Electronic banking essay

Finance, Banks



CHAPTER 1 THE PROBLEM AND ITS BACKGROUND This chapter includes the problem and its background, statement of the problem, hypothesis, and significance of the study, scope and limitations, and definition of terms. Introduction During the last years, the banking industry has developed noticeably. The financial services industry is altering rapid and visible. Previous ways of doing business are fading fast. Together with this fast transition is also the rising competition among banks. One of the greatest influences behind all of this is the growing development in information technology.

Because of this, costumers have been familiar with the ways of electronic banking services and its systems. Electronic banking is sometimes defined as the provision of retail and small value banking products and services through electronic channels. It is also often used to describe processes in which customers can perform banking transactions without visiting a brick and mortar institution (Jimenez and Roman). For many costumers, e-banking means 24 hour access to cash through an automated teller machine. In the Philippines, E-banking has made a favorable entrance Page | 1 hen automated teller machines (ATMs) were presented in the 1980s revolutionizing how we viewed the standard banking system. Aside from ATMs, electronic banking has also been made through internet connection and mobile phones. These systems provide costumers easy ways of banking and ability to gain access to their money from different locations on a 24 hour basis. With these innovations, costumers are able to enjoy convenient banking system. However, it can be seen that behind these developments, electronic banking carries risks as well as benefits.

There are some people that are having a hard time using this kind of technology. Some people in the rural area don? t have access in e-banking. Aside from that, ATMs require people to have their bank issued ATM card. The banks which issues ATM cards are usually those large banks. Rural banks do not have the huge ATM networks unlike the bigger banks. Another type of e-banking is through the internet connection; however, this can only be available to those who have internet connection at home.

The quantity of divulging to risks depends mainly on the degree of adopting new alternative electronic means of allotment of services and p r o d u ct s. One possible risk is not being able to achieve the business targets because of insufficient, resources badly chosen approach, or alteration in the economic or aggressive environment. It has something to do with the capability the credit world has in order to attain the operational objectives by exploiting the existing opportunities. The big transition on the banking sector and the embracing of fast paced developing technology also change the Page | 2 raditional strategic risks. A bank that will rush into the acceptance of fresh technologies so that is rendered pioneer is risking losing its investment as information systems lose their value in very short time interval. This prompted the researcher to conduct a study on the effects of electronic banking system in operation of banks, customer convenience, and improvement of Philippine banking system. STATEMENT OF THE PROBLEM This study aimed to find out the risks, functions, effectiveness, and usability of electronic banking, its effects on the costumers, the advantages and disadvantages it offers.

Specially, it attempts to answer the following questions: 1. What are the profiles of the respondents according to 1. 1 Age 1. 2 Gender 1. 3 Civil status 1. 4 Company or Bank employed in 2. What are the risks when taking transactions in electronic banking? 3. How do banks handle large number of customers engaging electronic transactions? 4. What are the advantages of electronic banking over manual banking system? Page | 3 5. What are the disadvantages of electronic banking? 6. How do you maintain the usability and user friendliness of banks websites? 7. What are the recautionary measures implied in order to diversify risks in automated teller machines? 8. How many Automated teller machines are installed within the city? Why? 9. What are effects of electronic banking system in bank operations? Customers? 10. How does electronic banking improve the quality of banking system in the Philippines? HYPOTHESIS Is there a significant difference between electronic and manual banking with regards to risks, functionality and effectiveness? Ho: There is no significant difference between electronic and manual banking with regards to risks, functionality and effectiveness.

Ha: There is significant difference between electronic and manual banking with regards to risks, functionality and effectiveness. Page | 4 SIGNIFICANCE OF THE STUDY The findings of this research study where beneficial or significant to the following persons: For the managers, this study would help them improve the standards of their ebanking services. For the business owners, this study would show them that in spite of the disadvantages of using electronic banking for their business, it can still be helpful and make their banking easier.

For the individuals, e-banking can be a big help and can be more convenient especially for those busy people who does not have time to go to the banks. For the future researchers the findings of the research study would provide basis for the conduction of future researches about risks on electronic banking. SCOPE AND LIMITATION The scope of the study is to get the reactions and views of bank managers in Metro Manila regarding electronic banking. Maximum 10 managers from different financial institutions were interviewed. Page | 5 DEFINITION OF TERMS

For the purpose of the study, the following terms have been defined hypothetically. Banking is the legal transactions executed by a bank in its daily business, such as providing loans, mortgages and investments, depending on the focus and size of the bank. Electronic banking is defined as the provision of retail and small value banking products and services through electronic channels. It is also often used to describe processes in which customers can perform banking transactions without visiting a brick and mortar institution Effectiveness is performance in terms of achieving objectives Functionality is the company? individual performance or ability in operating, manipulating, and administering their electronic banking system Risk is the possibility that the actual return on an investment will be different from its expected return. A vitally important concept in finance is the idea that an investment that carries a higher risk has the potential of a higher return Usability is the customer? s convenience in making electronic transactions and their confidence in using electronic banking Page | 6 CHAPTER 2 REVIEW OF RELATED LITERATURE AND STUDIES This chapter shows the related literature and studies to the present study of he

researchers. Related literature is composed of discussions of facts and principles to which the present study is related. These materials are usually printed and found in books, encyclopedias, professional journals, magazines, newspaper and other publications. These materials are classified as local, if printed in the Philippines and foreign, if printed in other lands. On the other hand, related studies, inquiries or investigations already conducted to which the presents study is related or have some bearing or similarity. They are usually unpublished materials such as manuscripts, theses and dissertation.

They may be classified also as local, if inquiry was conducted in the Philippines and foreign if conducted in foreign lands. Review of related literature and studies serves as a foundation of this study. This is because related literature and studies guide the researchers in pursuing this research venture. This chapter also includes the conceptual framework which is the central theme, the focus, the main thrust of the study and it serves as a guide in conducting the investigation. From the review of related literature and studies, the conceptual study of the framework of the study is made. Page | 7

LITERATURE Foreign. Electronic banking has become popular in many countries around the world, providing bank customers with the ability to check personal and business bank and credit card account balances online, view and print a list of recent transactions, and pay bills instantly. Money can be transferred immediately (or at a future date) from a customer's account to a business partner or to another of the customer's own accounts. In addition, account transaction details can be downloaded to a PC into a

financial software package (such as Intuit Quicken or Microsoft Money) or a spreadsheet.

As well as Internet banking, some banks also provide access to accounts through interactive digital television or via mobile phones (Ward, 2003). Attitude toward behavior refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question. Taylor and Todd (2001) suggested that the different dimensions of attitudinal belief toward an innovation could be measured using the five perceived attributes (relative advantage, compatibility, complexity, trialability and observability) of the innovation.

These attributes were originally proposed in the diffusion of innovations theory (Rogers, 1998). The importance of the Internet to users? banking needs relates to the advantages that accrue to the users of the technology in question. According to Tornaztky and Klein (2002) relative advantage is an important factor in determining adoption of new innovations. In general, perceived relative advantage of an innovation is positively related to its rate of adoption (Rogers, 2000). Agarwal and Prasad (1998) showed that relative advantage of an innovation is positively related to its rate of adoption.

Similarly, as Internet banking Page | 8 ervices allow customers to access their banking accounts from any location and at any time of the day, it gives advantage to customers to be able to manage their finances properly and in a more convenient way. The Internet banking services offer relative advantages when compared to branch banking and other alternative methods in terms of price, convenience and performance. On the importance

of trialability, Rogers (1993) and Agarwal and Prasad (1998) stated that potential adopters of new technology, who are allowed to experiment with it, would feel comfortable with it and thus be more likely to adopt it.

According to Tan and Teo (2000) if customers are given the chance to try the innovation, it will minimize certain unknown fears, especially when customers found that mistakes could be rectified and JIBC August 2010, Vol. 15, No. 2 – 4 – thus providing a predictable situation. A more rapid diffusion occurs when consumers can have low-cost or low-risk trial of the service. Internet banking services are free. The cost and risk to trial are relatively low especially when Internet access is available from work. Compatibility is another important dimension of the innovation diffusion theory.

In Tornatzky and Klein? s (1992) meta-analysis of innovation, they found that an innovation was more likely to be adopted when it was compatible with the individual? s job responsibilities and value system. Internet banking has been viewed as a delivery channel that is compatible with the profile of modern day banking customer, who is likely to be computer literate and familiar with Internet. The innovation should be compatible with the individual? s and group? s values or beliefs. Given that larger numbers of US customers are shopping/trading online, Internet banking ervices are therefore quite compatible for them once they overcome the security and privacy concerns. Page | 9 Perceived risk is the consumer's subjective expectation of suffering a loss in pursuit of a desired outcome. It is a multi-dimensional construct with overall risk being subdivided into performance, physical, financial, psychological, social loss, and time (Greatorex and Mitchell, 1994). Lockett

and Littler (1997) reported that perceived risks of the innovation were inversely related to adoption in telephone based direct banking services.

According to Stewart (1999), the failure of the Internet as a retail distribution channel has been attributed to the lack of trust customers have in the electronic channel and in the web merchants. Sathye (2000) confirmed security concerns are a burning issue for financial transactions done over the Internet. Thus, it is expected that only individuals who perceive using Internet banking as low risk undertaking would adopt it. Cooper (1997) identified the level of risk as an important characteristic from a consumer? s perspective in the adoption of innovation.

It has been known that security risk is one of the major barriers to the adoption of Internet banking. Since the birth of electronic commerce, financial institutions have stepped up online security measures to try to make the process less vulnerable to attacks. Some have spent millions adding more layers of authentication, toughening encryption schemes and going after and shutting down bogus bank sites (Salazar, 2009). Prakash (2008) states that design flaws that could compromise security were widespread and included some of the largest banks in the country.

Some bank sites make it hard for customers to make the right security decisions when doing online banking. For consumers the biggest risks are probably information overload and not understanding whom they are dealing with and on what terms. This can range from dealing with a perfectly respectable company from another jurisdiction, but not Page | 10 understanding for example the different legal environment and

compensation schemes, through to being vulnerable to scams and frauds (Sergeant, 2000). STUDIES Foreign. Automated Teller Machines or 24-hour Tellers are electronic terminals that let you bank almost any time.

To withdraw cash, make deposits, or transfer funds between accounts, you generally insert an ATM card and enter your PIN. Some financial institutions and ATM owners charge a fee, particularly to consumers who don? t have accounts with them or on transactions at remote locations. Generally, ATMs must tell you they charge a fee and its amount on or at the terminal screen before you complete the transaction. Check the rules of your institution and ATMs you use to find out when or whether a fee is charged. There is also the internet; The Internet will make banking a much more competitive environment in the next years to come.

Since the Internet is not constrained by geography, banks have to compete with national and multinational banks and companies for consumers located anywhere in the world. In addition, a number of "virtual" banks have now entered the market to compete with traditional banks for clients. ? As a result, the revolution brought on by Internet is modifying the nature of competition in terms of changing rules, creation of new opportunities, changed service and opening new markets especially in the retail banking segment evolving definition of convenience.

When talking about different delivery or distribution channels the term "multichannel-banking" is often used nowadays. Multi- Page | 11 channel-banking offers to the client the possibility to communicate or to make transactions through several different channels with the bank. In the

following almost all of these channels are mentioned (Bock, 2008). Without a doubt, the technological growth has considerably affected the profile of Bank risks and financial institution formation more generally. Some of these risks are increased, while others on the contrary are possible to be decreased.

In any case, the growth of electronic banking has created a new basis with regard to the degree of exposure to the risk and therefore consequently the need of not only a differentiated regulating frame, but also mechanisms of monitoring to be formed, which has already begun to be shaped in the fields of Basle Committee of Banking Supervision. The degree of exposing to risks, which are related to the electronic banking, depends mainly on the degree of adopting new alternative electronic means of distribution of services and products (Kumhar, 2006).

The business risk is the risk of not being able to achieve the business targets due to inappropriate strategies, inadequate resources or changes in the economic or competitive environment. It has to do with the ability the credit institution has in order to achieve the operational objectives by exploiting the available opportunities in the market. The big changes on the banking sector and the adoption of fast paced evolving technology also change the traditional strategic risks. A bank that will rush into the adoption of new Page

Technologies so that is rendered pioneer is risking losing its investment as information systems lose their value in very short time interval. Moreover, there is the risk of extensive investment in particular products or services, which will not become acceptable by the end users. On the other hand, if it

maintains a more conservative attitude there is the risk of becoming last, in an environment where the competition is moving fast and strengthens its place in the market. Internet banking may soon convert from a Complementary to the main provider of financial services and products (Ray, 2006).

Consequently, a possible failure of a bank entering this sector, can have various consequences on its future position in the market, especially when the competition of the banks, which are clearly connected with the i-banking and do not have any physical substance (virtual banks), is already given. Finally, the consequences, for the strategy that a bank follows from intercountry activities it will undertake, should be evaluated, taking into Consideration that the nature of internet is to encourage the expansion of banks in new markets abroad (Solanki, 2006).

One of the issues currently being addressed is the impact of e-banking on traditional banking players. After all, if there are risks inherent in going into e-banking there are other risks in not doing so. It is too early to have a firm view on this yet. Even to practitioners the future of e-banking and its implications are unclear. It might be convenient nevertheless to outline briefly two views that are prevalent in the market. Page | 13 The view that the Internet is a revolution that will sweep away the old order holds much sway. Arguments in favor are as follows.

E-banking transactions are much cheaper than branch or even phone transactions. This could turn yesterday? s competitive advantage – a large branch network – into a comparative disadvantage, allowing e-banks to

undercut bricks-and-mortar banks. This is commonly known as the "beached dinosaur" theory. E-banks are easy to set up so lots of new entrants will arrive. "Old-world? systems, cultures and structures will not encumber these new entrants. Instead, they will be adaptable and responsive. E-banking gives consumers much more choice. Consumers will be less inclined to remain loyal.

E-banking will lead to an erosion of the "endowment effect? currently enjoyed by the major UK banks. Deposits will go elsewhere with the consequence that these banks will have to fight to regain and retain their customer base. This will increase their cost of funds, possibly making their business less viable. Lost revenue may even result in these banks taking more risks to breach the gap. Portal providers are likely to attract the most significant share of banking profits. Indeed banks could become glorified marriage brokers. They would simply bring two parties together – e. g. buyer and seller, payer and payee.

Traditional banks will find it difficult to evolve. Not only will they be unable to make acquisitions for cash as opposed to being able to offer shares, they will be unable to obtain additional capital from the stock market. This is in contrast to the situation for Internet firms for whom it seems relatively easy to attract investment. Like ATMs, e- Page | 14 banking will impact on the nature of branches but will not remove their value (Sergeant, 2000). On strategic risk E-banking is relatively new and, as a result, there can be a lack of understanding among senior management about its potential and implications.

People with technological, but not banking, skills can end up driving the initiatives. Einitiatives can spring up in an incoherent and piecemeal manner in firms. They can be expensive and can fail to recoup their cost.

Furthermore, they are often positioned as loss leaders (to capture market share), but may not attract the types of customers that banks want or expect and may have unexpected implications on existing business lines. Banks should respond to these risks by having a clear strategy driven from the top and should ensure that this strategy takes account of the effects of e-banking, wherever relevant.

Such a strategy should be clearly disseminated across the business, and supported by a clear business plan with an effective means of monitoring performance against it (Carol, 2000) Page | 15 RELEVANCE OF THE REVIEWED LITERATURE AND STUDIES TO THE PRESENT STUDY Electronic banking is sometimes defined as the provision of retail and small value banking products and services through electronic channels. It is also often used to describe processes in which customers can perform banking transactions without visiting a brick and mortar institution.

In the Philippines, e-banking made an auspicious debut when automated teller machines (ATMs) were introduced in the 1980s revolutionizing how we viewed the conventional, brick-and-mortar bank structure. Today, ATMs have become a common customer delivery channel that is predominant in urban centers and sometimes even in the countryside. Aside from ATMs, other innovations have taken place such as phone and internet banking which again provide customers the ability to access banking services from various

locations and at a 24-hour by 7-days basis. At end-June 2004, 57 banks (41 domestic banks and 6 foreign banks) provided electronic banking services. Out of the 57 banks, 36 were universal and commercial banks (85. 7 percent of the 42 operating universal and commercial banks) and 21 were thrift banks (23. 6 percent of the 89 operating thrift banks). With these developments, customers are able to enjoy the many conveniences and lower costs that are offered by the said innovations. For example, ATMs have a nationwide presence but there is a concentration in urban areas, which are not easily accessible to those residing in the countryside. In Page | 16 addition, ATMs would require that you have a bank issued ATM card.

The banks that typically issue ATM cards are the larger banks with which poor and low income individuals do not transact. Another example is internet banking services, which has significantly increased convenience for clients, as they are able to perform certain transactions without leaving their home or workplace. However, this service is available only to those who have internet connection or are, at the very least, computer literate. In the same manner as ATM services, the poor and low-income clients will not be able to fully enjoy the benefits of this service. Microfinance has proven to financial institutions (i. e. anks) that the services they provide to their "traditional" clients can also be offered to poor and low-income entrepreneurs and clients, in a sustainable and viable manner. These institutions have seen that reaching out to the majority of the country? s population, which is the lowincome market, does not necessarily mean a losing proposition for their institutions. Similarly, it is only appropriate that the more efficient and cheaper methods of providing these financial services, such as electronic

banking services, which are offered to valued traditional bank clients, should also be offered to microfinance clients.

The increased convenience and lowered costs arising from innovations in electronic banking should also benefit the poor and low-income clients. Two case presentations will be made on existing models in which technological innovations of electronic banking are being used specifically to serve microfinance Page | 17 clients. First, is the use of mobile telephones through the short messaging services (SMS) to pay for microfinance loan amortizations using electronic cash platforms.

The other case is a brief example of the distribution of Automated Teller Machine (ATM) cards to microfinance clients, which aims to lower costs for the microfinance institution while increasing convenience for the clients. ATM machines have taken away much of the job of the local banker. Now, customers can deposit pay checks and withdraw cash freely at any time; banking has become private and independent. Now when you sign up for a new bank account, you set up your online banking information right away. People can perform almost all their banking transactions from home.

Some examples of this are ordering new sets of checks, making bill payments and transferring money between accounts. Electronic banking makes handling personal finances easier. People are empowered to learn what they need to know online and then make financial decisions and transactions in real time. Electronic banking has a positive financial impact, as traditional account maintenance fees are not charged, electronic bill payment saves mailing costs, and people can travel more easily than before,

able check their bank statements online from anywhere in the world and keep up with their financial obligations.

Page | 18 Theoretical Framework Electronic Banking Usability Functionality Risks Effectiveness Banking sector has continuously made significant advances towards innovating and exploiting opportunities offered through electronic. E-banking has been a cornerstone of many services which are important to the society. In this paper, the researchers have introduced a general framework for determining the effectiveness of electronic banking, starting from its usability and functionality offered by financial institutions to the perceived risks. Page | 19 Research Paradigm Electronic Banking Financial Institutions Usability

Convenience Functionality Transactional/Non Transactional Security Financial Institution Administration Management of Multiple Users Transaction

Approval Process Risks Assessment Advantages Effectiveness Disadvantages

Task Analysis Page | 20 CHAPTER 3 RESEARCH METHODOLOGY Generally,
the research design is explained in this chapter. The design that will be used
is explained and justified if it is suitable for the study. This chapter explains
the method of the research that will be used whether historical, descriptive
or experimental. Also the procedural part of the method, it? appropriateness
to the study, and some of its advantages should be given attention and
should be well discussed. In this chapter, the sample is also discussed. This
includes the sampling size and the sampling procedures. The researcher? s
explanation on how the sample of is selected and the proof that the sample
is representative of the population by showing that the researcher will use

appropriate techniques of sampling are also discussed. This chapter also states the instrument/ technique that will be used in the study. The last part of this chapter describes the treatment of the data.

This kind of treatment depends upon the nature of the problems, specially the specific problems, and the nature of the data gathered. RESEARCH DESIGN The research design employed qualitative design, particularly descriptive method of research in this study. Descriptive method of research is a fact finding study with adequate and accurate interpretation of the findings. It describes with emphasis what actually exists such as current condition, practices, situations or any phenomena. Since the present study or investigation is concerned with the effectiveness, functionality and Page | 21 isk of electronic banking, the descriptive method of research is the most appropriate method to use. SAMPLE The assessment of functionality, effectiveness and risk of electronic banking in financial institutions within some specific in Quezon City, Philippines was made, in which a total of ten (10) Bank Managers from different banks were utilized as the respondents. INSTRUMENTATION The instrument used in collecting data was Interview guide. This is concerned with the research paradigm constructed in the previous chapter, since the study is about functionality of electronic banking and it lies within banks management.

When properly constructed and responsibly administered, interview guide becomes a vital instrument by which statements can be made about specific groups or people or entire populations. It was inexpensive and the respondents had been clearly directed and asked when they answered the

interview. Interview Guide. The questions asked are necessary, useful, and needed on the subject matter. The list of questions is accurate, specific, and direct to the point. It is also fair with accompanying questions to balance the emphasis. Page | 22

Construction. The researchers had created the interview guide after reading related literature and studies. Questions related to the problems were formulated following the rules on rearing the interview guide. Validation.

After constructing the interview guide, the researcher had known the advice of different personalities including the researcher? s adviser, friends, other students and experts. The researchers then consider all the suggestion and comments and then a final draft of the interview guide was reared.

Administration and Retrieval.

The researchers administered the gathering of data by making an appointment with the bank manager and visiting the bank personally. Questions pertaining to the approved interview guide were delivered and answers were jotted down carefully. Interview results were then gathered and analyzed. Page | 23 INTERVIEW GUIDE 1. What are the profiles of the respondents according to 1. 1 Age 1. 2 Gender 1. 3 Civil status 1. 4 Company or Bank employed in 2. What are the risks when taking transactions in electronic banking? 3. How do banks handle large number of customers engaging electronic transactions? . What are the advantages of electronic banking over manual banking system? 5. What are the disadvantages of electronic banking? 6. How do you maintain the usability and user friendliness of banks websites? 7. What are the precautionary measures

implied in order to diversify risks in automated teller machines? 8. How many Automated teller machines are installed within the city? Why? 9. What are effects of electronic banking system in bank operations? Customers? 10. How does electronic banking improve the quality of banking system in the Philippines? Page | 24