

**USER'S SATISFACTION OF USING MOBILE RESERVATION TECHNOLOGY
CASE STUDY:
MOBILE TICKETING RESERVATION SYSTEM**

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UNIVERSITI UTARA MALAYSIA

2004



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MOBILE TICKETING RESERVATION SYSTEM**

A project submitted to the Graduate School in partial fulfillment of the requirement for
the degree Master of Science (Information Technology),
Universiti Utara Malaysia

By
Abdulromae Hawor

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ABSTRAK (BAHASA MALASIA)

Peralatan perhubungan bergerak dan pergabungan teknologi tanpa wayar semakin berkembang dengan pesat. Firma-firma telah menggunakan peralatan perhubungan bergerak dan teknologi tanpa wayar untuk meningkatkan prestasi perniagaan mereka. Berdasarkan kepada teknologi perdagangan-bergerak, kemudahan tempahan tiket kapal terbang boleh dilakukan pada bila-bila masa dan ketika. Kajian ini dijalankan bertujuan untuk mengkaji kepuasan pengguna ke atas teknologi tempahan tiket menggunakan prototype yang dinamakan “Mobile Ticketing Reservation Systems (MTRS)” yang menunjukkan implikasi dan penggunaan teknologi tanpa wayar untuk membuat tempahan tiket kapal terbang. Kajian ini disasarkan kepada pensyarah-pensyarah dan kakitangan Fakulti Teknologi Maklumat, Universiti Utara Malaysia, Sintok. Prototype ini adalah merupakan asas kepada konsep kemudahan penempahan tiket kapal terbang ekspres. Hasil kajian menunjukkan yang para responden kajian berpuas hati dengan prototype MTRS ini. Kajian ini juga mengemukakan beberapa cadangan untuk kajian-kajian di masa hadapan.

ABSTRACT (ENGLISH)

The mobile devices and the emergence of wireless technologies are rapidly increasing. Firms adopted mobile devices and wireless technologies to assist and improve their business' performances. With mobile commerce (M-commerce) technology, mobile ticketing reservation, service will be possible anywhere at anytime. This research aims to study the user's satisfaction of using mobile ticketing reservation technology by using a prototype called "Mobile Ticketing Reservation Systems (MTRS)" which demonstrates the implication and the usefulness of wireless technology on the ticketing reservation system. The target users of this study are staffs of Faculty of Information Technology at Universiti Utara Malaysia (UUM), Sintok. The prototype is primarily the concepts of airline ticketing reservation express service. The findings of this study revealed that the respondents are satisfied with the MTRS prototype. This study also proposed several recommendations for future research.

ACKNOWLEDGEMENTS

This acknowledgements go to several dedicated persons who have along the way provided support and advices during my progress in finishing this project. It is extremely impossible to mention all the names of these good people.

First of all, I would like to express my most sincere thanks to my supervisor, Mr. Azizi Bin Abas who has constantly provided guidance, comments as well as valuable ideas along the way.

I would also like to thank Mr. Waeibroheem Satapor for brushing up my English and for his gracious help and support.

Next, I would like to thank both of the evaluation committee of my project; Assoc. Prof. Dr. Norshuhada Shiratuddin and Mrs. Salina Ismail for their good suggestions.

Furthermore, I would like to thank lecturers and staffs at the Faculty of Information Technology (UUM) for their valuable suggestions and responds in the survey process, especially, Mr. Abdul Razak Ahmat and Mr. Baharudin Osman.

Most of all, I would like to thank my beloved parents and my family members for their support and encouragement at all times.

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LIST OF ABBREVIATIONS

B2B	Business-to-Business
B2C	Business-to-Consumer
CDC	Connected Device Configuration
CDMA	Code Division Multiple Access
cHTML	Compact HTML
CLDC	Connected Limited Device Configuration
CSD	Circuit Switched Data
CVM	C Virtual Machine
DBMS	Database Management System
E-Commerce	Electronic Commerce
EUC	End-User Computing
EUCS	End-User Computing Satisfaction
FOMA	Freedom Of Mobile multimedia Access
GPRS	General Packet Radio Service
GSM	Global System for Mobile Communications
HTML	Hyper Text Markup Language
HTTP	Hyper Text Transfer Protocol
IDC	International Data Cooperation Agency
IP	Internet Protocol
IRC	Internet Relay Chat
J2EE	Java 2 Enterprise Edition
J2ME	Java 2 Micro Edition
J2SE	Java 2 Standard Edition

J2SDK	Java 2 Software Development Kit
JVM	Java Virtual Machine
KVM	K Virtual Machine
M-Commerce	Mobile Commerce
MeT	Mobile Electronic Transaction Initiative
MIDP	Mobile Information Device Profile
MMS	Multimedia Massage Service
MTRS	Percentage of Inhabitants of Germany
OS	Operating System
OSI	Open Standard Interchange
PC	Personal Computer
PDA	Personal Digital Assistant
PHP	Professional Home Page
PKI	Public Key Infrastructure
QUIS	Questionnaire for User Interface Satisfaction
SDK	Software Development Kit
SIM	Subscriber Identification Module
SMS	Short Message Service
SSL	Secure Socket Layer
TCP	Transmission Control Protocol
TLS	Transport Layer Security
UDP	User Datagram Profile
UK	United Kingdom
UMT	Universal Mobile Telecommunication System

UUM	Universiti Utara Malaysia
WAE	Wireless Application Environment
WAP	Wireless Application Protocol
WML	Wireless Markup Language
WORA	Write Once Run Anywhere
WSP	Wireless Session Protocol
WTLS	Wireless Transport Layer Security
WTP	Wireless Transaction Protocol
XML	Extensible Markup Language

CHAPTER 1

INTRODUCTION

E-Business is quickly turning into the business, as the convenience and cost savings of the web are becoming apparent. The new Internet frontier is mobile e-Business, or “m-Business,” with a strong focus on mobile commerce, or “m-Commerce,” for both the consumer and business markets. Mobile e-Business is the arena in which innovation and powerful solutions are anticipated.

Quickly-evolving mobile commerce (M-Commerce) technology increasingly allows the mobile workforce to make productive use of otherwise idle time. People buy theatre tickets while waiting to board a plane, or monitor financial markets and scan e-mail between meetings, wherever they may be. They expect to be connected any time, any place, without being tied to a wired infrastructure (Peat, 2002).

Currently, business travel combines the possible uses for mobile services and information in an ideal way such as when a traveler is on a business trip where obtaining time-relevant information and using this information as a basis for transactions, like bookings and reservations, is crucial (BTI, 2004).

This study attempts to develop a prototype called “Mobile Ticketing Reservation Systems (MTRS)”. This study also studies the user’s satisfaction of using mobile ticketing reservation technology of this prototype.

The contents of
the thesis is for
internal user
only

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