

Chapter 5

FINDINGS

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In this section, the method used in this study is summarised. The following section discusses selection of measures, research instruments and interviews. This study reviews the usage of IT among bank staff through analysis of variables given below:

- Familiarity, awareness and usage of IT tools. It is measured by looking at the level of understanding and knowledge of banking staff to do specific tasks using computer technology.
- Extent to which banking functions are computerised - the major applications that have been computerised.
- Environmental change and globalisation of banking business - the new services that banks must provide and computerise in order to remain competitive and to cope with the new business era.
- Problems encountered in the implementation of IT applications.
- Staffs' attitude and opinion toward changes.

Based on an informal survey (interviews and observations) on banks staff who are the users of IT, an inner understanding of the system usage could be drawn. The research method used was a two-page interview guide (refer to appendix A). It contains two parts. The first part basically looks at the IT applications in various departments, both at headquarter and branch office level. The second part concentrates on the understanding, attitudes and perceptions of various levels of banking staff on banking services and IT

applications. Considerable efforts were made to ensure that questions asked were precise and brief.

The survey was targeted toward IT managers, branch managers, operation heads and other bank staff. Three bank headquarters and a random sample of 16 bank branches nationwide were selected. Appointments were made via telephone. Interviews and observations were conducted on stipulated dates with 41 respondents from various levels and departments. Follow-ups were made for insufficient information. This study has dropped the names of the banks to maintain its confidentiality of information. Table 5-1 shows the number of respondents according to their positions.

Table 5-1 Respondents by category

Position	No. of respondents
IT Manager	3
Branch Manager	4
Regional Manager	1
Operations Head	8
Other staff	25

Various banking services and facilities are available to customers in bank branches nationwide. In order to attract more customers and retain existing customers in the competitive financial market, banks need to provide up-to-date and sophisticated services. Figure 5-1 summarises the banking services in branch offices while figure 5-2 shows the main departments in the banks' headquarters.

Figure5-1 Departments in a branch office

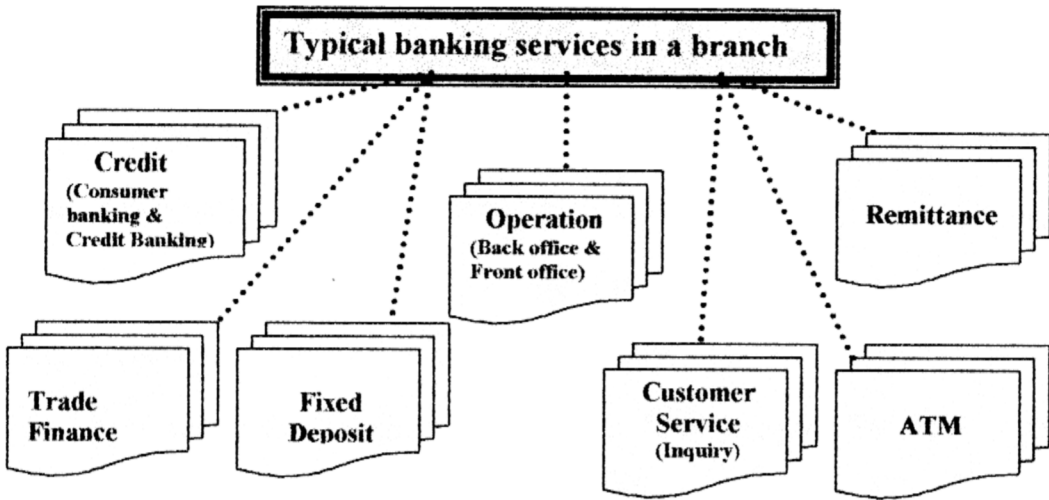
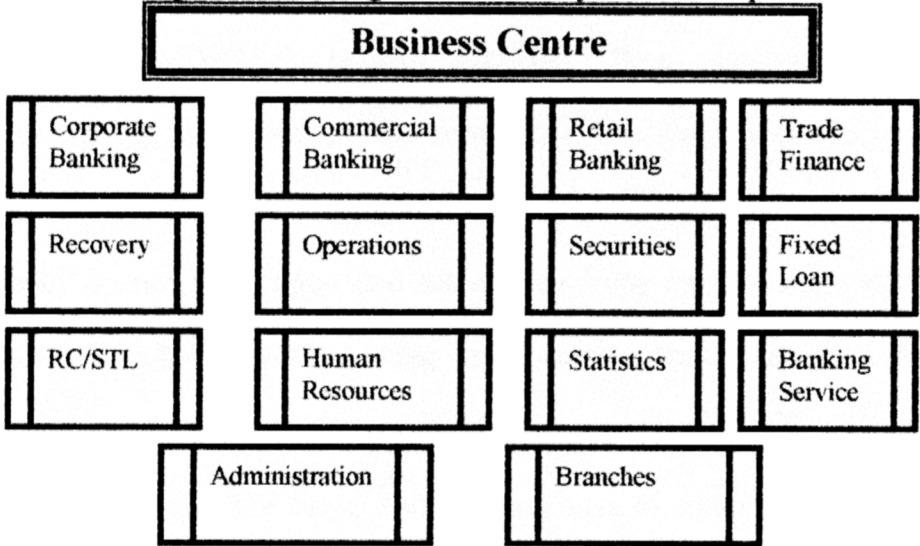


Figure 5-2: Management hierarchy at the headquarters



* RC - Revolving credit
STL - Syndicated term loan

5.1 RESEARCH RESULTS

This section presents the analysis of the research results. First, the general view of basic banking services is discussed. Thus, it explores the usage of IT in each department and the facilities available in headquarters and branches. Second, it discusses the knowledge of IT of banking staff, attitudes towards IT and the problems that they face. It also discusses the factors that contribute to the usage of IT.

5.11 Usage of IT

The study shows that all the selected banks have computerised about 75% of their applications. Of the banks studied, only one has adopted advanced computerised systems in its banking activities. The study also shows that head offices generally use mainframes in their daily operations. Some banks however use minicomputers and/or microcomputers in their banking activities. Data capturing, handling, recording, processing and communication are done using these devices. Banks generally use Wide Area Network (WAN) to support their banking operations. At the branch level, banks typically operate in an integrated network environment i.e. LAN. Some also use stand alone PCs. The WAN provides rapid communication between headquarters and branches. With the network, the banks become more integrated and flexible. This results in better services. The banks can also respond to competition and/or problem more effectively.

IT managers unanimously agree that the increase in usage of IT tools is due to the decrease in price of most hardware in recent years. This has led several banks to invest

heavily in IT. One should remember that usage of IT should be motivated by efficiency and effectiveness rather than just cost. Thus, the advances in the computers and telecommunication technologies suggest that there is a tendency to use IT widely. Generally, hardware expenditure is the largest, comprising purchase of minis or micros, ATM machines, WAN and LAN.

Basically communication between headquarters and branches seems to be adequate. Most of the branches are linked online to the mainframe or minicomputers at the headquarters. Most of the banks use partly leased lines from the Telekom. About 95% of the interviewees were not satisfied with the reliability of the online systems. Typically the systems are down at least two or three times per month, at an average of 15 to 30 minutes duration. In some banks, especially towards the end of the month, the systems are down for 30 minutes to one hour. This is mainly due to the breakdown of telephone lines and/or the computer systems at the headquarters.

Another means of communication would be via telephone and faxes for faster decision making. SWIFT, SPEEDS, telex and telegram are the most common means of communication either nationwide or worldwide. Most branches are still not equipped with Internet facilities and the use of e-mail and/or cc-mail is still at the elementary stage. To obtain information, e.g. information about company's performance or the parent company's strength, the branches will request the respective departments from the headquarters. The IT department staff will search for the information needed from the website and provide the respective branches the needed information.

Until early 1990s, in terms of computerisation, banks gave priority to consumer banking mainly on deposit handling and electronic transmission (including ATMs). Almost all banks are currently equipped with fully operational systems for deposit handling. The 1990's recorded a tremendous IT investment in other functional areas such as trade financing, remittances, corporate finances and treasury operations. The extent of IT usage in 16 large, medium and small bank branches surveyed is shown in table 5-2. The extent of IT usage in all functional areas except for deposit handling in small and rural bank branches are still low. The usage of customer information system, SWIFT and SPEEDS seems to be very low especially for small banks or rural bank branches.

Table 5-2: Main areas of IT usage

Function	Extent of usage of IT		
	Less than 50%	50-75%	Above 75%
Deposit handling	-	8	8
Loan Processing	10	2	4
Remittances	5	8	4
Corporate finance	6	6	4
ATM	-	-	16
Management/Operation	-	4	12

5.12 Software

Almost all the banks that responded to the interview use centralised information systems. The study shows that about 80% use software developed by vendors. Some large banks develop their own software in-house. In most cases, the vendors and the banks IT staff work closely to modify the existing software to cater for some new services.

Judging from the interview with the top management, it is clear that most in the higher management in the banking industry have insufficient knowledge of computers and IT. Their expertise lies primarily in the centralised information system. Some of the operation heads are not even aware of the software used or the vendors. Many of the banks are still use outdated versions such Wordstar for word processing and Lotus for spreadsheet in their daily operations. Only a few large banks use more recent software such as MSOFFICE 97. IT managers generally feel that the change in software is too rapid. Thus, they are often reluctant to switch to new software as the cost of changing software is high.

Customer information is the banks' core computerised system. It provides information about customers. The customer information software comes with different names, but they basically perform the same tasks. The software are specially designed for the banks' to update and retrieve customer information. The main features of customer software are:

a) Customer's General Information

The expert system provides facilities for storing customer information obtained through various external sources such as competitors, newspapers, journals, annual reports, etc. It gives information about the date the information was obtained, the source of information and details of information.

b) Financial Information

This enables the banks to perform financial analysis of customers. This feature is considered important as it keeps several years financial information of customers.

Customers balance sheet, financial ratio, profit and loss, profitability, liquidity, annual growth and assets information can be obtained from this system. Furthermore, the software also enables banks to keep customer's corporate history, business dealings, organisation's subsidiaries, suppliers and buyers, management structure and trade reputation.

c) Credit Rating

Banks normally process credit rating manually. This is now an automated service. With this facility, the banks can assess the customer's credit worthiness. Controls, such as calculating risk and repayment capabilities are handled by computers.

d) Customers Document

Customers' important documents such as letters, faxes, internal memos, etc are stored in this system. This can be considered as the customer's automated credit file.

In the area of loan processing and loan management, new computerised systems are being introduced. By typing in some basic information of the customer, e.g. assets, liability, balance sheet and profit and loss account, the system would give a detailed financial ratio analysis, funds flow statements and credit rating. Refer appendix B for a better understanding of the system. Interviews with few officers in-charge revealed that they prefer to do the evaluation manually. Only for very large organisation the system is used for evaluation. Another point to note is that this software is only available on stand-alone PCs for the loan department staffs only.

5.2 ATTITUDES AND OPINIONS

The study indicates that the management is reluctant to accept paradigm or shifts. According to a bank manager, management is reluctant when it comes to accepting changes. They fear the risks that may accompany changes. Most managers are happy to follow their old ways. They know their own old systems well since they have implemented them for many years. Since new systems require adjustments, managers prefer to perpetuate their own systems.

To be competitive, banks' top management should persuade their staff i.e. middle management as well as other staff on the essence of learning and accepting new paradigms. They should educate their staff on the significance of learning new things and the benefits they offer. This requires more training. But the problem is that they themselves lack the knowledge and expertise in the IT and related areas. They also fear learning new stuff. When there is an obstruction to the learning process, it causes inefficiency. The banks' staff need to update themselves with knowledge by unlearning old things and learning new things. Banks need to achieve uniformity and standardisation in decision making in order to reduce operational costs. Thus, banks need to standardise their IT applications throughout their organisations.

Basically banks have problem in providing training for their staff. Training to use new application is crucial. It is important for staff to learn the latest software technology available in the market. Complex and sophisticated applications need longer training periods. For a bank, sending more staff for training means, less productive or fewer

people available for routine jobs. On the other hand, software changes very fast. There is no point sending someone to learn MSWord 7.0 when MSWord 97 is already in the market. For a computer illiterate, using a computer needs a big change in his/her mindset. In some cases, top management needs to persuade them.

BPR implies that an organisation needs to be self-organised and flexible to maintain its stability and enable it to accept changes. For example, when someone in the bank is on leave, certain services need replacement. Here BPR plays an important role in providing the replacement and ensuring a smooth run in the organisation. Most banks still practise function-based organisation methods. In other words, in the input output process, there still exists a lot of redundancies. Banks should eliminate obsolete procedures. This will improve efficiency as well as reduce cost.

5.3 IT IMPLEMENTATION PROBLEMS

When it comes to implementation, it is crucial to decide on a system that would benefit everyone in the system. Management must ensure that there is no abuse of the system either by customers or bank officers. For instance, the ATM services in banks are not properly controlled or managed by top management. Thus, there is a loophole for abuse in the system. Almost every month there are ATM fraud cases reported in the newspapers.

The appropriateness of a system lies on how effective it is and how well it is implemented by management. Here, the question is, does the bank respond to the needs of its customers? As an example, when the on-line system in the bank is down, customers are unable to carry out their transactions. This contributes to customer dissatisfaction. How often does it happen? Almost three to five times in a month. In cases like these, management should provide an alternative system which could minimise their dissatisfaction.

The study shows that financial institutions do not use uniform software throughout their organisation. Most banks are using different software from different vendors. Banks need to have standard software within and across the banks. If one department uses MS Office and another uses Wordstar, there is no proper integration and exchange of information. If one party cannot access the data, it can cause problems. Thus, the conversion process can cost time and money.

Whenever banks purchase new technology, they should not blindly buy without any investigation. They have to evaluate the effectiveness of the technology carefully. New technology which may not appropriate to the organisation will increase the cost. During the interview, one of the managers shared his experience. A vendor persuaded the top management to purchase equipment to encode cheques. By using the new system in encoding cheques, it required 15 minutes to encode 45 cheques. Whereas it can be done manually within 5 minutes. In this case, the old system was better than the new system.

Another interview with an IT manager reveals that an increase in IT expenditure need not necessarily mean greater efficiency in the bank. Has IT improved efficiency within and among banks is still quite subjective. In some cases higher investment increases productivity. On the other hand, there have been cases where higher investments did not yield commensurate improvement in efficiency/productivity.

Some banks intend to privatise their IT department. Privatisation of IT departments, according to managers, would minimise their expenditure on IT. Banks can cut down on capital investment on IT as well as IT staff recruitment. Furthermore, privatisation is expected to increase productivity and efficiency. Banks will pay based on the number of daily transactions. Each transaction will be charged 30-50 cents according to distance and type of service.

In U.K, many large companies pay salaries of employees using Bankers' Automated Clearing Services (BACS) by sending data via telecommunications link. In Malaysia, the banks could only accept floppy disks sent by employers. The Autopay system by providing computer data through floppy disks has few disadvantages. In some cases, the diskette with viruses brings the system down. In other cases, the banks could not retrieve the data, as it was not saved properly, often resulting in delay of payments. IT Managers believe that switching to Autopay system via telecommunications link can save up to 80% of the transaction cost.