

Information Technology in Hotels to Improve Employee Performance: The Moderating Role of Employee Empowerment

تكنولوجيا المعلومات وتحسين أداء الموظفين في الفنادق: الدور المعدل لتمكين الموظفين

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Abstract

الملخص

Using information technology in the hotel industry is constantly evolving, and new technologies are occurring all the time. As technology continues to advance, it is expected to see even more innovative ways for hotels to use IT to improve the guest experience and to enhance operational efficiency. Therefore, this study mainly aims to assess the relationship between information technology and employee performance. It also tried to investigate the moderating role of the employee empowerment in this relationship.

In this research, a stratified random sampling technique, a target sample of 60 hotels was selected, and data was distributed to 1200 employees, however, only 770 questionnaires forms were obtained and valid. Generally, the results emphasized that six elements of information technology have significant impact on employee's performance in hotels. Furthermore, the results indicated the moderating role of employee empowerment in the relationship between information technology and employee performance. Accordingly, the study provides hotel managers with many beneficial implications to possess a competitive and empowered information technology in order to enhance their employee performance.

تلعب تكنولوجيا المعلومات (IT) دورًا فعالًا في نجاح الفنادق، فهي تعزز الكفاءة التشغيلية، وتحسن رضا العملاء، وتسهل تجربة شخصية أكثر سلاسة وسهولة لهم. ولذلك تهدف هذه الدراسة إلى تقييم العلاقة بين تكنولوجيا المعلومات وأداء الموظفين في الفنادق، وكذلك تهدف إلى التعرف على دور تمكين الموظفين كعامل مؤثر في هذه العلاقة.

باستخدام تقنية العينة العشوائية الطبقية، تم اختيار عينة مكونة من 60 فندقًا من الفنادق الخمسة نجوم في مصر. بالإضافة إلى ذلك، تم اختيار عينة عشوائية مكونة من 1200 موظف، وتم الحصول على 770 استبانة فقط قابلة للتحليل. تم جمع بيانات الدراسة باستخدام الاستبيانات. وأكدت النتائج أن تكنولوجيا المعلومات تعتبر عاملاً رئيسياً في تعزيز أداء الموظفين في صناعة الضيافة. كما توصلت نتائج اختبارات تحليل الانحدار إلى وجود ارتباطات موجبة ومعنوية بين متغيرات تكنولوجيا المعلومات (الأجهزة، البرمجيات، الشبكات، مهارات الموارد البشرية، قواعد البيانات والإجراءات) وأداء الموظفين. كما توصلت النتائج إلى وجود دور مؤثر لتمكين الموظفين في العلاقة بين تكنولوجيا المعلومات وأداء الموظفين. وعليه، تقدم الدراسة لمديري الفنادق العديد من الإرشادات الهامة لتبني عناصر تكنولوجيا المعلومات بشكل تنافسي من أجل تحسين الأداء النهائي للموظفين وتحقيق رضا العملاء.

Keywords: Information technology; Employee performance; Employee Empowerment.

الكلمات الدالة: تكنولوجيا المعلومات؛ أداء الموظفين؛ تمكين الموظفين.

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1. Introduction

Competition in the hospitality industry is highly strong and constantly struggling for guests' interest and bookings (Malik et al., 2021). To stay ahead of the competition, hospitality sector necessitates providing a remarkable guest experience, proposing competitive rates, and pulling technology (Cheng et al., 2019). Hence, hotels are increasingly embracing a wide range of information technology (IT) solutions to update operations, customize services, and achieve a competitive edge (Haug, et al., 2020). IT plays an imperative role in enhancing guest experiences, increasing operational efficiency, and motivating revenue growth in the hotel industry (Pinna et al., 2020).

IT has also empowered hospitality businesses to collect and analyze great amounts of guest data from a variety of sources, including reservation procedures, property management methods, and guest feedback (Pinna et al., 2020). This data can be used to secure valuable insights into guest preferences, market trends, and operational performance, optimizing resources, and making data-driven decisions (Hajro et al., 2017). IT is employed in the hospitality industry to generate information in several levels of hospitality management; reservation and booking, guest communication and engagement and revenue management and pricing optimization (Hole et al., 2019). So, front office employees mainly depend on reservation information system to organize, process, send and receive reservations from a lot of hotel guests, they also use the system to prepare documents related to payments and all guest settlements, to monitor the room inventory, manage various products and services used by the guests (Hajro et al., 2017). Thus, adopting such information and communication systems emphasizes the efficiency and professionalism in managing hospitality industry (Lee et al., 2020).

Gursoy et al., (2019) indicated that IT has been recognized as one of the greatest forces causing change in the hotel industry. In that, many hospitality businesses have turned to IT as a way to deal with an environment characterized by globalization, competition, high client turnover, and rising guest expectations (Robinson et al., 2020). IT investments are significant in the hospitality industry, but they do not always guarantee good returns (Göktas & Akgül, 2019). However, IT can be effectively employed to improve performance, then the organization employees must be able to use the technology well (Prentice & Nguyen, 2020).

Besides, Sardi et al. (2020) indicated that employee performance is the activities related to certain job and how well those activities were executed by employees. They indicated that employees need to align the objectives of the organization such as increasing sales and making profit. Thus, management should take continuous steps to help employees perform well and contribute to organizational goals (Garengo & Sardi, 2020). Therefore, this study mainly aims to assess the impact of IT on employee performance in a sample of hotels in Egypt, and to examine the role of managers in empowering their employees to use IT to perform well.

2. Conceptual Framework and Hypotheses Development

2.1 Information Technology and Employee Performance

The term information technology (IT) refers to a wide range of instruments, tools, and procedures that facilitate the generation, storage, retrieval, transfer, and modification of information (Fourie & Poggenpoel, 2017). It acts for the creation, processing, storing, securing, and interchange of all types of electronic data through the use of computers, storage, networking, and other physical devices, infrastructure, and procedures (Muda et al., 2020). Technology has been grown to be a vital component of the hotel business, helping to boost revenue growth, improving guest experiences, and increasing operational efficiency. Managers use IT as a tool to handle change (Muda & Erlina, 2019).

Hotels are using a greater variety of IT solutions to improve efficiency, customize offerings, and obtain a competitive advantage. In the hospitality industry, staff members are the most valuable resource (Malik et al., 2018). Since many hotel staff members interact directly with guests, they are essential to an organization's ability to outperform rivals and forge enduring relationships with clients that guarantee long-term competitive advantages in the environment of the hotel business (Faeq et al., 2021). In an ever-

changing environment, innovative performance can be attained quickly and effectively by making use of resources like IT (Mathis & Jackson, 2009; Yıldız et al., 2014; Haug, al., 2020; Putra al., 2022). As a result, the following hypothesis is proposed:

H1: Information technology positively influences employee performance.

2.2 Elements of IT

Butler (2018) asserts that an information technology system is made up of components related to management, organization, and technology. In doing so, Ishak and Asni (2020) made it obvious that management behavior, strategy, and leadership are all part of the management dimension of IT systems. The computer hardware, software, networking/telecommunications, and data management technologies (including the Internet) comprise the technology dimensions (Ishak & Asni, 2020).

An organization's people, structure, operational processes, politics, culture, and operational specialties are its fundamental components. Organizations are social entities created to accomplish particular goals (Lima et al., 2007; Dong & Yang, 2019; Koundal al., 2022). According to Lucier (2018), the researchers divided IT into six categories which were adopted in this study: hardware, software, networks, human resource skills, databases, and procedures

2.2.1 Hardware

Hardware basically refers to all of a computer's visible and touchable physical parts (Nguyen & Malik, 2021). According to Coltman et al. (2015), hardware refers to the internal and external tools and devices that allow carrying out key tasks like input, output, storage, communication, processing, and more. Motherboards, hard drives, and RAM are examples of internal hardware components, while monitors, keyboards, printers, and scanners are examples of external hardware. On the other hand, Bridges (2019) asserts that while hardware plays a significant part in fostering a productive workplace; establishing a productive workplace culture is the first step. Therefore, the following hypothesis is formulated:

H1a: IT hardware positively influences employee performance.

2.2.2 Software

A significant application area for technologies is software services. Software technologies help hotels manage more efficiently, save expenses, boost bookings by promoting more in social media and the sectoral market, improve reputation management, and offer efficient front-office management prospects (Tekin, 2019). In terms of cost, service quality, and flexibility, software services can provide hotels a number of benefits and opportunities (Coltman et al., 2015).

Using specialized software, guests can use hotel services at a reduced rate and from any location. Hotels don't need to hire more workers for the IT departments because they may outsource these tasks and execute them more effectively (Al-Rahmi et al., 2022). It was further clarified by Yurtsever (2019) that hotels can use software providers to access cloud-based applications. The running application's infrastructure and cloud platform are not managed by hotels. Thus, there is no longer a need for the associated software to be installed and used on the computer systems of the hotels. Nonetheless, access is feasible from any location at any time using a browser that is online. Furthermore, services related to support and maintenance gets easier (Nguyen, 2020). Therefore, the following hypothesis is formulated:

H1b: IT software positively influences the employee performance.

2.2.3 Network

Networking is an online interaction medium that allows people to form relationships, exchange ideas, communicate information, and bind society in a sentimental stream. According to Gomez et al. (2017), networking is rapidly expanding in a dynamic environment and changing it in a dramatic or

dynamic way. Additionally, networks influence workers' performance by enhancing their skills, knowledge, motivation, and intimate ties to hotels. In these networks, individuals with ties to hotels tell tales about businesses, sometimes with malicious intent and other times not (Messersmith & Wales, 2018). Employees may perform well as a result of these stories, or vice versa. As a result, the following hypothesis is put forth:

H1c: IT networks positively influences employee performance.

2.2.4 Human Resource Skills

Managing people who make a business run smoothly is just as important as making money (Moussa & El Arbi, 2020). An effective management strategy comprises empowering your staff. In addition to sourcing, hiring, screening, and training job candidates, human resources are the department inside a company that manages employee benefit plans (Alam et al., 2016). According to Bondarouk et al. (2017), the use of Human Resources Information Systems (HRIS) as a platform for gathering and archiving personnel data is growing. Moreover, record keeping, compliance, efficiency, HR strategy, and self-service HR were shown to be benefits of implementing HRIS, according to Ramírez and Tejada (2022). Hence, the subsequent hypothesis is put forth:

H1d: IT human resource positively influences employee performance.

2.2.5 Database

According to Bulchand and Gidumal (2016), a database is an ordered collection of structured data that is usually kept electronically in a computer. When necessary, databases facilitate the access and retrieval of certain information (Amatulli et al., 2019). Organizations can use databases to examine and interpret their data more effectively (Mariani & Predvoditeleva, 2019). Organizations can obtain insights into trends, patterns, and other crucial data that can guide decision-making by utilizing tools like pivot tables or SQL queries (Bahadur et al., 2018). Furthermore, Awad (2018) noted that databases allow for simultaneous access to and editing of data by different users, which can facilitate data sharing and collaboration inside businesses. As a result, the following hypothesis is put forth:

H1e: IT database positively influences employee performance.

2.2.6 IT Procedures

A procedure is a way of accomplishing a task that includes instructions and stages for every part of the task (Systemagic, 2017). Once developed, procedures often don't change to ensure that workers are aware of what to do in different situations. Procedures delineate the sequential execution of several tasks, as proven by Hashim and Isa (2018). Additionally, an employee onboarding checklist gives you a list of certain duties for onboarding a new hire and with procedures, the intended outcome can be reached (Al-Qudah et al., 2022). According to Hossain et al. (2019), the hotel is guided by IT protocols in a number of areas when it comes to correctly integrating IT. They also give hotel procedures consistency, which improves customer service and strengthens the brand's reputation (Hossain et al., 2019). Therefore, the following hypothesis is formulated:

H1f: IT procedures influence positively influences employee performance.

2.3 Employee's Empowerment

Giving staff members the freedom to decide for themselves and take initiative is known as employee empowerment (Myhill et al., 2021). Numerous benefits for employee performance, including higher productivity, have been demonstrated with employee empowerment (Ampofo, 2020). According to Tampi, al. (2022), there is a positive correlation between an empowered workforce and higher levels of engagement and initiative.

The success and survival of a business in this age of globalization depend heavily on employee empowerment (Albasal et al., 2022). According to Rehman et al. (2015) and Presbitero et al. (2019), empowerment fosters a sense of belonging, drives commitment, and makes workers feel essential to

the success of the company. Also, empowered staff members save a lot of money and time for the company by acting quickly to improve service delivery in their areas of expertise (Ohemeng et al., 2020). According to Nawez et al. (2014) and Tampi et al. (2022), employee empowerment can result in higher output and efficiency as well as a positive public perception of the company. Thus, the subsequent hypothesis is put forth:

H2: Employee empowerment moderates the relationship between information technology and employee performance.

Figure 1 illustrates the relationships among the study variables

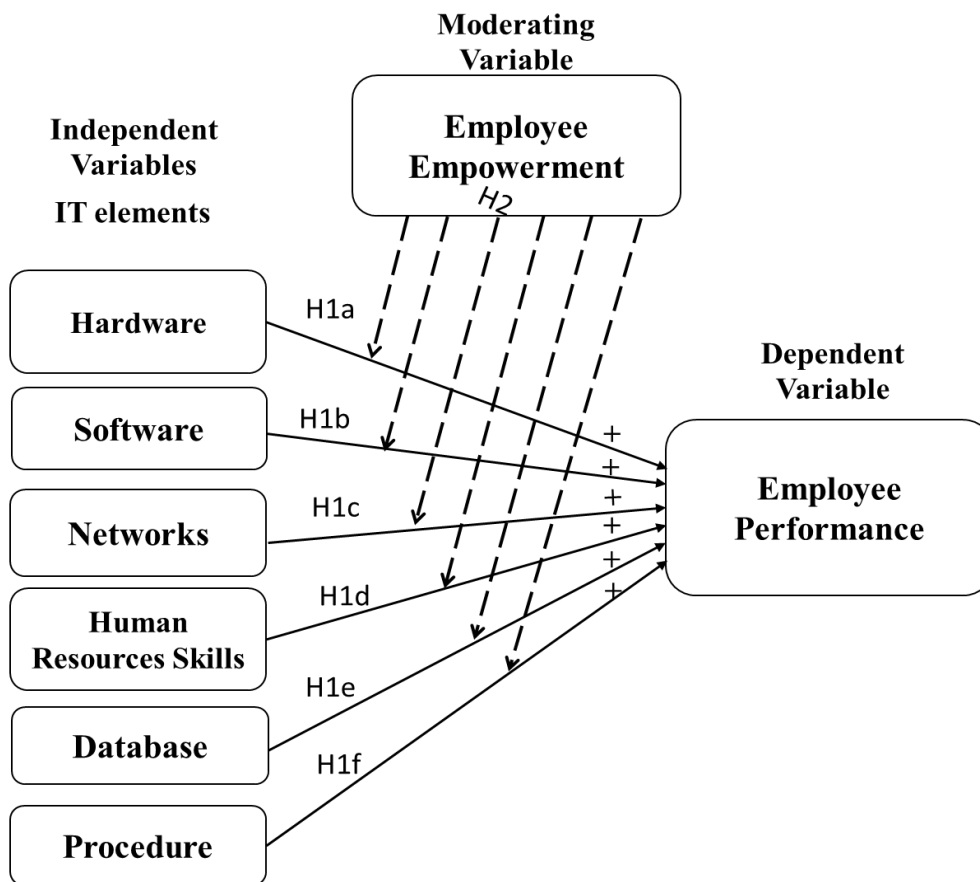


Figure 1: The Conceptual Framework

3. Research Methodology

3.1 Sampling

Researchers measure the variables and test the study hypotheses using a quantitative approach, which involves choosing a sample from the research population. A list of 126 five-star hotels from the 38th edition of the Egyptian Hotel Guide (EHA, 2022) was compiled by the researchers. Firstly, a sample of 60 hotels, comprising 48% of the total population was chosen using a stratified random sampling technique. Second, individuals were chosen at random by a simple random sample. Five-star hotels were chosen for the field study as it represents the benchmark for other hotels.

3.2 Instrument and Data Collection

A self-administered questionnaire was used to carry out the field study. It has two sections: the first part collected demographic data; while the second section had items to measure the study variables—information technology, employee performance, and employee empowerment. A 5-point Likert scale was used as the basis for the survey's items. Pilot study was undertaken prior to distribute of the questionnaire, to find out

any difficulties respondents may encounter when completing the questionnaire. Twenty employees who work at hotels and ten academic staff members were participated in this pilot study.

The hotel management gave the researcher permission to let the participants finish the questionnaire during regular business hours. The researcher gave an explanation of the purpose of the study and guaranteed that all the information gathered would be handled in the strictest confidence. There were 1200 surveys distributed, with 20 surveys sent to each hotel. Only 770 of those were determined to be valid, meaning that 64.16% of respondents answered. Therefore, according to Sekaran (2001), the percentage of completed and returned surveys showed a reasonable response rate.

3.3 Measurements

Every variable was selected from the body of current literature. *Hardware, software, network, human resource skills, database, and procedures* are the main constructs of information technology. Plessis and Dodd (2016) created six items for *Human Resource Skills*; Watson (2008) created fifteen items to measure *Hardware and Software*; Huber et al. (2007) created nine items to measure *Database and Procedure*; and Sokoll and Press (2012) created five items for *Network* measurement. Twenty-one items that made up the *task performance, adaptive performance and contextual performance* as constructs for employee performance were adopted from Koopmans et al. (2014). Employee empowerment consisted of *Delegating authority, increasing decision-making Responsibility, Occupational freedom and Independence, Staff professional development, Management assistance, and Confidence-building*; each of which consisted of five items that were adopted from Ardalan (2011).

4. Results

The Statistical Package for Social Sciences SPSS and AMOS version 26 programs were used to analyze and interpret the data obtained from the survey. Following data screening, the study's male and female participant counts were 60.5% and 39.5%, respectively. Most of the respondents (42%) in this category were under 30 years old, followed by those between 31 and 40 years old (31%). The highest percentage of respondents (65%), had a bachelor's degree, and was equally represented among the Front Office, Food & Beverage, and housekeeping departments. Directors, heads of departments, and employees were also involved in the study, but the majority (66%) was employees.

4.1 Reliability Analysis

The validity and reliability of the constructs were confirmed using a reliability analysis (Cronbach's Alpha). A reliability test was carried out for the following aspects of IT practices: employee performance (task performance, adaptive performance, and contextual performance), employee empowerment (delegation authority, decision making, freedom and independence, development of staff, management support, and confidence building), and hardware, software, network, HR skills, databases, and procedures. As can be seen in table 1, all of the constructs' Cronbach's alpha values were higher than 0.7, which is a very high result that indicates that the reliability of every construct employed in this study was supported.

Table 1: Reliability and Descriptive Analyses

Measure	Number of Items	Cronbach's Alpha
IT practices	35	.928
Hardware	9	.846
Software	6	.786
Network	5	.851
Human Resource Skills	6	.778
Data Bases	5	.728
Procedures	4	.783
Employee performance	21	.845

Task performance	6	.778
Adaptive Performance	7	.556
Contextual Performance	8	.811
Employee empowerment	30	.944
Delegation authority	5	.901
Decision Making	5	.779
Freedom and Independence	5	.636
Development of Staff	5	.867
Management Support	5	.773
Confidence building	5	.844

4.2 Descriptive Analysis and Correlations

Table 2 indicates that all study variables attained high means averages, indicating that the surveyed hotels took IT factors into consideration.

Table 2: Descriptive Analysis and Correlations

	Mean	Standard Deviation		Employee Performance
Hardware	4.39	0.44	Correlation	.343**
			P value	.000
Software	4.23	0.47	Correlation	.433**
			P value	.000
Network	4.12	0.69	Correlation	.247**
			P value	.000
HR Skills	4.29	0.47	Correlation	.563**
			P value	.000
Databases	4.16	0.52	Correlation	.407**
			P value	.000
Procedures	4.15	0.59	Correlation	.476**
			P value	.000
IT Practices	4.22	0.41	Correlation	.525**
			P value	.000

**** P value < 0.01**

Table 2 also indicates the statistical significance of the correlation coefficient to p-values was also considered in the interpretation. When the p-value is (< 0.05), a significance correlation exists; if the p-value gets close to 0, the significance becomes stronger, but when the p-value is (> 0.05) this means that no significance exists (Garriga et al., 2013). Overall, a substantial positive correlation (0.525) was found in the results between overall IT practices and employee performance, with a p-value of (< 0.01). Furthermore, it was shown that there are strong relationships between hardware, software, network, HR skills, Databases and procedures with employee performance.

5. Testing the Hypotheses and Discussion

5.1 Regression Analysis

The degree of employee performance was predicted using regression analysis (Table 3) based on IT practices (H1). The findings show that there is a substantial correlation between IT practices and employee performance ($R = 0.525$, $p\text{-value} = 0.01$). IT practices were found to be able to predict approximately 27% of the variance in employee performance. Employee performance will change by 0.427 units for every unit change in IT procedures.

Therefore, H1 is accepted. This result was in line with earlier findings by Lee et al. (2010) and Bulchand and Gidumal (2016), who discovered that IT has surpassed hotel performance in comparison to its competitors and that it influences employees' daily work habits and can enable them to perform to the best of their abilities (Cobos et al., 2016). Additionally, Schwab's (2017) research

revealed that hotel directors and front office managers concurred that routine task automation created by IT provided an opportunity to concentrate on client interaction.

Table 3: Regression Analysis for Testing the 1st Hypothesis

	Relation	R	R Square	B.	P. value	Result
H1a	Hardware---employee performance	.343	.118	.258	.000	<i>Accepted</i>
H1b	Software---employee performance	.433	.188	.304	.000	<i>Accepted</i>
H1c	Network---employee performance	.247	.061	.119	.000	<i>Accepted</i>
H1d	HR skills---employee performance	.563	.317	.397	.000	<i>Accepted</i>
H1e	Database---employee performance	.407	.166	.261	.000	<i>Accepted</i>
H1f	Procedures---employee performance	.476	.226	.267	.000	<i>Accepted</i>
H1	Overall IT --employee performance	.525	.276	.427	.000	<i>Accepted</i>

The findings demonstrated the significant influence of hardware on employee performance, with hardware accounting for 12% of the variation in employee performance. Employee performance will change by 0.258 units for every unit change in hardware. H1a is therefore approved. The results confirmed those of Coltman et al. (2015), who found that staff members may begin tackling their work responsibilities more quickly the faster the tool. Hardware influences employee performance since it keeps employees from getting sidetracked during working hours (Zadeh, 2011).

Additionally, 19% of the variance in employee performance was attributed to software, demonstrating the significant influence of software on performance. A 1 unit change in software will result in a 0.304 unit change in personnel performance. H1b gets approved as a result. The outcome is consistent with van et al. (2016), they found that subpar software doesn't only cause people to work less productively. It's a race between hotels to be the first to adopt innovative strategies and make large investments in software implementation plans (Mullins, 2007; Lewrick et al., 2010). Furthermore, the results of H1b are consistent with Piccoli and Grün (2017) who demonstrated how computer programs and software packages can assist in gathering and analyzing data that would typically be wasted or require a significant amount of labor from employees.

Network was responsible for almost 6% of the variation in employee performance. Employee performance will change by 0.119 units for every unit change in the network. H1c is therefore approved. This finding is consistent with Tam and Oliveira's (2017) findings that employee performance determines a hotel's productivity and earnings, and that workers have strong social media connections. According to other research (Liu & Lee, 2010; Jim, 2011; Tam & Oliveira, 2017), networking improves staff performance by raising their knowledge, skills, motivation, and level of association with the hotel. Every hotel uses social networking sites for business purposes, such as building customer relationships, according to Lee et al. (2010).

The findings also showed that *HR skills* accounted for approximately 32% of the variation in employee performance. A change of one HR skill unit will result in a 0.397 unit change of employee performance. H1d is so approved. The findings of this study were in line with those of earlier research conducted by Higon (2011), Troshani et al. (2011), and Markova (2012), who noted that HRIT is important in ensuring that the goals of human resources are linked to the overall strategic goals of the business.

Furthermore, 17% of the variation in employee performance was attributed to the *database*. Employee performance will change by 0.261 units for every 1 unit change in the database. H1e is so approved. Majid et al. (2015) and Muda et al. (2020) who discovered that databases may assist hotels in protecting their data through security measures as well as in analyzing and making sense of their data, concur with this result. Likewise, databases allow users to have a more comprehensive perspective of the data and make well-informed judgments based on the integrated facts, as demonstrated by Bulchand and Gidumal (2016) and Awad (2018).

Ultimately, procedures accounted for almost 23% of the variation in employee performance. Employee performance will change by 0.267 units for every unit that procedures are changed. H1f is therefore approved. While it was noticed that every aspect of IT practices had an impact on employee performance, there were differences between the factors in terms of their ability to predict employee performance: network had the least impact and HR skills had the greatest impact. This outcome was consistent with the findings of Systemagic (2017) and Hashim and Isa (2018), who exposed that procedures serve as broad guidelines for an organization's IT strategy. However, hotels require IT policies in order to survive in a market that is competitive (Lewrick et al., 2010; Lei, 2018).

5.2 The Moderation Analysis

Figure 2 illustrates the statistical test for path analysis using simple linear regression between the observed variables. The researcher standardized values to be accepted in AMOS data entry in order to do a path analysis. As a result, data might be obtained by using analysis of moment as observed variable in order to correctly perform path analysis statistical test.

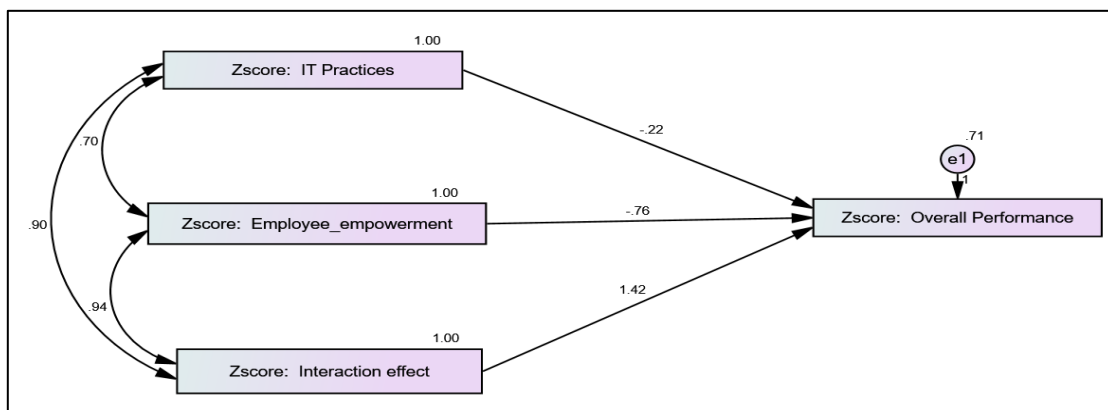


Figure 2: Path Analysis for Moderating Test

However, the findings that are presented in (table 4) support the acceptance of H2. An evaluation of the Beta coefficients ($\beta = \cdot, \text{ } p < 0.001$) indicated that employee empowerment as a moderator was a significant predictor of the relationship between IT practices and employee performance and was correlated with it.

Table 4: Path Analysis Model Results of the 2nd Hypothesis

Path Analysis	β	Result
IT practices → employee performance	-.22***	
Employee empowerment → employee performance	.78***	
Interaction Effect → employee performance	1.42***	Accepted

The results of the moderation analysis were further analyzed by plotting the interaction plot as shown in (Figure, 3). The interaction terms were significant with moderation interaction between IT practices and employee performance.

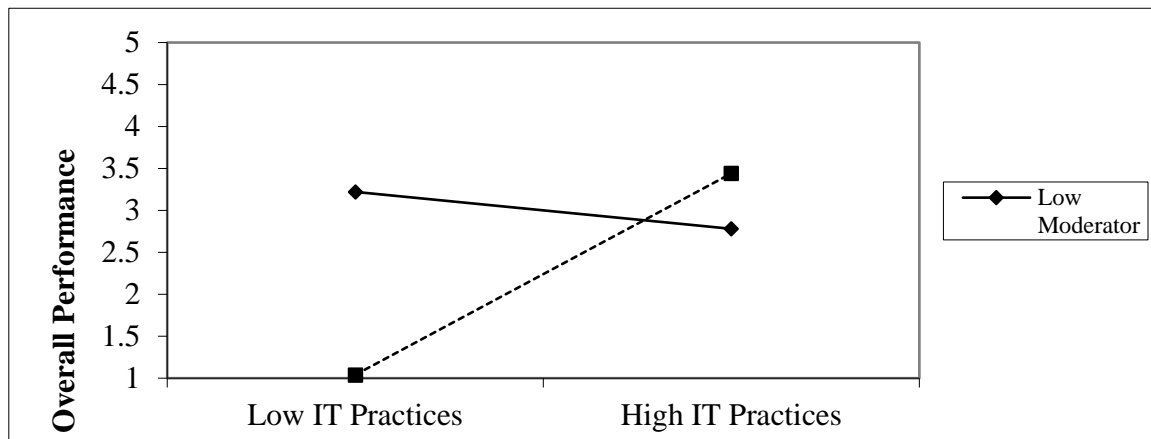


Figure 3: The Moderating Effect

The present study's findings are consistent with those of Zhang and Bartol (2010) and Jacqueline (2014), who revealed that employee empowerment, is considered a valuable instrument for employee advancement and enhancing organizational efficacy. Ajibade and Ayinla (2017) who demonstrated that empowered employees are more likely to feel invested in their work concur with this conclusion, and they suggest that it can have a variety of positive economic effects. According to Hanaysha (2016) and other research findings, companies that value employee empowerment experience lower levels of waste, bureaucracy, and time waste.

6. Conclusions and Implications

The hotel sector has been seen a transformation in the way it operates, manages, and provides services with the incorporation of Information Technology (IT). IT is essential for improving productivity, guest satisfaction, and overall hotel performance, from reservation systems to guest experiences. The findings showed that hotels may better manage inventory, reservations, customer data, track customer data, manage inventory levels, process payments, and handle bookings by carefully taking into account six IT components: hardware, software, networks, human resource skills, databases, and processes.

The results of this study, which assess the information technology implementation procedures in Egyptian hotels, add to the body of knowledge. The value of information technology and employee empowerment as perceived by hospitality practitioners can be used to represent the additional knowledge. However, this study's main contribution is to help hospitality professionals use and manage their IT resources more effectively, which will increase their overall effectiveness. From a practical perspective, in order to enhance the general performance of the hotels, managers need to be aware of the benefits of IT (hardware, software, networks, human resource skills, databases, and procedures), and attempt to use all these IT components to provide the guests with an exceptional experience. Managers should, for instance, fund ongoing training initiatives to guarantee that employees are proficient with the newest IT tools and deliver an exceptional work. Additionally, managers should make use of IT to enable effective communication between hotel staff members via integrated communication systems, enhancing responsiveness and teamwork. This is especially crucial for providing efficient and timely guest services. Additionally, they ought to gather continuously information on guest preferences, booking trends, and operational efficiency using new IT systems.

7. Limitations and Future Research

Due to the time and the high cost to reach other categories of the hotels, employees at five-star hotels are the only ones included in the study's target sample. Thus, the study's conclusions may not generalize to other categories of lodging or hospitality establishments in Egypt (such as restaurants, bars, and 2, 3, and 4-star hotels). Future studies should examine the challenges hotels experience in efficiently utilizing IT,

in order to gain a deeper understanding of the topic of IT in hotels. Further, the perception of the hotel guests relating to the IT service may be beneficial in the future researches.

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