

THE FACTOR INFLUENCE OF E-PURCHASING ON
SALE OF BUS TICKET INDUSTRY OF MELAKA
SENTRAL

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APPROVAL

(I/we) declare that have read these report and in the opinion of (me/us) this work is sufficient in terms of scope and quality for the purposes of the award of a Bachelor of Management Technology (High Technology Marketing)

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This report is submitted as part of the conditions of award of a Bachelor of
Management Technology (high-tech Marketing)

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DECLARATION

I admit this report was my own work except the summary and citations everyone I have explain its source.

Signature :

Name : KHAIRUL ANUAR BIN HASHIM

Date :

For My Beloved Family

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ABSTRACT

This research was addresses about the influences on Development of an Online Bus Ticketing System web portal to enable users, the bus operators and the customers to make an online bus ticket sale or purchase. It also act as an operation tool for bus operators to operate their organization smoothly. This research will be find the relationship between E-commerce, Portal, Security and Payment method with the online bus ticketing system. Usually, bus ticket purchase has been over the counter in bus terminals but today it has evolved with the rapid expansion of e-commerce system. Thus, prior to developing the system this research critically assess and study the reason on the evolution and the current e-ticketing systems. This paper also addresses the problems faced by customers and bus operators especially on long wait to purchase a bus ticket, illegal bus operators and unsafe environment. This research studies some issues on implementation and also recommendations on how Online Bus Ticketing System web portal can take place effectively. This research was praises on a star ranking system based on monthly sales, bus operator popularity and law traffic infractions. This research also recommends a Decision Support System to deal with the customer's constraint whereby it provides consistent choices to a customer to make decision. This research includes the development of a prototype Online Bus Ticketing System web portal to provision the research objective. This web portal will assist in future development that would support a fully incorporated system that links bus operators to customers, bus operators to bus operators, bus operators to other mode of transport workers, bus operator to businesses and bus operators to government agencies.

ABSTRAK

Kajian ini adalah tentang pengaruh dalam pembangunan sebuah sistem web portal online bas tiket untuk membolehkan pengguna, pengusaha bas dan pelanggan untuk membuat jualan tiket bas online atau membeli. Ia juga bertindak sebagai alat bagi pengusaha bas untuk menjalankan aktiviti organisasi mereka dengan lancar. Kebiasaannya, tiket bas biasanya dibeli di kaunter-kaunter terminal bas tetapi pada hari ini ia telah berkembang dengan pesat melalui sistem e-dagang. Oleh itu, untuk membangunkan sistem ini, satu kajian telah dijalankan bagi menilai secara kritikal dan mengkaji sebab evolusi dan sistem e-Tiket. Kertas kerja ini juga mengenalpasti masalah-masalah yang dihadapi oleh pelanggan dan pengusaha bas terutamanya pada pelanggan yang menunggu lama untuk membeli Tiket bas, pengusaha bas yang menyalahi undang-undang dan persekitaran yang tidak selamat. Kajian ini menegemukakan beberapa isu-isu pelaksanaan dan cadangan tentang bagaimana sistem Tiket bas Online web portal boleh berlaku dengan berkesan. Kajian ini akan mengkaji tentang hubungan antara e-dagang, keselamatan, portal serta pembayaran dengan sistem tiket bas dalam talian tersebut. Kajian ini adalah berdasarkan kedudukan sistem yang berkaitan jualan bulanan, populariti pengendali bas dan pelanggaran undang-undang lalu lintas. Kajian ini juga mencadangkan sistem sokongan untuk berurusan dengan pelanggan di mana ia menyediakan pilihan yang konsisten kepada pelanggan untuk membuat keputusan. Penyelidikan ini meliputi pembangunan prototaip sistem Tiket bas Online web portal untuk memperuntukkan objektif penyelidikan. Portal ini akan membantu di masa depan pembangunan yang akan menyokong sistem yang sepenuhnya diperbadankan menghubungkan pengusaha bas untuk pelanggan, pengusaha bas untuk pengusaha bas, pengendali bas lain-lain mod pengangkutan pekerja, pengendali bas kepada perniagaan dan pengusaha bas kepada agensi-agensi kerajaan.

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LIST OF ABBREVIATION

SPSS Statistical Package For The Social Science

CHAPTER 1

INTRODUCTION

1.0 Background of Study

The government of Malaysia has effectively capitalized its country's topography to construct a road system, especially the national highway to its public to substitute within the Peninsular Malaysia.

The North South highway with a total distance of 847.7 km was officially open on September 8 1994, which gives from Bukit Kayu Hitam, Kedah to Johor Bahru (The North South Expressway, 2006). It has made possible for a person to travel from north to south of Peninsular Malaysia within 9 hours compared to longer hours prior to its existence.

Melaka Sentral was the most significant public transport (bus) terminal in Malaysia (Wikipedia, 2006). Every year, the amount of public using its services has been increasing as the government constantly needs commuters to use public transport instead of private vehicles (Ng Cheng Yee, 2006). So much so during the weekend or any given public holidays, the number of commuters increases by doubles. The main activity that was taking place in Malacca Bus Terminal was over the counter bus ticket transactions.

Since the highway has encouraged the public to commute easily, the development of public transport system (express bus) was grown rapidly since then. In 1976, there were only 26 bus operators operating in Melaka Sentral, but in year 2003, there are 67 bus operators that are in operation and offering services to almost all destinations throughout the country. On the average, about 1,500 buses go in and out of Malacca weekly picked and leaved passengers for their various destinations. The number of buses increased on public holidays and school holidays (UDA Holdings, 2006a). To meet the demand of increased customers during this peak period, illegal bus operators was raised to the occasion to provide illegal bus services. These illegal bus operators were usually school and factory busses operated without permits or express busses with expired permits. There was a need to curb this phenomenon because, if any mishap would occur during the journey, the customers would not be subjected to any insurance coverage (The Star, 2006b). In short, by displaying all legitimate bus operators (either big or small) in the system, the customers were have wider range of choices of legal bus operators therefore reduced or eliminated the illegal ones out.

With the accumulative number of human traffic in Malacca, purchasing a bus ticket has been an uphill task if a passenger was planned their detailed traveling schedule. As the result of the survey conducted, due to the intense number of human traffic in Melaka Sentral, obtained a bus ticket was not merely a ten or twenty minute's task, but in fact, it was even taken up to an hour or two especially during the highest period.

Looking at this unpleasant scenario, Park May Berhad, an express bus operator has introduced an online e-ticketing system in the year 2001 (W.W. Tan et al. 2004). This online e-ticketing system would not only assisted the passengers but also the bus operator's position as an effective serviced provider, gained competitive advantages and also lead to superior control over the reservation process and operation, compared to conventional manual processing. The main feature in this online e-ticketing system was to cater destinations between inter cities within Peninsular Malaysia. With this system,

the passenger can perform an online bus booking at his or her own free time and would consecutively reduced the human traffic in Malacca.

Till to date there are six individual bus e-ticketing systems available in Malaysia, with only one website offering services collaborating only four bus operators. This service was limited to the public as there are 67 bus operators in the country (UDA Holdings, 2006a). The main purpose of introduced these e-ticketing system operated by individual operators were to ease the process of purchasing a bus ticket, ease the traffic condition in Malacca and to keep up with Information Technology era. Unfortunately, looking at the scenario, the objectives have unsuccessful.

It was believed the main reason for the failure of the existing e- ticketing systems was because there are only four express bus operators providing these services compared to the total of 67 bus operators (UDA Holdings, 2006a) currently in operation. This makes the destination choices and the number of seat offered very restricted. Thus, a development of a portal collaborates all available inter-city bus operators, the problem faced in obtained a bus ticket over the counter would ultimately be solved.

Besides the above given reason of constraint the traffic flow and reduced the human and negative environment congestion in Melaka Sentral, the element of provided options to a customer on which bus operator to use was very important and should be implemented in the Online Bus Ticketing System web portal. This element was relatively important based on the number of unsatisfactory experiences by customers and accidents occurred due to the negligence of the bus operators (Audrey Edwards, 2006). Therefore a customer has a choice to which bus operator to use based on a bus operator's classification or standard or rank given to a bus operator. The criteria that can be used to rank a bus operator could be based on the internal factor (i.e. company's performance) and external factor (i.e. public polling and governing bodies). To achieve this element the usage of a Decision Support System (DSS) and Management

Information System (MIS) as a tool to develop a system that would finally benefits the user to exploit their rights to make decision based on merit and also the bus operators to encounter their organization business objective.

1.1 Research Problem

Malaysia was functioned by an excellent transport system. Once you are in the country, there was always transport available to you even to remote zones. Traveling by road in Peninsular Malaysia was the most popular style of transport as it has well-developed road network structure.

The express bus operators have benefited from this well-developed road network system. This industry was grown from its modest operation to providing e-ticketing system by few bus operators operating individually. In line to support the government towards realization of Multimedia Super Corridor (MSC) and Vision 2020, every company should upgrade itself with the latest technology available towards the Information Technology (IT) era.

Due to dependency of Malaysians on the services provided by the bus operators, there has been a tremendous increase of number of bus operators in Malaysia. For instance, in Melaka Sentral, in the year 1976 there were only 26 bus operators, but in year 2003, there are 67 bus operators (UDA Holdings, 2006a). Such increase were made Melaka Sentral as the main place to purchase a bus ticket for a certain destination. Purchasing a ticket can either be done over the counter or via e-ticketing offered by a few major bus operators.

Between the two choices of purchasing a ticket, the option of over the counter purchase was the preferred choice. This was because the current e-ticketing system

operated by individual bus operators, does not provide enough choices to a passenger such as different destinations and the availability of tickets are limited. The development of an Online Bus Ticketing System web portal was also reduce or eliminate the activities of unauthorized bus operators who were operating without legitimate permits during the high demand period. This vital information should be conveyed to the customers because these illegal touts' busses were school and factory busses and might not be worthy enough to be used as express busses.

The bus transport operators should use IT as a tool to draw up a master plan in order to enhance the level of service provided to the users. Capitalizing on the rapid growth of ecommerce application users, there must be a portal that combines all these bus operators into a consortium providing services to the passengers. The objective of this Online Bus Ticketing System web portal in Malaysia has been conceptualized to achieve the faster bus ticketing booking and a choice of purchasing from different express bus operators, support services which were more responsive to user's needs, greater customer appreciation (through a Decision Support System), elimination of illegal bus operators and also to provide greater benefits to bus operators to enhance their business processes (through Management Information System). Faster bus ticketing booking would mean better response time from the bus services. A choice of booking from different express bus operators would allow users to have a choice of services to use based on standard rating derived from consumer's feedback, governing bodies, and individual bus operator's performance. Decision Support System were create standard rating to rank each bus operator and thus would allow a user to make decision on which bus operator's to use based on these ratings. With support services, which was more responsive to users' needs, were create greater customer appreciation and thus would benefit the bus operators. Online bus ticketing booking would contribute to the successful development of the Online Bus Ticketing System by attracting users within Malaysia as well as tourists.

This study survey was result in greater customer appreciation, whereby, customers were able to search for bus services, deciding which service to use through bus operators ranking and obtain e-tickets right after purchase by printing them online. When a ticket was purchased, the customer does not have to worry about a scheduled trip. It would also give benefits to the bus operators, whereby it should expose bus services to a large customer base, real-time online information on sold tickets and tickets availability, it should also allow administrators to insert, remove and edit available tickets online anytime and anywhere. Bus operators would also be able to gather valuable information such as sales reports and various reports for management decision making.

The main problem was collaborated (incorporating all available bus operators into a single system) Online Bus Ticketing System web portal was not available in Malaysia. A portal which was reliable in incorporating all express bus operators and allowing a user the flexibility of choosing a particular bus operator from a list of operators and allowing the user to specify the date and time of booking. It would also allow user to pay for the tickets and offer a secured transaction. Online Bus Ticketing System web portal was a total Internet Ticketing Operations offering the benefit of total in-house management of bus schedules, ticket bookings, ticket sales, report generation, and other business functions associated with ticket sales. It also offers the power of decision making to customers to make a ticket booking through bus operators' popularity, performance and ranking.

This powerful Internet based ticket booking system that allows a full control of not only on the ticketing inventory, but also the site's content. Some basic components of an Online Bus Ticketing System web portal that provides enhanced service to the bus operators and customers consist of the customer information such as name, address, phone number and e-mail address, Price list, Bus operators ranking, Seating chart, Loyalty Points/Redemption, Search engine, Payment information/credit card

authorization, Organization's advertisement/slogan, phone number, fax number, and address, Forum, Comments and suggestions section / option and Reports.

The overall research has identified the above-mentioned problems by conducting a survey and has proposed a framework on the development of an Online Bus Ticketing System web portal. A fully workable prototype system was developed based on the findings to support the following objectives.

1.2 Research Question

In this research, the focus was determine the development of online bus ticketing system in Malacca. So, the research question constructed as:

1. What was the relationship between e-commerce with online bus ticketing system in Malacca?
2. How the payment method influences the online bus ticketing system?
3. What was the relevant features of web portal for online bus ticketing system in Melaka Sentral.
4. What was the relationship between Security with the online bus ticketing system.

1.3 Research Objectives

The objectives of this research were as follows:

1. To study the relationship between e-commerce with online bus ticketing system.
2. To examine the relationship between payment method with online bus ticketing system in Malacca
3. To measure the relationship between a web portal with the online bus ticketing system in Malacca.
4. To study the relationship between security with the online bus ticketing system.

1.4 Limitation and Scope

This research focuses on two parties, i.e. the bus operators and the customers. The bus operators were the system administrator of this system. They were able to add, edit and retrieve information and generate reports to assist them with their daily operations. This back-end activities would help the bus operators to evaluate its current position and to plan its company's operations on how and what action to be taken in order to stay ahead in this competitive business world. The back-end activities mentioned above were the sales/business performance, public opinion through online voting and finally the bus operators commitment of maintaining good track records according to the policies of governing bodies.

These back-end activities would be the pillar for creating the competitive edge to a bus operator to spear-head in providing better service to a customer in this challenging business environment.

The customer would be able to utilize this Online Bus Ticketing System web portal to perform their transaction of purchasing bus tickets at their own hassle free time. The features that were available in this system would mostly reflect from the survey conducted during the data sampling stage.

In this business competitive era, Information Communication Technology (ICT) was placed on a platform by many organizations as their key indicator for success. Online data handling has been a major tool to provide better customer service. By adapting ICT as a tool to provide the bus operator's management, it would not only improve operations efficiency, gaining competitive advantages, delivering higher-quality services, but it would also lead an organization to superior control over the booking process which would allow the customers to choose their services from other competitors.

Thus, by developing the Online Bus Ticketing System web portal between inter-cities, the bus operators would have no choice but to join the bandwagon to stay ahead with ICT to improve its services and finally this would cause a reduction of human traffic in Malacca.

1.5 Significance of Project

This research survey identifies the need of developing and promoting a comprehensive Online Bus Ticketing System web portal of various bus operators in Peninsular Malaysia.

This study explores views from the bus operators as the service providers and the customers as the system users upon the adoption of this system. For the bus operators, the survey conducted identifies the responds received from the passengers on the current available system in the market, the cost-effectiveness of developing and maintaining this system and the usage of reports from the system.

On the other hand, the survey conducted on the system users identifies the awareness of the current system and the willingness to transform from practicing the conventional method of over the counter purchase of bus tickets to the modern method of purchasing through a web portal. The survey also introduces and identifies acceptance of the creation of bus operators' classification or standard via popularity, performance and maintaining satisfactory road traffic law track record, features available in the system and the level of security to perform a financial transaction.

1.6 Summary

This chapter covers the overall scope on the need and the implementation of an Online Bus Ticketing System web portal in Malaysia. The development of this system will benefit both the system administrator and the system user by adopting Decision Support System and Management Information System as a tool to maximize their right to make decision based on merit and meeting its organization financial objective respectively.

By developing an Online Bus Ticketing System web portal between inter-cities in Peninsular Malaysia, it would not only provide better service to the user, but also improve the overall standing of the bus operators in this competitive market. Furthermore, the adoption on ICT would also allow the bus operators to open its business horizon globally and make the entire world as its market place.