TOURISM WEB SERVICES USING E-BUSINESS

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ABSTRACT

E-tourism is a leading area in e-commerce, with an increasing number of travel agencies offering their services through online transaction brokers. This project started with requirements-gathering activities based on the questionnaires given to travel agencies and customers. We conducted the literature review on tourism sector that support with different technology. The purpose is to understand what really needed by the travel agencies in order to improve their business and propose a value added to their customer services. Mobile reservation is needed for travelers who usually move from one place to another, providing this mobile reservation system can help them to plan their businesses or holiday trips. Mobile reservation is also needed for travel agent and service provider to support their services. This project describes the development of mobile application that can invoke services from airline, car rental, to hotel reservation through travel agent as a broker. The implementation of web service technology and service-oriented architecture based on loose coupling principle among interacted-system has been used in developing this project. In the end of the project, some questionnaires regarding to the testing and satisfaction level of users have indicated the applicability of the proposed approach.

ABSTRAK

E-perlancongan merupakan satu bidang yang sedang pesat membangun dalam e-dagang, dengan peningkatan bilangan agensi perlancongan yang menawarkan perkhidmatan melalui broker transaksi atas talian. Projek ini bermula dengan aktiviti pengumpulan keperluan seperti penyebaran borang soal selidik kepada agensi-agensi perlancongan dan pengguna serta menjalankan penelitian terhadap kajian-kajian terdahulu dan teknologi-teknologi yang berkaitan dengan industri perlancongan. Kajian ini bertujuan mengetahui apa yang amat diperlukan oleh agensi perlancongan bagi meningkatkan mutu perniagaan dan memberi nilai tambah kepada pelanggan-pelanggan mereka. Kaedah penempahan bergerak (*mobile reservation*) diperlukan untuk pengembara yang sentiasa bergerak dari satu tempat ke tempat yang lain dan menawarkan system penempahan bergerak ini melalui penggunaan telefon bimbit dapat membantu mereka merancang aktiviti percutian dan perniagaan. Sistem penempahan bergerak ini juga diperlukan oleh agen perlancongan dan pembekal perkhidmatan dalam menampung perkhidmatan mereka. Projek ini merungkai kaedah membangunkan aplikasi bergerak (*mobile application*) yang berupaya mendapatkan perkhidmatan dari agen syarikat penerbangan, penyewaan kereta kepada pembekal perkhidmatan hotel melalui agen perlancongan sebagai broker. Implementasi teknologi berasaskan perkhidmatan web dan senibina berorientasikan perkhidmatan bagi mencapai (*loose coupling*) antara system yang berinteraksi telah digunakan dengan meluas dalam pembangunan projek ini. Di akhir projek ini, beberapa soal selidik berkenaan dengan pengujian dan tahap kepuasan menggunakan sistem telah disebarkan kepada agen perlancongan dan pelanggan.

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CHAPTER 1

PROJECT OVERVIEW

1.1   Introduction

In the last few decades, Information Communication Technologies (ICTs) have deeply affected the way business is performed and the way that organizations compete (Porter & Millar, 1985). The tourism and travel industries were particularly affected by these developments and in particular, the way organizations distributed their tourism products in the marketplace. They were supported by computer reservation systems, global distribution systems or tour operator's videotext systems (leisure travel networks).

An increasing number of travel agencies offer their services through online transaction brokers. Every travel agents which in the area of tourism sectors that to be more successful, they have to implement a good planning and management strategies in a way to conduct a service excellent in reservation management context. While the reservation is being performed, it is necessary to monitor the quality of service to ensure that customers are satisfied. The quality of service is also included in the business process especially for the organization which their businesses are based on servicing. Clearly, an organization must define and view their whole business processes, ultimately to achieve their own objectives.

In servicing process from customer's perspective, the reservation system must be able to provide data fast, accurately, and easily from particular system that provided by such travel agents (World Tourism Organization, 2007). In fact, based on the current survey explained in chapter 3, many travel agents did not provide to human user information or additional data needed by customer such as hotel, accommodation and any other related-information. The main value-added here is how a travel agent is surviving their businesses by adding some value creation in their business-model with applying information technology (IT) -based approach in order to survive in today's competitive area?

1.2 Problem Background

Over the past three decades, the tourism sector has grown significantly both in terms of tourist arrivals and tourism receipts (Nizam Mohammad, 1997). The growth is reflective of the importance of the tourism sector within the global economy and also of changing social and economic profiles of the world's population, increased spending power per capita, greater leisure time, better informed and traveled (and thus more discerning) public, and major demographic changes in the developed and to a certain extent developing world leading to major changes in travel and leisure demand characteristics. Table 1 shows the trends in Malaysia tourism World Tourism Organization (2007).

Table1: Trends in Malaysia Tourism Arrival and Receipt (1971 - 1991)

Year	Tourist Arrival (thousands)	Tourism receipts (Million US$)
1971	178,853	20,850
1981	298,784	103,750
1991	455,100	261,070

It also had occurred in almost all of the countries around the world who had promoted their potential tourism. The numerical growth characteristic of the tourism sector is increased; it is accompanied by demands for higher quality tourism experience and variation in tourism activities. Primarily, there is still a large potential for growth in the tourism sector. Secondarily, the tourism sector will also benefit from improved communication and transportation technologies. These improvements would include greater access to information about tourist destination and activities, and equally importantly enhanced access to tourism locations by way of more efficient transportation. Improved transport efficiency would in turn make travelling faster, more direct and cheaper while improving access to alternative locations.

Most organizations in travel industry context face a variety of challenges, including the need to become customer-driven through competitive products and services. A service management which involves in this reservation system is not complete as customer expected and too time-consuming. Based on some case studies that shown at chapter 3, the existing applications provided each service such as flight, hotel, and accommodation separately. In other words it did not integrate each other and not in real-time demand.

As the demand for good-quality services increased, it needs to do some transformation in this sector such as developing a smarter solution that can handle all of the needs from customer. In doing so, some questionnaire consisting questions and opinions directly from customer have to be distributed to them. Having distributed the questionnaire out to them, the expected system can be known, so the design based on what customer needed. Not only did question to the customer, but also to the agent traveler, having done it, it might figure out all what really do they want.

1.3   Problem Statement

The problems tackled in this study are:

1. How to give a better service fast, accurately to the customer in reservation management system context?

2. What is the appropriate system and change management need to be implemented to the travel agent in order to solve the problem in achieving competitive advantage?

1.4   Project Objectives

1. To analyze what particular data needed by the customer in their reservation process to support their travelling.
2. To suggest a proper way for travel agent in managing and giving better service to their customers.
3. To design and test web-based and mobile-based prototype reservation system using web service technology.

1.6   Project Scope

These are the identified scopes which define the boundary of the project:

1. The Feature for the proposed system based on the questioning activities which had been distributed out randomly to those who usually did reservation and to some other travel agents.

2. This proposed system developed in a mobile-based system, the communication among travel agent application and business providers application developed using web-service technology

3. Payment module was not covered in this proposed system

1.7   Importance of Study

Organizations are going through tremendous changes to create environments where everyone can contribute their best, where customer requirement are not only met but exceeded and where strategically planned with competitive advantage, efficiency, effectiveness, productivity, quality and customer satisfaction are taken as critical success factors. This study was important in order to give more valuable in servicing industries with an appropriate system that resolve the problem arises to them.

Having gotten data directly from both the customer and the travel agent who had experienced before and identified the problems associated with them, the design of the system is most likely based on what customers and travel agents wanted. Some benefits of this study are:

1. Customer

a. Ubiquitous Information; with either opening the portal or access from their mobile devices, costumer might know all of the related-information in a real-time way easily.

b. Time-saving - Consumer can save their time much; they don't need to go to travel agent anymore.

c. Full Access Information – customer can know and compare the latest price and other related information from each agent specifically.

2. Business Provider / Supplier

a. Reduced cost – electronic transaction enables faster processing cost, and can help to minimize errors often associated with paper based systems.

b. Access to new customer and markets – e-tourism provides a new sales channel opening up many new opportunities for suppliers.

c. Increased sales – with access to a wider public sector market, suppliers have the potential to increase revenue

3. Travel Agent

d. More competitive price – to pull the customer in, the travel agents need to strategically design their business models to keep up competitions.

e. New potential business – it can open other potential business due to the people around the world by promoting their portal and the way they serve their services.

f. Open to wide market – the agent broker can expand their market to the other segment such as advertisements, new business with third parties, etc.

1.8   Chapter Summary

In this first chapter a brief introduction about the project and how the project implemented has been discussed. The problem background and statement had also been discussed in this chapter by giving an introduction of the project and explaining why this project had been proposed. The objective, scope and the importance of this project had also been pointed out.

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