Enhancing Hospitality Facilities via Information Technology in the Egyptian Hotels
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Abstract
The research problem is shortage information technology facilities in the Egyptian hotels. So this research aimed to enhance hospitality facilities via information technology in these hotels; to achieve this aim; the research has one specific objective as follow: identify level of importance and satisfaction of hotels guests through some of questionnaires distributed for them. The hotel industry can potentially use e-commerce to enhance its primary and support activities by leveraging this new technology in the value chain. Hotels use information and communication technologies (ICTs) in order to improve their operations, manage their inventory and maximize their profitability. Their systems facilitate both in-house management and distribution through electronic media. Moreover, hotels utilize ICTs and the internet extensively for their distribution and marketing functions. Global presence is essential in order to enable both individual customers and the travel trade to access accurate information on availability and to provide easy, efficient, inexpensive and reliable ways of making and confirming reservations. The type of sample is convenience sample. This study employed a self-administered questionnaire. Two hundred forms were distributed in ten investigated Cairo hotels; twenty forms in each hotel; among them 180 forms valid for analysis (90%) to rate the importance and satisfaction with 15 hotel facilities which be offered via information technology. The findings revealed that the most important hotel facilities were accurate, fast and reliable website for gathering information and making reservation, express check-in / check-out, and touch screen to recognize the bill before check out time. Most of the respondents were dissatisfied about express check-in / check-out, speed internet access, and e-payment.

Keywords: E-commerce, information technology, hospitality, PMSs

Introduction
E-commerce uses the internet and other information technologies to support business capabilities. Internet and E-commerce have a role to change the balance of power between the organization and the industry (Rezvani, 2011; Werthner and Ricci, 2004).

In highly-competitive business environments, information and communication technology (ICT) has become an essential source of sustainable competitive advantage and a strategic weapon for the hotel industry (Connolly, Olsen and Moore, 1998). In particular, Siguaw and Enz (1999) pointed that ICT has a profound impact on hotels because a large
amount of information has to be processed and communicated among internal and external customers. Therefore, the ability to make a full exploitation of the hotel technologies to improve the efficiency of operations and customer service will be the key to future success in the hotel industry (Buhalis, 1995; Siguaw and Enz, 1999). In that sense, Law and Jogaratnam (2005) reported that a new challenge for hotel managers in the 21st century is to integrate the new, complex and varied services and technologies into their existing business operations. In addition, Siguaw and Enz (1999) implied that the hotel industry extensively relies on ICT to improve employees’ productivity and efficiency and subsequently to improve customer satisfaction. Further, Camison (2000) reported that using ICT can result in having advantages in competition, decreasing costs, gaining time, enhancing service quality and acquiring and sharing information. In a similar vein, Byars and Rue (2004) reported that ICT is also used in employee training, succession planning and compensation management. According to Law and Jogaratnam (2005), hotel technologies are useful when they make hotel employees more productive and better able to serve their customers. Therefore, when managers consider the decision to invest in ICT in an organization, it is important to cultivate and nurture a sense of “user satisfaction” among the employees with the ICT systems. Otherwise, it would be difficult to fully leverage the potential of the ICT capabilities as a result of the investment (Lo and Darma, 2000).

The Research Hypotheses

H01: Shortage information technology facilities in the Egyptian hotels.

H02: There is a gap between guests’ level of importance and their level of satisfaction regarding information technology facilities.

Review of Literature

Information and communication technology in the hotel industry

An overview of ICT in the hotel industry

According to Cho and Olson (1998), the hotel industry has identified effective implementation of ICT as a vital component of the effort to promote and achieve its goals for successful description, promotion, distribution and delivery of hotel products and services. Singh and Kasavana (2005) argued that hotels have been slow adopters of new technology as compared with other service industries. Chathoth (2007) claimed that hotels have been slow to implement new technology since the average firm in the industry has implemented new based-technology products and services several years after the technology was first introduced to the market. Buhalis and Main (1998) stated that the hotel industry, particularly full service hotel firms, has yet to fully accept ICT change to become more efficient in the service production functions. However, Law and Lau (2000)
argued that hotel managers are often resistant to accept new technologies, fearing that technologies might change their ability to provide hotel guests with the personal attention that characterizes a typical hotel business. For Law and Jogaratnam (2005), a new challenge for hotel managers in the 21st century is to integrate the new, complex and varied services and technology systems into their existing business operations. Several authors (Baker, Radley and Huyton, 2000; Aksu and Tarcan, 2002) classified hotel ICT applications into four types, front-office applications, back-office applications, restaurant and banquet management systems and guest-related interface applications.

**The benefits of using ICT in the hotel industry**

The benefits of using ICT in hotels are various and include performance improvements, employee productivity and efficiency, work effectiveness, improved service quality, customer satisfaction, improved decision making and increased revenues. Fink and Kazakoff (1997) demonstrated that hotels can obtain extensive benefits from ICT, for example, efficiency gains (e.g. the automation of clerical procedures), increased management effectiveness (e.g. in decision-making) and improved business performance (e.g. by entering into strategic alliances with other firms).


**Using the hotel ICT for competitive advantage**

According to Olsen and Connolly (2000), hotels generally view ICT as a key resource and critical in providing competitive advantage and positioning in the market place. Gratzer and Winiwater (2003) and Jones and Murphy (2004) reported that new ICTs are changing the economy and the way business is conducted in various forms. In particular, ICT forces hotels to find new ways to expand the markets in which they compete, to attract and retain customers by designing products and services to their needs and to restructure their business strategy to gain competitive advantage.

Gratzer and Winiwater (2003) maintained that to gain competitive advantage over rivals, a hotel must either provide equal value to the customer, but
perform activities more efficiently than its competitors (lower cost), or perform activities in a unique way that creates buyer value and commands a premium price (differentiation). In addition, Rivard et al., (2006) revealed that ICT can play two critical roles to create competitive advantage. First, ICT helps firms to gain competitive advantage by changing the competitive forces that collectively determine industry profitability by contributing to either lowering costs or enhancing differentiation. Second, ICT also is used to leverage firm capabilities, e.g. ICT infrastructure, ICT human resources and ICT intangibles.

Usage of information technology in the hotel industry
Hotels use information and communication technologies (ICTs) in order to improve their operations, manage their inventory and maximize their profitability. Their systems facilitate both in-house management and distribution through electronic media. ‘Property management systems (PMSs)’ coordinate front office, sales, planning and operational functions by administrating reservations and managing the hotel inventory (Buhalis and Jun, 2011). Hotels with high levels of ICT adoption are expected to be more interested and more capable of utilizing the possibilities presented by the internet in communicating and transacting with the potential customers than firms with low levels of ICT adoption.

PMSs integrate the “back” and “front” of the house management and improve general administration functions such as accounting and finance; marketing research and planning; forecasting and yield management; payroll and personnel; and purchasing. Also, hotel chains gain more benefits from PMSs, as they can introduce a unified system for planning, budgeting and controlling and coordinating their properties centrally. Moreover, Hotels utilize ICTs and the internet extensively for their distribution and marketing functions. Global presence is essential in order to enable both individual customers and the travel trade to access accurate information on availability and to provide easy, efficient, inexpensive and reliable ways of making and confirming reservations (Gilaninia et al., 2012).


Customers today are demanding more access to the internet, IT services, and amenities, e.g., automatic check-in and check-out and full technology provided in all guestrooms. A research study related to Colorado hoteliers showed that the internet service had a significant financial impact on their operations. The majority of the respondents mentioned that the internet had
increased their occupancy percentage, average daily rate (ADR), and revenue per available room (REVPAR) (Gregory and Breiter, 2001).

One of the most common technologies impacting the hotel industry is Wi-Fi. This allows hotel guests to access the internet from a bar, restaurant, lobby or guest room (Bentley, 2005). Scholars mentioned that wireless technology and related applications would impact hotel service delivery, cost containment, and the overall guest satisfaction (Singh & Kasavana, 2005). Some hospitality companies even accept biometrics, such as fingerprints, iris scans, facial scans or hand geometry analysis systems to increase physical or data security.

The impacts of using ICT in the hotel industry
According to Thompson and Richardson (1996), ICT failure occurs when technologies are designed, developed and implemented with little or no attention to the needs of employees or to the impact that the technologies might have on the workforce. For Roepke, Agarwal and Ferratt (2000), new ICTs would not be fully accepted if barriers of human factors are ignored. Hasan (2003) revealed that such human barriers include, ignoring employees’ willingness, abilities and manager support during designing new ICT. In this regard, Clegg et al. (1997) identified the major reasons for ICT failure in hotels as follows: (1) poor anticipation of user requirements, (2) a failure to involve users appropriately, (3) inadequate attention to business needs and goals, (4) poor project management and (5) poor management generally. To that end, Varini and Murphy (2005) pointed that hotel ICT failure can be critical with impacts on customers’ satisfaction, service quality, employees’ satisfaction and performance and market share.

In terms of improve the impacts of ICT on hotel employees, O’Connor (2000) as well as Dedrick and Kraemer (2005) recommended that all hotel employees need to develop appropriate knowledge and understand the use of ICT, as follows: (1) develop ICT resources, (2) facilitate organisational learning to make effective use of ICT, (3) educate senior management in relation to ICT to support resource allocation and understanding of the strategic impact of ICT and (4) increase understanding of the role of ICT. In this regard, Bharadwaj (2000) identified the following points: (1) integrate the ICT and business planning process more effectively, (2) develop reliable and cost effective applications that support the business needs of the firm faster than competition, (3) communicate and work with business units more effectively and (4) anticipate future business needs of the firm and innovate valuable new product features before competitors.

Methodology
Research Sample
In this study, convenience sample was used in order to achieve the aim and objective of this study. A self-administered questionnaire with guests was
designed as the research instrument for collecting primary data. This questionnaire included items pertaining to the guests demographic data, evaluating level of importance and their level of satisfaction regarding facilities which be offered via information technology in Cairo hotels. Two hundred forms were distributed in ten investigated hotels; twenty forms in each hotel; among them 180 forms valid for analysis (90%). The study focused on five star hotels.

The selected investigated hotels are:
- Cataract Pyramids Resort.
- Hilton Pyramids Golf Resort.
- Holiday Inn Cairo City Stars.
- Intercontinental City Stars.
- Mena House Oberoi Hotel.
- Le Meridian Pyramids Hotel.
- Movenpick Hotel Cairo- Media City.
- Ramses Hilton Hotel.
- Pyramisa Hotel.
- Sofitel Cairo Maadi Towers.

Pilot study
The pilot study was conducted in this research in Jan 2016. The aim of the pilot study was to ensure that the questionnaire form well designed and easily understood by potential respondents, to examine the reliability and validity of the research tool as well as to develop and refine measure of the questionnaire form. In this study, the research was piloted using interviews with four guests of five star Cairo hotels. These hotels are: Cataract Pyramids Resort, Intercontinental City Stars, Ramses Hilton Hotel, Pyramisa Hotel. The guests’ questionnaire was piloted by a limited sample in investigated hotels. The questionnaire form was revised and adapted according to the guests’ comments.

Statistical Techniques
Statistical Package for Social Sciences (SPSS) version 19 for Windows was used to analyze and compute the data. Frequency counts, percentage distributions were calculated and analyzed. After analyzing the results, certain interpretations of the data helped to draw conclusions about the findings of this study. Those conclusions were related to the objective of the study and formulated based upon the statistical applications that were employed.

Validity and Reliability
In order to increase the reliability of the method used in the current study, one measure was applied as follow: self-administered questionnaires directed to a sample of guests in order to know and measure level of importance and
their level of satisfaction regarding facilities which be offered via information technology in Cairo hotels. In this study, Cronbach’s coefficient alpha was used to measure the internal consistency of the scale. A minimum level of the Cronbach’s coefficient alpha is .7. The higher value of the Cronbach’s coefficient alpha indicates greater value. In that sense, all the values of the Cronbach’s coefficient alpha in this study were above the minimum level.

Results and Discussion
The study concerned with the guests in Cairo hotels to enhance hospitality facilities offered via information technology and measure their satisfaction towards these facilities.

Profile of the respondents
This question was concerned with profile of the respondents which included; gender, age, educational level, nationality and usage of computer and internet (see table 1).

Table 1: Profile of the respondents

<table>
<thead>
<tr>
<th></th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>95</td>
<td>53</td>
</tr>
<tr>
<td>Female</td>
<td>85</td>
<td>47</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 25 years</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>From 25 to less than 35 years</td>
<td>70</td>
<td>39</td>
</tr>
<tr>
<td>From 35 to less than 45 years</td>
<td>65</td>
<td>36</td>
</tr>
<tr>
<td>45 years and more</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University or High Institute</td>
<td>170</td>
<td>94</td>
</tr>
<tr>
<td>Secondary certificate</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Postgraduate studies (Diploma-Master-PhD)</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Nationality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egyptian</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>American</td>
<td>85</td>
<td>47</td>
</tr>
<tr>
<td>Asian</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>European</td>
<td>75</td>
<td>42</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Use a computer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>150</td>
<td>83</td>
</tr>
<tr>
<td>Twice a Week</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Once a Week</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>Once a Month</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Internet Reservation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>165</td>
<td>92</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Use the Internet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>175</td>
<td>97</td>
</tr>
<tr>
<td>Twice a Week</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Once a Month</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
As shown in Table (1), the sample was mainly from males (53%). The respondents showed that (39%) were from 25 to less than 35 years and 45 years and more were (25 %). Regarding educational level, most of the respondents (94%) were university or high institute. The majority of the respondents were American (85%). Most of the respondents (83%) use a computer on a daily basis. The majority of the respondents use the internet on a daily basis (97%).

Comparison between level of importance and level of guests satisfaction towards facilities which be offered in hotels via information technology

The aim of this comparison is to show the level of importance and level of satisfaction as determined by the respondents. For this purpose, the guests were asked to rate 15 factors with regard to their determined importance. They were also required to order their level of satisfaction with these facilities. The facilities were evaluated according to their level of importance on a 5 point Likert-scale where “1” indicating “Very unimportant” “and “5” indicating “very important.” Meanwhile, the level of satisfaction on a similar scale where “1” indicated “Strongly dissatisfied” and “5” indicated “Strongly satisfied.” The responses of this comparison are illustrated in Table (2).
### Table 2: Comparison between level of importance and level of guests satisfaction towards facilities which be offered in hotels via information technology

<table>
<thead>
<tr>
<th>Hotel facilities</th>
<th>Level of Importance</th>
<th>Total</th>
<th>Weighted average (%)</th>
<th>Level of Satisfaction</th>
<th>Total</th>
<th>Weighted average (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2   3   4   5</td>
<td></td>
<td></td>
<td>1  2   3   4   5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Express check-in / check-out.</td>
<td>-     -   30  100  50</td>
<td>740</td>
<td>82</td>
<td>60  90  20  8   2</td>
<td>342</td>
<td>38</td>
</tr>
<tr>
<td>Automatic Teller Machine (ATM).</td>
<td>33    40  65  20  22</td>
<td>498</td>
<td>55</td>
<td>55  83  23  14  5</td>
<td>371</td>
<td>41</td>
</tr>
<tr>
<td>Electronic key cards (i.e. electricity-air condition).</td>
<td>16    30  44  65  25</td>
<td>593</td>
<td>66</td>
<td>20  45  28  87  -</td>
<td>542</td>
<td>60</td>
</tr>
<tr>
<td>High speed internet access.</td>
<td>-    -  22  87  71</td>
<td>769</td>
<td>85</td>
<td>40  94  33  9   4</td>
<td>383</td>
<td>43</td>
</tr>
<tr>
<td>Accurate, fast, and reliable website for gathering information and making reservation.</td>
<td>-    -  23  33  12 4</td>
<td>821</td>
<td>91</td>
<td>28  96  43  9   4</td>
<td>405</td>
<td>45</td>
</tr>
<tr>
<td>Wireless internet access in hotel.</td>
<td>-     -  17  95  68</td>
<td>771</td>
<td>86</td>
<td>32  88  15  35  10</td>
<td>443</td>
<td>49</td>
</tr>
<tr>
<td>IT applications technical support (i.e. knowledgeable employees in e-commerce, internet technologies).</td>
<td>-     -  24  94  62</td>
<td>758</td>
<td>84</td>
<td>20  33  15  78  34</td>
<td>613</td>
<td>68</td>
</tr>
<tr>
<td>IT applications technical support (i.e. technical skills of employees to handle guests’ internet and computer-related problems).</td>
<td>-     -  32  70  78</td>
<td>766</td>
<td>85</td>
<td>20  55  15  65  25</td>
<td>560</td>
<td>62</td>
</tr>
<tr>
<td>E-payment and on-line purchasing systems for reservation rooms, tours, and events (i.e. conferences, meetings, and weddings).</td>
<td>-     -  38  45  97</td>
<td>713</td>
<td>79</td>
<td>56  75  15  14  20</td>
<td>407</td>
<td>45</td>
</tr>
<tr>
<td>In-room entertainment system (i.e. fax and printer machine).</td>
<td>-     -    -  86  94</td>
<td>814</td>
<td>90</td>
<td>-   63  33  54  30</td>
<td>591</td>
<td>66</td>
</tr>
<tr>
<td>In-room entertainment system (i.e. touch screen for concierge services such as local dining, tour, and other information).</td>
<td>21    14  38  93  14</td>
<td>605</td>
<td>67</td>
<td>54  29  43  21  33</td>
<td>490</td>
<td>54</td>
</tr>
<tr>
<td>In-room entertainment system (e-menu i.e. touch screen to make food and beverages orders).</td>
<td>-</td>
<td>-</td>
<td>26</td>
<td>130</td>
<td>24</td>
<td>718</td>
</tr>
<tr>
<td>In-room entertainment system (i.e. show exclusive movies).</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>85</td>
<td>80</td>
<td>785</td>
</tr>
<tr>
<td>In-room entertainment system (i.e. touch screen to recognize the bill before check-out time.</td>
<td>-</td>
<td>-</td>
<td>18</td>
<td>90</td>
<td>72</td>
<td>774</td>
</tr>
<tr>
<td>In-room entertainment system (i.e. touch screen to register needs and preferences.</td>
<td>-</td>
<td>-</td>
<td>65</td>
<td>45</td>
<td>70</td>
<td>725</td>
</tr>
</tbody>
</table>
Regarding level of importance of the respondents about hotel facilities which be offered via information technology, the findings in Table (2) state that “accurate, fast, and reliable website for gathering information and making reservation” had 91% as a rate of the maximum possible score. Least important attribute was automatic teller machine; it had only 55% of the maximum possible score. Other guests’ answers came in between. In terms of level of satisfaction, “knowledgeable employees in e-commerce, and internet technologies and applications” had 68% as a rate of the maximum possible score. Least satisfaction attribute was “express check-in / check-out, it had only 38% of the maximum possible score. Other guests’ answers came in between.

The same table indicates that there were shortage information technology facilities in the Egyptian hotels and noticeable differences or performance gaps between what the guests felt important stay facilities via information technology and what they satisfied about these facilities on their stay. These findings agreed with research hypotheses.

The respondents indicated in the questionnaire form that some of these facilities not available in the hotel (i.e. ATM, and touch screens in rooms). They added that if IT facilities available in the hotel such as new system for making check-in and check-out procedures quickly, wireless internet and touch screens in rooms, they will be visited it continually. Also, they confirmed that the e-commerce is very important in the hotel “e-payment”.

**Conclusion and Recommendations**

The results of this research indicate that the hotels have several important-experience gaps that they need to be considered. In other words, the level of importance of guests attributes was obviously different than their level of satisfaction about facilities which be offered via information technology. This may explain, at least partially, the reason for dissatisfaction about information technology facilities in this field of hospitality industry.

Based upon the previous results, the following recommendations could be suggested to be followed for enhancing facilities via information technology in hospitality industry.

1- The hotel management should be considered with information communication technology as a competitive advantage.

2- The hotel management should be considered with e-commerce “e-payment”.

3- The hotel management should recruit and select people with good customer experience regardless of their computing experience and basic IT knowledge. If hotel managers do not have the facilities and time resources to train new recruits, they have to select people with previous system experience.
4- The hotel management provides all rooms with touch screens. These screens enable the guests to:
   - Make food and beverage orders.
   - Recognize the bill before check-out time.
5- The hotel management should establish wireless internet access in all area of the hotel and enforce it (i.e. rooms, public area, restaurants, health club, and swimming pool……etc).
6- IT managers should select/design the hotel information system that complies with the hotel budget, facilities and number of rooms as well as the system that complies with end-user employees’ needs, capabilities and skills.

References


Martorell, G. (2002). The Internet and Tourism Principals in the Belaric Islands, Tourism and Hospitality Research, 6(1), 25 -44.


technological events in 2007 and 2027. Tourism & Hospitality Research, 6 (1), 24-37.

الملخص العربي
تحسين تسهيلات صناعة الضيافة عبر تكنولوجيا المعلومات في الفنادق المصرية
شرief جمال سعد
كلية السياحة والفنادق – جامعة المنصورة
أحدثت التطورات التكنولوجية التي شهدتها العالم خلال العقود الأربعة من القرن الماضي تغيرات هامة في مختلف القطاعات الخدمية والأنشطة القطاع الفندقي بهدف الارتقاء بجودة الخدمات الفندقية ورغبات النزلاء. وقد أصبح أهم ما يميز بيئة العمل الفندقية استخدام تكنولوجيا المعلومات وعلى وجه الخصوص أنظمة العاملين وتكنولوجيا المواصلات المختلفة والإنترنت، حيث أصبح بإمكان العاملين تجميع وتخزين وإرسال ومعالجة وإسترجاع البيانات والمعلومات في أقل وقت ممكن مما كان هذا دافعًا لعدد كبير من الفنادق إلى استخدام تكنولوجيا المعلومات كأداة استراتيجية لتحقيق ميزة تنافسية على مستوى الأسواق المحلية والعالمية. تهدف هذه الدراسة إلى تحقيق تسهيلات صناعة الضيافة عبر تكنولوجيا المعلومات في الفنادق المصرية. ولتحقيق هذا الهدف تم توزيع استمارة استبيان على عينة من النزلاء في فنادق القاهرة للعثور على مستوى أهمية ومستوى رضا النزلاء عن التسهيلات التي تقدم لهم عبر تكنولوجيا المعلومات. أظهرت نتائج البحث الميداني أن معظم النزلاء أكدوا على أن "الدقة والسرعة والمصداقية للموقع الإلكتروني الخاص بالفندق على الإنترنت للحصول على تجميع المعلومات والقيام بعمل حجوزات", "السرعة في التسليم والمغادرة", و"السماح للحجز عبر الإنترنت عبر الإنترنت" لهم أهمية كبيرة. وعلى الجانب الآخر أظهرت النتائج أن معظم النزلاء غير راضيين عن "السرعة في التسليم والمغادرة", "الدقة والفضاء الإلكترونية". ويمكن نتائج هذه الدراسة مساعدة مديرى الفنادق المصرية على تحسين التسهيلات التي تقدم للنزلاء عبر تكنولوجيا المعلومات.

الكلمات الدالة: التجارة الإلكترونية ، تكنولوجيا المعلومات ، صناعة الضيافة