THE CHANGE IN TRADITIONAL BANKING WITH THE **EFFECTS OF ICT**

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ABSTRACT

The application of Internet technology to the banking industry has transformed the traditional practice into a new era of convenient banking at your home or office with a touch of a button! This concept is new and practical to people who have the knowledge and means to accept this convenient and safe mode of operation. The objective is to survey all the local banks in Malaysia and observe what products and services they wish to offer to the community. A simple online survey of their available websites allowed one to view all the available transactions and activities connected to electronic banking or internet banking. The 10 local banks reviewed indicated that the most popular services and products available online are Current Account, Fixed Deposit, Saving Account, Home Loans and Credit Cards. Perhaps, the survey has proved that these facilities are the bread and butter for all local banks. Interestingly, all local banks have more than 80 types of transaction items stated on their websites. Not all of them can be practically done through the wireless technology; only a handful of them are acceptable to those who prefer the push of a button on the keyboard of the personal computer (PC). Nonetheless, the Internet or Web technology will pave the new wave of banking to the consumer who is knowledgeable in the area of the Information and Communicative Technology (ICT) in the local environment.

KEYWORDS

Internet banking, commercial banks, transactions.

1. INTRODUCTION

Since its introduction in Malaysia, the internet has been gaining extensive popularity. Its importance and advantages have been recognized and so Malaysia's emphasis on being recognized as an IT hub in Asia. Thus, the growing number of businesses expanding electronically. One of these business sectors is the banking and finance sector. The extensive use of the Internet has led to the introduction of online banking and financing using a computer. When Internet is allowed in the year 2002, most banks took this opportunity to test the market. Since then, many have joined the bandwagon and aggressively trying to outdo each other with special promotions and packages to pull in new accounts or attract their rival customers. The battle goes on and it is time to look at the state of affairs and take stock of its feasibility and competitiveness in the new era of internet (or online) banking and financing.

Security aspects must be considered by banks and their customers to trust the operating system, both in terms of cashing and making payments. Claessens et al (2002) felt that the first main security issue of today's online banking system must be to establish a secure channel to provide data integrity of communication between a customer and a bank. The safety features such as encryptions and users' passwords must be well protected in providing these services. The medium of usage; computers, mobile phones or personal digital assistance (PDA) are tools that enable the connection to the operating system must be affordable and connectable with ease and safety.

This paper aims to provide an overview of the developments in traditional banking with and without the influence of ICT. This study is limited as it will not try to understand why some banks, whether local or foreign, are providing certain services and why some are not. It is aimed more towards understanding how far the commercial banks in Malaysia are taking advantage of the use of ICT in banking with the loosening of rules and regulations by the Central Bank of Malaysia since using internet banking as a way to reach out to customers can bring about many advantages. So, this paper will look at the different products and services that are being offered by both local and foreign banks in Malaysia and also whether there has been an increase in the number of products and services being offered. It will also compare the overall scenario

presented by the local banks and the foreign banks based in Malaysia. This will give an idea of how far the local banks have come and whether they have matured enough to be able to compete with the foreign banks after the protection that has been so far provided by the Central Bank is slowly removed. Lastly, but not least, it will look at whether most of these banks provide transactional internet banking services or are still using the internet for informational purposes only.

2. LITERATURE REVIEW

Pang (1995) claimed that the first mode of electronic banking began in 1981 with the introduction of the automated teller machines (ATM) by the local banks in Malaysia. In 1992 some banks introduced phone banking to their customers using the automated voice response (AVR) technology. In this mode, users can make a telephone call to the bank from home or office to the bank's computer system and use the telephone's key pad to initiate the transaction through the AVR system. There is a limit to the types and number of transactions that can be performed with this system and there appear a growing concern over the issue of privacy using this means. Next came PC banking, where transactions are carried out by dialing directly into the banking system in order to access it electronically. A proprietary software is required. The stage was thus set for internet banking. With web technology available in Malaysia, this gave rise to another new innovative system of online banking activities in the new century. Internet or web banking has given a new dimension to customers who prefer to enhance their financial transactions in an innovated system by a touch of a button at their convenience! Where ATMs replaced the need to build physical branches, internet banking does away with the need to build anything physical, be it branches or ATMs.

Perumal and Shanmugam (2004) discuss the benefits and costs associated with internet banking in general. Based on previous published studies, they find that internet banking is cost reducing for a bank in that it reduces transaction costs. It also provides perfect information to all market participants thus bringing about efficiencies in the search process. And so with perfect information, there exists conditions for perfect or near perfect competition. But they also find that internet banking means that there are risks involved, namely credit risk, interest rate risk, liquidity risk, transaction risk and total reliability risk.

The banking and finance sector in Malaysia was allowed to use the internet as a medium of communication with its customers in the year 2000 by the Central Bank of Malaysia. Most banks took this opportunity to test the market and to compete with each other to get a bigger share of the business pie. The Central Bank of Malaysia, in its 2001 Financial Masterplan, recognized the importance of ICT and so encouraged its local banks to 'give greater attention to the development of ICT...' to 'create value' rather than to just relay information. It hopes that the banks will take up this opportunity to become more aggressive in their business approach and to become strong enough to compete with the foreign banks that are setting up their business in Malaysia. It has imposed restrictions on the foreign banks, which were only allowed to set up transactional sites in January 2002, to protect its local banks to allow them to grow but it is slowly loosening these restrictions and so it will not be long before all the banks in Malaysia, be it local or foreign, will be on the same platform to compete with each other for their share in the market.

The government recognizes the benefits that can come from the wide use of internet banking in Malaysia and so it is, through the Multimedia Development Corporation, working on several initiatives to help improve perceptions and use of internet banking as a way of banking. It is also aware that introduction should be followed by rules and regulations to avoid misuse. Several e-commerce laws known as cyberlaws have been introduced. Shanmugam et al (2002) feel the Digital Signature Act of 1997, Computer Crime Act of 1997, Copyright (Amendment) Act of 1997 and the Communications and Multimedia Act of 1998 have major implications for e-banking.

With more rules and regulations in place and with more coming, e-banking should be a safe mode of trade. The benefits of e-banking to both providers and users and to the economy as a whole are many. People are aware of these benefits yet many are still not ready to use it. A number of both local and foreign papers have looked at why consumers are wary of using this mode of trade. Suganthi et al (2001) looked from the consumer's perspective. By surveying internet users in the Klang Valley, Malaysia, they identified internet accessibility, awareness, attitude towards change, computer and Internet access costs, trust in one's bank, security concerns, ease of use and convenience as some of the major factors affecting the adoption of Internet bank services in Malaysia.

Aladwani (2001) on the other hand studied 'the perceptions of bank executives and IT managers and potential customers with regards to the drivers, development challenges, and expectations of online banking' in Kuwait. He found that banks that had introduced fully operational online services had done so due to the initiatives of their senior managers. He also found that aside from providing faster, easier and more reliable

services to their customers and reducing workforce, the perceptions of IT managers and senior managers were not the same on other issues such as improving the competitive position and bank's image, reducing costs, meeting customers demand and creating new markets. He also found that IT managers felt that top management support, availability of specialists and change in Internet technologies were important factors affecting the development of banking websites. He was also able to compare and contrast the perceptions of potential customers and top management and saw that both groups felt Internet security, customers' privacy, trust and service quality to be very important issues.

So far most papers done on online banking in Malaysia and abroad have addressed perception and security issues. This paper however will look at how far banks in Malaysia have adopted online banking as a means of trade and communication with their customers. The objective is to examine the types of online products and services provided by the commercial banks in Malaysia.

3. RESEARCH METHODOLOGY

There are a total of 10 local commercial banks and 13 foreign commercial banks in Malaysia. The 10 local banks are namely, Affin Bank Bhd, Alliance Bank Malaysia Bhd, Arab Malayan (Am) Bank, Bumiputera-Commerce Bank Bhd, EON Bank Bhd, Hong Leong Bank Bhd, Malayan Banking Bhd (or Maybank), Public Bank Bhd, RHB Bank Berhad and Southern Bank Bhd. As expected all the local banks have their own websites but while some are functional websites which provide internet banking services free of charge, there are still some banks which have only informational websites, i.e. websites that only provide information. However, not all the foreign banks have their websites so only those that have are looked at. These banks are ABN Amro Bank, Citibank Bhd, HSBC Bank (M) Bhd, OCBC Bank (M) Bhd, Standard Chartered Bank (M) Bhd, The Bank of Nova Scotia Bhd and the United Overseas Bank (M) Bhd. These foreign banks, especially those that have gone global a long time ago, have the utmost advantage as they are bigger in size, strength and expertise.

A table will be developed to record the types of products and services being offered by the banking institutions. There are a number of online products that are common and conventional such as deposits, loans and credit cards services. Most banks also include stockbroking, insurance, mutual funds and other treasury services.

Data will be gathered through the websites of these commercial banks that are accessible over a one-year period, i.e. from May 2004 to April 2005. Each of these websites will be carefully screened and the products and services recorded. Information obtained will be based entirely on what is being provided in the websites. So the amount of information gathered will be based entirely on the quality of information provided by each bank. Attention will be given to any distinct or specialized services that the banks offer. We will compare and contrast all the products offered across the industry and note the similarities and differences, especially the changes over the period. Special attention will be given to the services that these banks are offering online as this will provide an indication of how far these banks, especially the local banks, have taken advantage of the opportunities given to them by the Central Bank of Malaysia.

4. FINDINGS AND DISCUSSION

Before going into the online banking products being offered by the banks, an analysis is done on the types of products and services that each bank is offering as stated on their websites. In our survey of bank websites, we have found that all the local commercial banks provide the essential products or services in deposits, loans and credit card and are generally competing with each other in these three products in the market. In the global environment, banks offer the same products on their websites to attract customers to consume their products or services through value-added activities.

All local banks (100%) stated current account, saving account and fixed deposits in their websites. These are the usual and traditional products offered by the banks in the conventional practices. These products are the bread and butter for all commercial banks. Another noticeable item is the home loan category where 100 percent of the local commercial banks are observed in their websites. Also, credit cards are widely promoted by all local banks in their websites and the current environment is very competitive among the local banks. Again, these two are very crucial activities of commercial banks where profits can be easily generated.

In the case of foreign banks, only 2 products are being offered by all these banks; namely Fixed Deposits and Savings Accounts. Current Accounts are offered by all but one bank – Citibank. As for Home Loans, it is being offered by all banks except ABN Amro bank. This bank is concentrating more on wholesale rather than retail banking. This bank offers the three basic deposit products – Savings, Fixed and Current Deposits – and a few investment products.

4.1 Deposits

Aside from these basic services, all local banks provide additional services that help distinguish them from their competitors and so make them more attractive to certain consumer groups. Both local and foreign banks offer the opening of accounts that are aimed at specific consumer groups, such as a Graduate/Education Account and Young Saver's Account. What some local banks are offering but is not offered by foreign banks are accounts such as a multi-currency account, gold deposits account, senior savings accounts and a share trading account. In 2005, the share trading account was a unique product was being offered by just one local bank, Am Bank, but by 2006, two more banks have joined in – Hong Leong Bank and Maybank—making a total of 3 banks to offer this product. However, so far not foreign bank is offering such a product. Similarly, an Online/Internet account was being offered by Hong Leong Bank in 2005 but by 2006, Maybank have joined in to offer this product. In 2005, no foreign bank offered this type of account but by 2006, Citibank has started offering an Online Checking Account and so it has a unique feature over its foreign competitors in the Deposits category.

4.2 Loans

In the loans category, there has been little change in the local scene. No new products have been introduced, only an increase in the number of banks offering certain services. Where 50% local banks offered the overdraft facility in 2005, 70% do so by 2006. 4 banks offered Property Loans in 2006, as compared to 3 banks only in 2005. Affin Bank was in 2005 and in 2006 the only bank to offer two unique loan products not being offered by any of the other local banks, namely the Gratuity Loan Scheme and Loans for Armed Forces personnel. Only Public Bank offers Personal Loans. In 2005, more than 40% of local banks offer Automobile Financing/Refinancing (50%), Personal Business Loans (40%), Hire Purchase (60%), Share Margin Financing (70%) and Study Loans (60%). In the corporate loans category, Alliance Bank is the only bank to offer Asset Financing/Property Mortgage Loans. Revolving Credit Facility (50%), Term/Fixed Loans (60%) and Trade facilities/financing (90%) are some of more famous corporate loan products with more than 50% banks offering these products, while Bridging Loans (30%), Contract Financing (30%), Project Financing (30%), Structured Products (30%), Working Capital Financing (40%) are being offered by less than 50% local banks. The scenario has not changed much over the year except that Am Bank and Maybank are offering Factoring services in 2006.

Where there was not much change in the local scenario, the foreign banks have been expanding their loan products portfolio. Home Loans and Overdraft facilities are the most famous products with 6 out of the 7 banks offering these products both in 2005 and 2006. Foreign Exchange Loans is a unique product being offered by OCBC Bank. Compared to 2005, in 2006 2 more banks have joined in to provide Business Premises Financing to make the total to 4. Where only 3 banks offered Personal Loans in 2005, by 2006, one more bank has joined in. In 2005, only 14.3% offered Trade Financing/Facilities but by 2006, 57.14% are offering this product. Business Loans (28.57%), Project Financing (28.57%), Share Margin Financing (42.85%) and Working Capital Financing (28.57%) are the products that have not seen any change in the number of banks offering them. Aside from these, new products are being offered. 42.85% banks offer Term Loans and Ready Cash in 2006 and 28.57% banks offer Revolving Credit Facilities. OCBC Bank is the only foreign bank to offer Bridging Loans facilities and Property Loans in 2006, while UOB Bank is the only bank offering Education Loans and Medical Practice Financing.

4.3 Insurance

Just as there was not much change in the Loans category of local banks, the Insurance category saw little change from 2005 to 2006. Automobile Insurance, Life Insurance and Personal Accident Insurance each saw

a 10% increase from 2005 to 2006 with a total of 5, 5 and 4 banks respectively offering these products. In 2005, Child Insurance was being offered by Hong Leong Bank, Estate Management by Alliance Bank, Hospital and Surgical Insurance by EON Bank and Parent Care by Bumiputera Commerce Bank. These insurance products were unique to the banks mentioned above even in 2006. But by 2006, Maybank offered Worker's Compensation and Am (Am) Bank offered Computer Insurance as their unique insurance products. Both banks also introduced Mortgage Reducing Term Assurance by 2006. Education Insurance (50%), Health Insurance (60%) and Home Insurance (50%) were being offered at least 50% of local banks. Family Insurance (40%), Investment Linked Insurance (30%), Property Insurance (20%), Retirement Insurance (30%) and Travel Insurance (40%) were being offered by less than 50% of the local banks both in 2005 and 2006.

Similarly, most of the foreign banks analyzed did not increase their insurance products portfolio. Out of the 6 banks, OCBC Bank had Child Education Insurance and Mortgage Reducing Term Assurance as its new products by 2006. Standard Chartered Bank introduced its Medical/Health Insurance coverage. Citibank has seen the most change in this one-year period. It has expanded its Insurance products and services by introducing Legacy Plan, insurance for Critical Illness, Motor Insurance, Life Insurance, Medical/Health Insurance and Personal Accident Insurance. It is the only bank that is offering Legacy Plan and Critical Illness Insurance. Standard Chartered is the only bank to offer Personal Liability, Senior Citizen and Travel Insurance coverage. ABN Amro Bank and The Bank of Nova Scotia do not offer insurance products or services. In 2005, OCBC Bank did not offer any insurance products but by 2006, it offered Child Education Insurance and Mortgage Reducing Term Assurance. The most famous insurance product by 2006 is Life Insurance being offered by 4 out of the 7 foreign banks. Child Education, Credit Card, Health/Medical, Home, Motor and Personal Accident Insurance are being offered by 3 of the banks while Family, Golfers', Home Contents, Marine Cargo and Travel Insurance are being offered by 2 of the foreign banks. In 2005, only 2 banks offered Wealth Management services and by 2006, the number increased to 3.

4.4 Islamic Banking

Islamic banking, Investments and Internet banking are the three areas in which both local and foreign banks have expanded their services rapidly. For instance, in the Deposits category, Public Bank has introduced the Junior Saver's Account for its Islamic banking customers making it 40% of local banks offering this type of account while Hong Leong Bank has begun offering Student's Accounts, a service which was previously offered only by RHB Bank. The other types of accounts have remained the same. Current Account, General Investment Account and Savings Accounts are being offered by 90% of local banks while the Special Investment Account is being offered by 70% of local banks.

The Islamic financing has seen more changes than the Deposits category. EON bank has introduced the Pawnbroking facility and so is the only bank so far to be offering this. It is also now offering cash line facilities along with Hong Leong Bank, making the total number of banks offering this to 6. Hong Leong Bank is also offering Term Financing, a service that had so far been offered by 4 banks and Trade financing, which had been offered by 7 other banks. Maybank has also expanded its Islamic Financing products by offering Project Financing and Short-term Share Financing, increasing the proportion of banks from 20% to 30%. The proportion of banks in 2006 offering other products such as Business Financing (10%), Contract Financing (10%), Education Financing (20%), Fixed Asset Financing (0%), Gratuity Financing (10%), Hire Purchase (50%), Home Financing (80%), Leasing (30%), Personal Financing (30%), Property Financing (40%) and Revolving Credit Facility (20%), have remained the same as that in 2005.

Am Bank is the only bank that is offering Islamic Stock Broking and Credit card services in 2006. It had not offered these services in 2005. In terms of Takaful, only Maybank is offering products in this category. In fact it is now offering an extra product called Child Education aside from its Home Building, Mortgage, Motor and Personal Accident products. Hong Leong Bank has shown in its website that it is offering Takaful products but as of April 2006, no information has been posted on any of its Takaful items. Debit cards (10%) and Unit Trust Products (60%) have remained the same.

Out of the 7 foreign banks, Citibank, HSBC Bank and OCBC banks have introduced new Islamic banking products that have not been offered in 2006. Citibank introduced its Unit Trust Account while HSBC Bank introduced the Revolving Credit Facility. OCBC Bank has introduced the most number of Islamic banking financing products by 2006. It is now offering Cash Financing, Cash Line Facility, Hire Purchase, Negotiable Debt Certificate, Short-term Investments and Trade Financing/Facilities. The proportion of foreign banks offering other Islamic Banking products such as Current Account (57%), Fixed Deposit (14%), General Investment Account (43%), Savings Account (57%), Home Financing (43%),

Leasing (29%), Personal Financing (29%), Property Financing (14%) and Term Financing (14%), have remained the same as in 2005. Although not much has changed in the Islamic banking scenario, it is obvious that both the local and foreign banks feel that this area provides opportunities for further expansion of the portfolio of products and services.

4.5 Treasury And Investment Banking

In the Treasury and Investment Banking category, Am Bank introduced their Options Trading and Structured Investments services, EON Bank and Hong Leong Bank introduced Corporate Financing services for its clients while Maybank and RHB Bank are offering Gold Bullion products. Aside from this EON Bank also added other products and services to their current products. These products include Debt, Equity and Fixed income products. This increased the proportion of banks offering these products to 40%, 20% and 40% respectively. RHB Bank also added three more products – Negotiable Instrument of Deposits (NID), Repurchase Agreements (REPOs) and Short-term Revolving Credit. These products had been offered by other banks before thus increasing the proportion to 40%, 50% and 20% respectively. Other investment products that had been offered in 2005 have remained the same in proportion. In 2006, the proportion offering Caps and Collars (10%), Currency Options (40%), Currency Swaps (20%), Foreign Exchange (40%), Forward Rate Agreements (50%), Futures Trading (10%), Interest Rate Swaps (40%), Islamic Treasury Products and Services (50%), Long Term Foreign Exchange Contracts (20%), Money Market Instruments (60%) and Non Deliverable Forwards (10%), have remained the same as they were in 2005.

Out of the 7 foreign banks, only 3 of them have added new investment products, namely OCBC Bank, Standard Chartered Bank and United Overseas Bank. Of the four products that OCBC Bank has added, Repurchase Agreements (REPOs), Negotiable Instrument of Deposits (NID) and Yield Enhancement Investment are the three products that only this bank offers. It has also introduced Structured Investments but this was also introduced by UOB Bank making the proportion from 0% in 2005 to 29% in 2006. UOB added Gold Bullion Products making the total proportion of banks offering this product to be 29% respectively. UOB also added Foreign Exchange Services and Swaps along with Standard Chartered Bank. The proportion of banks offering Foreign Exchange Services increased from 29% to 57%, while those offering Swaps increased from 0% to 29%. Standard Chartered Bank introduced Securities Custody and clearing services and is the only foreign bank offering this. It has also added other products and services such as Fixed Income products, Debt Capital Market products, Corporate Finance Services, Offshore Banking services and Foreign Exchange Options to its customers. This has increased the proportion of foreign banks offering these services to 57%, 57%, 29%, 29% and 57% respectively. The other treasury and investment products have remained of the same proportion.

4.6 Internet Banking

The local banks have rapidly increased the number of products and services that they are offering through internet banking. However, not all the local banks offer internet banking services even if all have their websites. Affin Bank and EON Bank have so far not offered any internet banking services. Alliance Bank and Southern Bank have not increased their internet banking services compared to what they had been offering in 2005.

In 2005, only one local bank, Southern Bank, allowed the application of accounts through the internet, but by 2006 three other banks, namely Hong Leong Bank, Maybank and RHB Bank have offered this service. Maybank and RHB Bank have also allowed its customers to make Electronic Share/IPO applications. Thus the proportion has increased from 30% of local banks to 50%. Am Bank joined 6 other local banks that had offered cheque services on the internet in 2005 to make a total of 7 local banks offering this service in 2006. Am Bank also started offering Loan payment as part of its internet banking services in 2006. 40% of the local banks had offered this in 2005. The proportion of local banks offering Remittance services, share trading, trade facilities and zakat payments have increase as well. In 2005, the proportions were 10%, 20%, 10% and 10% respectively. But by 2006, the proportion increased to 20%, 30%, 20% and 30% respectively. Aside from adding on existing services, new internet banking services were introduced. Services introduced by the banks include Interbank GIRO (20%), prepaid recharge (30%), eProcurement (10%), University Fee Payment (10%), Foreign exchange contracts (10%), Payroll services/EPF/SOCSO (30%) and Dividend Services (20%).

The foreign banks too have been introducing new services as part of their internet banking offering. But two banks, ABN Amro and The Bank of Nova Scotia are not offering internet banking services while Citibank and UOB Bank have not introduced new services. One foreign bank, HSBC Bank, is now allowing online account applications, which in 2005 no foreign bank was offering. OCBC Bank is now providing extra internet banking services such as Trade facilities details (29%) and Real-time Account reporting (14%) as their new unique internet banking services. They are also offering Trade services, thus increasing the proportion of foreign banks offering this from 14% to 29%. Standard Chartered has seen a lot of change in this category compared to 2005 since it has introduced Trade facilities details (29%), FOREX rate booking (14%), MEPS (14%), GIRO Facilities (14%), Payables/Receivables outsourcing (14%). It is offering Funds Transfer and Account Details viewing to its customers, and this increases the proportion of foreign banks from 57% to 71% for both services.

Products and services such as Account Details, Bill Payment, Cheque Services, Credit Card Facilities, Electronic Share Application, Funds Transfer and Hire Purchase/Loan Application are the most offered facilities by both the local and foreign banks since these are the basic services that most individuals or businesses require, which if provided online will reduce the hassle of having to go personally to the banks to do and so save time and money for the customer. Also, allowing applications to be done online and statements to be viewed online provides the banks with the advantage of cutting costs of using paper to prepare monthly statements for the customers and of sending these documents through post. The bank's customers can also save their documents on their PCs thus avoiding having excessive documents to be managed. But of course, it is always encouraged to keep hard copies of these documents.

Table 1. Internet banking products and services offered by local and foreign banks in Malaysia

	Local B	anks		Foreign Banks		
	2005	2006	Change (%)	2005	2006	Change (%)
Account Application	1	4	30	0	1	14.29
Account Details	8	8	0	2	5	42.86
Bill Payment	8	8	0	4	4	0
Cheque Services	6	7	10	4	4	0
Credit Card facilities	7	7	0	3	3	0
Dividend Services	0	2	20	0	0	0
Electronic Share/ IPO Application	3	5	20	0	0	0
eProcurement	0	1	10	0	0	0
FD Placement & Withdrawal	2	2	0	0	0	0
Foreign Exchange Contracts	0	1	10	0	0	0
FOREX Rate Booking	0	0	0	0	1	14.29
Fund Transfer	8	8	0	4	5	14.29
	4	4	0	0	0	0
Hire Purchase/Loan Application	1	1	0	0	0	0
Insurance	0	2	20	0	1	14.29
Interbank GIRO	1	1	0	0	0	0
Investment	4	5	10	1	1	0
Loan Services	0	0	0	0	1	14.29
MEPS	0	0	0	1	1	0
Online Treasury	0	0	0	0	1	14.29
Payables/Receivables Outsourcing	0	3	30	0	0	0
Payroll Services/EPF/SOCSO	0	3	30	0	0	0
Prepaid recharge	0	0	0	0	1	14.29
Real-time Account Reporting	U	U	U	U	1	14.29

Remittance Services	1	2	10	1	1	0	
Share Trading	2	3	10	0	0	0	
SMS Alert Service	0	0	0	1	1	0	
Statements	0	0	0	4	4	0	
	0	0	0	2	2	0	
Telegraphic Transfer	1	2	10	1	2	14.29	
Trade facilities	0	1	10	0	0	0	
University Fee Payments	1	3	20	0	0	0	
Zakat Payments	1	3	20	0	U	U	

It is obvious that both the local and foreign banks still have a wide scope in the area of internet banking and they are realizing this and thus rapidly increasing the products and services that they offer in this category. Yeap and Cheah (2005) have observed that despite their technological advantage, the foreign banks are superior to the local banks only in terms of information provision, not in terms of transactional or online application. Why this is so might not be so easily explained without further research done. How far both types of banks go will depend on the benefits associated with this kind of banking and the reaction of the customer towards these services that are currently offered.

4.7 Other Products And Services

As mentioned before, credit cards are being offered by all local banks. However, only 71.4% (5 out of 7) of the foreign banks observed offered credit cards for its customers. However, only 4 local banks and one foreign bank, United Overseas Bank, offer debit cards to their customers. Remittance services are offered by 70% local banks and only 28.57% (2 out of 7) foreign banks. 9 out of 10 local banks offered SME/SMI facilities and Bumiputera Financing. Only 3 foreign banks offered SME/SMI services and 2 offered Bumiputera Development Services. Cash Management services are offered by 3 local and 2 foreign banks. No local bank offers Liquidity and Financial Management services. Liquidity Management services are offered by HSBC Bank only while Financial Management services are offered by Citibank only. The figures indicated above for each of the services were the same for the year 2005 and 2006.

Two local banks, Am Bank and Hong Leong Bank offer call center services while no foreign banks offer this service. Bumiputera Commerce Bank even offers Income Tax Collection and International Money Transfer services for its customers, which no other local or foreign banks are offering currently. Also 30% local banks offer safe deposit boxes for their customers but no foreign bank offers this service. All local banks except for Southern Bank offer Interbank GIRO but only one foreign bank, namely OCBC Bank offers this service. Also all local banks offer ATM machines at various locations in the country for transaction purposes but no local bank has ATM machines located outside their office. This is due to the regulation and restriction imposed by the Central Bank on the foreign banks on this issue. 50% local banks and 57% foreign banks offer phone banking services but while 40% local banks offer mobile banking services, no foreign bank offers this. However, Standard Chartered Bank offers fax banking services, lockboxes and electronic collection services. Also, United Overseas Bank offers drive through banking services.

4.8 Overall Picture

In the overall picture, when looking at non-internet banking products and services, only two local banks, Alliance Bank and Southern Bank, have not increased the number of products and services that they have been offering from 2005 to 2006. These two banks also did not increase their internet banking products as well within the time period mentioned. Affin Bank and EON Bank are two other such banks that had not added any new internet banking products by 2006. In fact, both these banks do not offer transactional internet banking services. But Affin Bank increased its product portfolio by 3.6% by adding an additional product in its non-internet banking category while EON Bank added 6 new additional products, thus increasing its product portfolio by 13.33%.

The rest of the local banks – Am Bank, Bumiputera Commerce Bank, Hong Leong Bank, Maybank, Public Bank and RHB Bank – increased both their internet banking and non-internet banking products and

services significantly. Maybank added the most number of non-internet banking products and services (19.6% increase), while it was the second highest in adding internet banking products and services (57.14%) after Bumiputera Commerce Bank (116%). But Bumiputera added the least non-internet banking products and services (4.5%). In the non-internet banking category, Am Bank increased its products and services by 15.25% followed by Hong Leong Bank (14.29%), RHB Bank (11.11%) and finally Public Bank with a change of 9.09%. For the internet banking category, both Am Bank and RHB Bank increased their products and services by 50% while Public Bank by 20% and Hong Leong Bank by 18.18%. Of course these percentages do not indicate the total number of products and services. They just indicate the changes that have taken place. Table 2 below gives a summary of this.

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	Communicative services				Transactional services		
	2005	2006	Change (%)	2005	2006	Change (%)	
Affin Bank Bhd	28	29	3.6	0	0	0	
Alliance Bank Bhd	44	44	0	5	5	0	
Arab Malayan Bank	59	68	15.25	6	9	50	
Bumiputera-Commerce Bank Bhd	22	23	4.5	6	13	116	
EON Bank Bhd	45	51	13.33	0	0	0	
Hong Leong Bank Bhd	42	48	14.59	11	13	18.18	
Malayan Banking Bhd	51	61	19.6	7	11	57.14	
Public Bank Bhd	33	36	9.09	10	12	20	
RHB Bank Bhd	54	60	1.11	6	9	50	
Southern Bank Bhd	34	34	0	7	7	0	

The foreign banks scenario is slightly different in that most of the banks have increased their non-internet banking products and services, except for ABN Amro Bank. Also, only 3 banks – HSBC Bank, OCBC Bank and Standard Chartered Bank – have added more products and services to their internet banking category. ABN Amro, Citibank, Bank of Nova Scotia and UOB Bank have not added any new internet banking products and services. Standard Chartered added the most number of products to its original 1 product, thus increasing by 700%, while OCBC Bank added 3 new products and HSBC Bank added one new product only. In the non-internet banking category, OCBC Bank added 16 new products while Citibank added 12 new products and services, which is an increase of their product portfolios by 48.48% and 50% respectively. Standard Chartered Bank increased by 32.43%, UOB Bank by 16.66%, Bank of Nova Scotia by 12.5% and HSBC Bank by 4.88%. Table 3 below shows this.

Table 3. Change in the number of products and services offered by foreign banks operating in Malaysia

	Communicative services				Transactional Services		
	2005	2006	Change (%)	2005	2006	Change (%)	
ABN Amro Bank	10	10	0	0	0	0	
Citibank Bhd	24	36	50	7	7	0	
HSBC Bank (M) Bhd	41	43	4.88	7	8	14.28	
OCBC Bank (M) Bhd	33	49	48.48	6	9	50	
Standard Chartered Bank (M) Bhd	37	49	32.43	1	8	700	
Bank of Nova Scotia Bhd	16	18	12.5	0	0	0	
United Overseas Bank (M) Bhd	42	49	16.66	9	9	0	

What we can conclude from the changes taking place in both the local and foreign banks is that the importance and capacity of the internet is being realized by most of the banks, although not all banks are taking advantage of this. From just offering communicative services on the internet, the banks are now

gearing towards offering more and more transactional services. The internet is being deployed to capture more of the market share and this could be due to changing attitudes of the customers towards internet banking. But given the scope of this study, it is not possible to relate the ability of the individual banks to offer transactional services to certain factors such as their investment in IT as this information is not available online in the annual reports of the banks.

5. CONCLUSION

The fundamental issue in any business is profitability and efficiency. Product differentiation and service efficiency and convenience will be the ultimate indicator of market reach and so, the ability of these banks to survive in the increasingly competitive race. The importance of promoting and attracting a well-diversified customer base will be ultimate for survival in the coming future. It seems the highly sophisticated information technology will be the agent of change and an invisible hand for banks to be successful in web (internet) banking.

Both the local and foreign banks are moving forward in their attempt to capture the most customers by offering new and innovative products and services. Due to the restrictions placed on the foreign banks so far, they still have a long way to go but maybe due to the international expertise that they have, once the restrictions are lifted, adding on more services will not be a problem to them. The local banks are already offering a large number of products and services and are given a head start in their competition against the foreign banks. But whether they will be able to compete with the foreign banks operating in Malaysia cannot be confirmed just by looking at their products and services. The confidence in their market power is important and this can only be determined by their profitability and other factors, which is not a part of this study. Also, not covered in this study are external and internal factors that could explain why some banks, local and foreign, are surging ahead with internet banking facilities while others are taking cautious steps. Further research can take any one of the directions.

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