

## TESIS^ APPROVAL STATUS FORM

JUDUL: Mobile Direct Selling Information (MDSI)

SESI PENGAJIAN: 2003/04

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^ Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

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This report is submitted in partial fulfillment of the requirements for the Bachelor of Information and Communication Technology (Software Development).


FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA  
2004

**ADMISSION**

I admitted that this project title name of  
**MOBILE DIRECT SELLING INFORMATION (MDSI)**

is written by me and is my own effort and that no part has been plagiarized without  
citations.

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**DEDICATION**

*To my beloved parent, your love and support are my greatest inspiration.*

*To my friends, for your sacrifices, encouragement, and support.*

*To my lecturer, for being receptive and critical, and challenging me to be a better student.*

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## ABSTRAK

Mobile Direct Sales Information (MDSI) adalah sistem yang menggunakan telefon mobil dengan tujuan utamanya untuk melihat jumlah mata yang dipungut dari pembelian produk bagi sesebuah syarikat jualan. Ahli bagi syarikat juga boleh mencari maklumat produk terbaru di samping maklumat produk yang sedia ada dengan menggunakan sistem ini di mana sahaja dan dari semasa ke semasa. Maklumat produk syarikat juga boleh dicari dengan menggunakan telefon mobil mereka dan dapat ditunjukkan kepada pelanggannya. Pengumuman yang dibuat oleh syarikat mengenai maklumat terkini dari pejabat dapat disebarkan kepada ahlinya. Pengumuman ini penting bagi setiap ahlinya supaya maklumat terkini dapat diketahui dengan mudah dan cepat. Pendaftaran perlu dibuat dahulu sebelum seseorang ahli dapat mencapai maklumat dari syarikat dengan menggunakan telefon mobilnya. Pihak pengurusan akan menguruskan sistem ini dengan memasukkan lebih banyak maklumat ke dalam pangkalan data seperti maklumat produk, pengumuman dan mengemaskinikan jumlah mata yang diperolehi. Untuk menguruskan maklumat ahli dan produk syarikat, sistem ini disediakan supaya ahlinya dapat mencapai maklumat yang diperlukan. Di samping itu, disebabkan pihak pengurusan biasanya amat sibuk di pejabat, MDSI disediakan kepada ahlinya di mana sistem ini mudah digunakan dan boleh digunakan secara beramai-ramai bagi mencapai maklumat serta membantu mereka bergiat aktif dalam penjualan produk syarikat. Metod *prototyping* digunakan dalam membangunkan projek ini disebabkan metod ini adalah elemen yang penting bagi pembangunan secara berulang di mana pembangunan ini disediakan, dikaji dan diperbaiki dari keputusan pengujian yang diperolehi dari satu fasa ke fasa pembangunan yang berikutnya.

## ABSTRACTS

The Mobile Direct Sales Information (MDSI) is a system that used mobile phone mainly to check their point earned upon purchasing the products. Member can also view the latest products information besides current products information using this system at any place and on time. The entire products information can be search just using the mobile device to be referred or show to customer. Announcement is essential for member to get new information from the office. This announcement is important for the user to get the latest information easily. Registration is done before the member can access the information from their mobile phone. Administrator handles the system in adding more information to the system's database such as products information, announcement and update the points. In order to effectively manage the member and products information, this system provides solution that could readily let member gets information needed. And, because its administrator is frequently busy in the office, MDSI provided its member with easy, real-time access to their information to help them stay productive on the road. The prototyping method is used in developing the project where this method is an essential element of an iterative design approach, where designs are created, evaluated, and refined with the results of testing at each cycle feeding into the design focus of the next cycle.

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## LIST OF ABBREVIATIONS

<b>ABBREVIATION</b>	<b>DEFINITION</b>
1G	First Generation
2.5G	2.5 Generation
2G	Second Generation
3G	Third Generation
3GPP	3rd Generation Partnership Project
AMPS	Advanced Mobile Phone System
CDMA2000	Code Division Multiple Access 2000
EDGE	Enhanced Data Rates for Global Evolution
EGPRS	Enhanced GPRS
GPRS	General Packet Radio Service
GSM	Global System for Mobile Communication
IE	Internet Explorer
IIS	Internet Information Services
IMT-2000	International Mobile Telecommunications-2000
IS-136	Interim Standard 136
IS-95	Interim Standard 95
ITU	International Telecommunication Union's
MDSI	Mobile Direct Sales Information
MMS	Multimedia Messaging System
NMIT	Nokia Mobile Internet Toolkit
NMT	Nordic Mobile Telephony
ODBC	Open Database Connectivity
OLE	Object Link and Embedded
SDK	Software Development Kit
SMS	Short Message Service
TACS	Total Access Communication System

UMTS	Universal Mobile Telecommunications System
WAP	Wireless Application Protocol
W-CDMA	Wideband Code Division Multiple Access
WML	Wireless Markup Language

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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Preamble or Overview**

Mobile Direct Sales Information (MDSI) system is developed and used in many direct selling companies since it has an unpredictable influence of expandable potential. MDSI is a system that used to connect its' members together and enhance their integrations through an efficient and time-saving way to get more information about points earned upon purchasing products, products information and the announcement.

In order to let member access the information needed easily, this system is developed. It also helps the member to increase their sales to get more points where products purchase will add the points to the member's account. Moreover, this system will explore the usage of the mobile phone to get information when user needed in any time and any place.

Currently, Malaysia has 79 organizations that provide direct sales such as Amway, Cosway, Elken and others. These three companies is studied and analyzed in gathering more information. All the organizations sell varieties of products and give different points to every products purchase by their member.

Most of the member checks their points earned through the administrator or from office. Some of the member wait for the letter send by the company to check their points earned. Products information especially the latest product is sometimes not clear in mind to be explained to the customer whom leads to failure to sell the products that needed by the customer. Moreover, the member need to make call to get the news from the company and not every member get the same news from the company.

In order to get the information needed easily and fast, mobile device is alternative equipment used to connect to the system database to retrieve the information needed and to increase their sale that will gain more points. Member can also get the latest information and services from the company through mobile phone. All the information is added by the administrator can be used by the member with just few clicks.

## **1.2 Problem Statements**

The company's information is provided to member through catalog or web sites. The catalog is burden to bring it which is heavy and not updated. Information provided in web sites is sufficient to let member view it but user need to find the equipment such as computer with connected to phone line in order to get the information. With these two channels is not enough to member get their information easily.

Member of the sales company usually are seldom finds out the point that they gain upon purchasing goods. They tend to wait for the letter of points earned send to their home or making calls to the company to inquire about it. These inflexible ways cause the member hard to get their points information.

The products information is send to the member by mail which takes few days to arrive and this cause the member have to wait for the product catalog. Moreover, the member is burden to bring the entire catalog book to let customer view it.

The latest announcement or news is spread to member from the company's web site. Some of the member is hard to get the news if they are working at outstation which they do not have the hardware and phone line to view it. In addition, some of the member will call to the office to ask about the latest news and the news is not known by other members.

### 1.3 Objectives

The objectives of the MDSI are

- Provide alternative channel of getting the information needed by the member and to expand the use of mobile phone besides computers.
- Member can view the point gain in purchasing goods from the company directly from their mobile device with securely.
- Customer can get the latest products information within short period and can bring it out to anywhere and anytime.
- The latest news can also be delivered to every member when they view the announcement. This enable member to act based on the news they gain from this system.

Below shows the differences between the current system and the MDSI system:

Table 1.1: Differences of Current System and MDSI.

	<b>Current System</b>	<b>MDSI</b>
<b>Hardware Used</b>	User access to the company's services using computer or laptop.	User access to the company's services using mobile phone.
<b>Points Earned</b>	Points earned are checked from the letter send, calling to office or web site.	Points earned are checked directly by browsing to the web page using mobile phone.
<b>Products Information</b>	Products information is printed in catalog and server that can be checked from web site.	Products information is in the server that can be checked using mobile phone.
<b>Announcement</b>	Latest announcement can be seen on the web site.	Latest announcement can be seen at anywhere and anytime.

#### 1.4 Scopes

MDSI is a system that contains two parts, member and administrator. MDSI is a client-server system that enables members of the company to retrieve information that is needed.

The administrator's scopes are:

1. To enable the administrator manage the information that is needed by the members.



2. To improve the company's operation and organization.

While the scopes of the member are:

1. To develop a system that can be used using mobile device by the entire member.
2. To develop a Wireless Application Protocol (WAP) based system using Wireless Markup Language (WML).
3. To enhance members connectivity to the information needed at anytime and anywhere.
4. To help the member retrieve the latest announcement on time.

In designing the system, the menu is limit to few and the size of the mobile phone's screen is small. In additional, the number of key clicks that contains on a mobile to get the information is also limit. The image size used should be small to be easily view in mobile phone.

## **1.5 Contributions**

As the aim of the MDSI, this system is developed for the member that will contribute effort to every member. They can effectively access to the information easily by using their mobile phone and make analysis to increase their points earned for every month.



Moreover, member can also get the chance to explore the usage of their mobile phone to get the information needed on time. Mobile phone is wireless equipment and can bring it out to anywhere. The accessibility to the information using mobile phone is an alternative way.

The administrator can manage and provides sufficient services to every member. This system will help the direct selling company organize their information systematically to be viewed by their member.

## **1.6 Expected Output**

The MDSI is a system using the mobile device especially mobile phone to let its member get the information needed at anytime, anywhere and to save their time. The client-server system is useful for member to retrieve information effortlessly by making request to the server.

A fully functional system which uses mobile phone is designed and projected at the end of the development. User to this system can explore the usage of mobile phone to get information needed easily. This system will help the member to enhance their ability to get information needed with just few minutes.