The Impact of Property Management System Practical Training on Graduates' Skills Development: An Analytical study on Faculties of Tourism and Hotels in Egypt

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Abstract

This study aimed to evaluate the effect of front office practical training on graduates' skills development. The research objectives are to examine the effect of instructor competency, training environment and training content on graduates' skills development.

The current study adopted the quantitative method using the questionnaire as a tool for data collection to test the research hypotheses and achieve its aim and objectives. The questionnaire form was distributed to 389 undergraduate from the targeted five governmental faculties, and 168 forms were included in this study.

It is revealed that the independent variable (training content) have significant positive effect on the dependent variable (developing graduates' skills), meanwhile the training content has the greatest effect on graduates' skills development, while the other two independent variable (instructor competency and training environment) were found insignificantly effecting the graduates' skills development.

There is a shortage of studies that evaluated the relationship between the training usages of specific IT software (e.g. front office modules) and the universities graduates' specifications (Law & Jogaratnam, 2005; Nthebe, 2016). This study consider from the few studies deep search with the PMS training in faculties of tourism and hotels in Egypt.

The researcher recommends continue developing the training on (IT) skills to enhance the specifications of graduates from the faculty of tourism and hotels in Egypt to be easily able to join the labor market.

Keywords: PMS, IT training, ICT, Front Office, Graduates skills, Hospitality curriculum.

Introduction

Training is a vital part of any work environment and can strongly influence the success of service-based businesses like hospitality. Information Technology (IT) is growing at a fast speed at all levels of the hospitality industry. It is used to manage inventory and to control assets by integrating all hotel operations, reshaping the marketing function, improving total efficiency, and enhancing customer services while providing strategic opportunities. The hospitality curriculum was noticed lack of usage of such IT training, especially regarding the front office software (PMS) (Law & Jogaratnam, 2005; Nthebe, 2016; Mayouf & AlSayed, 2016).

Although the industry recognizes that educational institutions are doing well, there are several concerns. There are apparently too many providers who offer poor and inconsistent training and who train the wrong people just to get a training subsidy. Moreover, even if industry training could improve the quality of the employees and, in turn, professionalize the industry, it would still not resolve the problem of recruitment and skills shortages (Bilgihan et al., 2014).

Irrespective of the wider economic circumstances, it is important to develop a form of career structure and career progression by which the industry can modernize the recruitment and training process. As such, the industry should give staff the opportunity to develop professionally through studies and training, apprenticeships, and traineeships. There seems to be a gap between graduates and the reality of the market (Sobaih and Jones, 2015). Indeed, this new generation does not have the patience to wait for promotion. This disillusion explains the low conversion

rate of the number of graduates who actually enter or remain within the hospitality industry (Whitelaw *et al.*, 2009).

Other downsides of current hospitality curriculum in Egyptian tourism faculties are that most of the IT training is just for basics and not properly assesses the students who pass with lower standards ((Mayouf and AlSayed, 2016).

Finally, there is a shortage of studies that explored the relationship between the training usages of specific IT software (e.g. front office modules) and the universities graduates' skills (Law & Jogaratnam, 2005; Nthebe, 2016).

Research Aim and Objectives

There is a little research that has been done related to the effect of software training on hospitality education graduates skills. This study aimed to evaluate the effect of Front Office Practical Training on graduates' skills development. The research objectives are to:

- 1- Evaluate the effect of Instructor Competency on Graduates' skills development.
- 2- Evaluate the effect of Training Environment on Graduates' skills development.
- 3- Evaluate the effect of Training Content on Graduates' skills development.

Review of Literature

Overview of the Information Technology (IT) in Hospitality

It was widely accepted that the largest element of any country development is related to the use of technology systems either in the management level or those who have a vital role in providing continuous and high-quality service to the audience. One of the very dominant and vibrant fields during last years in the global economy is the hospitality and service sector. According to Whitelaw et al. (2009) hospitality is the only pushing aid to any prosperity and advancement in any country since wide gauges propose that up to 10% of the worldwide workers are working in hospitality According to DiPietro and Wang (2010) technology is the strongest power of apprising the hospitality operations. Technology is also gradually becoming a critical source of sustainable competitive advantage in the hospitality industry, particularly in the areas of description, promotion, distribution, amalgamation, organization, and delivery of hospitality products (Van Praagh, 2009).

Recently, a study conducted by Mayouf and AlSayed (2016) highlighted that the concern of tourism education graduates in Egypt is the precise entry for the future in the hospitality work afterwards. At the same time, IT has become the key driver to enhance efficiency and business opportunities in the hospitality industry. Mayouf and AlSayed further recommended that hospitality and education sector must take this into consideration to enhance the ability of future decision making to use IT solutions to increase the efficiency and competitiveness of any service organization.

ICT commonly means more than its list of components, though. It also encompasses the application of all those various components. It's here that the real potential, power and danger of ICT can be found (Mayouf and AlSayed, 2016). There are many IT options that can be used in front office operations (Melián-González and Bulchand-Gidumal, 2017). For example, customer reservations is an important issue for hotel effective operations (Chathoth, 2007). Property Management Systems (PMS) is considered one of the technology cornerstones that automated all the hotel front office operations as highlighted by (Bulchand-Gidumal & Melián-González, 2015).

Property Management System (PMS) and Front Office Operation

Due to the wide decent variety of property types that sit inside an umbrella meaning of 'hotel', front office is a range of movement that changes enormously from property to another, effected by the size, area and market center of the particular property(Baum and Devine, 2007). Figg (2003:p45) defined Property Management System (PMS) as 'computerized system of storing information about hotel transactions, rooms management, and room rate; integration of all the systems features by a hotel property'.

Different features in PMS can be checked, the information from other sections to the hotel front office. Such as, the information concerns the occupancy percentage and its relation to housekeeping department; the information concerns the method a guest reports an emergency on the hotel; the information concerns the method that food and beverage departments report guest charges. A decent PMS can grasp these lines of communication. Hence, PMS is sorted out around capacities expected to help with carrying service to the guest (Bardi, 2010).

Central Reservation System (CRS) is an imperative resource for a hotel network that gives an extraordinary stage to chain reservations. To widen dissemination channels and increment occupancy rates, CRS might be interfaced to the Web reservation module as reported by (Kulkarni et al, 2013).

Notably, PMS is considered one application that tends to various back and front office options and has significantly effected general hotels daily transactions and operations (Collins and Cobanoglu, 2013; Bilgihan *et al.*, 2014). The PMS is the focal point of information for rate handling, reservations and room allocation and the connection to the web-based booking software and partners in the dissemination channels. While, from the visitor perspective, the PMS is, for the most part, inconspicuous, it stays basic to the operational efficiency of the business (Murphy, 2011).

Hospitality Training and Education in Egypt

According to Academic standards of the Tourism and Hotels sector NAQAAE (2009) the main task of tourism and hotels faculties is to build qualified graduates able to join the hospitality industry. Hospitality faculties target to give their graduates the abilities and experience that are important to success in a quickly changing and creating industry condition (Bilgihan *et al.*, 2014).

Further training is basic to enhance skills of the employee in front office. More consideration has been paid to pre-work training while less stress has been laid on training during the daily operation. The after effect of nearsightedness in training can be found in the deficiency of cutting-edge skills. With fast improvement of tourism and the globalization of service management, it is vital for all hospitality staff to get a handle on the skills required at present as well as skills to be utilized in the future. To mirror the requirement for hospitality industry, it is critical to characterize the skills and skills anticipated from any hospitality graduate. There is definitely an distinctive move in hospitality training where general management skills are acquainted with supplementing the practical segments (Bardi, 2010; Collins & Cobanoglu, 2013).

Information Technology Skills in Hospitality Education Curriculum

Commonly, skills in hospitality industry were seen only regarding their technical needs and employment in hospitality, in like manner, was built on the basis of a gathering the skills needed for particular technical positions (Baum, 2002). Baum (2002) further sorted key skills as five

types: first, communications (Oral & Written); second, application of numbers; third, IT; fourth, working with others; fifth, improving own learning and performance. These skills go side by side with other skills of communications, problem-solving, team skills and customer service in addition to job-specific skills (Whitelaw *et al.*, 2009).

Sobaih and Jones (2015) devoted to the need to intensify the relations between education and industry through the development of specialized courses that make future managers capable of leading projects and suggest innovative strategies to gain competitiveness in global tourism and hospitality markets by developing the curriculum to face these challenges to improve the quality and effectiveness of the delivered courses.

Concerning the industry-particular software, these software are the ones which are used in the hospitality sector and intended for hospitality majors that they will use in the accommodation field. Students should figure out how to utilize PMS by utilizing such of Fidelio or OPERA system. That training could be incorporated into core accommodation curriculum. Hence, students training is a vital issue and they will utilize comparative software once they graduate and begin to work in the hospitality field (Bilgihan *et al.*, 2014)

However, the strategically focused software offers key basic of decision-making tool used for planning, data collection, demonstrating, forecasting and reporting (Von Faber and Behnsen, 2013).

Gap between Hospitality Curriculum and Hospitality Industry Requirements

This new technological era requires the need to adapt, in terms of competences, to the infrastructure as well as to customer expectations, adjusting hospitality models, services, and sales techniques to what really matters to this new generation of customers. There looked like a gap amongst hospitality graduates and the reality of the market. For sure, this new era does not have the patience to wait for upgrade (Whitelaw et al., 2009; Afifi & Wahab, 2010)

Despite these dramatic technological changes affecting the industry, the vision of established experienced professionals remains a critical factor for the completeness of the education delivered by the education. With this scope in mind, hotel schools have to facilitate moments of exchange and learning, by inviting professionals with extensive experience in the field to mentor and offer useful advice on how to reconcile the theoretical concepts with the practical day-by-day needs, leading to bridge the gap between the academia and the industry (Sobaih and Jones, 2015).

Research proposes that there has been a gap between what is required by the business and what was being instructed in hospitality education (Berezina, 2009). Buhalis (1998) classified ICT courses in hospitality ICT Programs to three approaches; strategic management and marketing, operational management, and pure IT approach (Table 1).

Table 1: (ICT) in the tourism and hospitality curriculum

<u> </u>	1 '	<u> </u>	
Orientation Method	strategic management and marketing approach	operational management approach	pure IT approach
IT Specific module in the program	(A) Developing and using strategic IT applications for improving competitiveness.	(B) Developing IT software applications. CRS, Videotext, GDSs operations.	(C) Programming and developing computer applications for tourism and hospitality.

Thorough non-IT modules in the program	(D) Using IT for strategic various business functions and segments.	(E) Using IT and tourism specialized F&B and yield management systems and PMSs.	(F) Developing specialized application for the functions of tourism and hospitality enterprises.
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Source: (Buhalis, 1998)

The researchers in this field believe that curriculum should endeavor to adjust to the changing desires of expectations in the classroom-learning environment (Brown et al., 2014).

Training Effectiveness

Mayouf and AlSayed (2016) investigated the types and extent of the effectiveness of the training of the front office programs and the skills required by the colleges of tourism and hotels in Egypt from graduates' point of view. The results indicated that they finally recommended practices to enhance training efficiency and raise the perceived benefits of hospitality workers.

Previous business research suggested that trainee characteristics, training design, and work environment factors can positively impact an employee's training (Frash et al., 2010; Whitelaw et al., 2009).

There are four levels of training effectiveness reported by Frash et al. (2010) level 1, reactions, measures the trainees' liking of, and feelings for, a training program; level 2, learning, measures the principles, facts, and techniques absorbed by the trainees; level 3, behavior assesses the degree to which the learned principles and techniques are manifested in job behavior change; level 4, results, are the ends, goals, or desired business results that lead to reduction in costs or increases in production.

Since training covers everyday operations, it is troublesome for organizations to gauge the amount they spend on training. Subsequently, measuring rate of profitability (Return on Investment (ROI), (how adequately the organization utilizes its capital for training and the benefit from that development), is likewise hard to assess (Kiper and Tercan, 2012).

There are four fundamental skills, called: oral and written communication skills, supervision skills (training and employee motivation), the capability to induce customer loyalty and management skills. Notwithstanding these skills, different investigations have distinguished different skills, for example, critical thinking, and keeping up proficient and ethical standards, professionalism and leadership qualities to accomplish operational targets (Whitelaw *et al.*, 2009).

Globalization, culture diversity and experience need to be addressed as well as appropriate learning and reflection tools to develop intercultural competency. This is supported by the call to include the introduction of emotional intelligence in the curriculum to include philosophical and sociological foundation to support decision-making strategies. The argument is that students need to understand their industry, society and themselves to work successfully and independently in complex and changing environments. Critical thinking and a learning styles approach teach students how to learn and use experience and knowledge in the learning process (Lashley and Rowson, 2005).

Methodology

The current study adopted a quantitative method using the questionnaire as a tool for data collection to test the research hypotheses and achieve its aim and objectives. The methodology designed for the current research, was guided by the primary research hypotheses and the subsequent research objectives. The focus of the research was to evaluate the effect of PMS

software training on hospitality education graduates' skills development in Egypt, therefore, the researcher found that the quantitative method is an appropriate method to give practical significance to this research. In this regard, the current study adopted the quantitative tool, which included a mixture between adapted and developed questionnaire.

Population and Sampling

The study targeted the final year students as fresh forthcoming graduates from all public faculties of tourism and hotels in Egypt listed in Table (2)

Table 2: Egyptian tourism and hotels governmental colleges

Sr	University	Establishment Year
1	Helwan	1975
2	Alexandria	1983
3	El-Fayoum	1993
4	Suez Canal	1994
4	Minia	1995
6	Menofia – Sadat City	1997
5	Mansoura	2006
8	Louxor	2008
9	Marsa Matrouh	2009
10	Bani Suef	2016

Source: http://www.mans.edu.eg/en/egy-univ

All the faculties and higher education institutes of tourism and hospitality in Egypt providing similar intended learning outcomes through various types of courses and training in tourism and hospitality (NAQAAE, 2009).

The researcher visited these faculties (Helwan, Alexandria, Fayoum, Minia and Mansoura universities) and collect statistics about their fourth-year students' number for hotel studies section only.

According to table (3), the total number of undergraduates from targeted faculties is 389 undergraduates for the academic year of 2017/2018. The previous 5 faculties only used for the research while the other 5 faculties have been excluded from this study where no PMS software is used in the practical front office training.

Table 3: Targeted Faculties

Sr	University	# of Students	Percent
1	Helwan	155	39.8 %
2	Alexandria	41	10.5 %
3	El-Fayoum	42	10.8 %
4	Minia	107	27.5 %
5	Mansoura	44	11.3 %
	Total	389	100 %

A census sample (A comprehensive sample) is used, it's a type of sampling used in the case of a very small population or a desire to collect data from all members of the population; A census is attractive for small populations (e.g., 200 or less). A census eliminates sampling error and provides data on all the individuals in the population. In addition, some costs such as questionnaire design and developing the sampling frame are "fixed," that is, they will be the same for samples of 50 or 200. Finally, virtually the entire population would have to be sampled

in small populations to achieve a desirable level of precision.(Israel, 1992; Brown et al., 2017). So the questionnaire was distributed to all members of the population.

The required sample size (respondents) for a population size of 389 with a 5% margin of error and 95% confidence level is 194. As calculated on the online calculator link for Sample sizes below: https://www.checkmarket.com/sample-size-calculator/

Data Collection Tool

The study was conducted as a survey research which is the most popular (quantitative) research design in the social science. Survey research designs are quite flexible and can therefore appear in a variety of forms, but all are characterized by the collection of data using standard questionnaire forms administered by telephone or face to face, by postal or increasingly by using web-based and e-mail forms (Muijs, 2010).

The researcher use hard copy questionnaire form with thirty five closed ended questions and make a visit site to collect data from the targeted sample.

Validity and Reliability

This study adopted items from different studies and developed questions to fit the purpose of the study. The survey was piloted on a sample of 20 graduates to check its face and content validity. The comments of respondents related to language and design of questionnaire were considered in the final form. For reliability of questionnaire statement, Cronbach's alpha coefficient was calculated and exceeded 0.70 for all questions meaning that the questionnaire results are reliable (Hair et al., 2010).

Conceptual Framework and Hypotheses Development

This research framework figure (1) was designed by the researcher depend on the aim and objectives of the Research.

In this study, it is argued that the experience and knowledge of IT software training is promoting students to get higher level of developed skills related to the system.

Instructor
Competencies

H1

Training
Environment

H2

Graduates' skills
development

H3

Figure 10: Conceptual Framework

Because of little agreement achieved to the usage of front office software training in hospitality curriculum in one hand, and the lack of consensus about which graduates specifications will be developed afterwards on the other hand. Therefore, the current study is conducted to bridge this gap in the literature.

Conversely, this conceptualization was not empirically tested in the Egyptian hospitality and tourism education. These previous explanations guided the authors to test the following hypotheses:

- H1. Instructor competency has significant effect on graduates' skills development.
- H2. Training environment has significant effect on graduates' skills development.
- H3. Training content has significant effect on graduates' skills development.

Results and Discussion

The questionnaire form was distributed over 389 students from the targeted five faculties, and only 195 respondents completed the form, representing 50.1% of total forms distributed. After eliminating the invalid and not completed forms, only 168 forms were included in this study. According to Baruch & Holtom (2008), the average level of response rate is 52.7%, while (Richardson et al., 2005; Nulty, 2008) stating that 50% is regarded as an acceptable response rate in social research postal surveys.

Demographics and Description of Respondents

As shown in table (4) reliability scores in this study were: 0.73, 0.71, 0.93 and 0.92 for Instructor Competency, Training Environment, Training Content of the Front Office and developing Graduates' Skills related to training on PMS.

The recommendation of J C Nunnally & Bernstein, (1978) for Cronbach's alpha is a minimum of 0.70, so the reliability of the study is reliable as per Cronbach's Alpha previous values.

Table 4 . I detors Rendomity				
SR	Factor	No. of Items	Cronbach's Alpha	
1	PMS Instructor Competency	2	.729	
2	PMS Training Environment	4	.717	
3	PMS Training Content	17	.934	
4	Graduates' Skills Development	7	.926	

Table 4: Factors Reliability

Respondents Profile

Like what explained in table (5); the majority of the study respondents were males (59.5%), and only (40.5%) of respondent were females and this figures confirm that Women's reluctance to work in the tourism sector (Sony, 2012).

Table 4 : Respondents Profile

Classification Base	Categories	Frequency	Percent
Candan	Male	100	59.5%
Gender	Female	68	40.5%
	Helwan	65	38.7%
	Alexandria	18	10.7%
University Name	Fayoum	20	11.9%
	Minya	39	23.2%
	Mansoura	26	15.5%
	1st Year	9	5.4%
Actual Year of PMS Training	2nd Year	21	12.5%
	3rd Year	110	65.5%
	4Th Year	28	16.7%
Preferred Year of Actual Training	1st Year	17	10.1%

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	2nd year	49	29.2%
	3rd Year	89	53.0%
	4th Year	13	7.7%
	Opera	94	56.0%
PMS Used for Training	Ultra-Comsys	43	25.6%
	Other	31	18.5%

Also stated in table (5); the students from faculty of tourism and hotels- Helwan University represent the highest respondents (38.7%), while the students from faculty of tourism and hotels- Minya University represent (23.2%), the students from faculty of tourism and hotels- Mansoura University represent (15.5%), the students from faculty of tourism and hotels- Fayoum University represent (11.9%), and the students from faculty of tourism and hotels- Alexandria University represent (10.7%),

The majority of respondents answered that the actual year they getting the practical training on PMS is the third year (65.5%), then the fourth-year by (16.7%), while the second year (12.5%), and the first year (5.4%).

The high percent of students preferred the third year (65.3%) to get the practical training on PMS, then the second year (29.2%), while the first year (10.1%), And the fourth year (7.7%).

Finally, the PMS used in practical training in the targeted faculties as per respondents' answer is; Opera PMS (56.0%), while Ultra Comsys PMS (25.6%), and Other PMSs (18.5%), which means that OPERA PMS is the mostly used PMS in Faculties of tourism and hotels as for students responses, also, this is in line with (Bilgihan *et al.*, 2014) who stated that the Opera or Fidelio is the most PMS used in hospitality training.

Instructor Competency

Respondents were asked to evaluate the competency of instructor who run their undergraduate courses, a 5-point likert scale was used to illustrate the level instructor competency (Strongly Disagree=1, Disagree=2, don't know=3, Agree=4, and Strongly Agree=5).

Table (6) stated that; the most respondents agreed on the instructor skills and knowledge, Mean =3.94 which means that respondents agreed with instructor skills and knowledge.

Table 5: Instructor Competency

Classification Base	Mean	Std. Deviation
Instructor skills & knowledge	3.946	.791
Instructor experience	4.095	.685
Over all Mean	4.021	

Also the most respondents agreed on the instructor experience with the PMS and the guest life cycle operation, Mean =4.10 which means that respondents Agree on instructor experience.

Overall Mean =4.02 which means that respondents agree on instructor competency and Std. Deviation values referring to normal distribution of data.

Training Environment

Respondents were asked to evaluate the training environment during their education, a 5-point Likert scale was used to illustrate the level training environment (strongly disagree=1, disagree=2, don't know=3, agree=4, and strongly agree=5).

Table (7) clarified that; the most respondents don't know about the duration of PMS training course, Mean =3.45 which means that respondents don't know on duration of PMS training course.

Table 6: Training Environment

Classification Base	Mean	Std. Deviation
Duration of PMS training Course	3.452	1.125
Place of training and equipment	3.571	1.097
Place enough for students	3.446	1.093
PMS working efficiency	3.673	.865
Over all Mean	3.536	

Also, the most respondents agreed on the duration of course, Mean =3.57 which means that respondents agree on place of training and equipment.

The most respondents don't know about the place of training is it enough for students or not? Mean =3.45 which means that respondents don't know about training place.

The most respondents agreed that PMS software working efficiency, Mean =3.67 which means that respondents agree on PMS software working efficiency.

Overall Mean =3.54 which means that respondents agree on training environment and Std. Deviation values referring to normal distribution of data.

Training Content

Respondents were asked to evaluate the Training Content and the features they have been trained, a 5-point Likert scale was used to illustrate the level Training Environment (strongly disagree=1, disagree=2, don't know=3, agree=4, and strongly agree=5).

As explained from table (8); the most respondents agreed that they can make all types of reservations, Mean =3.67 which means that respondents agree on making all types of reservations.

Table 7: Training Content

Classification Base	Mean	Std.
Classification Base	IVICALI	Deviation
Make all types of reservation	3.673	.886
Make profiles for reservations	3.732	.851
Make Check In for reservations	3.845	.804
Make Check Out for reservations	3.768	.889
Add postings to guest rooms	3.369	.970
Modify or Delete Postings	3.470	.909
Check rooms Status	3.970	.769
Check occupancies	3.774	.914
Send Confirmation Letters	3.470	.966
Search for Bill History	3.464	.996
Print Operation Reports	3.726	.927
Follow operation traces	3.429	.982
Create Company Profile	3.375	.971
Create rate code for new contracts	3.202	.893
Create allotment doe new contracts	3.083	.858
Check Night auditor reports	3.417	.975
Check Analysis Reports	3.339	.984
Over all Mean	3.546	

Also, the most respondents agreed that they can make profiles for, Mean =3.73 which means that respondents Agree on they can make profiles for the guest.

The most respondents agreed that they can make check in for, Mean =3.85 which means that respondents agree on they can make check in for the guest.

The most respondents agreed that they can make check out for, Mean =3.77 which means that respondents agree on they can make check out for the guest.

The highest percentage respondents with don't know for how to add postings and billing transactions, Mean =3.37 which means that respondents don't know about how to add postings on guest bill.

The highest respondents percentage goes to don't know for how they can make modify or delete on postings and transactions on reservations Mean =3.47 which means that respondents don't know about modify or delete postings on guest bill.

The most respondents percentage agreed that they can make check for rooms status, Mean =3.97 which means that respondents agree they can check rooms status on PMS.

The highest respondents percentage goes to agreed that they can make check for occupancies, Mean =3.77 which means that respondents agree they can check occupancies on PMS.

The highest respondents percentage goes to agreed that they can send confirmation letters for confirmed, Mean =3.47 which means that respondents don't know about send confirmation letters for guest.

The highest respondents percentage goes to agreed that they can search for guest, Mean =3.46 which means that respondents don't know about how to search on guest bills.

The most respondents agreed that they can print operation reports, Mean =3.73 which means that respondents agree on they can print operation reports from PMS.

The highest respondents percentage respond with don't know about following operation traces, Mean =3.43 which means that respondents don't know about traces and how to follow it up.

The highest percentage of respondents respond with don't know how to make company profile, Mean =3.38 which means that respondents don't know about how to create company profile.

Most respondents respond with don't know how to create rate codes for new, Mean =3.20 which means that respondents don't know about how to create Rate codes for new contracts.

Most respondents respond with don't know how to create allotment codes for new, Mean =3.08 which means that respondents don't know about how to create allotment codes for new contracts. The highest percentage of respondents respond with don't know about night auditor, Mean =3.42 which means that respondents don't know about how to print night auditor reports from PMS.

The highest percentage of respondents respond with don't know about analysis reports, Mean =3.34 which means that respondents don't know about how to print analysis reports.

Overall Mean =3.54 which means that respondents agree on training content and Std. Deviation values referring to normal distribution of data.

Graduates' Skills Development

Respondents were asked to evaluate their skills they got it from PMS practical training, a 5-point likert scale was used to illustrate the level Skills (weak=1, accepted =2, good =3, very good =4, and excellent =5).

As illustrated in table (9); the highest percentage of respondents respond with good in Oral communication, Mean =3.45 which means that respondents good in oral communication.

Table 8 : Graduates' skills development

Classification Base Mean Std. Deviation
Oral Communication 3.452 1.183

Oral Communication	3.452	1.183
Written Communication	3.238	1.074
Dealing with Guest Complaints	3.351	1.100
Internal Communication and Team Spirit	3.691	1.020

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Dealing with Emergency issues	3.452	1.043
Dealing with Guest nee and Expectations	3.411	.962
Working with property standard	3.679	1.107
Over all Mean	3.465	

Also, the highest percentage of respondents respond with good in written, Mean =3.24 which means that respondents good in written communication.

The highest percentage of respondents respond with good in dealing with guest, Mean =3.35 which means that respondents Good in dealing with guest complaints.

The highest percentage of respondents respond with very good in internal, Mean =3.69 which means that respondents very Good in Internal communication and team spirit.

The highest percentage of respondents respond with good in dealing with emergency issues, Mean =3.45 which means that respondents good in dealing with emergency cases.

The highest percentage of respondents respond with good in expect guest needs and expectations, Mean =3.41 which means that respondents good in dealing with emergency cases.

Also, the highest percentage of respondents respond with very good working with property standard, Mean =3.68 which means that respondents very good in dealing with emergency cases. Overall Mean =3.47 which means that respondents respond with good on graduates' skills development and Std. Deviation values referring to normal distribution of data.

Hypotheses Testing

Multiple Linear Regression was used to test the research hypotheses. From table (10), it is clear that instructor competency, training environment, and training content explain 16% (R square=0.160) of the variance in graduates' skills development.

Table 10: R square

	Mod el	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson		
Ī	1	.400°	.160	.145	.82666			
Ī	a. Predictors: (constant), training content, instructor competency, training environment							
	b. Dependent variable: graduates' skills development							

From table (11), it is revealed that the independent variables (Instructor competency, training environment, and training content) have significant effect on the dependent variable (graduates' skills development) where F=10.4 and significance is less than 1%.

Table 11: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	21.253	3	7.084	10.367	.000 ^b
1	Residual	111.389	163	.683		
	Total	132.642	166			

a. Dependent variable: graduates' skills development

From table (12), it is revealed that PMS training content (B=0.397, and P<0.01) has the greatest effect on graduates' skills development, while the PMS instructor competency was found insignificantly effecting the graduates' skills development (B=0.163, and P>0.05) also, the PMS training environment was found insignificantly effecting the graduates' skills development (B=0.126 and P>0.05).

Table 9: Regression Coefficients

Model	Unstandardized Coefficients		t	Sig.
	В	Std. Error		

b. Predictors: (constant), training content, instructor competency, training environment

1	(Constant)	.967	.471	2.120	.047
	Instructor Specifications	.163	.098	3.096	.125
	Training Environment	.126	.076	.684	.202
	Training Content	.397	.102	2.947	.001
a. Dependent variable: graduates' skills development					

Figure 2 : Research Model

Instructor Competency

B=.163^{ns}
&P>0.05

Training Environment

B=.126^{ns}
&P>0.05

Skills

1....1

Training Content

Note: ** = significant at 0.01, ns= not significant From figure (2), it is clear that only one hypothesis out of three is supported; while the other two hypotheses first and second hypotheses are not supported.

Discussion of the Results

H1. Instructor Competency has no significant effecting on graduates' skills development.

From the result of (H1), this study is support the study of Mayouf & AlSayed (2016) who investigated the types and extent of the effectiveness of the training of the ICT and the skills required by the faculties of tourism and hotels in Egypt from the graduates' point of view. The results indicated that they finally recommended practices to enhance training efficiency and raise the perceived benefits of ICT instructors.

H2. Training Environment has no significant effecting on graduates' skills development.

Also from the result of (H3) this study is consistent with Murphy (2011) study who recommend for educational institutes, this requires close contacts with the industry as well as investments in research to stay aligned with an evolving IT and the curriculum flexibility that makes it possible to timely incorporate new developments in educational programs.

More above, in line with Brown et al. (2014) who advice that the researchers in this field believe that curriculum should endeavor to adjust to the changing desires of expectations in the classroom-learning environment.

H3. Training Content has a significant effect on graduates' skills development.

From the result of (H3) the current study is consistent with Sobaih & Jones (2015) they devoted to the need to intensify the relations between education and industry through the development of specialized courses that make future managers capable of leading projects and suggest innovative strategies to gain competitiveness in global tourism and hospitality markets by

developing the curriculum to face these challenges to improve the quality and effectiveness of the delivered courses.

Finally, it's consistent with Van Praagh (2009) who argued that the ICT modules in the Pacific International Hotel Management School include (managing computers, word processing, spread sheets, presentations, searching the internet, using e-mails, Moodle, and explaining computer fundamentals). She also emphasized the importance of understanding of accounting packages, electronic point of sales (EPOS) and property management system (PMS).

Conclusion

This study aimed to evaluate the effect of front office practical training on graduates' skills development. The research objectives are to evaluate the effect of three independent variables 1) PMS instructor competency, 2) PMS training environment and 3) PMS training content on the dependent variable graduates' skills development.

The current study adopted the quantitative method using the questionnaire as a tool for data collection in order to test the research hypotheses and achieve its aim and objectives. The questionnaire form was distributed to 389 students from the targeted five governmental faculties using a census sample technique. Out of 389 respondents, 195 of the questionnaires are collected and 168 forms were included in this study as valid forms. The data collected from respondents using questionnaire is summarized by using SPSS software. Here, data obtained from questionnaires are analyzed and interpreted.

It is revealed that the independent variable (PMS training content) has significant positive effect on the dependent variable (developing graduates' skills), meanwhile the PMS training content has the greatest effect on graduates' skills development, while the other two independent variable (PMS instructor competency and PMS training environment) were found insignificantly effecting the graduates' skills development.

Emerging from the importance of both tourism and tourism education for a country such as Egypt, this research is one of the few studies investigating in front office PMS practical training and its contribution to the development of graduates' skills.

Potential benefits of this research are to faculties of tourism and hotels in Egypt (both lecturers and students) and also to the hospitality industry. Ongoing research in IT field needs to continue to ensure that the graduates are competitive and are sought after in the field of hospitality.

Enriching the libraries of tourism and hotels faculties with a lot of terminologies related to the front office PMS, which are widely used in the industry and which benefit the undergraduates very much in order to join the labour market.

Limitations of the study

This research has been limited to the governmental faculties of tourism and hotels in Egypt and choose only five from all faculties for actually using the PMS for practical training while others not using PMS or it's not working for technical issues, the opinions and feedback of selected sample of undergraduates (fourth-year) only not from all undergraduates as the fourth-year consider as a core for graduates and to confirm on they got the PMS practical training during the previous years of study, The researcher start to collect the data from undergraduates from the first of February, 2018 till 15th of April, 2018.

Recommendations

Based on the analysis and the above mentioned conclusions the researcher gave some recommendations to enable faculties of tourism and hotels in Egypt to cover the shortage in PMS practical training.

Recommendations for faculties of tourism and hotels

- The researcher recommends continuing developing the training on Information Technology (IT) skills by faculties of tourism and hotels in Egypt to enhance the specifications of graduates to be easily able to join labour market.
- New ICT skills must be included in the hospitality curriculum in Egypt, such as electronic point of sales (EPOS), cost control and accounting packages.
- The training on PMS to be on the third-year for all faculties as per students' feedback also to be before the summer training on FO requesting by all faculties of tourism and hotels in Egypt.
- Give more interest to the environment of the training in faculties of tourism and hotels in Egypt while the results state that the environment of PMS training has no significant on graduates' skills.
- PMS training requested to be by expert instructors from the field or from the PMS providers company to be aware and updated with hospitality operations.
- Build a relationship between faculties of tourism and hotels and PMS providers to confirm on PMS working efficiency more over try to have 2 different types of PMS to cover technical issues if happen.
- Information Technology (IT) is essential to all undergraduates from faculties of tourism and hotels, but it needs to be included in the tourism and hospitality curriculum as an integrated learning process, which is related with the entire range of academic subjects taught in those courses.

Recommendations for Future research

- Advanced research in how the ICT Instructors and environment has no effect on graduates' skills as for the current study results.
- Advanced research on the faculties with no PMS for practical training to know the students feedback about the effect of that on their skills.

References

- Afifi, G. M. H. and Wahab, S. A. (2010) 'Benchmarking the Egyptian Tourism Higher Education Scheme', Anatolia. Routledge, 21(2), pp. 363–378. doi: 10.1080/13032917.2010.9687109.
- Bardi, J. A. (2010) Hotel Front Office Management, Organization. Available at: http://books.google.com/books?id=RnrtvXTL1pMC&pgis=1.
- Baruch, Y. and Holtom, B. C. (2008) 'Survey response rate levels and trends in organizational research', Human relations. Sage Publications Sage UK: London, England, 61(8), pp. 1139–1160.
- Baum, T. (2002) 'Skills and training for the hospitality sector: a review of issues', Journal of Vocational Education & Training, 54(3), pp. 343–364. doi: 10.1080/13636820200200204.
- Baum, T. and Devine, F. (2007) 'Skills and training in the hotel sector: The case of front office employment in Northern Ireland', Tourism and Hospitality Research, 7(3/4), pp. 269–280. doi: 10.1057/palgrave.thr.6050046.

- Berezina, K. (2009) The Information Technology (IT) Skills of Hospitality School Graduates as Perceived by Hospitality Professionals.
- Bilgihan, A. et al. (2014) 'The Information Technology (IT) Skills of Hospitality School Graduates as Perceived by Hospitality Professionals', Journal of Teaching in Travel & Tourism. Routledge, 14(4), pp. 321–342. doi: 10.1080/15313220.2014.955303.
- Brown, E. A., Thomas, N. J. and Thomas, L. Y. (2014) 'Students' willingness to use response and engagement technology in the classroom', Journal of Hospitality, Leisure, Sport and Tourism Education, 15(1), pp. 80–85. doi: 10.1016/j.jhlste.2014.06.002.
- Brown, T. T., Wood, J. D. and Griffith, D. A. (2017) 'Using spatial autocorrelation analysis to guide mixed methods survey sample design decisions', Journal of Mixed Methods Research. SAGE Publications Sage CA: Los Angeles, CA, 11(3), pp. 394–414.
- Buhalis, D. (1998) 'Information technologies in tourism: Implications for the tourism curriculum.', Springer, p. pp 289-297.
- Bulchand-Gidumal, J. and Melián-González, S. (2015) 'Information Technology (IT) in Hotels: A Full Catalogue', University Institute of Tourism and Sustainable Economic Development (TIDES) University of Las Palmas de Gran Canaria, (December), pp. 1–25.
- Chathoth, P. K. (2007) 'The impact of information technology on hotel operations, service management and transaction costs: A conceptual framework for full-service hotel firms', International Journal of Hospitality Management, 26(2), pp. 395–408. doi: https://doi.org/10.1016/j.ijhm.2006.03.004.
- Collins, G. and Cobanoglu, C. (2013) Hospitality information technology: Learning How to Use IT. Hunt Publishing Company.
- DiPietro, R. B., Wang, Y. (Raymond) and DiPietro, R. B., & Wang, Y. R. (2010) 'Key issues for ICT applications: impacts and implications for hospitality operations', Worldwide Hospitality and Tourism Themes. Edited by R. B. DiPietro. Emerald Group Publishing Limited, 2(1), pp. 49–67. doi: 10.1108/17554211011012595.
- Von Faber, E. and Behnsen, W. (2013) Secure ICT Service Provisioning for Cloud, Mobile and Beyond. 2 Ed. Germany: Springer. doi: 10.1007/978-3-658-00069-1.
- Figg, W. C. (2003) Technology system development and training The effect of technology development on front desk employees, Capella University. doi: 10.3102/00346543067001043.
- Frash, R. et al. (2010) 'Like It! Learn It! Use It?', Cornell Hospitality Quarterly, 51(3), pp. 398–414. doi: 10.1177/1938965510364931.
- Israel, G. D. (1992) Determining sample size. University of Florida Cooperative Extension Service, Institute of Food and Agriculture Sciences, EDIS Gainesville.
- Kasavana, M. L. and Brooks, R. M. (2001) 'Managing Front Office Operations Culinary and Hospitality Industry Publications Services', Weimar, Texas.
- Kiper, A. and Tercan, S. S. (2012) 'The usage of information technologies in classroom environment among primary school teachers and their perception on in-service training programs on it (sample of Sakarya)', The Turkish Online Journal of Educational Technology, 11(3), pp. 386–392.
- Kulkarni, A., Gangakhedkar, A. and Amdekar, M. (2013) 'Cloud Based Apartment Management System', from International Journal of Scientific & Engineering Research respectively in International Journal of Scientific & Engineering Research, 4(5), pp. 796–803.
- Lashley, C. and Rowson, B. (2005) 'Getting IT right', International Journal of Contemporary Hospitality Management, 17(1), pp. 94–105. doi: 10.1108/09596110510577716.
- Law, R. and Jogaratnam, G. (2005) 'A study of hotel information technology applications', International Journal of Contemporary Hospitality Management. Emerald Group Publishing Limited, 17(2), pp. 170–180. doi: 10.1108/09596110510582369.
- Mayouf, M. A. and AlSayed, I. A. H. (2016) 'ICT training programs in tourism and hospitality institutes: analytical study of types, effectiveness, and graduates perceived importance', Minia Journal of Tourism and Hospitality Research, 1(2), pp. 1–20.

- Melián-González, S. and Bulchand-Gidumal, J. (2017) 'Information technology and front office employees' performance', International Journal of Contemporary Hospitality Management, 29(8), pp. 2159–2177. doi: 10.1108/IJCHM-10-2015-0585.
- Muijs, D. (2010) Doing Quantitative Research in Education with SPSS. SAGE Publications. Available at: https://books.google.com.eg/books?id=apFMQHF768EC.
- Murphy, H. C. (2011) 'AN INVESTIGATION OF DATA MANAGEMENT AND Karolin Kokaz Pucciani', Tourism and Hospitality Management, 17(1), pp. 101–114.
- NAQAAE (2009) 'Academic standards of the Tourism and Hotels sector.' National Authority for Quality Assurance and Accreditation in Education.
- Nthebe, S. S. (2016) Hotel Front Office Staff and Interest in Tourist Attractions: Their Influencing Role in Business Tourists 'Visiting Intentions.
- Nulty, D. D. (2008) 'The adequacy of response rates to online and paper surveys: What can be done?', Assessment and Evaluation in Higher Education, 33(3), pp. 301–314. doi: 10.1080/02602930701293231.
- Nunnally, J. C. and Bernstein, I. H. (1978) Psychometric theory. McGraw-Hill New York.
- Van Praagh, M. E. (2009) Information and Communications Technology Skill Requirements for Hospitality Students. Available at: http://unitec.researchbank.ac.nz/handle/10652/1422.
- Sobaih, A. E. and Jones, E. (2015) 'Bridging the hospitality and tourism university-industry research gap in developing countries: The case of Egypt', Tourism and Hospitality Research, 15(3), pp. 161–177. doi: 10.1177/1467358415578188.
- Sony, K. C. (2012) 'Roles and Challenges of Women in Tourism Sector of Western Nepal: A Micro-Ethnographic Study', Nepal Tourism and Development Review, 2(1), pp. 32–59.
- Whitelaw, P. a et al. (2009) 'Training needs of the hospitality industry', CRC for Sustainable Tourism Pty Ltd, p. 21. doi: 10.1111/j.1471-0307.1986.tb02350.x.