث أحد الدراسات القليلة التي تناقش تأثير الذكاء الاصطناعي على أداء العاملين في قطاع الفنادق.

الكلمات الرئيسية: الذكاء الاصطناعي ، الفنادق المصرية ، جودة الخدمات ، الأثر الإيجابي ، أداء العاملين