

Effects of Computer Reservation System in the Operations of Travel Agencies

Asia Pacific Journal of
Multidisciplinary Research
Vol. 4 No.4, 23-28
November 2016
P-ISSN 2350-7756
E-ISSN 2350-8442
www.apjmr.com

Sevillia S. Felicen¹, Alex P. Ylagan²

College of International Tourism and Hospitality Management,
Lyceum of the Philippines University, Batangas City, Philippines
sevillafelicen@yahoo.com¹, ylagan_alex@yahoo.com.ph²

Date Received: June 7, 2016; Date Revised: July 25, 2016

Abstract - In travel industry, the main tool used is the computerized booking systems and now known as Global Distribution Systems or GDS. This paper aimed to determine the effect of using Computer Reservation System among Travel Agencies in terms of technical, human and financial aspect. This will help the Internship office to include the identified travel agencies in their linkages where the students will be deployed for internship. The result of this study will also be helpful and can be utilized in the course travel and tour operations with computer reservation system. The descriptive method of research was used with managers and users/staff of 20 travel agencies as participants of the study. Questionnaire was used as main data gathering instrument utilizing percentage, frequency and weighted mean as statistical tool. Abacus System is the computer reservation system used by all travel agencies in Batangas. All travel agencies offered services such as domestic and international hotel reservation, domestic and international ticketing and package tour. The CRS can connect guest to all forms of travel; it has installed built in system security features that can improve agency's efficiency and productivity.

Keywords: Computer Reservation System, Travel Agency

INTRODUCTION

In travel industry, the main tool used the computerized booking systems known as Global Distribution Systems or GDS. In reservations for travel product, the use of GDS effectively is the key skill of Travel Industry employees. In Australia and New Zealand, Amadeus and Sabre reservation systems are used daily by travel agency, airline, and tour company employees. Being competent in these skills will help graduates land his first job in travel. [1].

GDS or CRS system is for purely (information transfer) logistical functions. They store current information about all available service providers and have the necessary infrastructure to transfer such data. This means that the system also performs additional tasks related to service distribution, which in the area of goods is typically carried out by freight forwarders. They support the transport of goods by eliminating the physical distance between the producer and the sales mediator or the consumer respectively. CRS's are a combination of infrastructure measures offered to interested providers in the tourist industry [2].

Over time, technology has improved. Transforming tour has been overwhelming due to the influence of technology. Virtual world has never rest because the 24 x 7 internet connection. Today, buying and selling on the internet has reached ubiquitous proportions. This concept note explains how the traditional travel services model changed with the advent of Internet, resulting in disintermediation, and forced traditional service providers, Global Distribution Systems (GDS) and others to migrate to the new model. Consumers are increasingly looking at a convenient and comfortable way to purchase services at no cost/burden. Researchers and experts opine that although the scope of technology is immense, it has its own limitations. It is also concluded with suggestions that the field of travel services research is vast and an open area in India where industry and academic researchers can collaborate and benefit [3].

Nowadays, a travel agency needs at least an easily manageable website because tourists preferred to transact through websites that provide them with many different travel offers. A management as

effective as possible of an agency is made by centralizing the data available in the databases and by informing clients through the agency website. Moreover, in order to increase the efficiency of the agency, to decrease the response time and to increase clients' satisfaction, the travel agency should also use business intelligence solutions [4].

Global Distribution Systems were set up by air lines and subsequent to that, travel agencies, tour operators, independent tourist accommodation units, hotel networks, car rent companies, cruise organizers etc. got connected by means of the Internet. These information systems allows the user (particularly travel agencies and companies, more than individual clients) to get information about available places, tariffs, booking and ticket sales. Therefore, one can notice that the connection to these Hotels, Airlines Rehabilitators, Car Rent Companies, Travel agencies. Management – Marketing - Tourism computerized networks helps travel agencies to conceive by themselves certain tourist products without being compelled to ask for the help of tour operators [5].

Distributors are Computer Reservations Systems (CRSs) technology companies that consolidated supplier information, inventory and pricing data, also provided a way to electronically search, book and issue tickets and documents. The travel agent is another supply chains using CRSs that provide business travellers with leisure, one-stop shopping guidance and pricing and schedule advice to make reservations, issue tickets and provide ancillary services such as currency conversion or passport processing [6].

Amadeus is a leading provider of advanced technology solutions for the global travel industry. Customer groups include travel providers, travel sellers and travel buyers. Amadeus provides a comprehensive offer to the travel & tourism industry. These combine technology in distribution, IT, point of sale solutions and more, helping customers to take advantage of the technology and convert it to business success [7].

Sabre is an innovative technology used by more than a billion people around the world to plan, book and experience their travel at a time and price that is right for them. They set their lives in motion daily across the globe, diligently working magic behind the scenes to make the world a better place, one journey at a time. Sabre helps travellers to find the best price, improve a travel agency's efficiency and profitability,

make sure a flight has a qualified crew ready to go, helps hoteliers fill their rooms, and give an executive assistant the tools to book travel online [8].

The researchers chose this topic to determine the effect of using Computer Reservation System among Travel Agencies in terms of technical, human and financial aspect. This will help the Internship office to include the identified travel agencies in their linkages where the students will be deployed for internship. The result of this study will also be helpful and can be utilized in the course travel and tour operations with computer reservation system.

OBJECTIVES OF THE STUDY

This study aimed to assess Computer Reservation System used in the travel agencies in Batangas City and Lipa City, Philippines. Specifically, it determined the profile of the travel agencies in Batangas, identify the reservation system used by travel agencies, find out the services offered by travel agencies; determine the features of the CRS; and determine the effects of using computer reservation system in terms of human aspect, technical aspect and financial aspect.

METHODS

Descriptive type of research was utilized in the study. The respondents of this study were the managers and users of computerized reservation system. There were twenty (20) out of twenty-five (25) or 80 percent of total travel agencies in Batangas City and Lipa City participated in the study. The participants were one (1) manager and 2 users or staff from each travel agency with a total of 60 respondents. The method used to select them was simple random sampling technique.

Questionnaire served as the main data gathering instrument to obtain the essential information that pertaining to the use of computerized reservation system in travel agencies. Part of the instrument was adapted from the tool used in the institutional research of Vizconde and Felicen [9] titled "Computer Reservation System: As a Feature of Business Operations of Travel Agencies". Interview was also conducted to support and validate the data taken. The instrument was validated by the former tourism officer, who is now employed as faculty member of CITHM. Questionnaires were administered in twenty (20) different travel agencies in Lipa City and Batangas City, Philippines.

This study utilized percentage and weighted mean as statistical tool. These were used to determine the effects of computerized reservation system in travel agencies. Personal encoding was done and Statistical Package for Social Sciences (SPSS) was used to interpret the data gathered.

The given scale was used to interpret the result of the study: 4.50 – 5.00: Strongly Agree (SA); 3.50 – 4.49: Agree (A); 2.50 – 3.49: Moderately Agree(MA); 1.50 – 2.49: Disagree (D); 1.00 – 1.49: Strongly Disagree (SD).

RESULTS AND DISCUSSION

Table 1. Percentage Distribution of Business Profile

Profile Variables	f	%
No. of years in operation		
Less than one year	2	10%
1 to 5 years	3	10%
6 to 10 years	10	50%
11-15 years	6	30%
16 to 20 years	0	0
21 years	0	0
No. of employees		
1 to 2	3	20%
3 to 4	10	50%
5 to 6	3	20%
7 to 8	0	0
9 to 10	0	0
11 or more	2	10%
Accreditation		
Accredited	12	60%
Non- Accredited	8	40%

Table 1 presents the percentage distribution of business profile of the travel agencies in Batangas City. In terms of the number of years in operation, majority or 50 percent of the Travel Agencies are operating for 6 to 10 years and 30 percent are operating from 11 to 15 and 10 percent both are operating from less than a year and one to five years. This implies that travel agencies in Batangas are considered as expert in the business operation because they stay in the business for quite long years.

In terms of number of employees, 10 or 50 percent of the travel agencies have 3 to 4 employees, 20 percent had 1 to 2 employees and 10 percent had 11 or more employees. This implies that the use of CRS can help the travel agencies in Batangas to have only few employees. Those travel agencies with more

than 10 employees are big companies and offering transport services.

From twenty travel agencies, 12 or 60 percent are accredited by different accrediting bodies such as Philippine Cities Trade and Tourism Information Services (PCTTIS), National Statistics Office (NSO) National Statistics Office (NSO), Department of Foreign Affairs (DFA), Department of Tourism (DOT), and National Association of Independent Travel Agencies (NAITAS). This shows that majority of the travel agencies in Batangas are reliable because they passed the requirements of different accrediting agencies.

Table 2. Computer Reservation System Used

CRS	f	%
Abacus	20	100%
Galileo	0	0%
Amadeus	3	15%
SABRE	2	10%

Based from the result, all of the travel agencies in Batangas are using Abacus as their reservation system. A computer reservation system is based on a large central computer, or main frame, in central location serving many different sites, such as airline ticket offices and travel agencies. Global distribution system is reservation system that provides services to users in both hemispheres.

Since 1988, Abacus is Asia Pacific’s leading provider of travel solutions and services. It widens the distribution of travel content from hundreds of travel suppliers including airlines, hotels, and insurance providers. It fuses end-to-end technologies to create a differentiated portfolio of solutions and services driven by insights on how travel business operates in Asia Pacific. It helps enhance competitiveness, creates better customer experiences, optimise business operations [10].

Table 3. Services Offered by Travel Agencies

	f	%
1. Domestic and International Air Ticketing	60	100%
2. Domestic Hotel Reservation/Booking	60	100%
3. International Hotel Reservation/Booking	60	100%
4. Package Tour	60	100%
5. Visa and Immigration Assistance	39	65%
6. Red Ribbon	54	90%
7. NSO Authentication/Certification	51	85%
8. Embassy Translation/Authentication	48	80%
9. Education and Recreation Trip	45	75%
10. Passport Processing	48	80%

**Multiple Responses*

One hundred percent (100%) or all travel agencies offered services such as package tour, international hotel reservation/booking, domestic and international ticketing. Ninety percent are offering red ribbon services, eighty five percent offers NSO authentication and certification, eighty percent offers embassy translation/authentication and passport processing, seventy five percent offers education and recreation trip and sixty five percent offers visa and immigration assistance.

A full service agency sells standard travel agency goods and services, including travel packages and airfare. Additional services include passport assistance, providing access to top-of-the-line equipment and supplies, and a superior offering that includes accommodations, entertainment and access to better than average terrain and activities. The knowledge and expertise, competitive rates, and specialty focus on adventure travel is the value added offering of travel agency which translates into increased satisfaction for the customer [11].

Table 4. Assessment of Computer Reservation System on Human Aspect

Human Aspect	WM	VI	Rank
1. Connecting guests to all forms of travel	4.57	SA	1
2. Developing and nurturing the best skills in the travel agency industry	4.47	A	2
3. Unfamiliar features and commands that crop up during actual booking & ticketing	3.67	MA	6
4. Lack of human touch due to relying more on the systems capability	3.38	MA	7
5. Making work load more easier	4.13	A	5
6. Provide a free-stress working environment	4.30	A	4
7. Reducing human errors in pricing and ticketing of net fares information	4.33	A	3
Composite Mean	4.12	A	

The overall result on the assessment of the use of computer reservation system on the human aspect had composite mean of 4.12. The respondents strongly agreed that the good of benefits of using the CRS is that it can connect the guest to all forms of travel with the weighted mean of 4.57. The respondents agreed that CRS can develop and nurture the best skills in the travel agency industry, can reduce human errors in

pricing and ticketing of net fares information and provide a free-stress working environment with the weighted mean scores of 4.47, 4.33 and 4.30 respectively.

The respondents also agreed that CRS makes their work load easier with the weighted mean of 4.13. CRS can book air travel, land travel and sea travel by using only one system. However, respondents moderately agreed that there are unfamiliar features and commands that crop up during actual booking & ticketing and lack of human touch due to relying more on the systems capability with the mean of scores of 3.67 and 3.38, respectively.

The result implies that the use of CRS can connect the guest to all forms of travel such as air travel, sea travel and land travel, not only that but also for accommodation CRS has worldwide connection to airlines, ferries and land transport like rail transport, bus liners and taxi. Accommodation as vital component of travel is also included in the feature of reservation system. These services can be provided with just a click of the fingertips. In this system the travel agent are confident that the information given to the passengers are accurate.

Table 5. Assessment of Computer Reservation System on Technical Aspect

Items	WM	VI	Rank
1. Difficulty on the system-network connections resulting to transaction not generated to its component	3.48	MA	6
2. Establishing proper linkages with communication companies	4.07	A	3
3. Establishing rapport with other CRS companies.	4.02	A	4
4. Installation of built-in system security features.	4.32	A	1
5. Limiting man's capabilities due to depending more on the system	3.52	A	5
6. Replacing national airline system of limited scope and functionality	3.32	MA	7
7. Providing a lot of information aside from reservations.	4.13	A	2
Composite Mean	3.84	A	

Data from the table show that the respondents agreed on the effects of CRS with the composite mean of 3.84. The respondents agreed that CRS have installed built in system security features as indicated

by weighted mean of 4.32 followed by provides a lot of information aside from reservations with the weighted mean of 4.13. Establishing proper linkages with communication companies, and establishing rapport with other CRS companies and limits man's capabilities due to depending more on the system, rank third, fourth and fifth with the weighted mean scores of 4.07, 4.02 and 3.57 respectively. However, the respondents moderately agreed that they encounter difficulty on the system network connections resulting to transaction not generated to its component and replace national airline system of limited scope and functionality with the weighted mean scores of 3.48 and 3.32, respectively.

Since CRS provides services to the guest, it must contain a built in security features to protect information provided by the passenger/guest. The travel agencies must protect the Passenger Name Record (PNR) and should not be accessible to the agents they do not authorize. Such information if not secured will create customer relation problems.

Information-intensive service organizations made information systems as an integral part of their daily operations. However, it also caused consequent job dissatisfaction and systems-related stress among front-line service employees. It finds that front-line service workers can be motivated to use the technology not only by technological characteristics, such as ease of use and usefulness, but that they are also motivated by market supplier incentive and external management support [12].

Table 6. Assessment of Computer Reservation System on Financial Aspect

Items	WM	VI	Rank
1. High cost of subscription fee	3.05	MA	7
2. Improving agency's efficiency and productivity.	4.75	SA	1
3. Incurring cost for installation of software technology	3.92	A	5
4. Increasing the number of customers.	4.73	SA	2
5. Lessening operating expenses.	4.10	A	4
6. Improving customer satisfaction by offering value added services	4.43	A	3
7. Investing a lot on training new staff	3.80	A	6
Composite Mean	4.11	A	

Table 6 shows that the respondents agreed on the financial effect of CRS on financial aspects as denoted

by the composite mean of 4.11. The result revealed that the respondents agreed that CRS can improve agency's efficiency and productivity with the highest weighted mean of 4.75 followed by CRS can increase number of customers, with weighted mean of 4.73. Rank third was CRS improves customer satisfaction by offering value added services followed by lessening operating expenses at rank fourth with the weighted mean scores of 4.43 and 4.10 respectively. Incurring cost for installation of software technology placed on rank fifth while investing a lot on training new staff ranked sixth with the weighted mean scores of 3.92 and 3.80, respectively. However, respondents moderately agreed that CRS has high cost of subscription fee as denoted by weighted mean of 3.05.

The result implies that using CRS can improve agency's efficiency and productivity because with the use of automated system it can provide the travel agencies with great expansion on transaction volumes. This automation can raise booking and document preparation productivity. As a result of these, the travel agent can improve the services and therefore increase customer satisfaction.

Using technology, namely the Internet and CRS, has changed the way travel agencies operate and make travel agency market competitive. Offering tickets on-line at discounted rates increased price competition. Customer transaction in travel agency becomes prompt and efficient through the use of CRS. In this effect, smaller travel agencies had increased number of travel options available that made themselves to become specialists in one or more types of travel [11].

CONCLUSIONS AND RECOMMENDATIONS

Fifty percent of the travel agencies are operating for 6 to 10 years and with 3 to 4 employees. Sixty percent are accredited by different accrediting agencies. They are using Abacus System as computer reservation system (CRS). All travel agencies offered services such as domestic and international hotel reservation, domestic and international air ticketing, and package tour. The CRS can connect guest to all forms of travel; it has installed built in system security features for airline data, flight schedules and inventory management. It can also improve agency's efficiency and productivity. This further concludes that use of technology in the workplace has positive impact as well as negative impact. The result of this study will used as part of the pre-orientation program and will be included in the curriculum development. This gives

awareness to students and practicumers on in their internship to travel agencies.

This study was focused only in Batangas City and Lipa City areas; therefore, future study may be conducted using other variables and use wider scope with CALABARON Region as respondents.

REFERENCES

- [1] Learn to use a GDS – Galileo or Sabre or Amadeus retrieved from <http://hayton.com.au>
- [2] The Role of Global Computer Reservation, 6(2) retrieved from <http://aws.iwi.uni-leipzig.de>
- [3] Chakravarthi, J. et. al., (2012), Comparison of Traditional and Online Travel Services: A Concept Note, IUP. Journal of Business Strategy, 9(1)
- [4] Serbanescu, L. (2013), Improving the Performance and Efficiency of Travel Agencies with Technology, Agricultural Management, 15 (4)
- [5] Lordache C., Cebuc I., Hoarca, D. (2009), Tourism Operations' Technique, Economic Independence Publishing House, Pitesti,. retrieved from ebscohost.com
- [6] Cristiana, P. I. (2008). The Tourism Industry and the Use of Internet. Annals of the University of Oradea, Economic Science Series, 17(2).
- [7] About Amadeus (2013) retrieved from <http://www.amadeus.com>
- [8] Technology that Power Travels retrieved from <http://www.sabre.com/>
- [9] Vizconde, A. & Felicen, S. (2012). Computer Reservation System: As a Feature of Business Operations of Travel Agencies
- [10] About Abacus (2014). retrieved from <http://www.abacus.com.sg>
- [11] International Travel Agency Business Plan (n.d.) retrieved from <http://www.bplans.com>
- [12] Lee, H.Y., Lee, Y. K. & Kwon, D (2005). The intention to use computerized reservation systems: the moderating effects of organizational support and supplier incentive. Journal of Business Research, 58(11), 1552-1561

COPYRIGHTS

Copyright of this article is retained by the author/s, with first publication rights granted to APJMR. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>)