Perceived Usefulness, Perceived Ease of Use, and Attitude towards using Front Office Tasks Simulator: A Preliminary Study in Community College

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Abstract

The application of innovations are today's panache of teaching and learning in class. Conventional classrooms practiced by lecturers without teaching aids less contribution towards enhancing the capability of students on mastering the skills. Simulation tool in hospitality education is suggested to fill the deficiency by exposing students intangible business situations. In this study, Front Office Tasks Simulator has been used as an innovative teaching tool for hospitality students, particularly in Front Office subject. Thus, this study investigated to see how students perceived Front Office Tasks Simulator (FOTS) in terms of perceived ease of use, usefulness, and attitude toward the use of FOTS during simulation activities and examines whether these factors were correlated. The participants were 22 students from Community College of Sungai Petani who took Front Office course in the third semester of 2018 academic year. Questionnaires had been circulated to collect data. The results reveal that overall mean scores of perceived ease of use, perceived usefulness were at a high level, and students had a positive attitude toward the use of FOTS for doing the practical activities. It was also found students learning performance was positively correlated with perceived usefulness and perceived ease of use FOTS. The perceived ease of use had a positive relationship with the perceived usefulness of FOTS and attitude towards using FOTS doing activities. Moreover, the attitude was related to perceived usefulness while no relationship was found between attitude towards using and students' learning performance. The concluding remarks suggested the possibility to integrate Front Office Tasks Simulator (FOTS) for other institutions that offer the same course and further research should be carried out to examine those factors whether the results are equivalent.

Keywords: perceived usefulness, perceived ease of use, attitude towards using, learning performance, front office tasks simulator

Introduction

The hospitality industry is currently one of the fastest-growing industries worldwide, moreover, the hotel industry plays an important role in supporting Malaysian tourism as the major contributor in the service sector of the Malaysian economy. As supported by the statement from Monster.com Asia Pacific and the Middle East chief executive officer Abhijeet Mukherjee, he said: "with Malaysia's tourism sector identified as one of the major contributors to the nation's economic success, welcoming 8.47 million tourists in the first four months of the year, growth in the hospitality and travel industry appears poised to continue" (NST Business, 2018, para 12).

Based on CBRE|WTW's data shows that there is an estimated shortage of 23,600 hotel rooms at the end of the year 2017 in Malaysia (Ng, 2018). These statistics, also display there is a huge shortage of labor in this industry. Despite this, this industry is unique and people-oriented since it involves people serve people which involves employers, employees, and

customers. Therefore, hotel staff as the service delivers require not only customer service skills (Sanders, 2011) but they also need competencies, knowledge, and attitudes (Ahammad, 2013) to provide a better service experience.

In today's hospitality industry, guest service remains the essential and most important element (Högnäs, 2015) to win the customers' hearts due to hotel services begin at the front desk (Sayin & Karaman, 2019). In this view, it is expected that growth in the service industry will continue to be strong in 2017 (Geerts, 2016), creating a demand for an educated and trained workforce. Polytechnics and community colleges are playing a big part in giving education and training as an effort to develop human resources (Ministry of Education Malaysia, 2018). As stated in Polytechnic and Community College Strategic Plan 2018 - 2025 (Ministry of Education Malaysia, 2018), one of the core strategies is to produce quality Technical and Vocational Education and Training (TVET) graduates. Moreover, to meet the needs of today's education for hospitality student learning experience, as stated by Malaysia Education Blueprint 2015-2025 (Higher Education), educators are advised to apply technology and be innovative in their teaching skills (Ministry of Education Malaysia, 2016).

Limited equipment or teaching aids (Chijioke & Naade, 2018; Widiyatmoko & Nurmasitah, 2013) and an improper learning atmosphere (Che Ahmad, Shaharim & Yahaya, 2016; Mat Saad, Nik Yusoff & Mohammad Yassin, 2011) are always the primary problems contributing to the inadequate learning performance of learners. There is a growing awareness that higher knowledge of how learners learn plays a critical part in enhancing student teaching performance (Ampountolas, Shaw & James, 2018). Therefore, an innovative teaching tool - Front Office Tasks Simulator (FOTS) that has been developed to build simulation tasks card and prepare the simulated workplace environment for students to align well with learning the real activity of check-in/check-out processes which require students to combine motor skills (data entry, credit card/cash processing) with customer service and orientation (greet and interrelate with guests).

Research Objectives

This study aims to investigate the perspectives of Front Office students towards using Front Office Tasks Simulator as teaching aids for front office subjects in community college. In particular, this study has two objectives:

(i) To examine students' perceived usefulness and perceived ease of use of Front Office Tasks Simulator as an innovative teaching tool for Front Office subject in community college;
(ii) To what extend students' attitudes towards using Front Office Tasks Simulator.
(iii) To determine the relationship between students' learning performance, perceived ease of use, perceived usefulness, and attitude towards using Front Office Tasks Simulator.

Research Questions

(i) What are the students' perceived usefulness and perceived ease of use of Front Office Tasks Simulator?
(ii) How did the students respond to the use of Front Office Tasks Simulator for doing activities?
(iii) Are there any relationships between students' learning performance, perceived ease of use, perceived usefulness, and attitude towards using Front Office Tasks Simulator?

Theory

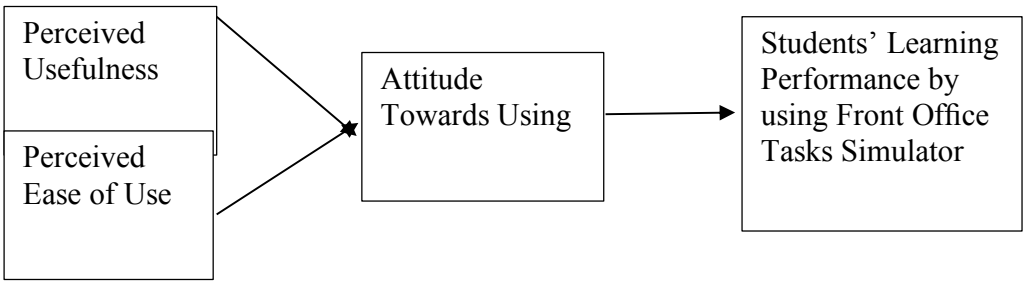
The theoretical foundation of this research derives from Ajzen and Fishbein's Theory of Reasoned Action (TRA) (1980). TRA suggests that conduct, in this case, acceptance of the

Dynamics financial management information system, is affected by individual perception and attitude, competing for the environment and social pressure. The Technology Acceptance Model (TAM) research instrument as created by Davis (1989) is an expansion of TRA.

TAM postulates that people may have been encouraged to use an information system because of the inherent benefits obtained, such as perceived usefulness, perceived ease of use, and attitude towards using the system. He assumes that the perceived user-friendliness towards the scheme can contribute to enhancing a person's efficiency. Because the user will have to deploy less effort with an easy-to-use instrument, he will be able to spare efforts to achieve other duties. He also assumes that the quality of job and productivity will boost with perceived usefulness because the scheme should assist the customer to perform better. Both perceived usefulness and perceived ease of use predict attitude towards using the tool, described as the user's desirability of using the tool. The general attitude of a user towards using the specified tool is hypothesized to be a significant determinant of whether or not he uses it. Attitude and perceived usefulness affect the person to effectively use the tool.

Figure 1

The Technology Acceptance Model for Front Office Tasks Simulator at Community College Sungai Petani Source. Technology Acceptance Model (TAM) (Based on Davis, 1989)



Methodology

This study adopted a descriptive survey research design. The methodology involved the use of questionnaires to elicit needed responses from community college students on their perceived ease of use, perceived usefulness, attitude towards using Front Office Tasks Simulator in teaching and learning of Front Office. The population of the study comprised of all hospitality students in Community College Sungai Petani, Kedah, Malaysia. Purposive sampling technique was used to select all the hospitality education students in their 3rd semester year in the college. This was because students in their 3rd semester were taken Front Office subject. A total of 22 students was therefore selected as a sample for this study.

The survey consisted of four sections. The first section comprised questions regarding respondents' demographic and background information. The second section measured student's perceived usefulness (5 items) of the FOTS as an innovative teaching tool adapted from Davis (1989). The third section measured students' perceived ease of use (5 items) based on Davis (1989). The fourth section comprised questions regarding attitude toward using (6 items) FOTS adapted from Douglas and Miller (2006). A five-point Likert scale response format was used with the following categories: 5 = strongly agree; 4 agree; 3 = undecided; 2 = disagree; and 1 = strongly disagree. Data were statically recorded and analyzed by the SPSS program. Personal data of the participants were calculated for frequency and percentage. Data concerning perceived usefulness, perceived ease of use, and attitude towards using FOTS were analyzed quantitatively for means and standard deviations. The ranges were as follows: 1.00-1.67 = low/negative, 1.68-3.33 = moderate, 3.34-5.00 = high/positive.

Literature Review

Simulation is considered a student-centered approach that students can learn by themselves (Chaparro-Peláez, Iglesias-Pradas, Pascual-Miguel & Hernández-García, 2013). Moreover, this has been stated by Frash, Antun, Kline, and Almanza (2010) that simulations that recreate working circumstances can be an efficient way to train and suit participants' needs and skill levels.

In Pratt and Hahn's (2015) findings, they concluded that simulation provided a worthwhile learning experience through the development of teamwork, offered a fun method of learning, and integrated their knowledge from other courses. Another study by Douglas, Miller, Kwanza, and Cummings (2008) added to this finding that simulation has shown to be a tool useful for the development of skills crucial to the hospitality business management. In this study, the findings showed that students' perceived usefulness of the simulation was positive.

A study by Ampountolas, Shaw, and James (2018) examined the learning experience of learners using hotel simulation as a teaching instrument. This research was attended by 101 learners of the hospitality management program in Switzerland, the United States, and the United Kingdom who had already been instructed in a course using hotel simulation training. Theoretical learning based on role-play using simulation can enhance practical knowledge and increase trust. Pedagogical interaction has been suggested as one of the main components of any teaching experience (Hay, Hodgkinson, Peltier, & Drago, 2004).

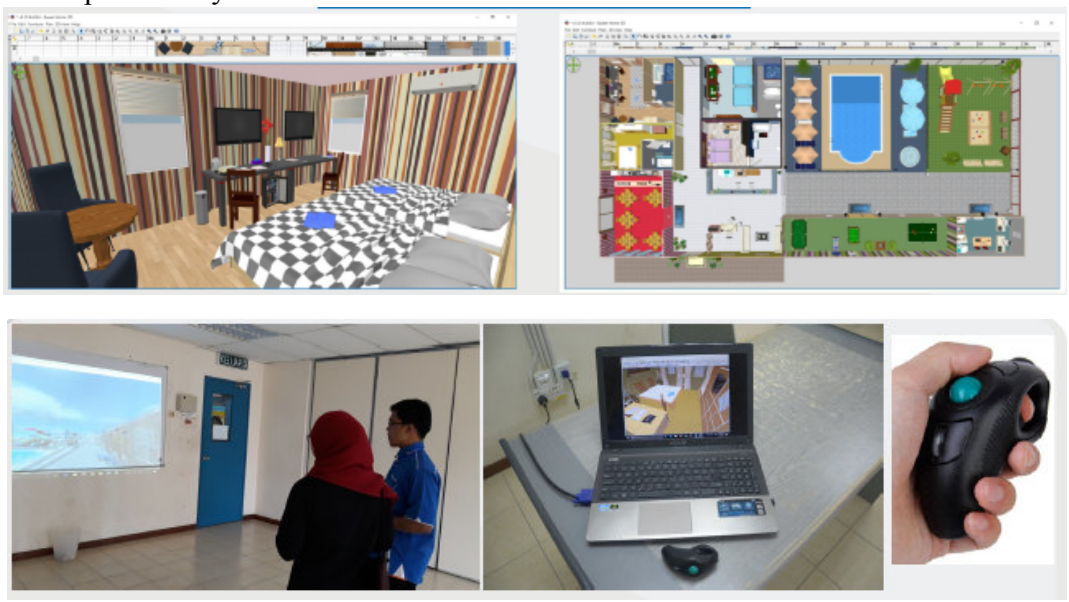
Front Office Tasks Simulator

Front Office Tasks Simulator (FOTS) is a new innovative learning instrument that has been created to provide learners with experiential learning to carry on as hotel staff through the many duties of a hotel worker. Front Office Tasks Simulator (FOTS) incorporates three innovation concepts.

i) VIRTEST plus 3D (Figure 1) - Has been created by using freeware –Sweet Home 3D to create a virtual guest room/hotel. Students as Bellmen can use Wireless USB Handheld Finger Trackball Mouse to move around in a virtual guest room/hotel just like in the real guest room and to take, to demonstrate, and to explain the facilities in the room and hotel to hotel visitors. For example, Bellman can describe items in a guest room such as:

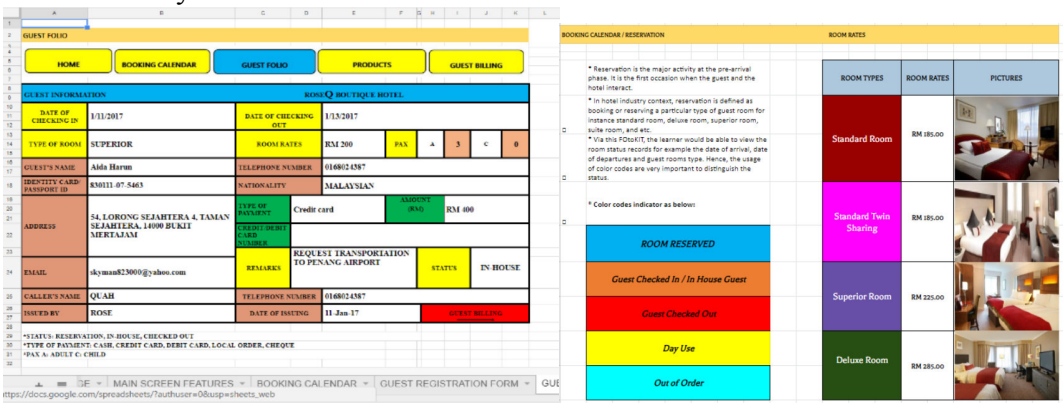
i. Insert room keycard for power
ii. Lamp switch
iii. Do not disturb (DND) & Makeup room switch
iv. Remote Control Air-conditioner
v. Television remote control and its location
vi. TV Channel
vii. Room service menu
viii. List of guestroom items
ix. Guestroom hotel phone
x. Coffee and tea making facility
xi. Minibar
xii. Safe box
xiii. Location of laundry bag
xiv Location of iron and ironing board
xiv. Amenities (shampoo dan soap)
xvi. Hairdryer
xvii. Environment card
xviii. Water heater controls
xix. Emergency exit plan

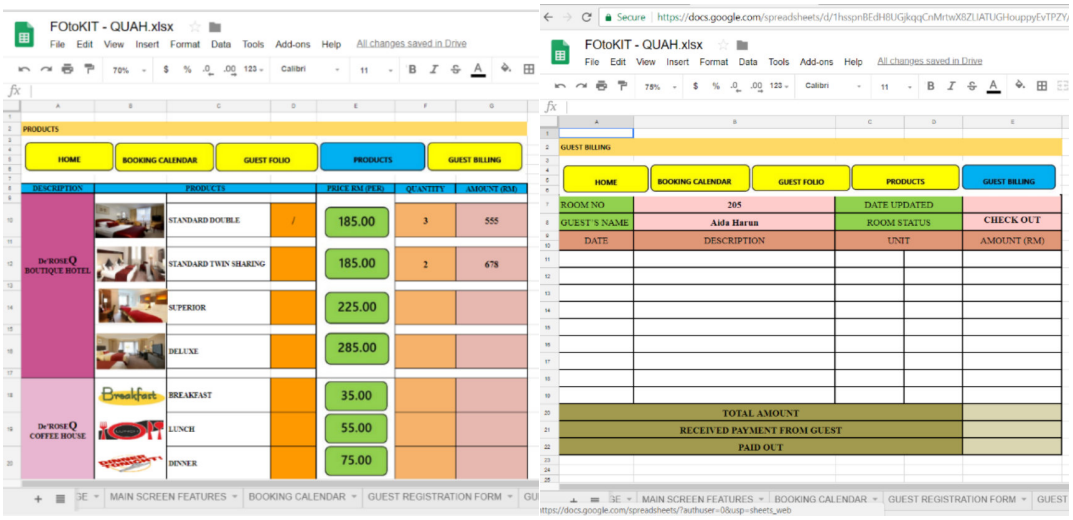
Figure 1
VIRTEST plus 3D layouts



ii) FOTOKIT (Figure 2) – Front Office Learning Toolkit as a simplified hotel system (Build with the manual and online system) that can be used by the receptionist and reservation clerk to make the reservation, check-in, check-out, and guest billing. Real activities are synchronized as the system is online. There are several functions in this simplified hotel system such as Booking Calendar, guest registration form, guest folio, product, and guest billing. Students as staff can use this tool to do practical for check-in, check-out, reservation, and guest billing procedures. All the rooms detail such as room price, room conditions (room size, queen- or king-sized bed), and room location such as city view or sea view) also provided in this manual to make students easy to learn and do the procedures. All the steps to fill in the forms such as registration form, reservation form, breakfast voucher, paid out the receipt, and security deposit receipt also provided in this manual.

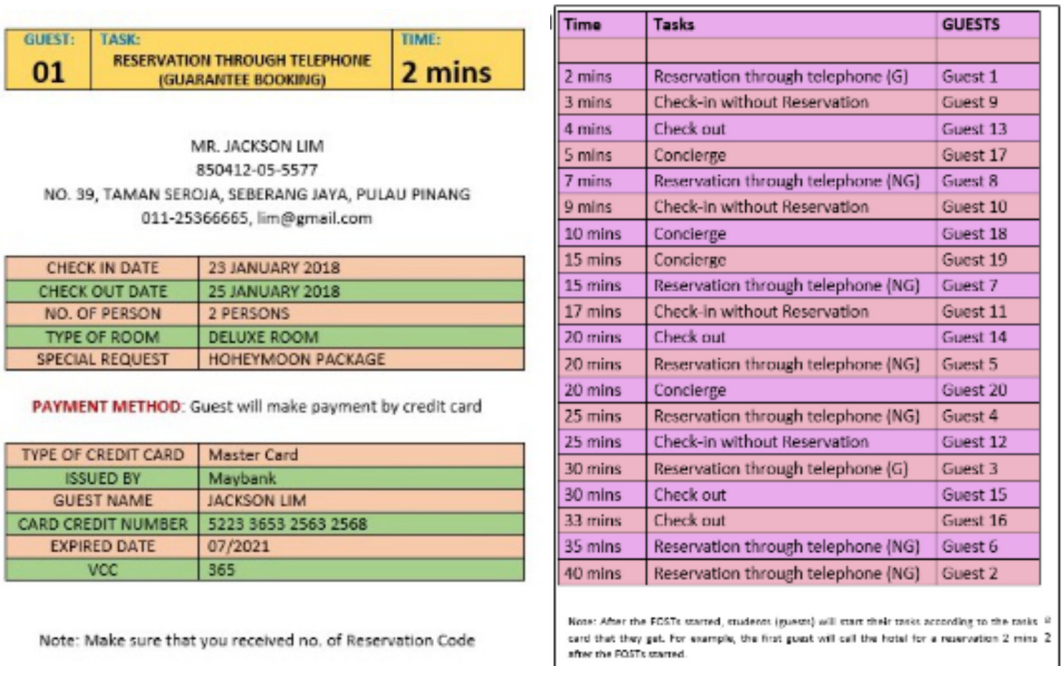
Figure 2
FOTOKIT layouts





iii) Tasks card/simulation training (Figure 3) – is a simulation activity intended to generate the actual working environment or situation or scenario for learners as staff to adapt the actual workplace environment and situation, such as reservation booking through telephone, check-in with or without reservation and check-out, concierge and bellmen. Students who participate in the situation and are supposed to apply their understanding to develop the best response to resolve the issues or problems presented in the simulation.

Figure 3
Tasks Card Layout



iv) Figure 4 shows the flow of the Front Office Tasks Simulator application process. Students as a guest will start with a Doorman (Doorman will greet and welcome the guest), then proceed to Bellmen (Bellmen will greet and escort the guest to Front Desk), next receptionist will continue the procedures by using FOTOKIT (the receptionist will greet and ask for guests enquires then he or she will try to fulfill the guests' needs) after that Bellmen will come over to offer the luggage assistant service

(Bellmen will take the luggage and bring the guests to their room by using VIRTEST plus 3D and explain the room and hotel facilities to guests. By doing this way, students will be able to see the flow of the hotel operation at the front desk because all the tasks are synchronized and this will involve all the students to participate in the class if compare to conventional teaching techniques.

Figure 4
The Real Workplace Situation of Front Office Tasks Simulator when It Was Implemented

Results

Research Question 1: What are the Students' Perceived Usefulness and Perceived Ease of use of Front Office Tasks Simulator?

Table 1 demonstrates the overall mean score of students' perceived usefulness of FOTS which was at a high level (Mean = 4.78, SD = .404). The first highest mean score fell on the item no. 1 (Can increase my understanding in a real workplace situation, Mean = 4.86, SD = .351) and item no. 3 (Can improve my learning experience, Mean = 4.86, SD = .351), followed by item no. 2 (Can increase my learning efficiency, Mean = 4.82, SD = .395). The lowest mean score was on items no. 4 (Can increase my focus on learning compare traditional learning, Mean = 4.68, SD = .568) and item no. 5 (Can sustain my learning performance, Mean = 4.68, SD = .568). It is interesting to see that all of the items were at high levels. In this study, item no. 1 (Can increase my understanding in real workplace situation) is well

scattered around the mean when compare to item no 4 and 5 as the SD for item no 1 is smaller.

Table 1
Mean and Standard Deviation of Students' Perceived Usefulness of FOTS

	Statement	Mean	S.D.	Level
1	Front Office Tasks Simulator increases my understanding of a real workplace situation.	4.86	.351	High
2	Front Office Tasks Simulator increases my learning efficiency.	4.82	.395	High
3	Front Office Tasks Simulator improve my learning experience.	4.86	.351	High
4	Front Office Tasks Simulator increases my focus on learning to compare traditional learning.	4.68	.568	High
5	Front Office Tasks Simulator can sustain my learning performance.	4.68	.568	High
	Total	4.78	.404	High

Table 2 shows the overall mean score of perceived ease of use which was at a high level (Mean = 4.69, SD = .526). When considering each item, it was found that five items could be arranged from most to least as follows: easy to use (Mean = 4.73, SD = .550), easy to complete course-related tasks (Mean = 4.73, SD = .456), is unambiguous and easy to understand (Mean = 4.68, SD = .568), provides helpful guidance in performing tasks (Mean = 4.68, SD = .568), and easy for me to remember how to perform tasks using the Front Office Tasks Simulator (Mean = 4.64, SD = .581). In this study, item no. 2 (easy to complete course-related tasks) is clustered closely around the mean when compared to SD item no 5 is higher and more spread out data values are around the mean.

Table 2
Mean and Standard Deviation of Students' Perceived Ease of Use FOTS

	Statement	Mean	S.D.	Level
1	Front Office Tasks Simulator is easy to use.	4.73	.550	High
2	Using Front Office Tasks Simulator to complete course-related tasks is easy.	4.73	.456	High
3	Interacting with Front Office Tasks Simulator is unambiguous and easy to understand.	4.68	.568	High
4	Front Office Tasks Simulator provides helpful guidance in performing tasks.	4.68	.568	High
5	It is easy for me to remember how to perform tasks using the Front Office Tasks Simulator.	4.64	.581	High
	Total	4.69	.526	High

Research Question 2: How Did the Students Respond to the Use of Front Office Tasks Simulator for Doing Activities?

Table 3 shows that the overall mean score of attitude toward using FOTS for doing activities was positive (Mean = 4.66, SD = .523). The first highest mean score fell on the item

no. 6 (I enjoy myself studying in this environment, Mean = 4.77, SD = .429), followed by item no. 5 (provide an attractive learning environment, Mean = 4.73, SD = .456), item no. 3 (Comfortable interacting with other students, Mean = 4.68, SD = .568), and item no. 2 (was fun to use, Mean = 4.64, SD = .658). The lowest mean score was on items no. 1 (Liked using the Front Office Tasks Simulator, Mean = 4.59, SD = .796) and item no. 4 (Improved quality of course compared to others, Mean = 4.55, SD = .671). All of the items were positive. In this study, item no. 6 (I enjoy myself studying in this environment) is well scattered when compared to item no 1 as the SD for item no 6 is smaller.

Table 3
Mean and Standard Deviation of Students' Attitude towards Using FOTS

	Statement	Mean	S.D.	Level
1	Liked using the Front Office Tasks Simulator.	4.59	.796	Positive
2	Front Office Tasks Simulator was fun to use.	4.64	.658	Positive
3	Comfortable interacting with other students.	4.68	.568	Positive
4	Improved quality of course compared to others.	4.55	.671	Positive
5	Front Office Tasks Simulators provide an attractive learning environment.	4.73	.456	Positive
6	I enjoy myself studying in this environment.	4.77	.429	Positive
	Total	4.66	.523	Positive

Research Question 3: Are There any Relationships between Students' Learning Performance, Perceived Ease of Use, Perceived Usefulness, and Attitude towards Using Front Office Tasks Simulator?

This research question was to examine the relationships among four factors. Apart from data from the questionnaire, the result from the test was calculated as an important factor. Student learning performance was measured by the practical score (reservation and reception) earned out of 110.

It was found that the mean score was 103.02 with S.D. of 4.61. Several analyses were, therefore, performed using Pearson Correlation Coefficients to find out whether any relationships existed. Findings reveal that student learning performance was correlated with perceived usefulness of FOTS (r=.150, p=.506) and perceived ease of use toward FOTS (r=.000, p=.999). That is, the more students perceived usefulness of FOTS, and the more they perceived ease of use FOTS, the higher learning performance they gained. However, there was no correlation between student learning performance and attitude toward doing activities using FOTS (r=.027, p=.904). Besides, it is noted that perceived ease of use had a positive high relationship with perceived usefulness of FOTS (r=.849, p=0.00) and attitude toward doing activities using FOTS (r=.827, p=0.00). The results also indicated that students' perceived usefulness of FOTS was correlated with their attitude toward doing the activities using FOTS (r=.849, p=0.00). The details were presented in Table 4.

Table 4
Intercorrelations among Variables

	Ease of use	Usefulness of FOTS	Attitude
Learning performance	.000	.150	-.027
Ease of use	-	.849**	.690**
Usefulness of FOTS	.849**	-	.827**
Attitude	.827**	.690**	-

** Correlation is significant at the 0.01 level (2-tailed)

Discussion

The first discussion is about the two factors comprising perceived ease of use and perceived usefulness which are at high levels. The findings indicate that students felt comfortable when FOTS was used as an innovative teaching tool in the course. One of the reasons may have been the use of FOTS, in which this tool can create an enjoyable learning environment and enhances student learning performance through simulation learning. As a result, they found simulation provided a worthwhile learning experience for students.

This is also consistent with a study by Ampountolas et al. (2018) who suggested that learning experience is obtained as students gain understanding in real-time. Regarding the high level of perceived usefulness, FOTS can be an effective learning method to increase students' satisfaction. The functions of FOTS itself were made learning more fun and meaningful. Apart from that, there were many other elements of learning context involved that they might consider useful such as virtual guest room/ hotel, simplified hotel system, and simulation tasks. Interestingly, perceived ease of use had a positive high relationship with the perceived usefulness of FOTS. Researchers might conclude that comfort with FOTS usage enabled students to see the importance of it. The more they were comfortable with FOTS, the more they perceived its usefulness. FOTS is not a difficult tool to use as there is a manual for it.

The second issue for discussion is about students having a positive attitude toward the use if FOST for doing the activities. This is probably because all the simulation tasks to be done in FOTS allowed them to notice the benefits of FOTS as an innovative teaching tool. It facilitated their learning in many aspects. They could learn and work together very well. Based on the findings, the attitude had a positive relationship with perceived ease of use. This may be concluded that a positive attitude comes from comfort with FOTS. This finding is consistent with Bugembe (2010) who proposed that perceived ease of use not only predicts attitude towards the system but is also an antecedent of perceived usefulness that is to say the less effort a system is to use, the more using it can increase job performance; and Matute-Vallejo and Melero-Polo (2019) who revealed that perceived ease of use and usefulness were positively influenced students' attitudes towards online business simulation game. Simulation integrated into innovative and interactive learning scenarios stimulates the learning. these experiential learning activities able to enhance their social skills, engage their critical thinking, acquire needed hands-on experience, and improve their self-confidence.

The next important issue is about learning performance. After doing the activities for 6 weeks using FOTS, it was worthwhile to assess their ability. It is strongly believed that the simulation tasks students did in FOTS enabled them to learn more about the procedure of reservation, check-in, check-out, and guest billing. The finding showed the average mean score of 103.02 from the full score of 110, which rather when compared to other classes taught in the traditional way only.

This is probably because doing a simulation task was not boring since it provided students with a platform to see the real workplace situation and gained experiential learning. In this study, learning performance was found to have a positive relationship with perceived

usefulness and perceived ease of use. This showed that the more students perceived usefulness and perceived ease of use FOTS, the higher their learning performance. How, in contrast to this, Nugroho, Dewanti, and Novitasari' (2018) findings stated that both perceived usefulness and perceived ease of use do not influence students' performance in E-learning. Several other factors are affecting perceived usefulness and perceived ease of use in influencing performance.

Limitation and Recommendation

The results of the current study should be interpreted with some limitations. First, the participants were restricted to community college students in Sungai Petani, Kedah, Malaysia; therefore, the results may not generalize to students in other institutions or other states. Second, in this study Front, Office Tasks Simulator (FOTS) was selected to facilitate experiential learning. Since students' perception of other simulation tool were not investigated, it is difficult to conclude that FOTS is the most effective learning tool. Therefore, future research should include other simulation tools in the course to find out which tool students perceive the most effective in enhancing their learning performance.

Conclusion

The results from this study will be useful for any teachers who want to integrate FOTS in future courses for experiential learning development. There are two issues to be addressed. Firstly, even though FOTS can be used to facilitate students' learning in Front Office to increase students' understanding of the flow of the real workplace situation, many factors to be considered when creating any simulation tasks. In this study, it is found that student learning performance was positively correlated with perceived usefulness and perceived ease of use FOTS. Students' perceived usefulness of FOTS was also correlated with perceived ease of use FOTS. FOTS is suitable for the course as the features of FOTS are user friendly, so students tend to have a positive attitude toward learning through FOTS. In this regard, students can increase other skills such as communication skills, interpersonal skills, and problem-solving skills. FOTS can be a platform that creates real workplace situations for students to gain real experience and ability to see the flow of how the real workplace situation in Front Office Department.

References

Ahamaad, S. (2013). *Importance of Training in Hotel industry - A case study of Hilton Hotel, Cyprus* (Master's thesis, Sodertorn University). Retrieved from http://sh.diva-portal.org/smash/get/diva2:651957/FULLTEXT01.pdf

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* Englewood Cliffs, NJ: Prentice-Hall.

Ampountolas, A., Shaw, G., & James, S. (2018). Active learning to improve self-confidence and decision-making skills through the use of hotel simulation. *Journal of Hospitality & Tourism Education, 31*(3), 125–138. DOI:10.1080/10963758.2018.1487786

Bugembe, J. (2010). *Perceived usefulness, perceived ease of use, attitude and actual usage of a new financial management system: A case study of Uganda National examinations board* (Master's thesis, Makerere University). Retrieved from http://www.dspace.mak.ac.ug/bitstream/handle/10570/2806/bugembe-cobams-masters.pdf?sequence=1

Chaparro-Peláez, J., Iglesias-Pradas, S., Pascual-Miguel, F. J., & Hernández-García, A. (2013). Factors affecting perceived learning of engineering students in problem-based learning supported by business simulation. *Interactive Learning Environments, 21*(3), 244–262. DOI:10.1080/10494820.2011.554181

Che Ahmad, C. N., Mohamed Noh, N., Adnan, M., Putih, M., & Ibrahim, M. H. (2013). Pengaruh persekitaran fizikal bilik darjah terhadap tahap keselesaan pengajaran dan pembelajaran. *Jurnal Pendidikan Bitara UPSI, 6*. Retrieved from https://www.researchgate.net/publication/294886469_PENGARUH_PERSEKITARAN_FIZIKAL_BILIK_DARJAH_TERHADAP_TAHAP_KESELESAAN_PENGAJARAN_DAN_PEMBELAJARAN

Chijioke, O. P., & Naade, N. B. (2018). Towards improving teachers' competences in the use of instructional materials in senior secondary schools' physics in Port Harcourt Metropolis, Rivers State. *International Journal of Innovative Education Research, 6*(1), 77-85. Retrieved from https://www.researchgate.net/publication/323857834_Towards_Improving_Teachers'_Competences_in_the_Use_of_Instructional_Materials_in_Senior_Secondary_Schools'_Physics_in_Port_Harcourt_Metropolis_Rivers_State

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*, 319-340. DOI:10.2307/249008

Douglas, A. C., & Miller, B. (2006, January). *Experiential learning: Empowering students in an interactive online hospitality simulation environment.* Paper presented at the 11th Annual Hospitality and Tourism Graduate Student Education and Research Conference, Seattle, WA. Retrieved from http://udel.edu/~blm/pdfs/Scholarship/douglas_grad06.pdf

Douglas, A. C., Miller, B., Kwansa, F., & Cummings, P. (2008). Students' perceptions of the usefulness of a virtual simulation in post-secondary hospitality education. *Journal of Teaching in Travel & Tourism, 7*(3), 1–19. DOI:10.1080/15313220801909270

Frash, R., Jr., Antun, J., Kline, S., & Almanza, B. (2010). Like it! Learn it! Use it? A field study of hotel training. *Cornell Hospitality Quarterly, 51*(3), 398–414. DOI:10.1177/1938965510364931

Geerts, W. (2016). *Casting an eye on 2016: Expectations for the lodging industry in the coming year.* Retrieved from http://blog.euromonitor.com/2016/01/casting-an-eye-on-2016-expectations-for-the-lodging-industry-in-the-coming-year.html

Hay, A., Hodgkinson, M., Peltier, J., & Drago, W. (2004). Interaction and virtual learning. *Strategic Change, 13*(4), 193–204. doi:10.1002/jsc.679

Högnäs, S. (2015). *The importance of the first impression in hotel customer service* (Degree's thesis, Vaasa University of Applied Sciences). Retrieved from https://www.theseus.fi/bitstream/handle/10024/96496/Sandra_Hognas.pdf?sequence=1&isAllowed=y

Mat Saad, A., Nik Yusoff, N. M. R., & Mohammad Yassin, R. (2011). Penilaian Kemudahan Pembelajaran, Peruntukan Kewangan dan Kursus dalam Perkhidmatan bagi Kursus Pendidikan Islam di Politeknik Malaysia. *Journal of Islamic and Arabic Education, 3*(1), 123–134. Retrieved from http://www.ukm.edu.my/jiae/pdf/30.pdf

Matute-Vallejo and Melero-Polo (2019). Understanding online business simulation games: the role of flow experience, perceived enjoyment, and personal innovativeness. *Australasian Journal of Educational Technology, 35*(3), 71–85. DOI:10.14742/ajet.3862

Ministry of Education in Malaysia. (2016). *Malaysia blueprint 2015-2025 (Higher Education)*. Retrieved from http://mohe.gov.my/muat-turun/awam/penerbitan/pppm-2015-2025-pt/5-malaysia-education-blueprint-2015-2025-higher-education

Ministry of Education Malaysia. (2018). *Pelan strategik politeknik dan kolej komuniti (2018-2025)*. Retrieved from http://www.mypolycc.edu.my/index.php/muat-turun/penerbitan/send/2-penerbitan/5-psjppkk

Ng, S. (2018, May 25). Hotels mushrooming in Malaysia. *EdgeProp*. Retrieved from https://www.edgeprop.my/content/1350899/hotels-mushrooming-malaysia

NST Business. (2018, September 20). High demand for hospitality and travel professionals in Malaysia. *New Strait Times.* Retrieved from https://www.nst.com.my/business/2018/09/413264/high-demand-hospitality-and-travel-professionals-malaysia

Nugroho, M. A., Dewanti, P. W., & Novitasari, B. T. (2018). *The impact of perceived usefulness and perceived ease of use on student's performance in mandatory e-learning use.* Paper presented at the 2018 International Conference on Applied Information Technology and Innovation (ICAITI). DOI:10.1109/icaiti.2018.8686742

Pratt, M. A., & Hahn, S. (2015). Effects of simulation on student satisfaction with a capstone course. *Journal of Hospitality & Tourism Education, 27*(1), 39–46. DOI:10.1080/10963758.2015.998911

Sanders, T. (2011). *Hotel front office training: Turning expense into investment* (Master's thesis, University of Nevada). Retrieved from http://digitalscholarship.unlv.edu/thesesdissertations/1103

Sayin, O. G. K., & Karaman, A. (2019). Communication and Productivity with Guests at Front Office; A Qualitative Study on Hotels. *Journal of International Management and Social Researches, 6*(11), 186–196. Retrieved from http://www.uysad.com/FileUpload/as907385/File/communication_and_productivity_with_guests_at_front_office_k_sayin_a_karaman_revize.pdf

Widiyatmoko, A., & Nurmasitah, S. (2013). Designing simple technology as a science teaching aids from used materials. *Journal of Environmentally Friendly Processes, 1*(4), 26–33. DOI:10.14266/jefp14-1