

**A Strategic Analysis on Internet Banking:
A Malaysian Case**

**A thesis submitted to the Graduate School in partial
fulfillment of the requirements for the degree
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**by
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ABSTRAK

Kemajuan teknologi di dalam bidang telekomunikasi dan informasi teknologi telah memberi sumbangan yang teramat terhadap evolusi sistem distribusi perbankan di Malaysia. Sejak Bank Negara Malaysia (BNM) membenarkan bank-bank tempatan untuk memperkenalkan perbankan Internet pada 1hb. Jun, 2000, cara distribusi ini kian berkembang di Malaysia pada zaman revolusi elektronik ini. Dalam kajian ini, analisis SWOT diaplikasikan pada perbankan Internet di Malaysia untuk mengenalpastikan kelebihan dan kelemahannya berbanding dengan peluang dan ancaman luarannya. Analisis ini merupai tahap permulaan dalam pembentukan pelan pemasaran strategik perbankan Internet kerana ia dapat mendefiniskan isu-isu utama yang perlu diatasi demi untuk menghasilkan satu pelan pemasaran strategik perbankan Internet yang efektif. Analisis sasaran pengguna serta penggabungan elemen-elemen pemasaran untuk menyokong pelan pemasaran strategik perbankan Internet di Malaysia juga dikaji dalam repot ini.

ABSTRACT (ENGLISH)

The vast technological advancement in the field of telecommunications and information technology had contributed significantly in the evolution of distribution channels for banking products and services in Malaysia. In recent years, since the granting of approval by the Central Bank of Malaysia for locally owned commercial banks to offer Internet banking services on June 1, 2000, this mode of delivery channel appears to be the current trend in the electronic revolution that is fast developing in the Malaysian banking sector. In this study, SWOT analysis is applied on Internet banking in Malaysia to assess its strengths and weaknesses, vis-à-vis its external opportunities and threats. This analysis forms the starting point of evolving an Internet banking marketing strategy plan as it provides the basis for defining which key issues will need to be managed in order to develop an effective Internet banking marketing plan for the future. This study also include a target market analysis, as well as the design of a marketing mix that is able to support the marketing strategy plan for Internet banking in Malaysia.

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CHAPTER 1

INTRODUCTION

1.1 The Context of the Study

As a result of the extensive technological advancement in the field of telecommunications and information technology, the banking business in Malaysia had undergone tremendous developments, specifically in the way in which banking products and services are made available for use. From the traditional brick and mortar branches, the banking distribution channels had evolved into the electronic era with the introduction of new delivery channels for banking products and services such as the automated teller machines (ATMs), telephone banking and PC-banking (Guru *et. al.*, 2001).

With the advent of the Internet and World Wide Web (WWW), the basis of competition and business infrastructure in the banking industry was changed dramatically through the use of the Internet as a delivery channel. In recent years, since the Central Bank of Malaysia (BNM) granted its approval for locally owned commercial banks to offer Internet banking services on June 1, 2000, this mode of delivery channel appears to be the current trend in the electronic revolution that is fast developing in the Malaysian banking sector.

The introduction of Internet banking offers banking firms a new frontier of opportunities and challenges (Suganthi *et. al.*, 2001).

1.2 Problem Statement

As highlighted by (Aladwani, 2001), Internet banking is the newest and least understood delivery channel for retail banking services, and as at to date, most research on Internet banking is to a large extent anecdotal. It was also noted that past research on Internet banking has a rather narrow focus in terms of issues discussed and data sources.

This problem is more evident in Malaysia due to the lack of quantitative studies on the issues relevant to Internet banking in the Malaysian environment. Most research studies done were empirical in nature. In addition, survey results were mostly obtained from the current Internet users and Internet banking users, thus eliminating the potential Internet banking users in their studies. The scope of sampling is also usually restricted to certain areas of coverage only, and this has also caused a limitation in terms of the data sources for the research studies. Due to the competitiveness among the banks, information pertaining to the banks' future direction and their strategy on their Internet banking services was difficult to obtain, as well as restricted.

1.3 Objectives of Study

The primary objective of this study is to identify and determine the issues and challenges faced by the Internet banking. This study also aims to present some practical implications for banks that are currently offering

Internet banking services as well as banks that are planning to offer such services. This includes an assessment on the current Internet banking environment in Malaysia, and the development of a marketing strategy that is suitable for Internet banking.

1.4 Methodology

The SWOT analysis model is used to assess the current Internet banking environment in Malaysia. Content analysis based on the literature review of published research papers and articles on the following areas were conducted to derive the pertinent issues and challenges of Internet banking that fit into the SWOT model:

- recent updates on issues and concerns pertaining to Internet banking;
- research studies pertaining to Internet marketing;
- articles relating to Malaysia's banking environment; and
- research studies, as well as survey results on the factors that affect the adoption of Internet banking.

Extending from the SWOT analysis, a marketing mix strategy for Internet banking was developed as part of the marketing strategy planning process. A case study on the Maybank Group's web portal www.Maybank2u.com was also done to assess its marketing mix strategy.

1.5 Literature Review

In year 2001, the Central Bank of Malaysia launched the Financial Sector Master Plan (FSMP). The stated objective of the FSMP is ‘to develop a more resilient, competitive and dynamic financial system with best practices, that supports and contributes positively to the growth of the economy throughout the economic cycle, and has a core of strong and forward looking domestic financial institutions that are more technology driven and ready to face the challenges of liberalization and globalization’. In achieving this objective, and in the progress of strengthening the financial sector to prepare them to face the global competition, the Central Bank of Malaysia had embarked on a consolidation exercise which resulted in the reduction of the number of banks from 33 in 1999 to only about 10 anchor banks in 2000. As such, to face the new challenge from competition, it was essential for the banks to become more efficient and cost effective, thus driving them to seek a new distribution channel that is less costly. This challenge has created further opportunity for Internet banking as a new distribution channel for banking products and services, as the Internet and virtual banking channels have significantly lower cost structure than other delivery channels (Sathye, 1999). The cost of providing banking services via the Internet banking was also the lowest as compared to the other modes of banking such as branch, phone and PC (Booz *et. al.*, 1997)

The current infrastructure environment to promote information communication technologies (ICT) in Malaysia is also encouraging the growth of Internet

banking. In South East Asia, Malaysia ranks second, after Singapore, to have the lowest Internet dial-up rate (Minges & Gray, 2002). The Malaysian government has also launched a number of initiatives such as the PC Ownership Campaign and tax rebate incentive on purchase of computers, to encourage the widespread access to computers and the Internet, which is essential for the greater possibility of use of Internet banking (Suganthi *et. al.*, 2001).

Reducing costs and improving competitiveness are not the only main factors for developing alternative distribution channels, but it will also enable the financial institutions to retain their existing customers, as well as to further attract new customers (Kimball & Gregor, 1995). As can be observed in the current Internet banking environment in Malaysia, some banks have embarked on cross-selling their other financial products such as insurance and shares trading, and forming alliances with online merchants to create an online shopping facility via their web portal to attract new customers base.

As indicated (Internetnews.com, 2001), the potential users of online banking in Malaysia will reach 1.1 million by year 2004 with the total number of online banking accounts reaching 1.6 million or 23% of all Malaysia Internet users for that year. This indicator figures that were estimated in year 2001 was significantly surmounted as Maybank alone has a total of 1.3 million Maybank2u.com registered users as at year 2004. This indicates the potential growth of Internet banking in Malaysia.

As occurs in any implementation of new, technology-based banking services, consumer acceptance is important in determining the feasibility and success of its implementation (Dover, 1993). Therefore, one of the main challenges that banks may face in the implementation of Internet banking as a new delivery channel is to understand the determinant factors that will affect the consumers' adoption towards Internet banking, and finding the means to overcome or minimize the impact of these factors. In recent years, there have been a number of theoretical research studies done to examine the determinants of acceptance and use of information technology (IT) by individual users, such as the Technology Acceptance Model (Davis, 1986) and the research framework by Tan and Teo (2000) that was adapted from Taylor and Todd (1995) which based on the theory of planned behavior (Ajzen, 1985) and the diffusion of innovations theory (Rogers, 1983). This framework was used in their study to identify the attitudinal, social and perceived behavioral control factors that would influence the adoption of Internet banking in Singapore. In another study by Suganthi *et. al.* (2001), the pertinent factors that were noted to affect the adoption of Internet banking in Malaysia include accessibility, reluctance, costs, trust in one's bank, security concerns, convenience and ease of use.

It is therefore essential for banks to develop an Internet banking marketing strategy plan to ensure the success of its implementation. Marketing strategy planning essentially consists of selecting target markets and designing a marketing mix that will be used to support the specified strategy (Stanton *et. al.*, 1991). The essential element of the marketing mix that need to be focused on for the achievement success of the Internet banking marketing strategy

consist of the four Ps: products, promotion, presentation and personalization (Amor, 2000).

1.6 Significance / Contributions of the Study

Since Internet banking is projected to have significant positive impacts on various elements of the current banking system, therefore this empirical study identifies the various issues, challenges and marketing strategies relating to the current Internet banking in Malaysia that could be used by the bankers and policy makers to address their concerns of the Internet banking management to ensure the growth of Internet banking in Malaysia.

CHAPTER 2

EVOLUTION OF THE DISTRIBUTION CHANNELS FOR BANKING PRODUCTS AND SERVICES IN MALAYSIA

The vast technological advancement in the field of telecommunications and information technology had contributed significantly in the evolution of distribution channels for banking products and services in Malaysia. In these past few decades, the banking business in Malaysia had undergone tremendous developments, specifically in the way, or the process in which banking products or services are made available for use.

2.1 Automated Teller Machines (ATM)

From the traditional brick and mortar branches, the banking distribution channels had evolved into the electronic era with the introduction of ATMs in the 1980s. Among all the electronic delivery channels, the ATMs are still the most widely accepted and highly utilised delivery channel (Guru *et. al.*, 2001). One of the distinct benefits that ATMs had brought to banks is the significant cost reduction, as it presented banks with a more economical substitute for the traditional brick and mortar branches. The ATMs revolution had enabled banks to offer extended banking hours that extended beyond the normal office working hours, as well as overcome the constraint of geographical location.

Some of the common functions of ATMs include account balances inquiries, cash withdrawals, cash and cheque deposits, as well as making utility bills payments.

2.2 Telephone Banking

Subsequently, in the early 1990s, telephone banking was introduced in Malaysia, which provided yet another delivery channel for branch banking services. This mode of banking utilizes telecommunication devices as the delivery channel for bank customers to perform their retail banking transactions. All that needs to be done by the bank customer is to use a touch-tone telephone or mobile communication unit to get connected to, and interact with the bank's automated system that runs on the Automated Voice Response (AVR) technology.

Telephone banking has the capability of performing almost all of the functions that are available on the ATM except for withdrawal and deposit of cash. Based on Leow (1999), among the benefits that telephone banking provides for the bank customers include increased convenience, expanded access and significant time saving. Whereas from the bank's perspective, the benefits derived from this mode of banking include substantially lower bank operating cost as compared to those traditional brick and mortar branch provided services. Furthermore, the large number of fixed line telephone services users also guarantees the critical mass criteria for telephone banking services.

2.3 PC-Banking

PC-banking is another significant technological breakthrough as one of the electronic delivery channels for banking services. This mode of banking enables banks to offer their services to customers via their own personal computers. With PC-banking, customers can use their personal computers at their own premises to access their accounts for transactions by subscribing and dialing into the banks' Intranet proprietary software system (either custom or standard personal financial management software) by use of password. In a way, PC-banking had virtually establish a bank branch in the customers home that offer 24-hours service, 7-days a week. However, in Malaysia, PC-banking is more popular among banks' corporate customers rather than to their retail customers. This may be so as PC-banking has the advantages of cost reduction, increased speed and improved flexibility of business transactions. In addition, not many retail customers are willing to incur the cost of purchasing, installing or setting-up the proprietary software system.

2.4 Internet Banking

Unlike PC-banking, the mode of Internet banking would free both the bankers and customers of the need for proprietary software system to carry on their online banking transactions. It involves the banks using the Internet as another delivery channel for banking services and transactions. Through Internet banking, one does not require special software or access to a private network, but banking transactions are all conducted via the Internet.

The concept of Internet banking represent a new and sophisticated delivery channel that web-savvy customers demand. The customer just need to have a computer with Internet access, a modem and telephone line, an Internet browser and have registered for an Internet banking service with his/her banking institution, then he/she can conduct Internet banking from virtually anywhere in the world. This new concept of browser-based online banking enables existing and prospective bank customers 24-hours, 7-days a week, immediate access to the bank without any expensive and inconvenient software purchase, installation or set-up.

2.5 Mobile Banking

During the early stages of Wireless Application Protocol (WAP) technology, some banks such as OCBC and United Overseas Bank, had embarked on the introduction of mobile banking that uses WAP-enabled mobile phone as the delivery channel for certain types of banking services that include balance enquiry, bill payments, statement request, fund transfer and credit card services. However, the launch of WAP-enabled mobile banking had not been well accepted due to the various complaints of slow data transmission encountered while performing a transaction. Recently in year 2003, the latest development in mobile banking was the introduction of Short Messaging Service (SMS) mobile banking by Hong Leong Bank and Bumiputera-Commerce Bank. This mode of banking utilizes the SMS technology with the banks having to work in collaboration with the local mobile cellular operators. As such, the effectiveness of mobile banking will be partly determined by the network coverage and services provided by the mobile cellular operators.

CHAPTER 3

INTERNET BANKING ENVIRONMENT IN MALAYSIA

The Central Bank of Malaysia granted the approval for locally owned commercial banks to offer Internet banking services on June 1, 2000. This approval was subsequently extended to locally incorporated foreign banks on January 1, 2002. Since then, the number of banking institutions in Malaysia that offer Internet banking facilities had grown to a total number of 13. Out of these 13 institutions, 8 are locally owned commercial banks, while the remaining 5 are foreign owned.

3.1 Types of Internet Banking Sites

In the current Malaysian banking environment, there are 3 types of Internet banking sites as defined by the Central Bank of Malaysia (BNM, 2000):

3.1.1 Informational site

This type of site is intended solely to distribute general information about the banking institution and to advertise its products and services, but provide no interactive capability. Among the 3 types of sites, this poses a relatively low risk as the information on the web site is not linked to the banking institution's internal computer systems that stores information database of the banks.

3.1.2 Communicative site

This web site allows some form of interaction between the banking institution's systems and the customer. Through this web site, customers are able to send information and make enquiries about their accounts via the form of e-mail, online forms, account inquiries or perform static file updates. These sites may represent a higher level of risk than informational sites as they may provide a path to the banking institution's internal networks via e-mail and attachments.

3.1.3 Transactional site

Through this web site, customers are allowed to execute transactions in addition to the capabilities as described above for informational and communicative sites. This web site represents the greatest risk to banking institutions as it provides a link to the bank's internal network and the computer systems holding the account information and other information assets of the bank.

3.2 A Review of the Malaysian Banking Sites

A review of the Malaysian banking sites on the Internet revealed that all locally owned commercial banks, which have been accorded an anchor bank status by the Central Bank of Malaysia, have a web presence, as well as Internet banking operations as listed in Table 1. It was further noted that the Internet banking services were provided not only for customers, but also for businesses.

Local Ownership		
Commercial Bank	Informational / Communicative Web site	Transactional Site Internet Banking
Affin Bank Berhad	√	X
Alliance Bank Malaysia Berhad	√	√
AmBank Berhad	√	√
Bumiputra-Commerce Bank Berhad	√	√
EON Bank Berhad	√	X
Hong Leong Bank Berhad	√	√
Malayan Banking Berhad	√	√
Public Bank Berhad	√	√
RHB Bank Berhad	√	√
Southern Bank Berhad	√	√
Foreign Ownership		
Commercial Bank	Informational / Communicative Web site	Transactional Site Internet Banking
ABN AMRO Bank Berhad	√	X
Bangkok Bank Berhad	X	X
Bank of America Malaysia Berhad	√	X
Bank of China (Malaysia) Berhad	X	X
Bank of Tokyo-Mitsubishi (Malaysia) Berhad	X	X
Citibank Berhad	√	√
Deutsche Bank (Malaysia) Berhad	X	√
HSBC Bank Malaysia Berhad	√	√
J.P.Morgan Chase Bank Berhad	X	X
OCBC Bank (Malaysia) Berhad	√	√
Standard Chartered Bank Malaysia Berhad	√	X
The Bank of Nova Scotia Berhad	√	X
United Overseas Bank (Malaysia) Berhad	√	√

Table 1: Commercial Banks in Malaysia with Online Presence

Generally, most banks are currently offering the following types of Internet banking services for their customers:

- Online and real-time account balances enquiries
- Fund transfer between own personal accounts and third party accounts
- Credit card services such as online payment, gifts redemption, outstanding balance enquiries, transaction history and statement request

- Cheque book request, stop cheques request and online cheque status enquiry
- Online utilities bill payments and loan repayment

As for businesses, the types of Internet banking services that are currently available in the Internet banking environment include the following:

- General online banking services such as account balances enquiries, fund transfers, loan repayment and rates enquiries (foreign exchange rates and interest rate)
- Online trade finance services such as application for Letter of Credit / Trust Receipt as well as outstanding balance and facilities status enquiries
- Online payroll services such as salary crediting services, online payment and submission of employee details for tax deductions and monthly Employee Provident Fund (EPF) contributions

Bank	Internet Banking Services for Customers	Internet Banking Services for Businesses
Alliance Bank Malaysia Bhd.	√	√
AmBank Bhd.	√	X
Bumiputra-Commerce Bank	√	√
Hong Leong Bank Bhd.	√	X
Malayan Banking Bhd.	√	√
Public Bank Bhd.	√	X
RHB Bank Bhd.	√	X
Southern Bank Bhd.	√	√
Citibank Bhd.	√	X
Deutsche Bank (M) Berhad	√	X
HSBC Bank Malaysia Bhd.	√	√
OCBC Bank (Malaysia) Bhd.	√	√
United Overseas Bank (M) Bhd.	√	√

Table 2: Internet Banking Services Offered by Commercial Banks in Malaysia

Table 2 is a summary of the Internet banking services that are currently being offered by the Malaysia banks as of February 2, 2004.

In addition to the above types of services, the review on the Malaysian banking sites also indicate the cross selling efforts being established by the banks via their online links to their subsidiaries to offer other types of services such as providing online share trading platform, and online wealth management and investment opportunities. As at the date of review, the banks that currently offer online share trading include Alliance Bank, AmBank, Bumiputra-Commerce Bank and Malayan Banking Berhad.

The review also shows that in an effort to promote Internet banking usage among their customers, banks offer their Internet banking services free of charge. Furthermore, for convenience purpose, most banks also allow their existing account holders to online application for the setting up of an Internet banking account.

In comparison to other countries' Internet banking services such as in the United States, it can be concluded that Malaysia's Internet banking environment is still at the infancy stage, and the opportunity of growth for more types of online services are available for our banks to explore. In the following chapter, an analysis on the current Malaysian Internet banking environment is done to assess the current status of this new banking delivery channel.

CHAPTER 4

SWOT ANALYSIS: INTERNET BANKING IN MALAYSIA

SWOT analysis is a management tool that is widely used by organizations in their process of strategy formulation. Generally, SWOT analysis can be applied on any subject matter. It is a detailed analysis of a subject matter's strengths and weaknesses, as well as its environmental opportunities and threats. Such an analysis could assist in establishing a realistic basis for the formulation of strategies that take maximum advantage of the subject matter's strengths and opportunities, while minimizing the weaknesses and threats.

In the following section, SWOT analysis is applied on Internet banking in Malaysia to assess its competitive strengths and weaknesses, vis-à-vis its external environments' opportunities and threats.

4.1 Strengths of Internet Banking in Malaysia

4.1.1 Convenient Accessibility

The Internet is becoming an increasingly popular way for customers to find information and manage their finances because of advantages such as its immediacy and 24-hour availability (Q-go.com, 2002). Among all the current

available banking delivery channels, Internet banking can be seen as the only delivery channel that offers customers 24/7 (i.e. 24 hours a day, 7 days a week) accessibility while providing them full control of handling their banking transactions. Customers can instantly access in detail up-to-the-minute information of their accounts, as well as execute swift movement of funds electronically over the network.

Banking via the Internet provides customers more flexibility and convenience of performing their routine banking transactions on their own PC from anywhere and at anytime. It significantly saves customers' time from the hassle of traveling to bank branches or ATMs. Besides that, Internet banking also enables customers to enjoy extended banking hours, as they no longer are restricted to the banks' counter operating hours, i.e. 9:30 a.m. – 3:00 p.m.

4.1.2 Cost Advantage

As indicated in the cost comparison study done by Booz, Allen & Hamilton (1997), there is significant cost advantage of using Internet as the delivery channel for banking services over the other modes of banking. This is shown in Table 3 below:

Branch	Phone	PC	Internet
US\$1.08	US\$0.54	US\$0.28	US\$0.13

Table 3: Cost comparison among the different banking delivery channels

In addition, the study also estimated that the cost of providing banking services via the Internet banking costs approximately 15-20 percent of the revenues

generated, as compared to the traditional branch banking's running costs of 50-60 percent of revenues. Thus, successfully migrating branch customers to Internet banking can assist banks to lower their cost while improving their profitability.

Furthermore, by distributing information in electronic form, the banks can also reduce material costs by saving on paper, the printing and the manual distribution. In a way, the bank customers are taking over parts of the distribution costs that was previously bore by the banks.

4.1.3 Wide Market Coverage

The Internet is able to offer banks a wide customer base of existing Internet users. It can also be used as a mode to attract new customers in a bank's existing market or to extend its reach into new geographical markets. According to the Malaysian Communication and Multimedia Commission (MCMC), there were about 1.7 million Internet subscribers in Malaysia as at December 2000, and this is assumed to imply at least 4 million effective Internet users in the country that is about 17% of the Malaysian population (Minges & Gray, 2002). This figure portrays the potential customers base in which banks can target to ensure a critical mass for the economic viability of providing Internet banking services.

4.1.4 Reduced Customer Attrition

There are 2 forms of customer attrition (Bézard, 2003):

- *Customer defection* refers to a customer closing all his accounts at an institution (current account, credit card, home loan, etc.).
- *Customer relationship diminishment* refers to customers who reduce the number of accounts or their deposits held at an institution.

One of the major advantages of the Internet is its global availability. As such, the Internet offers the potential to lower the bank's attrition rate as existing Internet-based customers who move (i.e. within Malaysia or to anywhere in the world), can still continue to use the bank from their new location as long as there is Internet access. In a way, providing Internet banking services can help increase customer retention rate, as well as improve customer loyalty through a never closing site.

Once customers adopt online banking, they become more profitable to the bank, retention rates increase and the bank-customer relationship is strengthened.

4.1.5 Strengthening Customer Relationship

Internet banking has the web server technology that has capability to track each customer's on-line transactions, as well as the search engines technology that can be used to analyze customer behaviors and profitability. As customers operate online with their bank, they can get personalized financial offerings that suit their needs without leaving the bank's web site. Thus, if used

well, the Internet can be a useful tool for banks to strengthen their relationship with the customers.

4.1.6 Cross-Selling Opportunities

The cross-selling opportunities that Internet banking present do offer significant revenue potential for the banks. The capabilities of the web provide powerful tools for effective information posting, hosting and presentation. Advertisements can be posted on the web in the form of banners, pop-up screens, movies and video clips (Ranchhod, 1998). Banks can utilize their web sites to advertise their various product features. Furthermore, a review on the banks' which have a web presence in Malaysia indicate that all have an interactive type of web sites, i.e. a web site which allows some interaction between the bank's systems and customers, both existing and potential. The customers can make enquiries, request for information, or leave comments. As such, Internet banking provide the opportunities for customers to browse the banks' interactive web sites to gather further information of the banks' financial products and services that might be of relevance to their needs. In a way, Internet banking can be used by banks to increase product penetration per customer, by helping cross-sell new relevant products and services to their customers. It has been noted that customers who adopt Internet banking typically use more products as compared to non-Internet banking customers (Hutto, 2002).

4.2 Weaknesses of Internet Banking in Malaysia

4.2.1 Internet Security Issue

Internet security concern has been the most widely cited factor that is restraining the consumer acceptance towards electronic commerce. This concern has also been the main barrier to the conduct of financial transactions over the Internet and may perhaps pose the greatest threat to the growth of Internet banking in Malaysia.

In recent years, there have been a rising number of cases involving Internet banking fraud being reported worldwide. In Hong Kong for example, the fraud cases reported involve unauthorized fund transfers from customers' accounts, as well as unauthorized capturing of customers' Internet banking IDs and passwords through the launch of a Trojan horse. The latest type of Internet banking fraud that has recently been used against customers of some large European and American banks is called the Phishing fraud. This scam was also detected in the Malaysian Internet banking environment during end-December 2003. Phishing fraud involves fraudulent e-mails sent by fraudsters trying to obtain customers' login IDs and passwords by tricking them into visiting a fake website.

As long as consumer confidence is not generated among banks customers on the Internet security, the acceptance of Internet banking as a delivery channel will be delayed. Thus, banks have the responsibility to ensure a secure banking site for their customers.

4.2.2 High Cost for Customers Maintenance

Although Internet banking may cost a fraction of in-branch or ATM transactions, but Internet banking customers may cost banks millions in calls and e-mails to support centers for Internet banking help. Banks that offer Internet banking may have to incur additional cost such as setting-up of 24-hours Helpdesk centers, training cost for bank personnel to provide customers support and also the cost of losing dissatisfied customers. Beyond the cost issues, banks recognize that Internet banking customers demand a satisfying experience, and their expectations of services are high and climbing.

4.2.3 Limitation on Internet Banking Functionality

The Internet banking services that are currently provided by our Malaysian banks are still at the infancy stage. There are still many branch banking transactions that are not available via Internet banking such as cash deposit and withdrawal, cheque deposit, loan application, account opening, bill presentment and dealings in foreign currencies exchanges. Due to such limited banking services via Internet banking, customers may be discouraged to open an Internet banking account as they may be more satisfied with the existing banking methods.

4.2.4 Consumer Acceptance Towards Technology

As happened in all the other previous introduction of new electronic banking delivery channels that were the predecessors of Internet banking, such as the ATMs, PC-banking, mobile phone banking and etc, the consumer acceptance level towards each of these new introduction usually kicked off

with a slow start. As written in many research papers, this situation most likely arises due to the major psychological and behavioral factors that affect the adoption of any new innovation. Among the mostly cited factors include, consumer awareness, ease of use, security, accessibility, technology phobia or simply reluctance to change, preference for personalized services and cost of adopting the innovation (Suganthi *et al*, 2001).

In addition, the effect of uncertainty avoidance on technology acceptance could also be a threat to the growth of Internet banking usage. In Hofstede's research in 1980, uncertainty avoidance was defined as "the degree to which members of a society feel uncomfortable with uncertainty and ambiguity" and this could affect technology acceptance by influencing their choices of computer-based media versus traditional media.

As highlighted in the earlier point, of particular concern to the bank customers would be the transactional security and reliability of the Internet for financial transactions and services. In addition, the uncertainty of legal liability in the event of dispute over an Internet banking transaction has also in a way deter the consumer acceptance towards the use of technology for their banking transactions. In Malaysia's environment, Internet banking is still a new and untested domain of banking service, and as such the consumer acceptance towards this new delivery channel will still remains uncertain.

4.3 Opportunities of Internet Banking in Malaysia

4.3.1 Low Dial-up Rate

According to Minges & Gray (2002), Malaysia has the second lowest dial-up Internet prices in South East Asia, just above Singapore. The dial-up Internet access using a special 151x code is regulated at a lower rate than voice telephone calls. For example, TMnet charges 2.5 sen per minute for dial-up Internet access compared to 3 sen per minute for local calls. As such, this attractive dial-up rate policies in Malaysia would ensure the growth opportunity of Internet banking as a delivery channel.

4.3.2 Government Encouragement to Increase Availability of Access to the Internet

An essential prerequisite that will affect the adoption rate of Internet banking is the availability of access to the Internet. The more widespread the access to computers and the Internet, the greater the possibility of use of Internet banking (Suganthi *et al*, 2001).

In the course of achieving the Malaysian government's goal to increase the penetration of Information Communication Technologies (ICT) to ensure no citizen is denied access to information, knowledge and opportunity in the digital economy, the government has launched a number of initiatives to encourage purchases of computers. One of these initiatives is the PC Ownership Campaign launched in October 1999 that allows citizens with children over 10-years of age to withdraw their Employee Provident Fund (EPF) contributions to purchase PCs. Another government incentive is the

RM500 tax rebate from the consumers' taxable income when they purchase PCs. On top of that, the Internet service providers (ISPs) have also launched programmes offering lower-priced PCs when signing up for Internet service.

4.3.3 Demand for New Type of Online Transactions

The need for new and improved methods of payment for business-to-business (B2B) and customer-to-customer (C2C) transactions are bound to offer new opportunities for banks that provides Internet banking facilities. For example, nowadays, businesses aim for efficiency in trade and lower transaction costs, and Internet-based payments should benefit both banks and businesses.

In Malaysia, most of the B2B and C2C payments are still paper based, i.e. making a paper cheque payment. An example in case would be our monthly credit card bill payment. If we do not have a banking account (i.e. savings or current) with the credit card issuing bank, we will then have to issue a cheque payment and either mail the cheque or hand deliver it to deposit for clearing. This method of payment is time consuming and can be a more expensive mode, as compared to using the Internet to make automated checking house (ACH) payments that are currently available in other countries such as the United States and Europe.

Thus, it is envisaged that as Internet banking develops and customers gain confidence in it, there will certainly be a demand for more types of online services by our Malaysian consumers.

4.4 Threats of Internet Banking in Malaysia

4.4.1 Speed of Internet Connectivity

One of the pertinent factors that affect the adoption or usage of Internet banking is the Internet connection speed (Suganthi *et al*, 2001). In Malaysia, despite the strong government emphasis on multimedia and the establishment of the Multimedia Super Corridor (MSC), it still has a low level of broadband access to the Internet. Apart from the business sector, few homes or small businesses had high-speed access. As such, this issue of slow Internet connection speed may pose as a threat to attract customers to adopt Internet banking.

4.4.2 Regulatory and Legal Infrastructure

Another important aspect in developing Internet banking in Malaysia is the quality of our regulatory and legal framework to protect the interests of the Internet bank customers as well as the financial institutions. The main concern that customers have would be on how the banks would deal with erroneous transactions that occurs in online transactions, i.e. will the burden of proof be on the customers or the banks would be willing to settle the issue up front and investigate the problem later.

As at to date, the laws relevant to electronic fund transfer (EFT) and electronic banking in Malaysia are governed by the statutes such as:

- (a) Banking and Financial Institutions act (BAFIA) 1989;
- (b) Digital Signatures act 1997; and
- (c) Computer Crimes Act 1997.

Besides the above statutes, our Central Bank of Malaysia, pursuant to powers under the BAFIA 1989 has also issued the “Minimum Guidelines on the Provision of Internet Banking”.

In terms of our current legal infrastructure, at the moment, the legislation concerning e-commerce transactions in Malaysia still remains largely untested, although various initiatives have been undertaken by the Malaysian government to introduce new legislation to provide the pillars of the legal framework for e-commerce transactions in Malaysia. This was one of the issues that was mentioned during the opening address by Dr. Zeti Akhtar Aziz to the Banking and Financial Law School in Kuala Lumpur on the legal aspects on ICT developments in Malaysia that was held on the 24 April 2001. It was also highlighted that the changing environment due to the rapid advances in ICT has required financial institutions to be adaptive and responsive. This rapid change has also created a need for a regulatory framework that promotes innovation, while reinforcing the prudential limits to ensure that elements of instability do not emanate from such innovations. It was also emphasised that regulators will need to take into account the nature and dimensions of the change so as to devise the appropriate regulatory response that will provide a conducive environment for the financial industry to develop.

As such, at this juncture, the legal infrastructure governing Internet banking transactions is still at the early stage and remains largely untested. Thus, this uncertainty concerning the legal liability in the event of a dispute over an Internet banking transaction will be a threat to the growth of Internet banking

in Malaysia, as this uncertainty will affect the consumers' acceptability towards the use of technology.

4.4.3 Other Banking Delivery Channels

Reluctance to change is another factor that might affect Internet banking adoption because the existing mode of service or product delivery fulfills the customer's needs adequately. For customers to change their present ways of operating and to take up new technology, it must "fulfil a specific need", and unless such a need is fulfilled, consumers may not be prepared to change from the present ways of operating (Suganthi *et al*, 2001).

In comparison with the current available banking delivery channels in Malaysia, branch banking still remains as a major threat to the growth of Internet banking in Malaysia. According to the general survey findings by Guru *et. al.* (2001), most Malaysian banking customers still patronize the bank branches and find interaction with human tellers as important. Their survey results indicated that 90% of the respondents visit their bank branch at least once every month. This shows that consumers of banking services in Malaysia still find it useful to visit their bank branches regularly every month to perform some banking transactions. Furthermore, the survey results also indicated that bank customers in Malaysia do quite highly value the importance of the personal touch in banking services, as 90% of the sample respondents indicated that they find human tellers important.

Besides branch banking, ATMs will also be a major threat to Internet banking as the survey results also show that majority of the respondents stated the frequency of their ATM usage to be more than 4 times per month. Furthermore, the survey results indicated that ATMs are the most widely used electronic banking facility among the 3 main electronic delivery channels in Malaysia, i.e. ATMs, telephone banking and PC-banking.

4.5 Summary

The following table is the summary of the current SWOT analysis on the Internet banking environment in Malaysia.

Strength		Weakness	
(1) Convenient Accessibility		(1) Internet Security Issue	
(2) Cost Advantage		(2) High Cost for Customers Maintenance	
(3) Wide Market Coverage		(3) Limitation on Internet Banking Functionality	
(4) Reduced Customer Attrition		(4) Consumer Acceptance Towards Technology	
(5) Strengthening Customer Relationship			
(6) Cross-Selling Opportunities			
Opportunity		Threat	
(1) Low Dial-up Rate		(1) Speed of Internet Connectivity	
(2) Government Encouragement to Increase Availability of Access to the Internet		(2) Regulatory and Legal Infrastructure	
(3) Demand for new type of Online Transactions		(3) Other Banking Delivery Channels	

4.6 Validation of the SWOT Analysis Findings

The above findings on the SWOT analysis were presented to a few IT specialists from 2 foreign banks and 2 local banks for their reviews and comments with regards to the impact on their respective organisations. These IT specialists consist of the key personnels who are responsible for their respective banks' Internet banking operations.

Based on their feedback, it was noted that the strengths of Internet banking which forms the main motivating factors for the banks to embark on Internet banking slightly differs between both the local banks and foreign banks. For example, the IT specialists from the foreign banks cited that one of the main reasons for them to offer Internet banking services is to reduce customer attrition as their customer base is comprised largely of businesses with worldwide operations.

As such, it is critical for these foreign banks to offer a delivery channel that could sustain their banking relationships with their customers in as many places as possible. It was also mentioned that the decision to offer Internet banking services in Malaysia is also to support their head office's operations. On the other hand, the local banks' IT specialists were of the opinion that Internet banking's ability to penetrate to a wider market coverage is the more important reason that motivates these banks to offer this delivery channel.

Furthermore, they also agreed that through Internet banking, they are able to achieve cross-selling businesses for their different banking products and

services. They felt that this is mainly due to the ability of Internet banking to provide their customers with the ability to search for the relevant or necessary financial information that could cater to their financial needs that will enable them to make an informed decision to invest or use the bank's other financial services. All the IT specialists agree that Internet banking will be an important tool for strengthening their relationship with their customers and it will one day be the most convenient banking delivery channel for their customers.

From the bank's perspective, it was noted that Internet banking as a delivery channel does not provide as much cost advantage as it does to Internet banking users. It was highlighted by the IT specialists that the initial infrastructure set-up cost as well as the maintenance cost outweighs the cost savings derived from this delivery channel. Besides that, all the IT specialists have the same agreement on the fact that the Internet security issue will always remain as the main concern for banks which offer Internet banking due to the uncertainty of the vast development in the

The IT specialists agreed that the Government's initiatives to promote Internet accessibility and the current low dial-up rate in Malaysia do encourage the potential growth of Internet banking, as these are the motivating factors that promote Internet usage as a medium of delivery channel. They further mentioned that their banks' strategy have also been tailored closely in-line with the current situation of continuous changes in the way businesses are conducted, i.e. paperless and instantaneous. In addition, the marketing promotions that these banks have implemented for their Internet banking

customers were also largely determined by the current lifestyles of its customers' and their demand for more online transactions to facilitate their daily or routine tasks such as online top-up of prepaid phone bills and online shopping.

Most of them were of the opinion that in certain aspect, the current infrastructure to promote online monetary transactions via Internet was still in the infancy stage in Malaysia as compared to other countries. They agreed on the findings that legal and regulatory concern in the event of a dispute over an Internet banking transaction is one of the most frequently asked questions by their customers prior to them opening an Internet banking account. The IT specialists from the foreign banks highlighted that the types of Internet banking transactions being provided by their offices in Europe and the United States of America are more than those that are available in Malaysia. One of the reasons cited for this is partly due to the legal and regulatory environment in those countries that are more encouraging for the implementation of more types of Internet banking transactions. In addition, they also felt that the low level of broadband access infrastructure in Malaysia do specifically affect the usage of Internet banking at homes due to the slow Internet connectivity speed. Based on their customers' feedback, most of their customers perform their Internet banking transactions from the office rather than at home. The most common reason cited for this is that the office Internet access speed is much faster, and the occurrence of Internet connection cut-off is also less frequent. The local banks' IT specialists further mentioned that their banks' future direction will most likely be maintaining or increasing the number of their banks' other

banking delivery channels such as the ATMS and branches. This is due to the fact that their customer base consists largely of small retail customers who comprised of diverse demographic features. A large part of them still consist of customers who prefers the old way of banking, and may not be receptive towards the more modern and technological advanced banking methods.

CHAPTER 5

DISTINCTIVE CHARACTERISTICS OF INTERNET BANKING

SERVICES MARKETING

The development of a marketing program for Internet banking is uniquely challenging as it involves strategic planning for electronic services marketing in the banking industry. Due to the special nature of services that stems from a number of their distinctive characteristics, these features create special marketing challenges and opportunities for banks to work on. Among the notable distinctive characteristics of Internet banking services include the following:

5.1 Intangibility

Intangibility means that Internet banking service, unlike physical products, cannot be seen, tasted, felt, heard or smelled before purchase. As defined by Kotler (1997), 'a service is any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or not may not be tied to a physical product'. Thus, one of the tasks of service marketers is to develop mechanisms to reduce customer uncertainty about intangibility.

5.2 Inseparability

Inseparability is the fact that many services are created, dispensed and consumed simultaneously. For example, banks via their Internet banking

channel creates and dispense almost all their services at the same time when the customers log-on to their banking site, and they require the presence of the customer for the banking services to be performed via the Internet. The implication of this is that in many cases both the service provider and the customer must be able to interact with each other.

5.3 Variability

A further characteristic of Internet banking services is variability, due to the fact that no two offerings of the same service will ever be identical because both the customer needs and the service provider's abilities differ. For example, a bank customer logs-on to the banking site without knowing whether his / her banking transactions will be performed at that time without any technical glitches or not. The Internet banking services performance or quality may differs for each and every customer who logs-on to the banking site. Therefore, banks should pay special attention to ensure consistency of quality and to maintain high levels of quality control in their banking sites.

5.4 Perishability and fluctuating demand

Unlike manufactured goods which can be produced and stored for later use, another characteristics of Internet banking service is that they are highly perishable. For example, unused Internet banking services during the time of customer visits to the banking site represents business that is lost forever. Furthermore, the usage of Internet banking services also fluctuates considerably by day of the week and by hour of the day. As such, marketing strategies have to be developed for effective matching of supply and demand.

CHAPTER 6

INTERNET BANKING MARKETING STRATEGY PLANNING PROCESS

The stages involved in the marketing strategy planning process as per the ‘classicist’ model of planning are described as the figure below.

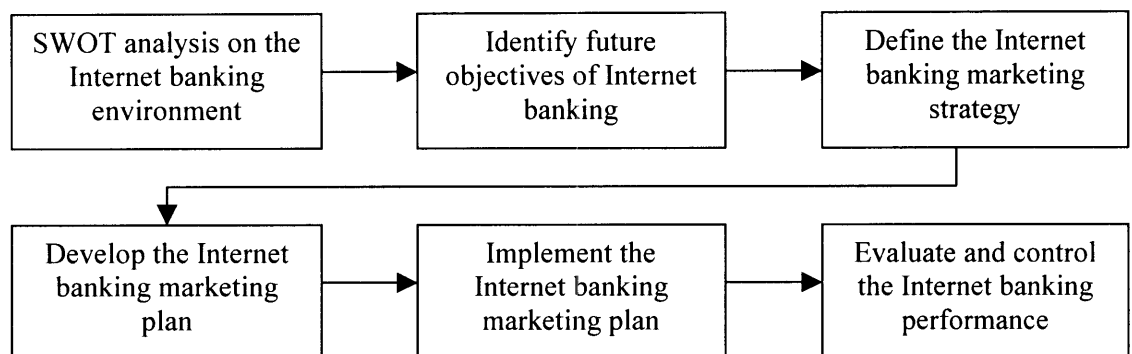


Figure 1: Stages of the marketing strategy planning process

In the previous chapter, having performed the SWOT analysis on the current Internet banking environment in Malaysia is the starting point of evolving an Internet banking marketing strategy plan. Through SWOT analysis, the current banking industry’s market conditions were determined and the role that Internet banking plays in the delivery of customer satisfaction was also assessed. It provides the basis for defining which key issues will need to be

managed in order to develop an effective Internet banking marketing plan for the future.

The next stage in the planning process is to determine the future objectives of Internet banking by assessing how this electronic delivery channel will affect the performance of banks that implement it. In general, banks established an Internet presence with various objectives. Among the major objectives of banks embarking on Internet banking include:

- (a) Act as a proactive, defensive or offensive business strategy as a response to the initiatives already implemented by competition.
- (b) Improve profitability via cross-selling of banking and investment products opportunities, as well as income generation through the forming of alliances with merchants or retailers.
- (c) Increase market share through higher market penetration and capturing of new market share.

Having identified the future objectives of Internet banking, the subsequent stage in the strategy planning stage is to define the marketing strategy on how to position the bank in a specific way in order to achieve the stated objectives. The Internet banking strategy may entail Web-enabling the bank's current business model to maintain their current customer base; extending their current business model to expand the bank's products and services and grow their customer base; or building a new business model, with new products and services to gain new customers and new revenue streams (Hutto, 2002).

After defining the bank's Internet banking strategy, the next stage in the Internet banking strategic marketing planning process is to define the nature of the marketing mix activities (i.e. the product, promotions, presentation and personalization) which form the basis of the Internet banking marketing plan that will help the banks to achieve the objectives of implementing the Internet banking channel. The marketing mix activities need to be structured closely in-line with the results from the SWOT analysis in order to achieve a maximization on the strengths and opportunities of Internet banking while minimizing the weaknesses and threats of it.

The implementation of the Internet banking marketing plan provides detailed descriptions of all actions to be taken to manage the marketing mix, including timings and definitions of which specific individuals or departments in the banks that are responsible for implementing the plan. During this stage, financial forecasts that include revenue, expenditures and resultant profits will also be done.

In the final stage, upon implementation of the Internet banking marketing plan, control systems should exist to identify rapidly any variations of actual performance from the forecasted results, as well as be able to provide diagnostic guidance on the cause of those variations. Contingency plans should also exist to handle the fact that events rarely happen as predicted by the original plan. With contingency plans being in place, if actual events are at variance with original plan, then management is more able to immediately implement actions to overcome the encountered obstacles.

CHAPTER 7

MARKETING STRATEGY FOR INTERNET BANKING

Marketing strategy planning essentially consists of (1) selecting target markets and (2) designing a marketing mix that will be used to support the specified strategy (Stanton *et al*, 1991).

In today's marketing world, emphasis on customer orientation and customer satisfaction have been given much importance for the success of the marketing strategy. As such, organizations will need to determine who its potential customers are in the early stage of the strategy marketing planning process, as only then can they be able to develop a marketing mix that will satisfy the wants and needs of these customers. In the following sections, a target market analysis for Internet banking will first be defined, and then followed by the development of the marketing mix that caters to the target market which are essential for the achievement of the Internet banking marketing strategy.

7.1 Target Market Analysis

A market is defined as people or organizations with (1) wants / needs to satisfy, (2) money to spend, and (3) the willingness to spend it. A target market is a group of customers (people or firms) at whom the seller specifically aims

its marketing efforts (Stanton *et al.*, 2001). In order for the development of an effective marketing mix to support the marketing strategy, it is essential for the seller to carefully select and accurately identify the target markets.

The task of analyzing the bank's target markets for Internet banking services mainly consist of understanding the demographic factors of the users, and the psychological determinants of the users' behaviors that influence their intention to adopt Internet banking.

Subdivision in the demographic composition of the population is an important base for segmenting the Internet banking users' markets as their wants / needs and services usage often are related to one or more of these demographic subdivisions.

As per Balachandran *et al.*, 2000, the younger generation who are generally more computer literate and have an affinity for the web are more likely to adopt Internet banking in Malaysia. This finding is also supported by the findings of Ramayah *et al.* 2002 which shows that awareness of Internet banking was high among the respondents who have experience using the Internet. In addition, it was also found that those in the 21 – 40 age group, higher educated (bachelors degree and masters), earning moderate to high income (RM10,000 per annum and above) and holding higher positions (supervisory and above) are more aware of Internet banking as compared to their counterparts. However, their study further shows that although awareness was high, this awareness has not translated into actual use. As such, the

migration from traditional banking to Internet banking is still very far behind and the banks has so far not been successful in the process of migration, although they have been successful in promoting and creating awareness of the product and services that they are offering through the Internet.

In the research study by Suganthi *et al.* (2001) on the demographic differences between the Internet banking users and non-Internet banking users in Malaysia, it was noted that the only significant difference appears to be in the average level of monthly income. The result indicates that the Internet banking users appear to come from the more affluent part of the society, and this is not surprising since the more affluent are often the trend setters and they are also less likely to be concerned with the risk of Internet bank transactions in view of their greater financial security and resilience.

The results of these research findings generally implies that the target markets for Internet banking in Malaysia will largely comprise of the young working adults that are affluent, educated and computer literate. As such, marketers for Internet banking services should develop their marketing strategy in line with the needs / wants of these target group.

As expressed by Engel *et al.* (1986), 'marketing starts with the analysis of consumer behaviour which are those acts of individuals directly involved in obtaining, using and disposing of economic goods and services, including the decision processes that precede and determine these acts'. It was also stated that 'understanding consumer motivation and behaviour is not an option, but it

is an absolute necessity for competitive survival'. Therefore, a detailed understanding of consumer behaviour is a critical antecedent in the development of an effective Internet banking marketing strategy.

As consumer acceptance is important in determining the feasibility and successful implementation of new, technology-based banking services (Dover 1993), it is thus important for marketers to look into consumer intentions to adopt Internet banking services. In recent years, there have been a number of theoretical research studies done to examine the determinants of acceptance and use of information technology (IT) by individual users. One of these is the Technology Acceptance Model (TAM) that was introduced by Davis (1986). In this work, it has been argued that users develop perceptions about the usefulness and ease-of-use of various technologies and that these, in turn, influence actual system use. As such, according to TAM, the easier the technology is to use, and the more useful it is perceived to be, the more positive one's attitude and intention towards using the technology will be.

Closer to Malaysia's Internet banking environment context, there was a study by Tan and Teo (2000) on the factors influencing the adoption of Internet banking in Singapore. In this study, a research framework that was adapted from Taylor and Todd (1995) which based on the theory of planned behaviour (Ajzen, 1985) and the diffusion of innovations theory (Rogers, 1983) was used to identify the attitudinal, social and perceived behavioral control factors that would influence the adoption of Internet banking. The framework postulates that a person's intention to adopt Internet banking is determined by three

factors. They are (1) attitude, which describes a person's perception towards Internet banking; (2) subjective norms, which describe the social influence that may affect a person's intention to use Internet banking; and (3) perceived behavioural control, which describes the beliefs about having the necessary resources and opportunities to adopt Internet banking. This intention to adopt Internet banking services, in return, is expected to affect the actual adoption of Internet banking. The research findings show that intention to adopt Internet banking services can be predicted by attitudinal and perceived behavioral control factors, but not by subjective norms.

The attitudinal factors that have significant influence include:

- *Relative advantage*, i.e. individuals who perceive Internet banking as advantageous would also likely to adopt the service.
- *Compatibility*, i.e. Internet users who feel that using Internet banking is compatible with their values about living and working; with their Internet experience and with their banking needs, are more inclined to adopt such services.
- *Trialability*, i.e. potential adopters who are able to experiment with an innovation will be able to give meaning to it and feel more comfortable with it, and thus are more likely to adopt the innovation.
- *Risk*, i.e. only individuals who perceive using Internet banking as a low risk undertaking would be inclined to adopt it.

The perceived behavioral control factors that have significant influence include:

- *Self-efficacy*, i.e. Internet users who are confident of their abilities to use Internet banking services are more likely to adopt such services.
- *Government support*, i.e. as government support lends credibility and feasibility to new electronic commerce applications such as Internet banking, thereby making them more likely to be accepted by potential adopters.

In another study by Suganthi et al. (2001) on the pertinent factors that affect the adoption of Internet banking in Malaysia, the following were noted:

- *Accessibility*, i.e. Internet access and Internet connection speed.
- *Reluctance*, i.e. willingness to adopt technology enhancement, level of awareness of current trends and attitude towards change.
- *Costs*, i.e. cost of computers and cost of Internet connection.
- *Trust in one's bank*, i.e. banks reliability in correcting erroneous transactions, trust in the bank to compensate for losses due to security infringements and banks response rate to queries.
- *Security concerns*, i.e. clear and understandable instructions, security of Internet transaction and length of Internet experience.
- *Convenience*, i.e. time saving and convenient way of doing bank transactions.
- *Ease of use*, i.e. ease of performing Internet banking transaction and ease of navigation in the banks site.

Thus, having an understanding of the target market for Internet banking services, this will assist banks in developing an appropriate marketing mix

strategy that would cater to their users' needs, as well as targeting potential users to adopt the Internet banking services.

7.2 Marketing Mix Strategy For Internet Banking

The essential elements of the marketing mix that need to be focused on for the achievement success of the Internet banking marketing strategy consist of the four Ps: Products, Promotion, Presentation, and Personalization (Amor, 2000).

7.2.1 Product

In Internet banking, the product that is offered to customers is the banking services via the Internet delivery channel. Banks need to review their banking services and choose those that are the most suitable for Internet business and put them first on their transactional sites. As in the product life-cycle concept, banks need to recognize what part of the life cycle its Internet banking delivery channel is in at any given time. The competitive environment and the resultant marketing strategies generally will differ depending on the stage. In Malaysia's banking environment, Internet banking as a delivery channel for banking services is still at the infancy stage (i.e. similar to the introduction stage in a product life cycle). In many aspects, the pioneering stage is usually the most risky and expensive one. There is also a high percentage of failures, and banks may have to go through some trial and error processes to improve this new delivery channel in this stage. As such, banks may only offer the most basic type of banking services that are low in risk via the Internet channel at this stage.

The product strategy for banks will also largely be dependant upon the bank’s risk appetite towards Internet banking innovation. As per Chaston (2001), the risk in any e-commerce innovation can be defined in relation to the two dimensions of (1) adding e-commerce features to an existing product versus launching a new product, and (2) modifying the way an existing market is served versus entering a new market sector. Combining these two dimensions creates the product / market matrix as shown in the figure below.

		Market served	
		Modified	New
Product Innovation	Modified	(1) Zero risk Adding e-commerce features to an existing product	(2) Low risk Adding e-commerce features to an existing product to serve a new market
	New	(3) Average risk Developing a new e-commerce product to modify the way an existing market is served	(4) Above average risk Developing a new e-commerce product to serve a new market sector

Product / Market Innovation Matrix

Figure 2: E-commerce product / market matrix

As reviewed in Chapter 2 on the types of Internet banking services that are currently offered by banks in Malaysia, it can be said that most banks fall under Cell 1, that is the lowest risk proposition because it merely involves adding Internet features to the bank’s existing services, such as online viewing of account balances, funds transfer, bill payments and etc.

At this point of time, a few banks have also slowly embarked on to Cell 4, that is the highest risk option. Banks in this category have applied the Internet innovation to expand into a new market sector with a new e-commerce product. Example of this is banks that offer online shares trading services to capture the investors market. Another example is banks that form strategic alliance with online shopping merchants that allows the merchants to sell their products and collect payments from the customers online via the banks' web portal.

Generally, most banks are still taking the conservative stance in terms of the types of Internet banking services that are currently being offered to their customers. It can be said that at the moment, Internet banking services are only taking over those routine banking transactions. As such, based on the product / market matrix, banks in Malaysia still have plenty room for growth in their offerings of Internet banking services.

7.2.2 Promotion

Promotion can be considered as a process whereby information about the organisation's product or service is encoded into a promotional message for delivery to the customer (Ray 1982; Crowley and Hoyer, 1994), and the aim of these activities is to cause the customer to purchase the organisation's output (Kotler, 1997). The advent of the Internet has added various new dimensions to the promotional management process. Berthon (1996) noted the Internet as a mix of personal selling and broadcast advertising. He suggests that Internet can be used to generate awareness, passively to provide information, to demonstrate the product, and, if required by the customer, to support

interactive dialogue. As such, Internet can be used to move customers through the phases of the Internet banking usage decision process. This phased movement begins with attracting web site visitors, making contact with interested individuals, converting some visitors into customers / users, and then supporting the usage and post-usage phase. As individuals progress through each stage phase of the process, it is theoretically possible to assess the effectiveness of the website.

It was noted by Suganthi *et al.* (2001) that creation of awareness among the consumers is one of the more important characteristics for adoption or acceptance of any innovative service or product. Rogers and Shoemaker (1971) also asserted that consumers go through a series of process in knowledge, conviction, decision and confirmation before they are ready to adopt a product or service. As such, effective promotion strategies are critical at the initial phase of the Internet banking usage decision process, i.e. attracting visitors to the banking sites. In order to achieve this, one of the essential tasks that needs to be considered when developing the promotion strategies is for the banks to choose a domain name that fits their business and needs before they can promote their web site.

The domain name could be the company's name if the company is well known, or if the company is offering services for a particular target group, it could choose a domain name that matches a keyword people would search for. As mentioned in the study by Vijayan *et al.* 2003, it was indicated that one of the items that contributes to the factors for ease of use of banking sites is having a

web site address that is catchy and easy to remember. This seems to be in-line with what the Malaysian banks are doing in choosing the domain name for their banking sites. As listed in Table 4 below, it can be noted that most of the banks that have an online presence in Malaysia have their respective bank's name or initials in the domain name.

Commercial Banks	Domain names
ABN AMRO Bank Berhad	www.abnamromalaysia.com
Affin Bank Berhad	www.affinbank.com.my
Alliance Bank Malaysia Berhad	www.alliancebank.com.my
AmBank Berhad	www.ambg.com.my
Bank of America Malaysia Berhad	www.bankamerica.com.my
Bumiputra-Commerce Bank Berhad	www.bcb.com.my
Citibank Berhad	www.citibank.com.my
Deutsche Bank (Malaysia) Berhad	db-direct.my.db.com
EON Bank Berhad	www.eonbank.com.my
HSBC Bank Malaysia Berhad	www.hsbc.com.my
Hong Leong Bank Berhad	www.hlb.com.my
Malayan Banking Berhad	www.maybank2u.com.my
OCBC Bank (Malaysia) Berhad	www.ocbc.com.my
Public Bank Berhad	www.publicbank.com.my
RHB Bank Berhad	www.rhb.com.my
Southern Bank Berhad	www.sbb.com.my
Standard Chartered Bank Malaysia Berhad	www.standardchartered.com.my
The Bank of Nova Scotia Berhad	www.scotiabank.com.my
United Overseas Bank (Malaysia) Berhad	www.uob.com.my

Table 4: Domain names of the Malaysian banking sites

Having chosen the domain name, banks then need to ensure that their domain name is made known to as many people as possible. This can be achieved by registering their web sites with search engines and online directories so that users can more easily find them. Banks could also obtain an existing or potential customer's e-mail address so that they could advertise their web sites

via e-mail newsletters to them. In addition to promoting the web sites via online media, banks should also use the traditional media for their promotion activities, such as the banks' brochures, letterheads and business cards, direct mailing, newspaper, magazines and via the broadcasting media of television or radio.

Banks could also organize trade shows to promote and launch their Internet banking services to the public. Through these trade shows, banks may offer instant sign-up as well as providing users with on-site hands-on experience on the use of the Internet banking services. This in a way could enable trialability of the Internet banking services by potential users, and thus building their confidence in adopting it.

7.2.3 Presentation

Several studies on e-commerce have noted that some features of web sites are critical for their online business success. One of these studies is by D'Angelo and Little (1998) in which it was argued that factors such as navigational characteristics, visual characteristics and practical consideration (including images, background, colour, sound, video, media and content) are important considerations in designing a web site.

On a web page, the most important thing is content. Thus, users should never be left leaving the web page without giving them information. When designing the web site, it should come in mind that customers want to find what they are looking for fast. Thus, it is essential to offer a simple-to-use search engine that

could assist the customers to where they want to go as fast as possible. As mentioned by Amor (2000), web site needs to be designed in such a way that every single piece of information on the web site can be reached with three clicks as customers do not have the time to click thorough all the pages on a given web site. Furthermore, banks should avoid including too much graphics or images on their web sites which may take ages to download. This is because many users still connect to the web using a modem, and the more seconds users have to wait, the more likely they will just go on to another site. It is also important to keep the banks' web page content up-to-date and offer real-time information to its customers. For e.g., customers will not find it advantageous of looking at their bank account if the data is not up-to-date.

In addition, it is also necessary to understand that copywriting and content development for the web is quite different to copywriting for print. This is because the online reader:

- Skims rather than reads very word.
- Jumps from page to page.
- Can enter content at different points.
- Doesn't like deep scrolling.
- Finds reading on screen more difficult.

As such, copywriting and content development that may have been previously created for offline readers can rarely be successfully used for online purposes

unless it is expertly edited. Banks have to adapt the print material and make them suitable for online use.

Besides content of the web page, the design and attractiveness of the web sites are also important as it is the first thing the customers are going to see. Just as the banks' letter heads adhere to the corporate or brand image in design elements and colours, web site should also use the same elements. This is to ensure that anyone looking at the web site would be able to associate it with the bank and its product and services in an instant.

For colour schema, it is important to choose the colours that would support the message of the web page, and stick to the chosen colours throughout the site. It is also essential to check that the web site has a good colour design, and this can be done by printing out a page on a black and white printer. If the page is readable, then the colour design is right.

Navigation tools available in the web sites is one of the major determinants for ease of use of the sites. Thus, ease of navigation in the banking sites is considered as one of the pertinent factors that influence the adoption of Internet banking (Suganthi *et al.*, 2001). Throughout the whole web site, the navigation and the graphics should look the same, simple and clear in order to guide the customers and give them control over the web site. It is essential to have a navigation bar that every user can understand, and it is also necessary to replicate all graphical navigation bars in textual links in order to support the non-graphical browsers. In addition, it is also essential to provide guides and

clear instructions throughout the site in order to help users find their way around. The user should always have the capability to go back directly to the beginning of a channel or to the main home page.

Overall, the presentation elements on a web page are critical for the success of an online business. However, banks should not be too overwhelmed in trying to make their web site attractive by putting in more graphics, videos or sounds that might slow down the whole Internet banking transaction process. Thus, it is still essential for banks to offer content of the web page on a low-bandwidth solution.

7.2.4 Personalization

As defined by Talha *et al.* (2003), personalization is the process of tailoring pages to individual user characteristics or preference. It is a means of meeting the customers' needs more effectively and efficiently, making interaction faster and easier, thus increasing customer satisfaction and the likelihood of repeat visits. From the moment the customers register as users for the Internet banking services, banks should start to collect information on them.

Banks should tap on the possibilities that IT provides for electronic businesses, that is, identification, interaction, differentiation, tracking and customization. Combining these possibilities will enable banks to develop a successful one-to-one marketing strategy to personalize their Internet banking services for the customers. As mentioned by Amor (2000), a web site that does not use one-to-

one marketing will not be successful in the future, as it ignores the needs of the customers.

Being able to identify a customer will enable banks to understand the Internet banking services usage patterns for every single customers. Having this understanding of the usage patterns of the customer, the bank could present to the customer the relevant banking products, services or information that could satisfy their needs or interests.

As mentioned earlier, bank customers in Malaysia still highly value the importance of personal touch in banking services. This could be achieved through the Internet which is able to offer a wide range of communication possibilities, such as interactive chats and e-mail. These services allow the Internet banking customers to interact with the banks fairly easily, but the banks need to respond very quickly as this is one of the main attributes of the online service quality.

Internet banking also makes it easy to keep track of the customers' every Internet banking transactions. This tracking information can be stored in a database and be made available to everyone within the bank who is in contact with the customer. With this information, banks could then be better able to differentiate and customize their Internet banking services offerings to tailor to each of their customers needs and wants. Furthermore, it was also noted by Ghosh (1998) and Mols (2000) that the Internet banking can offer personalized services to their customers in order to build customer loyalty, since they can

automatically track through the Internet, individual customers' financial service usage and gather the information in their integrated database.

Therefore, personalization is one of the main marketing strategies that needs to be considered by banks in their Internet banking business in order to develop customer relationships.

CHAPTER 8

CASE STUDY: MAYBANK'S INTERNET BANKING

MARKETING MIX STRATEGY

8.1 The Maybank Group

Since its incorporation on May 31, 1960, Maybank has progressed to become the biggest bank in Malaysia. Currently, the Maybank Group is the largest financial services group in Malaysia with over 400 branches nationwide and has an international network that covers 13 countries. It offers a comprehensive suite of financial solutions, services and products ranging from banking, insurance, factoring, asset management, stock broking, trustee services, nominee services, discount-house business, property trust fund management, unit trust fund management, venture capital and auto finance services.

The Maybank Group has maintained its leadership role in line with its objective of being an agent of dynamic change in financing business expansion and assisting national economic growth. Over the years, it has strengthened its position through continuous and innovative initiatives, and realizing the Malaysian Government's aspiration to internalize e-commerce, it has become the first bank in Malaysia to launch Internet banking services through its online

financial portal www.Maybank2u.com in June 2000. With their continuous improvement effort, the Maybank's online portal had achieved various awards as listed below:

Year	Awards
2002	Best of e-Commerce Interactive Marketing Innovations – Asia Pacific ICT Awards [MSC-APICTA] 2002
2002	Best Consumer Internet Bank in Malaysia – Global Finance
2002	Best Consumer Online Securities Trading in Asia Pacific – Global Finance
2001	Best Internet Application Website @ My 2001
2001	Best Internet Bank in Malaysia – Global Finance
2000	PIKOM Computimes Award for E-Commerce Site of the Year 2000

For the financial year 2003, the number of transactions through Maybank's Internet banking rose 64.4% as compared to the previous financial year, and the highest increases were noted for bill payments and third party fund transfers which doubled in volume. Maybank recognized the significant potential of Internet banking as an electronic delivery channel that will enable the Group to achieve its vision of becoming the leading financial solutions provider committed to meeting and exceeding its customer expectations in the target markets and countries it serves.

8.2 Maybank's Internet Banking Marketing Mix Strategy

The marketing mix strategy that Maybank adopts for their web portal is discussed in the following section.

8.2.1 Product

It has been four years since Maybank launches Internet banking facilities to its customers. At the time of the initial launch, Maybank only offers

its online transaction services from 6.00 am to 12.00 midnight, and the types of services provided includes banking enquiry functions, bill payment, credit card payment, funds transfer, and accounts summary as well as transaction history.

Since then, Maybank has continuously develops and introduce new online facilities to their customers via their web portal. As at to date, the online services that Maybank offers has expanded to include the following:

(a) Online banking

In general, the types of banking services available for the online banking customers are as follows:

- Enquiry services on the details and balances of the customer's banking accounts, credit card, fixed deposit and loan, as well as account statement request.
- Funds transfer services between own accounts, third party accounts and Interbank transfer (GIRO).
- Cheque services that include enquiry on the cheque status (i.e. whether it is paid, unpaid, stopped or returned), request for stop cheque payment and cheque book.
- Fixed deposit services that include placement and upliftment.
- Standing instruction services which enables the customers to make periodical funds transfers to their own or third party accounts, as well as payments to selected payee corporations.

(b) Online bill payment

This service enables the Maybank Internet banking users to make immediate and future payments to registered corporations by debiting their banking accounts or credit cards issued in Malaysia, and also to reload mobile / Internet prepaid for Celcom, DiGi and tmnet.

(c) Online shares trading

Through the Maybank2u.com portal, shares trading customers who maintain a share trading account with Maybank or Maybansec, are able to buy and sell their shares online. In addition, they are also able to view real time stock prices and have access to the latest market updates and announcements, as well as stock research reports.

(d) Online loans application

Maybank is the first local bank in Malaysia that offers online home loan pre-approval to customers. Through this online loan service, customers could submit their application any time, 24 hours a day, and get a reply within 3 working days.

(e) Online cards

Customers could obtain information on the privileges and rewards of the various cards offered by Maybank, such as credit cards and debit cards. Currently, for online cards services, customers are able to apply for credit cards online via the Maybank2u.com portal.

(f) Online insurance

This service enables the customers to obtain online information on the various types of insurance that are provided by the Maybank Group. In addition, customers could also renew their policy online, as well as view their insurance premium statement.

(g) Online shopping

This service offers the web visitors and the Maybank2u.com registered users to shop online with a variety of products from the Maybank's online merchants or business partners. Through the Maybank2u.com Business Partnership Programme that is a strategic alliance that gives the online merchants the opportunity to sell their products and collect payments from their customers online, Maybank has embarked on the business of e-commerce that is still not being offered by many bank in Malaysia.

In addition to the above services, Maybank has also offered its corporate customers with online facilities via its Internet channel Maybank2e.net. Through this channel, the corporate customers could make online payroll and EPF contributions to their employees' accounts. Recently in February 2004, Maybank has introduced a new web-based dividend payment service offered via the Maybank2e.net platform, which enables companies to pay their dividends by auto-crediting the shareholder's bank account.

Through its one-stop online financial portal, it can be noted that the Maybank Group has embark on cross-selling the Group's other financial products and

services such as insurance, shares trading and other investment products such as unit trusts. In addition, Maybank has also continuously introduces new innovative e-commerce products such as the auto-credit dividend payment system and online shopping facilities via its web portal. As such, based on Chaston's (2001) product / market innovation matrix as explained in the earlier chapter, it can be noted that Maybank's Internet banking services offering strategy falls under Cell 4 (i.e. it has applied the Internet innovation to launch a new e-commerce product and entry into a new market sector).

As mentioned by the Maybank Group's Chairman Tan Sri Mohamed Basir bin Ahmad, it is Maybank's commitment to push the limits of technology to enhance the reach and quality of its services to customers. As such, it will be Maybank's strategy to continuously develop innovative product and services via its web portal to capture the Malaysian, as well as the offshore financial markets.

8.2.2 Promotion

The domain name for Maybank's web portal is Maybank2u.com. It has uses the numeric '2' to represent 'to' and also the letter 'u' to represent the short acronym of 'You'. The use of numbers and letters to represent short acronyms for words, have been widely used in the IT and communication world. This has enabled the creation of short and catchy domain name that is convenient and easy to remember, as what have been done by Maybank.

Since the launch of Maybank2u.com, this domain name has been widely advertised in the bank's brochures, letterheads and business cards, magazines and newspaper. Maybank has also increase the visibility of their offerings through banner advertising and creating web links with their online merchants' sites.

In its promotion strategy to encourage more users to sign up and adopt Internet banking, Maybank has also provided an online demonstration site to its potential users that allow them to experiment and have a trial usage of the Internet banking services. This demonstration site will give the potential users examples of what they can see and do in its transactional site when they sign up as an Internet banking users.

In April 2003, Maybank had launched its Internet banking kiosks that provide convenience for customers to access its online financial portal at its banking premises. This launch had also made Maybank the first bank in Malaysia to introduce the Internet banking kiosk concept where the bank provides the terminals at branches to enable its customers to undertake their Internet banking transactions, and thus further promoting the usage of their Internet banking services.

8.2.3 Presentation

Maybank has adopted its corporate colour, i.e. yellow and black as the main colour schema for its web site. This is in line with the Maybank Group's

aim to project a consistent image for the Group, thus creating a strong brand and identity.

In order to make content browsing easier, the Maybank2u.com home page is divided into five sections (i.e. top, left, center, right and bottom). At the top of the page is logos and portal introduction information that appear in every page. The web site visitors can select other countries' Maybank2u.com web sites from the drop down list located at the top right hand side corner. In addition, the introduction information about the web portal is also located here, such as the security features of the site, the connection to the online demonstration site, the instruction on how to sign up as Internet banking users, the Maybank contact details and other more detailed information on the available online transactions and benefits of using the web portal.

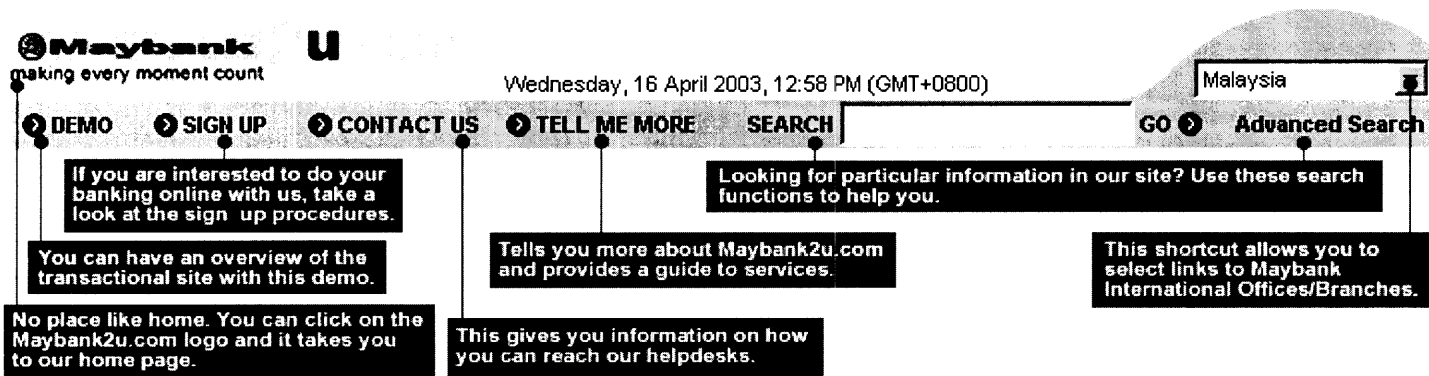


Figure 3: Top section of Maybank2u.com home page

On the left is the transactional panel that is also featured in every page to guide the web site visitors on the available online transactions offered by the Maybank Group. The transactional panel is subdivided into three main categories, i.e. Consumer which features all the available online services offered to the consumers, Business which features the available online services and other services offered to the businesses, and Corporate Info which features the navigation tool to enable the web site visitor to go back to the main home page.

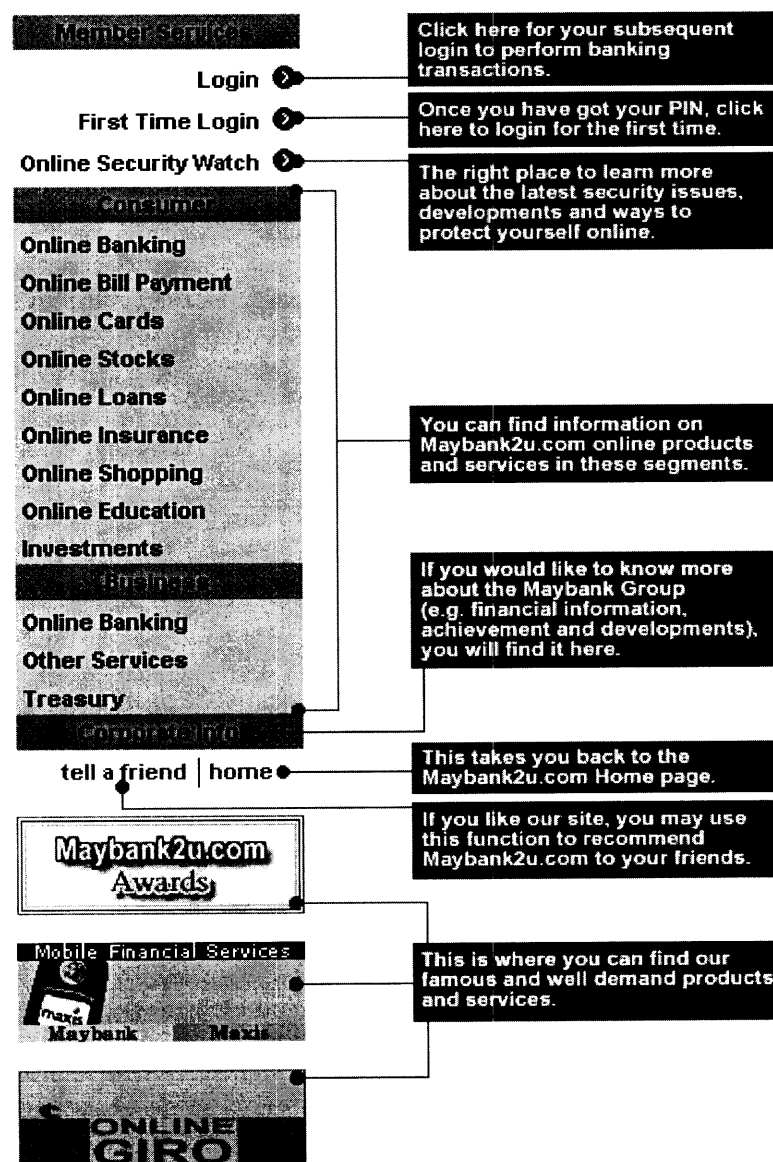


Figure 4: Left section of Maybank2u.com home page

The communication section that conveys Maybank Group's latest business announcements and third party content is located at the center of the home page. The latest KLSE stock indices, foreign exchange rates, as well as Reuters news updates are also featured here.

MAYBANK HIGHLIGHTS

- MAPEX 2003 - Buy now and enjoy exclusive savings!
- NEW 6-digit Password for Maybank-Maxis Mobile Financial Services
- Bank your career with us. Apply for a Maybank Scholarship Award 2003
- Announcement of new ATM services
- Easy Approval Scheme For MaxiHome Refinancing
- Revised procedures on cheque encashment
- Introducing the new chip-enabled Maybankard

more

This feature provides you with our new products, services and latest developments in the Maybank Group.

KLSE STOCK INDICES

Index	Close	Open	Last	Change	% Change
EMAS	153.39	153.55	153.79	0.40	0.26%
COMPOSITE	631.17	632.02	633.09	1.92	0.30%
INDUSTRIAL	1386.23	1386.29	1388.33	2.10	0.15%
2ND-BOARD	93.54	93.56	93.31	-0.23	-0.25%

Last update: 16-April-2003 at 12:55:46
Click "Refresh" for price update every 5 minutes.

more

This real time main stock indices on trading days segment gives you useful information if you are engaged in buying or selling shares.

Figure 5: Centre section of Maybank2u.com home page

Next, on the right is the information section that tells customers about the Maybank Group's products and services. Here, the web site visitors could gather more information about the Maybank Group, its financial highlights, press releases related to the Maybank Group, as well as other related links.

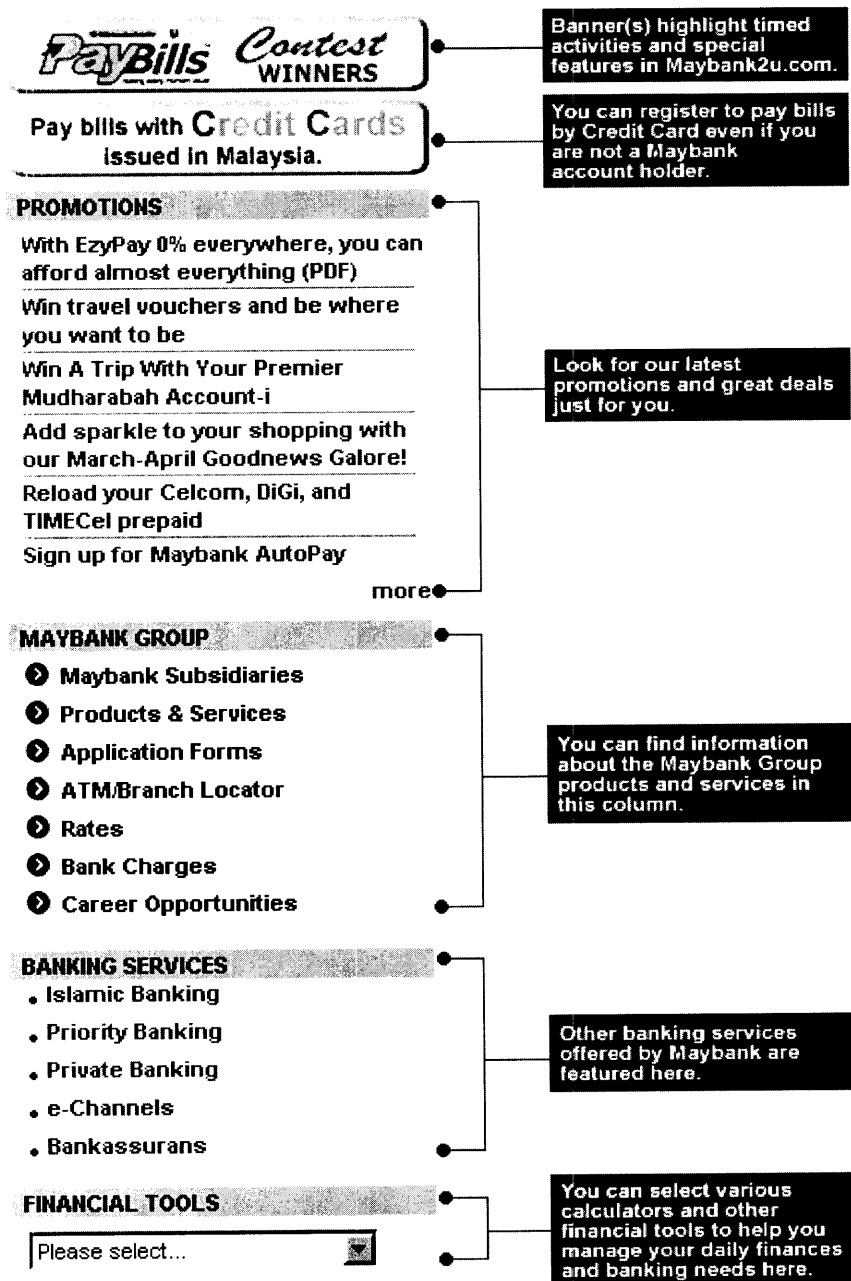


Figure 6: Right section of Maybank2u.com home page

Lastly, at the bottom of the page is the site functions that appear in every page for easy navigation.

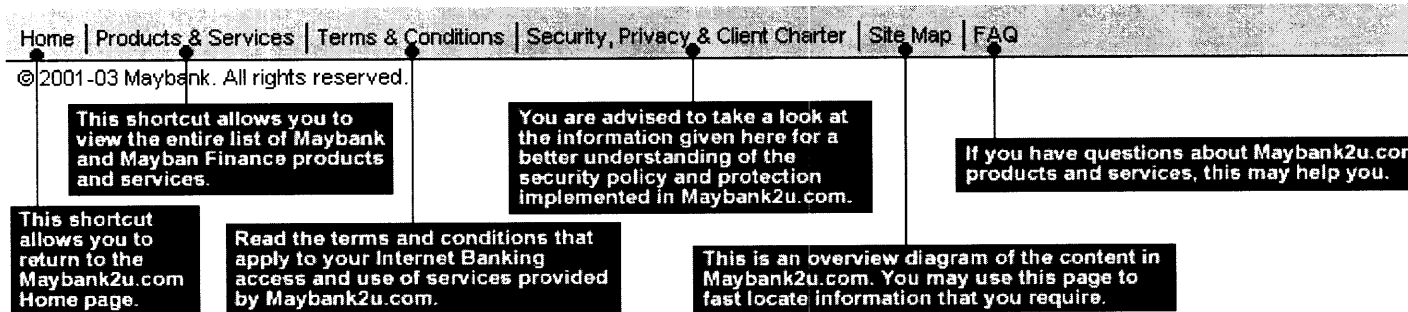


Figure 7: Bottom section of Maybank2u.com home page

Generally, the web design layout and the navigation tools provided in the Maybank's web portal is user friendly and informative. The many awards won by the Maybank2u.com as mentioned earlier support this fact.

8.2.4 Personalization

In its effort to understand its Internet banking users, Maybank has included the capability of setting-up each of its Internet banking users' profile for individual personalization purposes. Having the information on the areas of financial interests of its Internet banking users (i.e. whether in Investment, Personal Finance, Credit Card, Insurance, Share Trading and Financing, or Islamic Products) during the profiling session, will enable Maybank to better understand the types of financial products and services that can be marketed to the individual Internet banking users. In its personalization process, Maybank has also tried to gain an understanding of its Internet banking users' personal lifestyle and interest, as well as their financial status. With all these

information, Maybank could present to the customer the relevant banking products, services or information that could satisfy their needs or interests. Maybank has also provided its Internet banking users with a 24-hours daily customer support service through the telephone and e-mail.

CHAPTER 9

CONCLUSION

Internet banking in Malaysia still has the potential for growth in the future, despite the issues and challenges that are currently faced by the banks that offer Internet banking facilities. The assessment on the current Internet banking in Malaysia through the SWOT analysis reveals that the major issues which banks need to address is to have in place a marketing strategy that could capitalize on the strengths of Internet banking to overcome its weaknesses. In addition, this marketing strategy will also needs to complement the current opportunities and threats that the environment presents for the development and growth of Internet banking.

The development of a marketing strategy for Internet banking has a few distinct features as it involves strategic planning for electronic services marketing in the banking industry. Among these is the intangibility characteristic of banking services itself, which involves the users' financial position, as well as the involvement of a new IT innovation in the transaction process. As such, the understanding of users' behavior as well as the marketing mix activities that could be used to support the Internet banking marketing strategy have to take into account both the marketing principles and the IT innovation principles.

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