



UNIVERSITI PUTRA MALAYSIA

**ONLINE ORDERING SYSTEM FOR
KUMPULAN IKATAN PERUSAHAAN SDN BHD**

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Dedicated to

My Mum and Dad



**ONLINE ORDERING SYSTEM FOR
KUMPULAN IKATAN PERUSAHAAN SDN BHD**

*This project paper is submitted as partial
fulfillment of the requirements in attaining
the degree of Masters of Science in
Information Technology*

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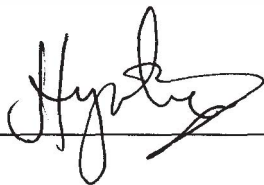
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SUPERVISOR ENDORSEMENT AND CERTIFICATION

**PROJECT PAPER
ONLINE ORDERING SYSTEM FOR
KUMPULAN IKATAN PERUSAHAAN SDN BHD**

This project paper was prepared by Pathmanathan Kandasamy as a partial fulfillment of the requirements for the degree of Masters of Science of Information Technology and hereby accepted and certified by



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ABSTRACT

Kumpulan Ikatan Perusahaan Sdn Bhd which sells car products needs a website to provide ordering facilities through Internet as an effort to expand its market and to increase profit. At the same time, this web development pioneers the effort of e-commerce realization in future. Through this web site, users can browse product that are sold by Kumpulan Ikatan Perusahaan Sdn Bhd and then make online orders. The objective of this system is to promote products of Kumpulan Ikatan Perusahaan Sdn Bhd. The applications which will be developed id divided into two main module that is order module and Kumpulan Ikatan Perusahaan Sdn Bhd management module. Order module describes the online orders by customer and the management module describes management of Kumpulan Ikatan Perusahaan Sdn Bhd from the aspect of receiving orders, product deliveries, payment and updating of products and suppliers.

ABSTRACT

Kumpulan Ikatan Perusahaan Sdn Bhd memerlukan laman web yang mampu menyediakan kemudahan penempahan melalui Internet dalam usaha untuk meluaskan pasaran dan menambah keuntungan. Pada masa yang sama, pembangunan laman web ini merintis usaha merealisasikan perdagangan elektronik pada masa hadapan. Kewujudan laman web ini membolehkan pengguna dari seluruh dunia melihat barangan aksesori kereta yang dijual dan menempahnya secara online. Objektif system ini adalah untuk mempromosikan Kumpulan Ikatan Perusahaan Sdn Bhd. Pembangunan aplikasi system berasaskan web ini terbahagi kepada 2 modul utama iaitu modul penempahan dan modul pengurusan Kumpulan Ikatan Perusahaan Sdn Bhd. Modul penempahan adalah modul yang menggambarkan penempahan oleh pengguna Internet manakala modul pengurusan Kumpulan Ikatan Perusahaan Sdn Bhd adalah modul yang menggambarkan pengurusan Kumpulan Ikatan Perusahaan Sdn Bhd daripada aspek penerimaan penempahan, penghantaran barangan, pembayaran, serta pengemakinian barangan dan pembekal.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Electronic commerce over the Internet is predicted to grow at an ever-increasing rate over the next few years, with on-line sales already heading for several billion. Many companies are using this new sales channel, and a few retailers now have established major on-line sales sites. There have been some successes, particularly in technology, business-to-business and niche markets. Before the existence of the Internet, customers are attracted to buy products around their place. Distance is one of the barriers for customers to buy products from other places. It is also very costly for companies or shops to promote their product at other places.

Since the existence of the Internet, buyers and sellers found the solution for their problem. Internet connects people around the globe even though they are physically far. Using web page, companies could promote

their product and services to people around the globe. Customer can buy their product or services with just a click of a mouse.

Topic for this project is “ Online Ordering System for Kumpulan Ikatan Perusahaan (KIP) Sdn Bhd”. The constructed web site will display information about KIP Sdn Bhd, their products and user can do their reservation/ordering online in this web site. Customer can obtained their product from KIP Sdn Bhd which is situated at Damansara or the product will be sent directly to the customers address.

1.2 Problem Definition

Kumpulan Ikatan Perusahaan Sdn Bhd is located at Damansara, is their only office which sell automobile products such as automatic transmission fluid, brake fluid, car wash, car wax and etc. Customers for KIP Sdn Bhd is only limited to people around Klang Valley. KIP Sdn Bhd ‘s Management needs one solution to promote and expand their business globally without physically opening new branches. In the other hand, management need a system which enable customer to shop without physically visiting KIP Sdn Bhd. Therefore, the proper method which was proposed is to develop web based application which enable shopping is done thought Internet.

1.3 Introduction to Project

This project was proposed for developing a web based application system which enables buying / marketing is done through Internet.

The developed application system enables Internet users to view product available at KIP Sdn Bhd and order/reserve the desired products. In the same time, management can use the developed application system to process the reservation, add new stock or update business information.

The developed system will change the existing business style with e commerce or business without border. Management system will be done systematically using the developed application system.

1.4 Problem Solution

Develop web based application system which has capability to surf and order product through Internet and processing of ordering from the user for the KIP Sdn Bhd management.

1.5 Project Objectives

The objectives for this project are as follows:-

- i. Enable user to view products of Kumpulan Ikatan Perusahaan Sdn Bhd
- ii. Enable user to use search function to search desired product.
- iii. Enable user to order the product and pay using bank draft or credit card.
- iv. Kumpulan Ikatan Perusahaan can market their product through e-commerce to International market.
- v. Kumpulan Ikatan Perusahaan management can process orders and update their product.

1.6 Project Scope

To meet the objective of this project, various scopes has been outlined:-

- i. User can order products online and products will be delivered after the purchaser settles their payment through credit card or bank draft.
- ii. Security issue for payment using credit card online is the on of the barrier for this project.
- iii. New product will be added from time to come.
- iv. Product search for certain product can be done in this web page.

1.7 Advantage

There are several advantages for this project such as:

i. Expand Business

It allows the wider market reach through Internet rather than focusing in local market.

ii. Alleviate Transaction

Transaction is done digitally through Internet which is fast and effective. User can have their own time to choose the desired product without any disturbance. Sales is based on users wish and product will be sent to customer after the payment is cleared.

iii. Increase sales

User can shop unlimited hours, the fact that Internet is accessible 24 hours thus the user is able to purchase the products any time of the day.

iv. Save cost

The company need not do heavy advertising in the local market and foreign market, whereby Internet advertising is more affordable and cheaper. It reduces paperwork and time for the company.

CHAPTER 2

LITERATURE STUDY

2.1 Introduction

Online ordering system using Internet will become pioneer to future electronic commerce. This study has been conducted to study about the advantage of electronic commerce and the technology used for implementation and realisation of electronic commerce.

2.2 Electronic Commerce

Clark (1993) has defined electronic commerce has a business which is carried out with the help of telecommunication and telecommunication equipment. Every electronic commerce web will consist of three basic elements: -

- i) Useful information and Advertising – intent to attract customer and give confident about the company.
- ii) Catalogue – detailed information provider about the advantage of product, specifications and price.
- iii) Ordering process – this section will details the method for specifying and payment term for ordering

2.2.1 Online Catalogue

The key to a good electronic commerce site is to provide an environment that makes it easy for the customer to navigate through the catalogue of products and ultimately make a purchase. In this section, we take a look at the purchase cycle from the point of view of the customer

The customer must be able to find the product they need without going through endless levels of indexes or menus. The visitor should be able to get to the product they need with very few clicks. 80% of visitors to any site will take one look at the page they arrive on and then leave. It has been estimated that you lose 20% of visitors every time you ask them to link to a new page. Good navigation is essential.

The information must be comprehensive once the customer has located the product of interest. Provide pictures and diagrams to help the customer understand what is being offered.

2.2.2 Shopping Cart

When the catalogue is small (say less than 20 items), a simple order form will often do the job. However on larger sites the customer will flag products during this browsing session to be added to an electronic 'shopping cart'. At any point the customer can review the contents of the cart, the cost and so on. This makes it easy for the customer to browse the site selecting products as they go.

2.2.3 Check Out

When the shopping session is complete, the customer clicks on a hyperlink which takes him or her to the checkout page. At this stage the customer is presented with a list of the goods marked for purchase, the total cost, shipping, handling, tax, etc. The customer can then add shipping instructions, name, address and so on.

The customer is normally given a range of payment options, and some of the more common are discussed in more detail below. The most common is to use a credit card, and the customer enters the card number, name on the card and expiry date.

At this stage the Web site should switch to secure mode. The technology normally used is called SSL (Secure Socket Layer). This means that all communication with the server is encrypted in such a way that eavesdroppers cannot (without disproportionate difficulty) steal the credit card information. It is important for customer confidence that the site switches to secure mode as soon as credit card information is requested.

The customer will get visual warning from his or her Web browser that they are in secure mode, a blue key and blue line in Netscape or a padlock symbol in Internet Explorer. There are some older browsers that don't support SSL but most do.

This technology is widely used and quite well understood by Internet users.

2.2.4 Security Issues

It is therefore essential that traffic be scrambled (or encrypted), and the standard SSL protocol developed by Netscape provides a high level of protection. The US government views encryption technology as munitions, and therefore the only version of SSL available worldwide is the relatively weak 40-bit version. However, this version is quite strong enough to protect against automated scanning as described above, as it takes over an hour to crack one message.

Browsers that support this technology indicate that a secure session is in progress by showing a dialog box, or in the case of Netscape Navigator by showing a blue key on the screen.

Even if the customer is protected by SSL technology, it is clearly important that the information remain secure.

Once stored on the Web server, and before being passed to the merchant, the information is at risk from someone breaching security on the server and examining the files. Protection from this can be provided by either:

- Encrypting the information stored on the server
- Using a 'firewall' to protect the information. A firewall is a device (or a piece of software) which limits access to a server to specific types, such as 'Web traffic only'. An important UK acquiring bank (Barclays) insists that credit card data be held behind a firewall.

The further stage of sending the information to the credit card processor, and to the merchant must similarly be protected.

The 'blue key' which Netscape Navigator provides to show that a secure session is under way is therefore no guarantee of total security, and the reputation of the merchant (or the payment process) is also important.

In an attempt to overcome these weaknesses, the industry has developed the SET specification. SET stands for Secure Electronic Transactions. The SET standard has been developed to protect payment instructions in transit.



2.3 Advantage of Electronic Commerce

There are 10 reasons for promoting and doing business in the Internet which were stated by Brad Hampton and Kim Hampton(1998) :

2.3.1 Announce the existence of Business to the World

Globally at the moment there are 70 million out of the world population have access to Internet. In the future, any business should have own email address and web site.

2.3.2 Advertising Tool

Using web site business owner's can list out brief information about their product, location and method of payment. Furthermore they can update the information frequently. Catalogue with graphic can be included as part of the advertisement.

2.3.3 Customer Service

Providing open communication is the one of the way to provide service to customers. Using Internet Business owner's can send latest information and update to the customers.

2.3.4 Publicity

On the internet most companies try to publish press releases on the net which helps them to publicize their company . Thus another place where companies gain publicity on the internet is through virtual communities which encourages companies to do their networking with other collaborative groups through global roaming

2.3.5 To Open the Business to International Market

Most companies in order to gain comparative advantages go on the Internet. This helps them to get their customer base more in volume and helps them to sell goods B to B (business to business) and B to C (Business to Consumers).



2.3.6 To Test New Product and Services

Companies are able to conduct online surveys through the Internet with relevant question in order to test their new product. Usually companies will delay their launching of new product in the market until they print new catalogue. However with web page, companies can promote their product easily and faster than traditional method that is printing catalogue. Updating a web page involve very minimal cost compared to the cost for printing catalogues. Furthermore two way communication in the Internet enable companies to get feedback immediately from the users about their product.

2.3.7 To reach high demography market

Electronic commerce helps companies to market their products globally with the help Internet by segmenting websites country wise with provides localization

2.3.8 To Reach certain Market

Yahoo, Lycos, Metacrawler and MSN enable potential customer to search their product.



2.3.9 To Provide 24 hours access

Buyers today have many choices either they go shopping or buy things with a click of a mouse the choice is theirs. Internets advantage is that it is 24 hours and buyers can purchase anytime they wanted to.

2.3.10 Cost Saving

Using Internet as their marketing tools companies can avoid printing catalogues that cost more to the companies. This can save cost for companies in marketing aspects. Another important things is that using Internet companies need not physically open their branches to expand their businesses.

2.4 Studies on Information Design

Information design describes the organization of information which provides clarity, meaning and context for the information (Mok, 1996). Information design involves taking data like text, pictures, multimedia elements, programning elements and organizing them in a way that is meaningful and useful.