# EXPEDIENCY HEURISTIC IN TRAVEL AGENCY WEBPAGE

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# **ABSTRACT**

Travel agency webpage plays an important role nowadays. Day by day there is an increase demand on travel for any purpose and of any duration. Human computer interaction is commonly implemented in travel agency webpage. Previously, weak human computer interaction is implemented in the travel agency webpage, SMAS Travels Sdn Bhd. That is why planning a trip could be time consuming and confusing. In this project, strong human computer interaction will be implemented. This implementation will overcome the problem of time wasting and the customer can carry out their work productively. Therefore, strong implementation of human computer interaction is required to develop an efficient travel agency webpage.

### **ABSTRAK**

Laman web agensi pelancongan memainkan peranan yang penting pada hari ini. Hari demi hari permintaan terhadap aktiviti pelancongan kian meningkat untuk apa pun tujuan dan pada bila — bila masa. Elemen interaksi di antara manusia dan komputer kebiasaannya diterapkan dalam laman web agensi pelancongan. Sebelum ini, elemen interaksi di antara komputer dan manusia yang lemah diimplementasikan dalam laman web agensi pelancongan, SMAS Travels Sdn Bhd. Oleh sebab itu perjalanan yang dirancang memakan masa dan mengelirukan. Dalam projek ini, elemen interaksi di antara komputer dan manusia yang kuat akan diimplementasikan. Implementasi ini akan mengatasi masalah pembaziran masa dan pengguna dapat melaksanakan pekerjaan mereka secara produktif. Maka, implementasi interaksi di antara komputer dan manusia yang kuat diperlukan untuk membangunkan suatu laman web agensi pelancongan yang efisien.

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# LIST OF SYMBOLS

ITC - Israel Tour Connection

HCI - Human Computer Interaction

RAD - Rapid Application Development

HTML - Hypertext Markup Language

PHP - Hypertext Preprocessor

DFD - Data Flow Diagram

ERD - Entity Relationship Diagram

PK - Primary Key

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### **CHAPTER 1**

## INTRODUCTION

### 1.1 Introduction

Travel agency webpage plays an important role nowadays. Day by day there is an increase demand on travel for any purpose and of any duration. Previously, weak human computer interaction is implemented in the travel agency webpage, SMAS Travels Sdn Bhd. That is why planning a trip could be time consuming and confusing. In this project, strong human computer interaction will be implemented.

## 1.1.1 Project Overview

The main idea of travel agency webpage is to support customer so that they can carry out their activities productively and safety. Strong implementation of human computer interaction in the system improve safety, utility, effectiveness, efficiency, and usability of the system [1]. Customers get a lot of benefits if they are planning their trips using travel agency webpage. Using travel agency saves money as working relationships with travel suppliers and the latest in computer reservations technology enable them to access the most up-to-date information on how to get the customers the best value. The travel agency works for the customer and will do everything they can to meet their customer's travel needs.

This travel agency webpage is developed for SMAS Travels Sdn Bhd. The system is a web based system, easier to customer to use the application. The users of this system are the people (customer) all around the globe. This system enable the users register and login into the system, search and book the packages all over Malaysia, search the flights in Malaysia and join the mailing list in SMAS Travels Sdn Bhd [2].

### 1.2 Problem Statement

The need for the system arises as a result of the current system of SMAS Travels Sdn Bhd always changed. So a new effective system of travel agency webpage should be developed as it is proved that travel agency webpage hold an important role in daily life. Compared to their current travel agency webpage, the implementation of Human Computer Interaction is weak [2]. This makes people find that travel agency webpage is useless and not helping at all. With a new developed system, there is a hope that the system will implement strong Human Computer Interaction in the webpage. Managing the travel agency database to be more systematic is also one of the problems stated. This is because travel agency webpage dealt with many customers and the information stored are variety. Systematic databases are real important as it will ease the flow of the system and being very helpful when it comes to the customers' information.

# 1.3 Objectives

The objectives of the system developed are:

- i. To develop prototype travel agency webpage for SMAS Travels Sdn Bhd
- ii. To implement strong Human Computer Interaction in the webpage

# 1.4 Scope

The scope of the project are:

- i. SMAS Travels Sdn Bhd is a web based system that can be viewed by Google Chrome browser. The online application must be performed in order to run the system. Comparison will be made between the current SMAS Travels Sdn Bhd which is retrieved from August 8<sup>th</sup> 2010 with the new developed webpage of current SMAS Travels Sdn Bhd in PSM II. Users are the customers in which they can register and login, book the packages and search the flights in Malaysia.
- ii. Human computer interaction values where Jacob Nielsen Heuristic is used.

## 1.5 Thesis Organization

This thesis consists of six (6) chapters. All of this chapter will explain each part of the system. Chapter 1 will illustrate the brief introduction of the project. It includes project introduction, project overview, the problem statements, objectives and scope.

Chapter 2 will discuss on literature review that had been done while researching for the travel agency information. This chapter will also explain the comparison between the current travel agency systems and approach of hardware and software necessary that will be used during development.

Chapter 3 will discuss on methodology, flow of the system and the designs of the system proposed.

Chapter 4 will discuss on how the implementation occurs. This chapter will explain about the detailed designs and coding. There are some functions like message box, alert or warning which will make it become a complete system.

Chapter 5 will discuss on results and discussion about the travel agency webpage and the weakness of it. The results of questionnaires that had been done are also included. The result and recommendation of the system will be discussed for further research of the system.

Chapter 6 will discuss on conclusion of the travel agency webpage information that had been researched for a long time. The purpose of this chapter is to briefly summarize about the developed project and will be explaining overall briefly about the travel agency webpage.

## 1.6 Solution

In a conclusion, travel agency plays an important role nowadays. People all around the globe use their services. Thus, a system should be developed about travel agency webpage and a strong implementation human computer interaction must be applied so that people can do their work productively and safely. In this case, Jacob Nielsen 10 heuristic of usability is implemented. Systematic database is also important in the travel webpage as the important information will be stored in the system.

#### **CHAPTER 2**

### LITERATURE REVIEW

#### 2.1 Introduction

A travel agency sells travel related products and services to customers, such as airlines, car rentals, cruise lines, hotels, railways, sightseeing tours and package holidays that combine several products on behalf of the suppliers. There are also travel agencies that have offices in countries other than where their headquarters are located and they serve as general sales agents for foreign travel companies. Besides that, travel agencies have developed an internet presence of their own by creating travel websites, with detailed information and online booking [3].

This literature review is for reviewing the varieties of current travel agencies in the world and the techniques and technologies involved for developing the webpage. Besides that, the implementation of human computer interaction is also considered on whether the current system implemented the human computer interaction or not. There are four current travel agencies spotted and will be revealed in this literature review. The heuristic of human computer interaction will also being discussed in this chapter.

### 2.2 Current System of Travel Agency Webpage

There are four current system of travel agency webpage that has been studied which are Israel Tour Connection (ITC), Global Travel International, Triways and SMAS Travels Sdn Bhd. All of the webpages are studied to know what is the current situation for travel agency webpage in the world where ideas are collected and the techniques and elements that are implemented in every each of the webpage are analysed.

## 2.2.1 Israel Tour Connection (ITC)

The travel agency website is www.israeltour.com. Israel Tour Connection (ITC) is a wholesale tour operation that is dedicated to Israel Tourism [4].

## The advantages of the webpage are:

- i. The webpage are designed simple so that the user cannot make a serious error. The webpage's design is a careful design which prevents a problem occurred in the first place. Jacob Nielsen heuristic of usability in error prevention is implemented.
- ii. There is less animated objects to prevent excessive memory load.

  Jacob Nielsen heuristic of usability which is recognition rather than recall implemented in this webpage.

Although it has advantages, the webpage might have lack of some elements for other users to handle such as refer Figure 2.1.



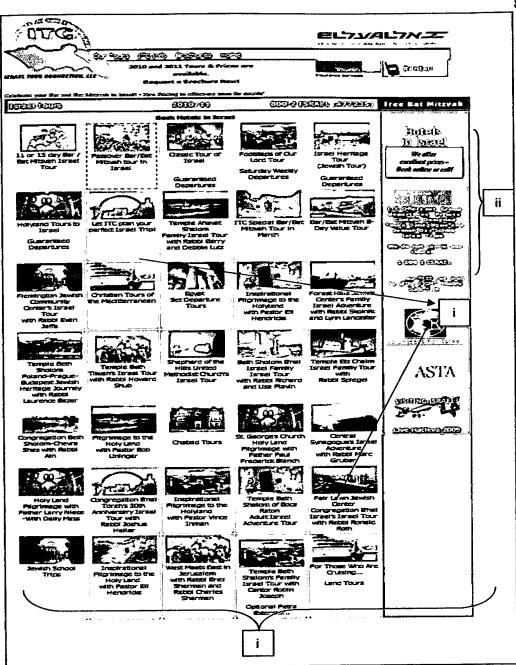


Figure 2.1 Interface of Israel Tour Connection (ITC) [4]

## The disadvantages of the webpage are:

- i. The interface for www.israeltour.com is crowded and not centered. This is where the division between the right and the left side is not balanced. The information appeared is not in a logical order. Match between system and the real world usability of Jacob Nielsen is not implemented.
  - The design supposedly should organize the user interface purposefully, in meaningful and useful ways based on clear, consistent models that are apparent and recognizable to users, putting related things together and separating unrelated things, differentiating dissimilar things and making similar things resemble one another.
- ii. Dialogues should not contain information which is irrelevant or rarely needed. The aesthetic and minimalist design usability of Jacob Nielsen heuristic is not implemented. Irrelevant information should not be shown because it only make the design look crowded. User only want to find the content they need.

# 2.2.2 Global Travel International

Global Travel International offers the best last minute travel deals and special offers. The global travel agency has a lot to offer and is partner with some of the world's most respected travel providers[5].

## The advantages of the webpage are:

- i. The webpage have consistent sequences of actions in similar situation. This is to help the user intuitively knows what to do because they have seen the same situation before throughout the interface. Schneiderman's strive for consistency rules of interface design is implemented in this webpage.
- ii. Displays of the interfaces are kept simple which is Schneiderman's reduce short term memory load rules of interface design is implemented in this webpage.

Although the webpage is useful for users when it comes to booking, but the webpage is still lack of some elements according to the user interface design, tips techniques and principles such as refer Figure 2.2.

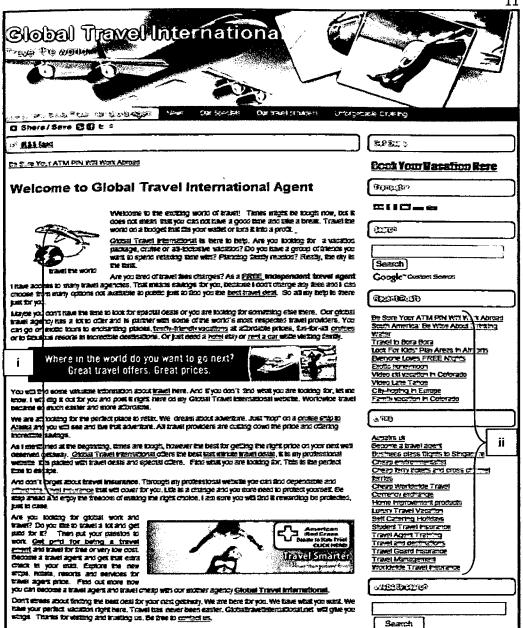


Figure 2.2 Interface of Global Travel International [5]

The disadvantage of the webpage are:

i. Users often choose system functions by mistake and they will need a clearly marked "emergency exit" to leave the unwanted state. The user control and freedom Jacob Nielsen's heuristic is not implemented in this webpage. ii. Dialogues should not contain information which is extraneous or rarely needed. The aesthetic and minimalist design usability of Jacob Nielsen heuristic is not implemented. Too much information will make the users confused as the user have their own objective and the user know what they are looking for in the webpage.

## 2.2.3 Triways

Triways was incorporated back in 1981 initially as a government-appointed agency to promote Malaysia globally as a tourist destination. They set their footprint in the niche market of Hajj and Umrah sector bringing countless numbers of spiritual travelers to the Holy Land [6].

## The advantages of the webpage are:

- i. The tasks in the webpage are simple in order to avoid complex problem solving and excessive memory load. Norman's simplify the structure of tasks principle of design is implemented in this webpage.
- ii. The current issue is displayed in the webpage as using both knowledge in the world and knowledge in the head of Norman's design principle is implemented.

Despite the advantages of the webpage of Triways, the webpage is somehow lack of the elements of usability according to the design guidelines for homepage usability such as refer Figure 2.3.