

Assessment of Amadeus System Taken by Tourism Students of the College of International Tourism and Hospitality Management

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Abstract

This study aimed to determine the performance of the students on the Amadeus examination; to compare the performance of the students when grouped according to year level; to identify the problems encountered in using the system; and to prepare a plan of action to enhance/ improve the Amadeus System. The researchers used descriptive design. The results showed that passing was only half of the population while good grade rank the highest. As to the comparison on the performance when grouped according to year level, the performance of the students varies in Tour 4 since the performance of the students vary in their grade accomplished in their subject. There is a small difference between the performances of each year level who take the Amadeus examination. The respondents generally agreed that the problems encountered in using the system was students short allotted time in studying Amadeus system.

INTRODUCTION

The CRS or Computer Reservation System came into being in the 1950s as internal systems within individual companies, which as technology developed meant that they increasingly became available to travel agencies and thus to other companies on the basis of bilateral agreements. Their history is an interesting example of how a commercial operating tool can become an independent activity in its own right. They first developed by way of the extension of their functions: from reservation systems to yield management systems, in addition to containing information on passengers and seat coverage. They thus became an essential tool for competition, in that they enable companies to improve their profitability in a deregulated market competing on prices. (Sudhir,2007)

The progressive departure of airline companies from the shareholders of the CRSs, the increase in their profitability and the requirements of competition are encouraging merger processes that indicate a shift towards an oligopolistic structure for the sector worldwide, with dominant participants at a local level. An airline's computerized reservation system (CRS) is a typical computer assisted sale system. There are three categories of personnel in a CRS business environment: vendors who provide the services, agents who act as representatives for the vendors, and customers/shoppers. A computerized reservation system encompasses three tiers of functional components; reservation/information services, communication networks, and agent/customer premise applications. Information technology is one of the most important keys to the success of the CRS business. They store current information about all available service providers and have the necessary infrastructure to transfer such data. Therefore, CRS's can be characterized as supporting distribution process since the current systems do in no way support negotiation between the producer and the consumer (Schulz, 2008).

The internet has dramatically changed the way people communicate research information and buy goods and services. Travel products in particular have proven to be suitable for sale online. Furthermore, from a consumer perspective, purchasing online in many instances grows faster (Rutherford, et.al., 2007). Internet mediated adoption can excel only if the consumer knows how to maneuver through various reservation systems and has enough confidence in systems security, authentication procedure, and privacy protection to file credited information online. However, no guarantee exists that an online reservation system provides the absolutely best fares and discloses all available options. The application of modern information has emerged broadly including online reservation systems that are why the electronic marketing had boost very fast.

ICTs or the International Communication Technologies increasingly transform distribution to global value system, where access to information and ubiquity is achieved, while interactivity between principals and consumers provides major opportunities. Internet propels the re-engineering of the entire process of producing and delivering tourism products, as well as boosting interactivity between partners that can design specialized products and promotion in order to maximize the value-added provided to individual consumers. Ultimately, ICT tools reinvent the packaging of tourism to a much more individual focused activity, offering great opportunities for principals, and intermediaries and enhancing the total quality of the final product (Buhalis, 2006).

Travel technology is a term used to describe application of information and communications technology to travel, tourism and the hospitality industry. Travel technology may also be referred to as e-travel or e-tourism. Travel technology was originally associated with the computer reservation system systems (CRS) of the airline industry. It includes dynamic packaging which provides useful new options for consumers who can choose exactly what they need and within their budgets. This can also refer to technology intended for use by travelers, such as light-weight laptop computers with universal power supplies or satellite internet connections. Tourism technology, initially based on the concept of cultural technology, is a more comprehensive catchall term covering tangible and intangible knowledge and know-how used to add to the value of tourism products on a micro level and the management of value chains of the travel and tourism industry on a macro level. New tourism products are also the end result of tourism technology combining with other industries (Sudhir 2007).

Whilst the businesses in this sector can be broadly split into the independent travel agencies and the multiples who are owned and operated by tour operators and other tourism concerns, two basic principles characterize success in each: good quality customer service and management. In terms of management, controlling costs, ensuring highly motivated staffs are employed and building upon a customer base through word of mouth are all critical. The independent agencies, which are manager-owned and typically employ fewer than five staff, contrast with the large chain agencies, located in prominent high street or shopping mall locations, which have high passer-by traffic. (Page, 2007).

Code sharing is a marketing arrangement between two airlines whereby one airline's designator code is shown on flights operated by its partner airline. Two letter designation codes are provided by the International Civil Aviation Organization (ICAO) to identify the airlines on passenger tickets, computer reservation systems (CRS), airline guides and airport information boards. Under a code sharing agreement, the connecting flights being operated by two separate airlines may be listed as bring a 'single carrier' service, which gives substantial marketing advantages.(Duvali, 2007)

The effects of code sharing have been scrutinized by Bruckner, who found that passengers for interhubs are somewhat financially disadvantaged when a code-share alliance is established for the purpose of serving two

or more major hubs. However, Brueckner also found that there was an overall gain in consumer and total surplus following the formation of a code-share alliance. What it suggests is when selecting a potential code-share partner, an airline would think carefully about the potential market gain from servicing major hubs using such an arrangement, and thus sharing the revenues in an interline market, versus the total costs for operating in the network alone.(Duvali,2007)

Amadeus System

Amadeus provides Customer Service Management (CMS) for airlines, sales, reservations, and e-ticketing systems, and corporate self-booking tools for major world leading airlines and travel suppliers. Amadeus also offers services for trains, cars, cruises, and hotel reservations. There are many benefits for the airlines which use Amadeus. The system of Amadeus is quite fast and efficient. Amadeus also allows the airlines to change their existing bookings or request new time limits. Amadeus is able to offer free technical support and this can be matched by the partner institution offering a scholarship plan for students with no resources. Indeed, education projects are then seamlessly integrated into alliances with either local authorities or educational institutions. Lastly, Amadeus also will send automatic recognition or acknowledgement to their partner airlines once all the updates are finished.(Dublois, 2013)

Travel agents typically deal with a diverse range of tasks including making reservations, planning itineraries (including complex round-the-world), calculating fares and charges, producing tickets, advising clients on destinations, resorts, airline companies and a wide range of travel products, communicating with clients verbally and in writing, maintaining accurate records on reservations, ensuring racks are stocked well or supplies are kept in-house and act as intermediaries where customer complaints occur. (Page, 2007)

Airlines have recognized the opportunity to use mobile technology to improve passenger efficiency and as a communication tool during times of service disruption. Most airlines have done the basics which include mobile check-in, 2D bar code boarding passes and itinerary management. Many airlines have mobile booking capability today and most will be adding it over the next 12 months. In developing markets such as Africa and India where the primary connection to the Internet is the mobile device, the entire travel booking process may take place on the mobile phone. Today, airlines across the globe also use SMS as a means to provide information to travelers particularly in times of service disruptions. These may simply be messages which notify the passenger that the flight is delayed or those which offer alternatives when a flight is cancelled. This research uncovered that these standard functions are no longer a differentiating factor for the airline, but are a necessity in order to remain competitive (Sattel,2011).

In particular, an electronic ticket or e-ticket is used to represent the purchase of a seat on a passenger airline, usually through a website or by telephone. This form of ticket is rapidly replacing the old paper tickets. Where paper tickets are available, airlines frequently charge extra for issuing them (Sudhir, 2007). Amadeus is seeking to increase ICTs market share around the world, especially where ICT's shareholders have a strong commercial interest. The developments on the internet are kept away from publicity as they imply a certain degree of disintermediation and can create confrontation with travel agencies. As the GDSs are looking into emerging developments and are identifying new opportunities. Constant innovation and change by using the leading technology for the benefits of stakeholders are the requirements to ensure prosperity for the future. (Cooper, et. Al.2005)

Problems and Issues In Amadeus System

Schools and universities in the present generation are requiring their tourism students to take the online courses for Global Distribution system, mostly Amadeus, Galileo and Sabre and other online reservation systems. This system entails to lift the higher learning of each and every student regarding technological aspects of reservation. For the future travel agents, universities seek to bestow the assurance of knowledge to their students. Giving the pledge to students that they had all the learning in their hand before entering the real world is a great accomplishment for them.

Lyceum of the Philippines University in Batangas is a tertiary educational institution that envisions itself to be the center for academic excellence in the country and in the Asia Pacific Region.

BS Tourism aims to equip students with the ability to start their own entrepreneurial pursuit in the field of tourism and hospitality as well as work as excellent employees in these industries. Future careers are tour guides, tour operators, travel agents, front desk clerks, flight attendants, reservation officers, teachers, restaurant crew, entrepreneurs, foreign consultants, etc. In relation to hospitality computer application, it offers computer courses such as Basic Computer Introduction to Information Technology, Computer Application in Hospitality with Lab, and Business Computer and Management Information System.

Nowadays, Bachelor of Science in Tourism management is becoming in demand due to tourism growth especially in the Philippines and since technological advancement has always been a part of every industry.

In order to prepare the Tourism students of the Lyceum of the Philippines University in having a career in hotels, travel agencies, airlines, and other related fields, the researchers urge themselves to come up with a research which focuses on Information Technology. Equipping the students with the knowledge and skills in IT is a must for them to be competitive in their chosen career. Furthermore, findings of the study would be an excellent input in the enhancement of the IT courses of the Tourism curriculum.

Hence, the present generations are in more technological and practical living, travelers are more reliable towards their travel mostly in assuring their tickets and its cost.

CRS is a big help to enhance the current system from automated to online in the university. This may also be beneficial to the students of CITHM for their study in the field of hotel reservation and management (de Leon, et al. 2010).

IT applications in Tourism Curriculum courses are being utilized in different areas like travel agencies, airlines and hotels. IT courses are highly utilized in travel agencies for booking and reservation followed by other clerical works, confirmation and cancellation of flights. Thus, all IT courses are often used in the airlines and hotel industries (Abante, 2009).

Teaching methods and activities used by instructors in the field of hospitality and tourism education and investigated relationships between educator variables such as gender, years of teaching experience, type of institution, and teaching methods and activities are factors in the effectiveness of their strategies towards teaching (Deale, 2010).

Considerable discrepancies between the respective views of industry professionals and tourism education providers in Australia on the relative value of tertiary degrees for tourism and on the relative merits of various subjects taught at university. This research indicates a gap between education provision and the needs of industry. An industry-education cooperation curriculum framework needs to be well established to ensure a closer relationship between academia and industry in order to address this perceived gap. At this research was based on THE-ICE member universities, this organization would appear to be the ideal vehicle through which these consultative and collaborative discussions could be initiated (Wang, et. Al. 2012).

Legal, technological and economical changes have put pressure on Amadeus to adapt its strategy and product offerings to the changed business environment. In order to maintain a leading position as provider of ICT solutions to the travel industry. Based on the open-source technology and graphical user interfaces, the new systems enable value-based pricing and other features that match the challenges and needs of airlines. For example, self-service technology could become a dominant channel for transacting business in many markets. This is just one example of new technologies that will influence the development of ICT solutions to the travel industry. Amadeus' success depends on their ability to recognize new developments and to transform them into products that meet their customers' needs (Egger & Buhalis, 2008).

Hotel and tourism industry has become the main source of income in every locality. Therefore its progress and development contributed much to the nation's income and profitability. And technology innovation is such an advantage. He discussed the different major application and the software selection techniques to help improve the performance of the business operation, so it is now easy to understand what kind of strategy the company will use in order to attain financial success. If a small hotel and a small tourism operator will be able to adapt the system, they will surely boost themselves into success (Geron, 2005)

Amadeus is seeking to increase ICTs market share around the world, especially where ICT's shareholders have a strong commercial interest. The developments on the internet are kept away from publicity as they imply a certain degree of disintermediation and can create confrontation with travel agencies. As the GDSs are looking into emerging developments and are identifying new opportunities. Constant innovation and change by using the leading technology for the benefits of stakeholders are the requirements to ensure prosperity for the future (Cooper, et. al.2005).

Amadeus, founded in 1987, has the most extensive distribution network with most of the international booking in the world. Amadeus was formed by an alliance between Air France, Lufthansa, Iberian Airlines and Scandinavian Airlines System (SAS) specializing in IT solution to manage airline, train, cruise ship, rental car, and hotel and travel bookings. Amadeus offers travel agents the largest community of carriers and markets with electronic ticketing around the world (Andrews, 2007). The system evoked by professionals and instructors to the students especially to the tourism students to expand their knowledge in reservation system. Amadeus is now a trend in many schools as part of their curriculum to prepare their learners in the world of technology and reservation.

Recently, the researchers have come to believe that Amadeus is a very complex learning tool for tourism students who aim to work as reservation agents in different hospitality and airline industries. Motivated by the "Taking the lead", the administration aims to provide the quality education and develop the potential leaders of the future, they definitely implement the best for their students. The researcher had design this study to assess how Amadeus System really affects the study of tourism students of CITHM. Motivated to be globally competitive, the students must possess the learning that will ready themselves to their careers. Since Amadeus is used globally, is it really compiled in the potential skills of the students? The researcher's aims to solve the problems

encountered of the students before and after taking the examination and does it still remembered until the present time. The institution is preparing fresh graduates to become professionally competent, morally upright and socially responsible contributors to the national development.

The researchers had design this study to further enhance the stratagem of the professors in teaching Amadeus System. Having the advocacy to be competent reservation agent in the future this will set as the medium of every student as well as educators to analyze how Amadeus succeed in their learning.

OBJECTIVES OF THE STUDY

This study aimed to assess the Amadeus system used by the College of International and Hospitality Management. More specifically it sought to determine the performance of the students on the Amadeus examination, To compare the performance of the students when grouped according to year level, to identify the problems encountered in using the system, and to prepare a plan of action to enhance/improve the Amadeus system.

METHODS

Research design

The researchers used descriptive method in order to gather information and data. This determines the level of effectiveness and assesses the problem and issues encountered in Amadeus short course offered to students. This design described and answered the current situation of the study that can be further enhanced for the career of the students in the near future.

Participants

The respondents of the study are the 2nd year to 4th year BSITTM students who took Tour 4 (Travel and Tour Operation) with embedded Amadeus System. Of the 145 tourism students, 54 came from the 4th year level, 44 from the 3rd year level, and 47 from the 2nd year level.

Research Instrument

The study used a self made questionnaire as its data gathering main instrument to.

The questionnaire is divided into four parts. Part one is about the profile of the respondents regarding their age, gender and year level. The second is about the problems and issues encountered by students before and after taking the exam. In addition, the third part focuses on the certificates received after the Amadeus examination and students' grades in their course Tour 4. Lastly, the fourth part is where students may write their suggestion regarding the further improvement of the Amadeus system. Only 98% of the questionnaires were retrieved by the researchers during the data gathering. The researchers likewise generated the students' Amadeus examination results from the CITHM department for the purpose of comparing their scores on year level basis.

Data Gathering Procedure

The questionnaire was constructed based on the appropriate facts of the information materials. After devising the questionnaire, it was submitted to the adviser for approval. The questionnaire was then personally distributed to the respondents.

Previous results of Amadeus examination from the past years were also included in the study to compare its effectiveness on the tourism students.

Data Analysis

The data gathered are tallied, encoded and interpreted using frequency distribution, weighted mean and Pearson-r. All data were treated using PSAW version 18 at 0.05alpha level in order to have an in-depth analysis.

RESULTS AND DISCUSSION

Table 1. Performance of the Students on Amadeus

Indicators	F	P
Certificate Received		
Training Diploma	72	50.30
Certificate of Participation	71	49.70
Tour 4(Travel and Tour Operation) grades		
1.25	7	4.90
1.50	17	11.90
1.75	23	16.10
2.00	40	28.00
2.25	30	21.00
2.50	18	12.60
2.75	8	5.60

Table 1 is divided into two parts, the certificate received and their grade in Tour 4 (Travel and Tour Operation). Presents based on the table, 72 students or 50.30 percent received training diplomas while 71 students or 49.70 percent got certificates of participation. Training diploma stands for passing grade while certificate of participation stands for a failing grade. Thus, half of the students' population got passing grades while the other half failed half of it got failed. The results also show that passing rate is low.

The second part shows that the good grade ranks highest while the excellent grade ranks lowest. 40 students got the good grade with 28 percent while only 7 students got excellent grade with 4.90 percent. The highest grade that the students received is excellent composed of 7 or 4.90 percent while the lowest grade that the students got is fair with frequency of 8 or 5.60 percent. It appears that many students got good grades, only few got the higher grades and nobody failed the subject.

Grading is a tool of approval in adolescence and it makes students' motivation higher to study hard and do their best for gaining environmental approval from others. Besides this, grade levels of adolescents are indicators and criteria for evaluating their personality, because their performance through the classes is accounted for their individuality in the society. Moreover, academic achievement among adolescents is a tool for stating the

losers and winners. This is a kind of production which is made in schools. If all these functions are put together, a student who wants to handle all these processes must be competitive with his/her peers. In this way, adolescents can survive academically. The student must be the best in this competition for pursuing her/his life (Bulut, 2012).

Table 2. Comparison on the Performance When Grouped According to Year Level

Year Level	Grades	F Value	p-value	Decision	Interpretation
1st Year	2.25	2.683	.049	Accepted	Not Significant
2nd Year	2.25				
3rd Year	2.25				

The table reveals that, the computed F-value of 2.683 is greater than the critical value and the resulted p-value of 0.049 is less than 0.05 level of significance; thus, the null hypothesis is rejected. This means that the performance of the students varies in Tour 4 since the performance of the students vary in their grade accomplished in their subject. There is a small difference between the performances of each year level who take the Amadeus examination. Training in using practical activities might include developing students' understanding of theories of learning (Dillon, 2008).

Table 3. Problems Encountered in using the System

Problems Encountered	WM	VI	Rank
1. There are no hands on or laboratory class provided to students in using Amadeus system.	2.87	Agree	6.5
2. Only manuals or written lectures are provided by the instructors during class.	3.01	Agree	3
3. Students can't easily understand and absorb what is discussed without the practical or using the system.	2.99	Agree	4
4. The lecture is so fast that the students can't understand.	2.85	Agree	8
5. The instructor/mentor is not approachable enough to help students with their difficulties in class.	2.58	Agree	10
6. Students were only given half day hands on using the system and after that is the examination.	2.96	Agree	5
7. The process of using Amadeus system is not practiced before the students graduated.	2.77	Agree	9
8. With regard to the user name given to students, they are not monitored if the students really do it and really understand what have in the lectures.	2.87	Agree	6.5
9. The knowledge of the students from lectures without practical practice is not enough to take the Amadeus examination.	3.05	Agree	2
10. Students have only short allotted time in studying Amadeus System.	3.06	Agree	1
Composite Mean	2.90	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Often; Agree – 2.49 = Disagree; 1.00 – 1.49 = Strongly Disagree

Table 3 shows the problems encountered in using the system. The respondents generally agreed on these

problems as evidenced by a composite mean of 2.90. The students short allotted time in studying Amadeus System ranked first with a weighted mean score of 3.06. The time allotted in studying Amadeus is diminutive for the students to fully absorb the learning. It is followed by the insufficiency of the students' knowledge from lectures if they will not be given practical training or exercises before taking the Amadeus examination (3.05). Providing manual or written lectures are only provided during class (3.01) follows. Manuals are provided but they are not enough to establish the learning that the tourism students need. Practical examination is necessary for students to practice their acquired learning. Therefore, it should not be based on manuals only. Designing faculty development programs that use pre and post measures to account for growth in and support for implementing student centred teaching strategies in the college of tourism students will help improve student learning (Finn, 2010). Matching learning style with instructional mode apparently facilitates positive interpersonal relations, and while it would seem to point the way for increase learning, the empirical data that support the idea are rather scarce (Corbet and Smith, 2007).

On the other hand, the instructor's mentor's is being an approachable especially for students who need help in dealing with their difficulties in class got the lowest mean value. One month is the longest time allotted for studying Amadeus system before taking the examination. Thus the lecture is considerably fast and some students usually do not understand the lecture easily. Comprehensive curriculum hence allows students to master every skill and expertise required. And all the knowledge gained from the program is complemented with behaviour management techniques. (igiaindia.in)

Tourism students should be knowledgeable and competitive enough mostly in reservation systems. Reservation practices are taken in their secondary year in college. Before graduating and entering the career field, the senior students didn't have the assurance in reservation systems. The study of tourism and hospitality also provides opportunities for students to develop their general intellectual capacities for life-long learning (334.edb.hkedcity.net).

Several students didn't get their profound knowledge because of the conceited approach of some professors. Emphasis is put on using the student group as a resource of learning, giving a focused practitioner that provide live case materials and offering students career advices for improvement. (Lincoln.ac.uk)

Since, Amadeus covers a more extensive range of learning outcomes through employing wider range of assessment practices that are not necessarily possible in written examinations, practical work is central to teaching and learning reservation systems and that good quality practical work helps develop students' understanding in computer reservation systems (Dillon, 2008).

Table 4. Action Plan

Objective	Programs/ Activities	Person Responsible
1. To lengthen allotted time in studying Amadeus.	Offering Amadeus System as a separate course to tourism students in one whole semester.	LPU/ CITHM
2. To assure the knowledge of students before taking the Amadeus examination.	Provision of hands- on or practical examination during class using LPU facilities.	LPU/ CITHM
3. To effectively teach the Amadeus system to students.	Giving mock examination in school before the examination in Makati to assure that they will pass.	LPU/ CITHM
4. To easily understand and absorb what is discussed during Amadeus class.		
5. To extend the hands- on exploration of Amadeus System in Makati	Offer a whole day hands- on training before taking the examination on the other day.	

CONCLUSION

One half of the students' population who took the Amadeus examination passed. The performance of the groups of respondents do not differ. Limited time allotment for hands-on was a common problem. A proposed plan of action was formulated to address the problems encountered

RECOMMENDATION

The school may provide a hands-on practical examination using LPU facilities before taking the Amadeus examination. The College of International Tourism and Hospitality Management (CITHM) may provide a refresher Amadeus program for the senior students. The Amadeus System may be offered as a separate course to make the student more knowledgeable about Computer Reservation System. For future researchers, this could be a source or reference for their future study about the course Amadeus.

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