ADOPTION OF INTERNET BANKING FROM A CUSTOMERS’ PERSPECTIVE IN GHANA

(The study of Standard Chartered Bank-Kumasi)

Group: 2328

Authors: Justice Antwi-Boasiako -721012
         Konlaan Leedip Boinkum -790109

Supervisor: Jean-Charles Languillaume
THESIS ABSTRACT

COURSE: Master Thesis in Business Administration 15 ECTS

Research problem

To what extent do customers’ at Standard Chartered Bank in Kumasi adopt internet banking?

Purpose of the study

The purpose of this study is to explore barriers and drivers to the adoption of internet banking among customers at the Standard Chartered Bank-Kumasi.

Research Question

- Are customers at Standard Chartered Bank-Kumasi aware of the existence of internet services in their bank?
- What factors may motivate Standard Chartered Bank-Kumasi customers to adopt internet banking?
- What factors may impede the adoption of internet banking by the customers of Standard Chartered Bank-Kumasi?

Methods

The authors adopted the qualitative method which seeks in-depth information from respondents. The authors also relied on both primary and secondary data. The primary data is obtained through telephone interview. The secondary data use includes books and journals as well as internet sources. The principal theories used are the diffusion of innovation by Rogers (2003) and the hierarchy of effects model by Evans et al. (2006).

Conclusion

The analysis from the study has shown that, many factors such as education, need age, etc are the driving force that influence customers in our study to adopt internet banking. Other factors include the perceived ease of use and perceived usefulness is important for the customers to adopt internet banking. The study has revealed that, most customers consider the adoption of internet banking as associated with high cost, complexity to use internet and lack of security as well as low awareness are some of the factors hindering the adoption of internet banking among the customers in our case study.

Keywords: adoption, internet banking, Ghana, information and communication technology.
Acknowledgement

This piece of work could not have come to a fruitful end without the help and guidance of some individuals. First of all, we would like to express our heartfelt gratitude to our supervisor, Jean-Charles Languilaire for his time and constructive suggestions when writing this paper. Thanks also go to our group members for their contribution and suggestions. We would also like to thank the Marketing Manager of Standard Chartered Bank- Kumasi Branch for assisting us in getting customers. We thank all the customers who made themselves available for the interview which provided us the necessary information to enable us to write this thesis.

We would also like to thank all lecturers at the School of Sustainable Development of Society and Technology, Mälardalen University especially Tobias Eltebrandt and Charlotta Edlund for their lectures and insightful ideas during the course of study. This has broadened our horizon in the subject area.

Our thanks also go to our families who have supported our education in diverse ways up to this level. Thanks also go to our friends for their support and encouragement when pursuing this programme. To all whose names are not mentioned here we say well done for your support.

Our last thanks go to the ALMIGHTY GOD for giving us the strength and wisdom when carrying this project. May his name be praised, Amen.
# Table of contents

1 Introduction ........................................................................................................... 5
1.1 Background – overview of Ghana.......................................................................... 5
1.2 The banking industry and the emergence of information technology in Ghana .... 5
1.3 Problem statement ............................................................................................... 6
1.4 Purpose of the study ............................................................................................. 7
1.5 Research questions .............................................................................................. 7
1.6 Justification of the study ...................................................................................... 8
1.7 Limitation ............................................................................................................. 8
1.8 Structure of the thesis ......................................................................................... 8

2 Definitions of concepts and conceptual framework ................................................. 9
2.1 Internet banking as innovation ............................................................................ 9
2.2 The adoption of technology ................................................................................. 10
2.3 Our conceptual framework ................................................................................ 13
2.3.1 Factors influencing customers choice of adopting internet banking ................. 13
2.3.2 Socio-economic and enhanced factors .............................................................. 14
2.3.2.1 Need .............................................................................................................. 14
2.3.2.2 Education ................................................................................................... 14
2.3.2.3 Age .............................................................................................................. 14
2.3.2.4 Perceived risks ........................................................................................... 15
2.3.2.5 Information provision .................................................................................. 15
2.3.2.6 Trust and security ....................................................................................... 15
2.3.3 Perceived attribute of internet banking ............................................................ 16
2.3.3.1 Relative Advantage .................................................................................... 16
2.3.3.2 Complexity ................................................................................................ 16
2.3.3.3 Compatibility .............................................................................................. 16
2.3.3.4 Trialability .................................................................................................. 17
2.3.3.5 Observability .............................................................................................. 17

3 Research methods ................................................................................................ 18
3.1 The research approach ....................................................................................... 18
3.2 Choice of method for this research .................................................................... 18
3.2.1 Sources of data for the study ........................................................................ 19
3.2.1.1 Primary data ............................................................................................... 19
3.2.1.2 Secondary data .......................................................................................... 19
3.3 Data gathering techniques ................................................................................. 20
3.3.1 Interviews ...................................................................................................... 20
3.3.2 Selection of Standard Chartered Bank and its Customers ............................... 21
3.3.3 Selection of respondents .............................................................................. 21
3.3.4 Customers profile .......................................................................................... 22
3.4 Interview guide design ...................................................................................... 22
3.5 Ethical considerations ....................................................................................... 23
3.6 Criticisms of the method .................................................................................. 23
3.6.1 External / Population validity ......................................................................... 23
3.6.2 Reliability ...................................................................................................... 23
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Presentation of empirical findings</td>
<td>24</td>
</tr>
<tr>
<td>5</td>
<td>Analysis</td>
<td>27</td>
</tr>
<tr>
<td>5.1</td>
<td>Socio-economic and enhanced factors</td>
<td>27</td>
</tr>
<tr>
<td>5.1.1</td>
<td>Need</td>
<td>27</td>
</tr>
<tr>
<td>5.1.2</td>
<td>Age</td>
<td>27</td>
</tr>
<tr>
<td>5.1.3</td>
<td>Education</td>
<td>28</td>
</tr>
<tr>
<td>5.1.4</td>
<td>Perceived risks</td>
<td>28</td>
</tr>
<tr>
<td>5.1.5</td>
<td>Information provision</td>
<td>29</td>
</tr>
<tr>
<td>5.1.6</td>
<td>Trust and security issues</td>
<td>29</td>
</tr>
<tr>
<td>5.2</td>
<td>Perceived attributes of internet banking</td>
<td>30</td>
</tr>
<tr>
<td>5.2.1</td>
<td>Relative advantage</td>
<td>30</td>
</tr>
<tr>
<td>5.2.2</td>
<td>Compatibility</td>
<td>31</td>
</tr>
<tr>
<td>5.2.3</td>
<td>Complexity</td>
<td>31</td>
</tr>
<tr>
<td>5.2.4</td>
<td>Observability</td>
<td>32</td>
</tr>
<tr>
<td>5.2.5</td>
<td>Trialability</td>
<td>32</td>
</tr>
<tr>
<td>6</td>
<td>Conclusion</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Appendixes</td>
<td>40</td>
</tr>
</tbody>
</table>

**List of figures & Table**

- Figure 1 Rogers (2003) innovation decision process by customers | 12
- Figure 2 Evans et al. (2006) innovation decision process by customers | 12
- Figure 3 Proposed composite model for the study | 13
- Table 1 | 33
1 Introduction

The section provides background information of the thesis and basically deals with the overview of Ghana and the introduction of internet banking by the Standard Chartered Bank-Kumasi. It also outlines the purpose and the rationale for the study as well as the limitation of the study.

1.1 Background - Overview of Ghana

Ghana is a small country in the western part of Africa and shares boundary in the north with Burkina Faso, east with Togo and west with Cote d’Ivoire while in the south is surrounded by the Atlantic Ocean. According to the World Fact book (2008), the total land area of Ghana is 239,460sq km with an estimated population of 23,832,495. Ghana is endowed with rich natural resources such as gold, industrial diamond, timber and hydro-electric power. Due to the rich nature of the land coupled with heavy rainfall, the country is agrarian in nature. The agricultural sector accounts for about 35% of the Gross Domestic Products (GDP). The agricultural sector alone employs about 55% labour force, the industrial sector employs about 15% while the service sector employs about 29% (World Factbook, 2008). (See appendix A for Ghana map and our study area).

Even though Ghana is considered as a developing country, Kapur et al. (1991 in Adorkor, 2007) argue that, the country is ranked as one of the most advanced countries in the African continent. This situation has changed the traditional practices and now the country is embracing the modern way of life. Perhaps, this may stem from the globalization which makes it possible for countries that are less developed to enjoy the technologies of the developed countries including the use of modern technology in the service sector. This is the case when considering the development of banking sector in Ghana. Abor (2004) conducted a study technological innovation in the banking industry in Ghana: an evaluation of customers’ perception and concluded that there has been as dramatic revolution in the banking sector with special emphasis on the use of information technology in service delivery to the customers.

1.2 The banking industry and the emergence of information technology in Ghana.

The development of the banking industry in Ghana started in the colonial period as far back as 1896 (Vidal & Co. 1999). The first bank established was known as the British Bank for West Africa (BBWA) currently known as Standard Chartered Bank with its headquarters in Accra (Ghana Business Index, 2009; Adorkor, 2007). Due to its success after its establishment many branches were opened in many parts of the country including Ashanti and northern territories. Shortly after Ghana obtained independence in 1957, the Bank of Ghana (BoG) and the Ghana Commercial Banks (GCB) were established to facilitate government business (BoG website, 2009). Later Agricultural Development Bank (ADB) was also established to cater for the needs of farmers and other categories of the people. In 1989 the banking law was enacted which resulted in the establishment of many banks such as Merchant Bank, Ecobank and Social Security Banks, Rural and Community banks with the aim of encouraging individuals to cultivate the habits of savings (Vidal & Co, 1999). In this dynamic business environment coupled with globalization, for the banks to remain competitive requires the provision of innovative service to its customers.
Customers are becoming more informed, more complex and more demanding. Hence, most service providers have adopted the service perspective to cope with competition. This situation may be partly driven by customers, partly competition driven or could be technology driven (Gronröös, 2007). This may stem from the development of information and communication technology which has changed the way most banks in the world render services to their customers. Thus the emergency of electronic banking makes it possible for banks to create new services to their customers. Many scholars argue that, the development of information technologies is having greater impacts on marketing activities (Porter, 2008; Baines et al. 2008). Most service providers such as banks all around the world are taking advantage with the technological innovation through the use of internet and electronic medium to deliver quality and superior services to their clients. According to DeYoung et al. (2005), internet services provided by banks to their customers have now become part of the banking business.

To take advantage of information and communication technology, the Standard Chartered Bank - Ghana started introducing innovative services in the country to its customers. According to the Managing Director, Essoka (The Banker, 2004) in order for the Standard Chartered to strengthen its competitive position in the banking industry, there is the need to harness the power of information and communication technology. This situation compelled the bank to introduce innovative products to its customers such as the debit card in 2001 (Abor, 2004). The latest innovative product is the launch of internet banking in Ghana. This is considered as an ‘alternative channels’ introduced by Standard Chartered Bank in Africa throughout 2008 (Ghana Business News, 2009). The bank introduced internet banking with the hope that customers may adopt this innovative service to facilitate their financial transactions. However, most transactions in the country are still conducted using the traditional ‘brick and mortar’ method (Abor, 2004). This involves the customer going to the premises of the bank and has interaction with the employees when transacting business, thus either to withdraw cash or make deposit.

As an explanation, it may be argued that not all innovations based on technological development become successful physical products or service. Hence, it is important that service organizations should ensure that customers are part of the service creation so as to ensure the success of the product when introduce into the market (Grönroos, 2007).

1.3 Problem statement.

Ghana is one of the first countries in the African continent that started implementing information ad communication technology as far back as 1989/90 (Ahiabenu, 2001). This is due to the rapid diffusion of new technology which is considered by the country’s financials sector as a new way of conducting business. The rapid internet growth in Ghana is due to the liberalization of the telecommunication industry by the government (Internet World Statistics, 2008). As at 2004, there are more than 100 internet service providers in Ghana (Internet World Statistics, 2008). This is due to the fact that, information and communication technology is considered to hold the promise for service providers and other business firms (Porter, 2008). These enabling conditions made it possible for most of the foreign and the local banks operating in Ghana to introduce electronic banking as part of the services to customers (Abor, 2004). The banks consider this as a convenient for both private and businessmen. This is due to the fact that the customers may have access to their accounts at any time without necessarily having face-to-face interaction with the
employees at the bank (Chou and Chou, 2000; Ghana Business News, 2009). In addition, the use
of information and communication technologies may enable the service providers to offer quality
and just-in-time delivery to their customers upon request. This would make the banks to be very
competitive in this dynamic world of business (Porter, 2008; Abor, 2004).

Many studies have shown that, the use of information and communication technologies by
financial institutions has much positive impacts on bank productivity, cashiers’ work, banking
transaction, bank patronage, bank services delivery, customers’ services and bank services. They
concluded that, these have positive effects on the growth of banking (Balachandher et al. 2001;

There is undeniable fact that, the use of information and communication technology helps
service providers to deliver services on time. However, Vijayasarathy (2001 in Patricio, 2003)
states that the use of technology in service delivery is not attractive to all kinds of customers.
This situation may arise as a result of many factors including personal as well as external. Based
on this argument, our study would explore the factors that may influence customers at Standard
Chartered Bank – Kumasi to adopt internet banking. Many scholars are of the view that when an
innovative service is introduced into the market, it should possess certain qualities to meet the
needs of customers before adoption can take place (Evans et al. 2006). Rogers (2003) further
argues that, customers also go through certain process in decision making before adopting an
innovation. The main research problem is to what extent do customers’ at Standard Chartered
Bank - Kumasi adopt internet banking?

1.4 Purpose of the study

The purpose of this study is to explore barriers and drivers to the adoption of internet banking
among customers at the Standard Chartered Bank-Kumasi.

1.5 Research question

In carrying out this research and to be able to analyze the topic, the following research questions
will be considered.

- Are customers at Standard Chartered Bank-Kumasi aware of the existence of internet
  services in their bank?

- What factors may motivate Standard Chartered Bank-Kumasi customers to adopt internet
  banking?

- What factors may impede the adoption of internet banking by the customers of Standard
  Chartered Bank-Kumasi?

These research questions are very important since it will guide us to focus on our topic and also
help us to explore the factors that influence customers’ choice of innovative service such as
internet banking. Thus, the success of every business and especially the banking industry
depends on how well customers may adopt an innovative service offered by the service provider.
1.6 Justification of the study

The outcome of this research would provide much information to customers who are contemplating whether to adopt internet banking or continue to use the traditional banking. This would enable them to make informed decision.

Apart from the above, this research could also provide useful information for the banking institutions, government and as well policy makers when implementing information and communication technologies for the country. This is important in that, the outcome would provide much information about the general knowledge of the people and how they are conversant with using information communication and its related facilities.

It would also be a source of future researchers who are interested in this area of study since it will provide a valuable source of information and may also serve as a database for future studies.

1.7 Limitation of the study

In carrying out this research, the authors encountered some difficulties. First and foremost, the study is limited to the few customers at Standard Chartered Bank- Kumasi. This may affect the results and therefore generalization cannot be made from the results.

In addition, corporate bodies and institutions are excluded from the study and the study focused on individual customers and this may affect the results of the study and therefore the analysis would exclude such bodies. Besides, it was difficult to obtain some vital information from the bank since most information are kept secret form the general public.

1.8 Structure of the thesis

Chapter 2 deals with the definitions of certain concepts used in the study. It also discusses the theoretical model such as diffusion of innovation and hierarchy of effects model. The proposed conceptual framework used in the study is also presented.

Chapters 3 presents the various methods used in the study and include method of data collection, sources of data and criticisms of the method used.

Chapter 4 presents the empirical findings from the study through the interviews of respondents’ which would be used as a basis for analysis as well as the information from the manager.

Chapter 5 deals with the analysis form the study and basically uses the interviews conducted and the composite conceptual framework developed from the theories used. It deals with two main areas of study namely socio-economic and enhanced factor and the perceived attributes of internet banking.

Chapter 6 presents the conclusion from the study as well as suggestions from the authors.

References

Lists of Appendices
2 Definitions of concepts and conceptual framework

This section deals with the definitions of some concepts used in this study. It also outlines theories and literature which forms the basis of our study namely, the adoption of internet by from a customer’s perspective: the case of customers at Standard Chartered Bank-Kumasi. The principal theories include diffusion of innovation by Rogers (2003) and the hierarchy of effects by Evans et al. (2006). The reviews of these theories lead us to define our conceptual framework used in this thesis.

2.1 Internet banking as innovation

Many authors have defined internet banking in different ways and some definitions are given below.

Electronic banking involves the deployment of banking services and products over electronic and communication networks. It therefore involves the use of the electronic and communication networks such as Automatic Teller Machines (ATMs), direct dial-up connections, internet banking as well as mobile devices (Singh and Malhotra, 2004). In this study, our focus would be on the internet banking.

According to Grabner-Kräuter and Faullant (2000), internet banking is a technology which allows customers to conduct a wide range of banking transactions via the bank website – anytime and anywhere, faster and with lower fees compared to using traditional, real-world bank branches. It can thus be said to be any technology that enables customers to have access to their banks and transact business from home or any comfortable place through the internet. Internet banking therefore involves extensive use of technology when compared to traditional banking and is takes place in virtual environment. As a result, customers face with implicit uncertainty of using an open technological infrastructure for financial transaction (Gan et al. 2006 in Grabner-Kräuter & Faullant, 2008).

Internet banking also refers to the use of internet as a remote delivery channel for banking services, such as opening a deposit account, transferring funds among different accounts, electronic bill presentation and payment (Furst et al. 2000 in Dash and Bruce, 2009).

According to Essinger (1999), internet banking is a means of giving customers access to their bank accounts via a website and to enable them to enact certain transactions on customers’ accounts, giving compliance with stringent security checks.

Having considered some above definitions of internet banking, it is important for us to reflect on some of the definitions that have been given to innovation by different authors since it is has a connection with internet banking in our study.

Evans et al. (2006) define innovation as anything (e.g., idea, concept, product or service) perceived as being new in the marketplace while Rogers (2003) defines an innovation as an idea, practice or object that is perceived as new to an individual or other unit of adoption. Garcia and Calantone (2002) also define innovation as an iterative process initiated by the perception of a new market and/or new service for a technology-based invention which leads to development, production and marketing tasks striving for commercial success of the invention. Innovation is
therefore a process which consists of the technological development of the innovation combined with the market introduction of that invention to the end-users through adoption and diffusion. Fagerberg (2004) classifies innovation as product or process. Product innovations are new – or better – material goods as well new intangible services. Process innovations are new ways of producing goods and services which may be technological or organizational. Fagerberg (2004) therefore concludes that the systems of innovation include all the important economic, social, political, organizational, institutional and other factors that influence the development, diffusion and use of innovation.

From the foregoing discussion, it may be said that, internet banking involves the technological innovation taking place in the banking sector which makes it possible for the bank to offer services to its customers in a convenient, flexible and easy manner. This is because in the case of the traditional banking all transaction of customer is recorded on paper which takes a long time. This is the case when the customer is making deposit or withdrawal since the cashier has to look through the pile of ledgers in order to locate customer’s name. It is therefore important to consider the factors that may influence customers to adopt internet banking at Standard Chartered Bank-Kumasi.

2.2 The adoption of technology

The focus of this thesis is to explore the underlying factors that may influence the adoption of internet banking by customers at Standard Chartered Bank-Kumasi. The study therefore forces us to pay attention to two main models which are useful for us to develop our proposed conceptual framework. These models are the diffusion of innovation (Rogers, 2003) and the hierarchy of effects (Evans et al. 2006). Diffusion is the process by which an innovation is communicated through certain channels over time among members of a social system (Evans et al. 2006; Rogers, 2003). Diffusion is therefore involves a special type of communication which could be planned or unplanned and concerns with the spread of new ideas to the members of a social system (Rogers, 2003). The communication channel through which the innovation passes is important for its adoption and includes interpersonal as well as the different mass media (Bass in1969 in Rogers, 2003). Time at which members in the social system adopt the new idea is very critical since different customers adopt innovation at different time scales based on personal characteristics and well as external factors.

The first model used in this thesis is the diffusion of innovation (DOI) developed by Rogers (2003). The theory of diffusion of innovation (Rogers, 2003) emphasizes the user’s perception of innovation as vital for its adoption is used. In Rogers’s theory much emphasis is placed on the users’ perception about the product/service at the expense of other factors which can also lead to adoption of innovation by the potential adopters. Rogers’s theory also provides much insight about the innovation decision process that customers go through which may influence their decision to adopt the new idea or not. Rogers (2003) further states that there are prior conditions which may necessitate customers to adopt a product or service and these prior conditions are the previous practice, felt needs, innovativeness and norms of the social systems. The diffusion of innovation theory argues that individual decision to adopt innovation depends on the perceived attributes of the innovation as well as the characteristics of the decision-making unit. In Roger’s (2003) view, these attributes are the relative advantage, compatibility, complexity, trialability
and observability. The characteristics of the decision making unit include the socio-economic characteristics, personality variables and communication behaviour. The model is illustrated below:

<table>
<thead>
<tr>
<th>Prior conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Previous practice</td>
</tr>
<tr>
<td>2. Felt Needs/Problems</td>
</tr>
<tr>
<td>3. Innovativeness</td>
</tr>
<tr>
<td>4. Norms of the social system</td>
</tr>
</tbody>
</table>

Figure 1 Innovation decision process by customers

Source: Rogers, 2003

'The innovation-decision process is the process through which an individual (other decision-making unit) passes from the first knowledge of an innovation, to forming an attitude towards the innovation, to a decision to adopt or reject, to the implementation of the new idea, and to confirmation of this decision' (Rogers, 2003, pp 170). Thus based on individuals customers decision process about the product or service adoption would take place or not.

According to Rogers (2003), adoption is a decision by the individual customer to make full use of an innovation as the best course of action. Thus, when a customer adopts an innovation and is satisfied with it, that customer may continue to use the new idea. Discontinuance on the other hand occurs when the customer makes a decision to reject an innovation after it has previously been adopted. Rejection is a decision by a customer not to adopt innovation while late adoption on the other hand occurs, when an individual reject the innovation and adopt it at the later stages (Rogers, 2003).

The perceived attributes of innovation is important factors that influence individual’s decision to adopt a product or service. On the other hand, the perceived risk which customers face when exposed to the product or deciding to adopt a product is also important criteria that should be
taken into consideration (Blythe, 1997; Evans et al. 2006; Yi-Shun et al. 2003). According to Blythe (1997) any action taken by the customer may result in unpredictable consequences in which some may be unpleasant. Hence when the perceived risk of the product or service in terms physical, financial or social is very low, there is high tendency that potential customers are likely to adopt the service or product at a faster rate. Contrary, when potential adopters perceive the innovation as having higher perceived risk, the adoption rate is likely to be low (Evans et al. 2006).

The model of hierarchy of effects (Evans, 2006; Blythe, 1997) is also used in this thesis which shows that customers go through a certain sequential processes before adopting or rejecting the innovation. The model represented diagrammatically as

![Figure 2 Innovation decision process by customer](image)

Figure 2 Innovation decision process by customer

Source: Evans et al. 2006.

The hierarchy of effects model states among other things that customers’ innovation decision process starts with the awareness and knowledge stage which is similar to Rogers (2003) adoption theory. At the awareness and knowledge stage, individual customers are being exposed to the innovation and gains understanding of how the innovation functions. The liking and preference stage enables the customer to the form attitude towards the innovation which can be favourable or unfavorable (Blythe, 1997; Evans et al. 2006). It should be noted that, when the customer develops a favorable attitude towards the innovation leads to conviction and purchases. This results in the use of the innovation by the customer while unfavorable attitude may lead to rejection of the innovation. Thus, the customer’s decision to develop favourable or unfavourable attitude towards innovation would be based on the perceived ease of use or the perceived usefulness of the innovation (Davis, 1989). In this way, even if customers are aware and have knowledge about the existence of an innovation but find it difficult to use, it is unlikely that they may develop favourable attitude towards the innovation. This situation is likely to impact negatively on the success of that innovation in terms of adoption (Davis, 1989; Evans et al. 2006). On the other hand, if customers are aware and have knowledge of an innovation and perceive it to be useful or find it easy to use, there is likelihood that, they may develop favorable attitude towards the innovation. This may lead to adoption by the potential adopter (Davis, 1989).
2.3 Our composite conceptual framework

Based on the hierarchy of effects and diffusion of innovation models, we propose a composite model below as the framework for this study. It would enable us to explore the factors that may influence customer’s decision to adopt internet banking in our study. As can be seen in the proposed composite model socio-economic and enhanced factors and the perceived attributes may all influence potential adopters’ decision either to adopt internet banking or to keep to traditional banking. This study will be concentrating on the perceived attributes of internet banking as well as the socio-economic and enhanced factors. Each element in the model is explained below;

Figure 3 Proposed composite model for the study.

Adapted from Rogers 2003; Evans et al. 2006 and Blythe, 1997.

2.3.1 Factors influencing customers’ choice of adopting internet banking

From figure 3, it can be seen that the socio-economic and the enhanced factors as well as the perceived attributes service may all influence the way customers perceive the internet banking.
Based on the customer’s perception about internet banking, the potential adopter makes a decision to adopt or reject. When the individual customer rejects internet banking, it implies the customer may continue to use the traditional banking. As a result, there is a tendency that such customers are likely to spend more time at the bank's premises. Alternatively, when the individual customer decides to adopt internet banking, the implication is that it may facilitate the customer's transaction. This is due to the improved services which ultimately saves the time and cost incurred by the customer than using the traditional bank.

2.3.2 Socio-economic and enhanced factors

2.3.2.1 Need

According to Hassinger (1959 in Rogers 2003) and Evans et al. (2006), individuals seldom expose themselves to the message of innovation unless they first feel the need for it. A need is a state of dissatisfaction or frustration that occurs when an individual’s desires outweigh the individual’s actualities (Rogers, 2003). Hence, customers may look for a new technology if they are not satisfied with the existing technology or upon realizing that there exists an innovation which is superior to the existing technology (Krushna, 2007). Sometimes too, individual customers may receive a message on the existence of an innovation. But when such message is in conflict with their needs, interests, and existing attitudes, they try to avoid such messages. This tends to slow down the diffusion of innovation. This process is called as “selective exposure” by the customer (Evans et al. 2006; Rogers, 2003).

2.3.2.2 Education

The level of customers' education (formal, non-formal, e.g., adult education, and informal) may provide much insight about the benefits and uses of the new technology (Krushna, 2007). This is because it is expected that customers with higher education can make an informed decision when it comes to innovative products as well as their associated advantages. Normally, innovators are those who have higher education and are more influential in society than those who adopt the innovation at later periods (Blythe, 1997; Evans et al. 2006; Rogers, 2003). Hence, all other things being equal, customers in our study with higher education are more likely to adopt internet banking. This may trigger others to adopt which may eventually increase the rate of adoption. This is because people look up to such people for new ideas till a critical mass is achieved. On the other hand, customers with less education may not appreciate the benefits of innovation when introduced into the market. Such customers may wait for some people to adopt before they may follow (Evans et al. 2006; Rogers, 2003). This situation may be very common in developing countries where illiteracy rate is high especially in Ghana where about 42.1% of the population is illiterate (World Factbook, 2008). It may be argued that less educated customers may be less inclined to adopt online banking due to the technical nature of conducting transactions on the internet (Anon, 1999).

2.3.2.3 Age

Older individuals are less likely to adopt an innovation than younger ones (Anons, 1999). This is because such individuals are likely to have been habituated with using the existing technology for a long time/or they have less education (Krushna, 2007). As a result, such individuals may
not see the need to adopt such new technology since perhaps they know that the benefits may not be realized during their lifetime and thereby decreasing the rate of adoption (Krushna, 2007). According to O’Donohoe and Tynan (1988 in Evans et al. 2006), young adult are advertising literate. Perhaps this may have much influence on young customers’ decision to adopt new technology than the old people. Evans et al. (2006) argue that those customers who are above 36 years are always individualistic and skeptical of marketing activity. This is due to the fact that such individuals are not born in the information age which may result in their low knowledge about computer especially in developing country like Ghana.

2.3.2.4 Perceived risk

Another factor that may influence customers in our study to adopt an innovation is the perceived risk that may be associated with the innovation. The perceived risk is any action taken by customer produces unpredictable consequences, and some of which might be unpleasant (Evans et al. 2006; Anon 1999; Blythe, 1997) and this may affect its adoption rate. Thus, when customer considers the perceived risk of innovation as low, then the rate of adoption is likely to be high. On the other hand, an innovation with high level of perceived risk generally have low adoption rate (Evans et al. 2006).

2.3.2.5 Information provision

According to Bass model (1969 in Rogers, 2003) potential adopters of an innovation are influenced by two types of communication channels, namely mass media and interpersonal channels. Sometimes customers may not be aware of the existence of an innovation and even if they are aware, they may receive information from many sources. The credibility of the information is important for potential adopters to make an informed decision to adopt or reject the innovation (Blythe, 1999; Evans et al. 2006). Thus, if credible information can be obtained easily by customers without any difficulty, there is likelihood that the rate of adoption will be high. Mass media – television, radios and newspapers can be used to disseminate new ideas in our study area especially during the knowledge stage of innovation-decision process (Rogers, 2003). Even though the role of mass media is very important in creating awareness, interpersonal communication has been found to be most effective means of diffusion of innovation during persuasion stage (Rogers, 2003). This is because customers perceive interpersonal communication as trustworthy when it comes to financial matters (Evans et al. 2006; Owusu-Frimpong, 1999).

2.3.2.6 Trust and Security

Trust is the perceived credibility to the extent that to which the partner believes other party has required expertise to perform a certain job effectively and reliably (Ganesan 1994, in Yi-Shun, 2003) whereas security refers to the protection of information or systems from unsanctioned intrusions or out flows (Yi-Shun et al. 2003). Sometimes customers do not trust the service provider offering internet banking and also believes that, the information provided online would not be protected. Also when customers consider the partner providing the service cannot fulfils his obligation in the course of transaction; the more this situation may affect customers’ decision to adopt online banking.
2.3.3 Perceived attributes

According to Rogers (2003), every innovation has five attributes – relative advantage, complexity, compatibility, observability and trialability that may determine its rate of adoption of a new product or service by customers.

2.3.3.1 Relative Advantage

Relative advantage is the degree to which an innovation is perceived as being better and offer more advantages than the alternatives (Rogers, 2003). It means that the innovation which is considered as new must offer the customer a better range of benefits than the existing solution in terms of cost and availability of internet facilities in our study.

*Cost:* From an economic viewpoint, the cost of a product/service may affect its demand and consequently the rate of adoption by customers when considering internet banking. In this case, higher income customers can afford an innovation (Anon, 1999). Therefore higher income customers are more likely to be earlier adopters than customers with low income since higher income customers are able to take risks (Blythe, 1997). This is because earlier adopters and able to endure the shock when there is a loss and also enjoy early mover advantage which may be ascertained from the adoption of innovation (Evans et al. 2006; Rogers, 2003). On the other hand, customers with low income are less likely to take risk and hence adopt innovation at later stage (late adopters) or may not adopt internet banking at all (laggards) (Anon, 1999; Rogers, 2003).

*Availability of internet facilities:* Relative advantage can also be seen in the availability of the service or product. The availability of internet facilities at a moderate price may make it easy for some customers to adopt internet banking. This would enable the customers to have access to their accounts all the time. On the other hand, lack of internet facilities and the cost of enjoying the facilities may make it difficult for the customers to make a decision to adopt internet banking.

2.3.3.2 Complexity

This may be explained as the degree to which an innovation is relatively difficult to understand and use (Rogers, 2003). Generally, innovation which is very difficult to operate by customers tends to diffuse slowly while those that are not complex may be adopted at a faster rate (Rogers, 2003). Potential adopters tend look for innovation that is simple to use including its design and fits to traditional banking practices (Blythe, 1997). As a result, if the internet banking has these features in the sight of the customer, the rate of adoption would be high.

2.3.3.3 Compatibility

Compatibility is the degree to which an innovation is perceived as consistent with the existing values, past experiences and needs of potential adopters (Evans et al. 2006; Rogers, 2003). Potential adopters therefore look for innovation that may be compatible with their needs and values. Blythe (1997) argues that customers may not be willing to take risks of adopting a product or service that are radically different from their existing lifestyles. As a result, if internet banking which is considered as an innovation fits with the lifestyles of the customers, the rate of
adoption would be generally high. On the other hand, if customers perceive that, adopting the innovation may lead to dramatic change in their lifestyles may decrease the rate of adoption by potential customers.

**2.3.3.4 Trialability**

Typically, innovations that can be tried on limited bases prior to adoption has higher rate of adoption than those that cannot be tested at all (Evans et al. 2006; Rogers, 2003). This is due to the fact that the potential adopter may perceive an innovation which cannot be tried with uncertainties. Therefore adopting such an innovation may be considered as risky by the individual customer. Patricio (2003) pointed out that customers sometimes find it difficult to evaluate new services where quality of trustworthiness dominates. In view of this, innovation which cannot be tried on a limited basis may be difficult for customers to adopt. On the other hand, generally innovations which can be tried by potential adopters have higher adoption (Rogers, 2003).

**2.3.3.5 Observability**

Individual customers are likely to adopt an innovation if its effects and benefits are visible (Evans et al. 2006; Rogers, 2003). This attribute is of the view that if potential customers are able to see the products in use, it is likely to raise interest and hence subsequent purchase and use. Thus, that if the benefits of an innovation that can be easily observed by members in the social system, the rate of adoption may be very high.
3 Research Methods

This section provides the methods used by authors while carrying out this research. It deals with the sources of data, method of data collection and the choice of respondents. It also includes the procedure for the interview and criticisms of the method used.

3.1 The research approach

According to Ghauri and Cateora (2006), there are two research approaches that can be employed by researchers when conducting marketing research which are quantitative and qualitative research. The choice of the research approach depends on the on the circumstances of the research project and its objectives (Baines et al. 2008).

Quantitative research involves using structured questions whereby answers are produced and can be easily converted to numerical data. In quantitative research, questions are designed in order to get a specific response to certain aspects of the respondents’ behavior (Ghauri and Cateora, 2006). Quantitative research therefore involves collecting information from a large number of respondents which can be converted into numerical data such as percentages, averages or other statistical methods. Hence, generalization can be made form quantitative research approach (Baines et al. 2008).

Qualitative research on the other hand, involves open-ended and in-depth and seeks unstructured responses that reflect the person’s thoughts and feelings on the subject (Ghauri and Cateora, 2006). It therefore interprets what the ‘people in the sample are alike, their outlooks, their feelings, the dynamic interplay of their feelings and ideas, their attitudes and opinions, and their resulting actions’ (Sidney, 1994 in Ghauri, 2006). In marketing context, qualitative research is used in exploratory design. The objective is to gain preliminary insights into decision problems and opportunities (Hair et al. 2006). This will help the researcher to formulate and define the problem clearly thereby subsequent research can be conducted. This method employs case studies, ethnographies, focus group discussion and interviews (semi-structured, open), questionnaires (structured or semi-structured) and participant observation (Baines et al. 2008; Fisher, 2007; Ghauri and Cateora, 2006).

The purpose of qualitative data is to identify and understand underlying motivations, memories, attitudes, opinions, perceptions and behaviors. This method tends to focus on the collection of detailed amount of primary data from relatively small samples of subjects by asking questions or behavior (Hair et al. 2006). It also uses non-statistical analysis and adopts non-probability sampling methods in data collection. Usually this method uses open ended questions that allow for in-depth responses from the respondents (Hair et al. 2006). The benefit of qualitative data is that, it provides rich description and explanations of processes in identifiable local context which helps researchers to go beyond the initial conceptions and to generate or revise the conceptual framework (Miles and Huberman 1994, in Fisher, 2007).

3.2. Choice of method for this research

The research approach employed in this study is qualitative which is in line with our purpose of our study. The recap of the purpose of this study is to explore the barriers and drivers to the adoption of internet banking among the customers of Standard Chartered Bank in Kumasi.
is due to the fact that, there is not much information since internet banking is still at its infant stage. The method would therefore provide us with much information so as to get deeper understanding of the issue at stake. It would help us to explore the underlying problem of internet banking on the topic under consideration. Thus, qualitative approach is used to identify the basic factors affecting people’s attitude, feelings and thought and used to uncover the underlying motivations behind customer behaviour concerning internet banking (Baines et al. 2008; Ghauri & Cateora, 2006). We are aware that data collected are always subjective while the researcher is interpreting the result due to personal influence. However, during the interpretation and analysis, we shall be as much as possible remain neutral so as to reduce if not completely eliminated the influence of personal bias in the study.

The purposive sampling method is adopted for this study. This method uses non-probability sampling method in which participants are selected according to the experience individuals’ belief and therefore meet the requirements of the study (Hair et al. 2006). According to Hair et al. (2006) the sampling generated by this method is better than the one generated by convenience. However, this method is criticized of lacking representative of the sample. Therefore caution should be taken when interpreting the results derived from purposive sampling (Hair et al. 2006).

3.2.1 Sources of data for the study.

The source of data is of great importance for research to be carried. In this study information would be gathered from both secondary and primary sources to enable the authors to do comprehensive analysis of the study.

3.2.1.1 Primary data.

Primary data involves the first time collection of a data for the purpose of a particular project (Baines et al. 2008; Ghauri et al. 2006). In this way primary data can be said to be any data that the researcher takes from the field which could be in the form of observation or through the use of telephone to gather information for the research. The primary information for this study is gathered through telephone interviews of some customers in the selected bank with the help of interview guide. This information would provide us with the basis for the analysis and also to compare the theories in which we developed our conceptual framework.

3.2.1.2 Secondary data

According to Ghauri and Cateora (2006), secondary data involves data that has been collected by someone else for another purposes and valuable information can be extracted for this study. Baines et al. (2008) argue that, secondary data involves gaining access to the results or the outcomes of previous research projects. Its importance is that, it is cheaper and more efficient way of data collection at no cost and saves time (Baines et al. 2008; Hair et al. 2006).

According to Hair et al. (2006) in most research, secondary data collection is used as the starting point in defining the actual research that needs to be conducted. For this study, the secondary sources to be used include journals which are relevant to this area of study, reports, articles from banks that have already implemented internet banking in both developed and developing countries. We used books from the Mälardalen University library as well as internet sources.
To ensure the credibility of the secondary data, the information from Fisher (2007) is used as basis of selecting the materials. The various secondary data used for this thesis are peer reviewed journals in this area of study which we think are up-to-date. Therefore the information extracted from is considered as accurate (Fisher, 2007). In the case of the internet sources, we are critical in the selection of material. The renowned search engine such as google scholar is used and keywords such as ‘internet banking in Ghana’, ‘adoption of internet banking’ etc to search for materials for the thesis. As a result, any researcher can use the same search engine and keywords to obtain the materials in this thesis. Fisher (2007), mentions that most internet material may contain both high quality and utter tosh and therefore we made critical evaluation in the selection of the material from the internet sources. In addition, the books used are the literature recommended during the academic studies period.

3.3 Data gathering techniques

3.3.1 Interviews

According to Ghauri and Cateora (2006), an interview involves talking to people to get much information a specific matter. There are three choices researchers can employ when using interview to conduct research which is face-to-face, by telephone or through mailed out questionnaire to the interviewee. The face-to-face interview is the data collection techniques that require the presence of the interviewer who asks questions and records the subject’s answers. The mail out interview involves the process whereby questionnaires are distributed to and returned from respondents via the postal services (Hair et al. 2006). Telephone interviews on the other hand are simply personal interviews conducted via telephone technology. Hair et al. (2006) discuss the merits and demerits of telephone interview as follows:

Telephone interviews are less expensive compared face-to-face interviews. It also allows individuals to contact more people within a limited period. Telephone interviews also enable interviewers to call back respondents who did not answer the telephone. Respondents also see telephone interview as more anonymous and may feel less threatened. It also reduces the opportunity for interviewer’s bias. Using the telephone at a convenient time for the respondents facilitates collection of information that would be impossible to interview personally due to the geographical distance.

However, telephone interview tends to be shorter than self-administered interviews because respondents can hang up on long telephone calls. There is sometimes poor perception of telephone in some people’s mind and sometimes difficult for respondents to perform certain task.

After considering the advantages of telephone interview over others such as mailed out questions to the respondents, we thought that may delay our work. Hence, we employed telephone interview. The choice of telephone interview for this study is also necessitated due to the geographical distance between the authors and the interviewees which may not be possible to use face-to-face interview.

An interview may be classified as structured, semi-structured and unstructured. In the structured interview, questions are prepared and some of them had answers while others were open (Fisher, 2007). Thus, both closed and open questions could be used in the research to enable the
respondents to provide as many answers as possible to the open questions while the closed questions had limited answers.

According to Saunders et al. (2003), in the semi-structured interviews, non-standard questions can be employed and based on the answer from the respondents. This would enable the interviewer to ask probing questions to the respondents. The significance of probing questions is that, it would enable the respondents to clarify the issue at stake in order to improve the quality of the answers received. The semi-structured interview uses non-standard questions and therefore the interviewer would ask different questions to different interviewees.

Unstructured interview on the other hand, has no formal questions and this provides opportunity for the respondent to reply in their own words. It would also provide opportunity for the interviewee to discuss the issue at length (Hair et al. 2006). As a result, unstructured interview provides much insight for the researcher and that would help him to determine which aspects of the topic need further investigation.

Based on the above explanation, this study has employed the structured interview whereby all our respondents are asked the same questions. This was done with the hope of getting diverse answers from respondents especially the open and while the closed questions would provide us with limited answers.

3.3.2 Selection of Standard Chartered and its customers.

The Standard Chartered Ghana (Kumasi Branch) is chosen due to its strategic location as the centre of the country. It is also one of the oldest banks which started operating in the country since 1896 and that of Kumasi in 1905 (Vidal & Co, 1999). The selection of the bank is due to its experience in the banking industry from the colonial era and also has internet banking. We consider the recent introduction of internet banking by bank as a contemporary issue which needs to be examined from the customer’s point of view in terms of adoption.

3.3.3 Selection of respondents.

To get respondents for our study, we had telephone interview with the Marketing Manager of the bank to seek permission and also help us to get customers for the study. We explained our intention to him and he assured us of contacting some customers for us. In the subsequent call to the manager, we had the contact of the customers who were willing to take part in the study. As stated previously, we contacted the marketing manager through telephone. Since the marketing manager is responsible for the launching of new services and also to ensure its success, we asked him few questions regarding internet banking. Also the information obtain would provide us with much insight into internet banking. Some of the questions include, ‘How is the internet banking operated and how can you ensure the security of customers given the recent rise in internet fraud in the country?’ This is done to get more information to supplement the information obtain from the respondents. See appendix C for details.

Later we contacted the customers and explained the purpose of our research to them and they assured us of their cooperation. We prepared interview guide to be used during the interview process. Initially, we thought of sending the interview guide to the respondents to enable them to have time to reflect on the questions. However, we realized that it the postal delivery system may
delay the process looking at the limited time to complete our thesis. This means that, the respondents did not have time to reflect on the questions which we think may affect the answers provided. However, we hope that the information obtain from respondents would be useful for this study.

3.3.4 Customers’ profile

In all, we contacted eleven customers of the bank and used all of them as our subject of examination. These customers have been operating with the bank for varying years. Thus, old and new customers are used which we think would provide us with the necessary information required for this research. Since they are customers of the bank for some period of time, we hope they have rich experience and could provide us with detailed information. In terms of age, the respondents are selected from the different groups ranging from 20 to 50 years. On educational level, the respondents have high school to postgraduate education which we think that would provide information about the educational level and how that affects the adoption of internet banking. The respondents consist of both males and females.

3.4 Interview guide design

Fisher (2007) has provided guidelines for researchers when using telephone interview and states that telephone interviews should be kept short. Thus, complex and long questions may make it difficult for interviewees to respond to such questions. Constructing short questions which captures the main area of the research objectives would make it easy for interviewees to answer the questions with ease. We prepared our questions in line with this guidelines and constructed short questions. The interview guide is prepared based on the purpose as well as the conceptual framework for this study. The guide is divided into two sections and is constructed in English language. This is because English is the official language in the country which would make it easy for the respondents to understand and respond easily.

Each section deals with some aspects of the framework, namely the socio-economic and enhanced factors of the customers and the perceived attribute of internet banking. In order to explore the factors concerning socio-economic and enhance factors in our framework, questions such as customers level of education, customers level of computing, and how often customers visit internet café, and on awareness, respondents were asked to mention some of the services they think the bank offers and if they are satisfied with the services etc are asked. See appendix D for details. According to Fisher (2007), demographic and personal characteristics could be asked last when eliciting information from respondents. However, in order to go by our conceptual framework, we asked respondents personal information in section A on appendix D to enable us to analyze the socio-economic as well as the enhanced factors in the framework.

Regarding questions pertaining to the perceived attributes of internet banking in the framework, we asked questions such as ‘have you seen anyone using internet banking?’ What criteria do you consider before adopting internet banking? (See appendix C section B for details). According to Fisher (2007), when a researcher is using telephone interview, it is important not to over-schedule and also to limit the number of interviews carried out in a day. This is done to avoid tiredness which may lead to wrong recording of answers. Since we used few respondents for the study, we used three days for the interview. On the first day, we interviewed five
respondents which are considered to be the maximum for a day according to Fisher (2007) on 31st March, 2009. The second interview took place on 2nd April, 2009 and four respondents are interviewed. The last interview conducted was on 30th April, with only two respondents are interviewed.

3.5 Ethical considerations

Generally, in research it is important that respondents understand the purpose and the reasons for the study. As a result, we made our intention clear to the respondents and also assured them that their identity would be kept secret and confidential. We informed that their responses are meant for academic purposes and would not be used for economic gains (Fisher, 2007). This made them to feel comfortable. That enables them to provide adequate responses since they are not afraid that, they may be politically victimized. As a result, the respondents have the freedom and therefore gave us much information which was useful. Even though some of the responses are out of our interview guide but we consider them to be useful.

3.6 Criticisms of the method

3.6.1 External / Population validity

External validity involves whether generalizations or interpretation of a research can be equally applied well to other populations or other contexts (Fisher, 2007). Since the study is based on few respondents and also limited to a particular bank, it may be criticized that the views may not represent the entire customers of the banks. Therefore the outcome of the study cannot be used to make a generalization about the internet banking situation in the study. Even though the sample size is not all that large, but it may be stated that the result would provide much insight into the topic under consideration. In view of this, Norman (1970 in Donkor, 2008), stated that, general statement can be made from a single or multiple cases as long as long as the analysis captures the interaction and the characteristics of the phenomenon under study.

3.6.2 Reliability

Qualitative research is often criticized of its reliability and argues that, qualitative research involves some scientific elements but normally lack the critical element of true reliability (Hair, et al. 2006). Reliability involves to the consistency of a measure. Thus, a research is considered as reliable if any time the research is carried out to the subjects may produce the same or similar results. However, it should be noted that, reliability is affected by time, analytical bias and questioning error (Baines et al. 2008). We are aware that, there is ever increasing development of technological changes in societies every now and then in the country. Notwithstanding all these changes taking place, if all other things are kept unchanged, we believe that another researcher can carry out research which may produce similar or the same results. In view of this all the methods used in this study has been documented including the interview guide. Therefore any researcher can use the same interview guide to carry out the study and may produce the same or similar results.
4 Presentation of empirical findings

This section presents the results from the telephone interview we conducted and involves mainly the answers from the interviewees. Our interview guide is made up of two sections and each section deals with different issues concerning the customers. In addition the information obtained from the manager is also presented here as section at the first part. See appendix C.

This part deals with the information from the marketing manager (See appendix C for details)

According to the marketing manager, as long as one remains as a customer of the bank can apply for internet banking and there is no segmentation. He mentions that, using internet banking service is free for the customer. Concerning the question on marketing communication used by the bank, the manager reports that the bank uses the various marketing communications such as radio, television and brochures to create awareness among the customers.

Regarding questions on who qualify for internet banking, the manager mentions that each customer who wants to use the internet service has to apply for it. He further explains that, if approval is given, a unique pin code is given to the customer. The function of the code is to ensure confidentiality and would also make it possible for that customer to log-in to the banks website. On customers’ security, the manager mentions that, the bank uses an encryption technology when the customer is transacting business online. This technology uses 128-bit secure socket layer (SSL). The manager further explains that, the SSL is a strong technology which makes it possible to protect all online transactions carried out by the customer. This technology thereby makes it impossible for third parties to have access to the customers’ information.

On transfer of funds, the manager reports that, a customer can transfer money to pre-registered customer of Standard Chartered Bank. The highest amount that can be transferred at a time is 500, 00 cedis. The manager reports that, as soon as the transfer is done the amount gets to the accounts of the receiver. Explaining the rationale behind the limit to a customers’ own money, the manager mentions is the directive from the Bank of Ghana which regulates the all the financial activities of the country. It is therefore imperative for the bank to follow the directive to avoid sanctions. Hence, the bank has no option than to abide by it.

Section A.

This part deals shows the results from the interview and basically deals with the socio-economic and enhanced factors in our framework. Questions asked include age; educational level and customers’ competency in using computer are presented here. See appendix C section A for details.

On age, the interviewees ages ranges from 20 years to 50. Out of the eleven interviewees, four of the respondents are in their twenties while three are in their thirties. Two of the respondents are in their forties and the other two are in their fifties. These ages would provide us with a basis to compare our outcome of our studies with other researches on how age influences consumer’s decision to adopt innovation.
It was also found during the interview that the educational level of the respondents’ ranges from high school level to postgraduate level in different subject areas. In all, most of the respondents have higher secondary and post secondary education whereas few of them had bachelor as well as a postgraduate education. One of the respondents had Higher National Diploma (HND. It was found out that, most of the respondents have been operating with the bank for some years and the least was six months. In this way, we hope they know much about the services offered by the bank and can provide valuable information.

Question regarding customers’ competence in terms of using computer, that most of the respondents indicate that, the have low knowledge of computing while others has fair knowledge. A respondent mentions that he has a degree in computer science and therefore he has an excellent knowledge in computing.

It was realized that most of the respondents do not have personal computer and cited reasons for not having personal computers as a result of low knowledge in the using of computer. In addition, they mention the high cost of computers which makes them not affordable. While those who said as having computers mention that they acquired them from their work place. They mention that are paying by installment – since the bought the computer on hire-purchases, at the end of every month a certain amount is paid to the company they bought from.

Regarding question concerning if customers who have personal computers have internet services at home, the interviewees who responded as having personal computers mention that they do not have internet facilities at home. The reasons given are that, they cannot pay for the internet bill and prefer going to internet café to access information. This is because it is cheaper to visit internet cafés compared to subscribing to internet service providers on individual basis. The respondents mention that mostly they use internet at workplace.

The respondents who answered in the negative form mentioned that they rarely go to internet café while others mentioned that they visit café at least once a week. Those respondents who mention that they visit internet cafés however complained that, it takes a long time for the website to open. The respondents also mention that the cafe operators have adjusted the computers so that user may be allowed to spend more time so that they pay more money.

Section B

This section of the interview deals with the general customers’ perception of the banking services as well as internet banking.

Questions concerning the type of services rendered by the bank, it we realized during the interview that all the respondents mention cash deposit as well as withdrawal. The respondents also mention ATM and given out of loans when needed. Other services provided by the apart from those mentioned above, it was realized that few of the respondents mention internet banking more while few mention telephone banking.

On customers’ satisfaction considering the current services rendered by the bank, we found out that majority of respondents admit that, they are satisfied with the current services received from the bank while few of them stated that they are not satisfied. It was found that, the respondents who are satisfied said that the do not have the intention of switching to other services offered by
the bank. They further mention that the bank staffs are easily approachable and are always willing to help customers when get contacted. They therefore prefer using the traditional banking. The respondents who complain that they are not satisfied with the traditional banking mention that it is characterized by long queues when want to transact business. They mention that due to this complains, they are likely to adopt electronic banking.

On awareness, the study identify that few of the respondents are aware of the existence of internet banking while most of the respondents stated that they are not aware of this service. Those respondents who mention that they are aware mention that, they had the information from many sources including the brochures found at the bank premises, radio advertisement and friends. An interviewee mentions that he had information from the bank staff when he was transacting business.

On the basis of adopting internet banking, two interviewees mention they are currently using internet banking. The respondents mention that, they have adopted internet banking since it enables them to check their account at the end of the month when the salary is paid. In addition, it offers them the opportunity to purchases some items to anytime. The respondents also state that internet banking is cost effective way of conducting business and also save times. One of the respondents mentions that, the transport cost alone is very high for him to move from his residence to the bank premises. This situation creates inconvenience which also adds extra cost to him when he uses the traditional banking. He however say that, it is easy for him to go to the nearest internet café and conduct his business. An interviewee gave reason that he adopted the internet banking because his company is using internet banking and therefore a need for his company. This is facilitating the company’s transactions with other companies which influenced him to adopt the service. In view of this, it would enable him to carry out his financial obligations.

The rest of the respondents mention that they have not adopted internet banking and give reason that, they are unfamiliar with using the computer. Besides, they mention internet fraud in the country popularly known as ‘sakawa’- a term used to refer to internet fraud. As result, most respondents mention that, they consider internet banking as risky and do not trust financial transactions carried over the internet. In addition, some of the respondents state that sometimes they do not have access to the internet café. This is due to the unreliable power supply in the metropolis. These situations they mention do not encourage the adoption of internet banking. Besides, some of the respondents mention that the major mode of payment is the use of cash at the retail shops and are comfortable with that system.

Question regarding observation, it was found out that few of the respondents have seen people using internet banking. These respondents state that, they would adopt internet banking later. However, the respondents failed to give any specific that they would adopt internet banking. Other respondent said she has no intention of adopting the internet service while majority of the interviewees said they have not seen anyone using internet banking. However, they are quick to add that, previously the bank was using ledger and have to look through the books in order to look for ones name when one wants to withdraw money. But nowadays, the bank staffs sit on computer and as soon as you present your check for withdrawal or want to make deposits, everything is done on the computer.
5 Analyses

This part of the paper presents the analysis from the study based on the interview with the help of our proposed conceptual framework. It is divided into three sections based on our model.

5.1 Socio-economic and enhanced factors

5.1.1 Need

According to Rogers (2003, pp 172) ‘a need is a state of dissatisfaction or frustration that occurs when an individual desires outweighs the individual's actualities’. Whittington (2001) comments that, effective and successful innovation comes from seeking out customers' needs and matching them with appropriate products or service offers. It is therefore imperative that, Standard Chartered Bank has to consider the needs of its customers so that its launching of internet banking would have met the needs of most customers. It was found that most of the customers are satisfied when using the traditional banking. Perhaps this may be due to the low level of computer literacy and hence internet banking does not meet the needs of the customers. Thus, most customers argue that, visiting the bank premises and having interaction with the employees help them in away to solve their problems. It also enables them to ask questions concerning the operations of the bank. It can also be stated from the empirical findings that, few respondents who are operating business to business see internet as a need. This is because it facilitates their business operation. On the other hand, it should be stated that, most of the customers who mention they are satisfied with the current service operate on consumer to consumer business. So in spite of the advantages of using the internet banking, we found out that most customers do not see the need to switch to online banking which may deprive them of their interaction with the employees at the bank. Hence, need is an important element that drive the customers in our study who operate business to business to adopt internet banking. On the other hand, customers who operate on customer to customer business are satisfied do not see internet banking as a need thereby limiting the adoption by the customers in the study.

5.1.2 Age

The age of an individual affects his/her decision to adopt a new technology. Thus, old people are habituated with the traditional way of doing things and also think they may not reap the maximum benefits and as a result tend not to adopt (Krushna, 2007). According to O’Donohoe and Tynan (1988 in Evans et al. 2006), young adult are advertising literate and this may have much influence on their decision to adopt.

Evans et al. (2006) argue that customers who are above 36 years are always individualistic and skeptical of marketing activity. It may be argued that such people are not born in the information age resulting in their low knowledge in terms of using computers. This is likely to hinder the adoption of an innovation associated with information and communication technology. This situation may be very common in developing country like Ghana where most of the populations do not have access to internet facilities (Internet World Statistics, 2008). As a result, such customers may not see the justification for adopting internet banking and prefer to use the traditional banking. However, it can be said that, in spite of the fact that the customers used in our study consists of both old and young, it was found out that, most of them are not familiar
with computers. Hence young customers who are supposed to be computer literate and are more willing to adopt innovations associated with information and communication technologies. It should be stated that, those respondents who are currently using internet banking are from the ages of thirties and forties. Hence we can conclude that, age which is supposed to drive young customers to adopt internet banking is not clearly seen in this study.

5.1.3 Education

It has been argued that the level of customers’ education may affect his decision to adopt new technology (Krushna, 2007). Generally, customers with higher education may have better insight innovation and its associated benefits. This may drive such customers to adopt internet banking and while the reverse is the case. However, we could say that there is no direct relationship between educational level and adoption of internet banking since the all the customers used in our study have at least higher education. Perhaps this may be due to the type of education the customers received which is not directed to the practical training. A study conducted by Badu and Markwei (2000), to determine the internet awareness and use in the University of Ghana concluded that, most of the students and staff hardly use internet to search for information apart from using to access their emails. According to them, this situation may stem from the fact; they lack prerequisite internet skills and training in the use of computer to do other things which will facilitate their work. Even though the educational level of the respondents in our study is high and most of them are aware of the benefits. This is the case where most respondents mention that in recent times, the bank staffs sit on computers when making deposits or withdrawals. From the study, it is identified that, majority of the respondents mention that they are satisfied with the traditional banking. Thus, higher education which is expected to enhance customers’ knowledge and provide much insight into the benefits of internet banking has little impact on customers’ decision making to adopt internet banking in this study.

5.1.4 Perceived risk

The perceived risk involves any action taken by the consumer and which produces unpredictable consequences and includes physical, financial and social loss by the potential customer or adopter. When the perceived risk is high, the tendency for the customer to adopt the service or product is low and vice versa (Evans et al. 2006; Blythe, 1999). As pointed out by some of the respondents, the perceived risk in terms of financial loss when using internet banking is high among customers in our study- the term ‘sakawa’ is used to denote cyber fraud. Thus, the financial risk is the situation whereby the customer could lose money when transacting business online (Blythe (1997). In addition, the physical infrastructure such as frequent interruption of power supply as complained by the respondents all have negative impacts on customers’ decision about this new service rendered by the bank. It can be stated that from the study that, the perceived financial risk in terms of losing some money through internet fraud is high. This situation is coupled with the physical and technological risks that customers think may encounter when using internet banking especially the unreliable power supply complain by the respondents. These factors act against the adoption of internet banking in the study.
5.1.5 Information provision

According to Blythe (1997), decision making and information gathering is very critical especially when customers are contemplating of adopting an innovative service. Hence, the source of information may influence customer’s decision in many ways. It was realized from the study that, few of the customers in the study who are aware of the existence of internet banking had information from different sources. These sources the respondents mention include brochures from the bank premises, radio and television, friends as well as bank staff. Thus customers try to avoid advertisement carried out on radio and television if the advertisement does not meet their taste (Evans et al. 2006). According to Rogers (2003), interpersonal communications are a very important during the persuasion stage and this has the tendency to increases the rate of adoption. It can be stated that in Ghana and Kumasi in particular, there is close relationship among the people. This can be inferred from the empirical findings where most respondents mention that, having interaction with the bank employees serves as satisfaction to them. Hence, word-of-mouth may be considered as a potential means of influencing customers to adopt an innovation. This is because such information may be regarded as trustworthy by the customers (Owusu-Frimpong, 1999). Thus, customers always belief that the information provided by their peers is more reliable and trustworthy than information received through the mass media (Rogers, 2003; Owusu-Frimpong, 1997). It can be stated in this study that, few respondents had information from their peers compared to that of the mass media. Thus, marketing communication which should act as a catalyst to drive customers to adopt innovation is not all that effective in this case especially interpersonal communication. This situation is limiting the adoption of internet by customers in the study.

5.1.6 Trust and security

Trust and security issues have been found to be one of the paramount determinant factors that influence customers to adopt internet banking. According to Grabner et al. (2008), trust is a critical element in electronic commerce due to the fact that, virtual environment is characterized by degree of uncertainty in terms of economic transactions and is higher than traditional settings. Many studies have concluded that, most customers are unwilling to disclose their detailed private information when using internet to transact business due to lack of trust and security they do not have in the service provider (Egwali, 2008; Sathye, 1999).

On the other hand, when the customers trust the bank or service provider and that the information provided would be protected when using online banking or service, the tendency for potential adopters to use online banking would be high. Evans et al. (2006) argue that, products with a high level of perceived risk will generally have a lower adoption rate as can be seen in banking if security of personal data or finance is perceived to be at risk.

In the study, it was identified that, most customers do not trust the banks. This trust situation is worsened by the recent internet fraud which is characterized in the country thereby putting some fears in the customers (Ghanaweb, 2009; myjoyonline, 2009). Warrington et al. (2000 in Yi-Shun, 2003) state that customers are concerned about the level of security when providing sensitive information online and as a result may perform financial transactions online only when they develop certain trust in the service provider.
As the manager points out, individual customers using internet banking is protected by secured socket layer which is a strong 128-bit encryption technology. Even though the customers using internet banking are protected when transacting business online this makes it difficult for third parties to have access to such information. However, it seems most customers in our study are not aware of this technology thereby limiting the adoption of internet banking.

5.2 The perceived attributes

As stated in the conceptual framework, the perceived attributes of innovation by Rogers (2003) used in this study are;

5.2.1 Relative advantage

Relative advantage is the benefits of an innovation over the others and in our study; we divided relative advantage into two dimensions, namely cost and availability of internet facilities.

Cost:

From an economic point of view, the cost of a product/service may determine the rate at which customer may adopt that innovation. In terms of cost of adopting internet banking, as the manager reports adopting internet banking has no cost to the customer. However, it should be stated that, the operating cost of using internet banking is high. According to Ahiabenu (2001), the cost of using internet facilities in Ghana is about US$ 0.02 dollars per minute. Assuming that, a customer spends an hour every week in an internet café to check his accounts and also transact business, it implies that customer would pay about US$ 1.2. If that customer pays US$ 1.2 every week for a month, that customer is likely to pay 4.8 dollars. According to Global Policy Network (1999), the average daily household income in Ghana is US$2.59 while an average household of four persons have an average daily income of US$ 0.65. It further states that, only households in the top 20 percent of the income distribution and those in Accra earn a per capita income of a little over US$1 per day. Giving the low income level of Ghanaians especially outside the capital city, most customers in the study consider this as an expensive venture. In addition, it can be stated that the internet facilities are characterized by slow opening of the website. This means that the customer is likely to spend more time at the café thereby paying more money. This situation is worsened by the frequent power supply interruption and therefore deters customers to adopt internet banking in the study.

Availability of internet facilities

According to the Manager, internet banking is available to customers at the bank at no cost. However, Ahiabenu (2001) states that it costs about US$35 per month as subscription fee for a private individual who wants to get connected by internet service provider. Thus, out of about 150 internet facilities in the country, about 90% of them are found in the Greater Accra (Ahiabenu, 2001). There are low internet facilities in the country especially outside capital city which do not augur well for the adoption of internet banking in our study. According to internet world statistics (2008), out of the total population of 23,832,495, only 880,000 Ghanaians currently have access/ using internet facilities even though it has grown dramatically over the past 8 years to about 3.8%. It can be realized that, notwithstanding this dramatic growth, there a still a lot of people who do not have access to internet facilities especially in the cities outside
Accra (Ghanaweb, 2009). This factor is a major contributory factor limiting customers at Standard Chartered Bank at Kumasi to adopt internet banking in the study.

Some of the respondents who use to visit internet cafe complain that sometimes they have to queue due to a large number of people using the internet before having access to the computer. In addition, some of the respondents mention that since the internet cafes are operated on commercial basis by private individuals, the computers are very slow. This situation coupled with fluctuating power supply sometimes frustrates customers. This creates an inconvenience for customers to visit café especially when they do not have much time. Others also mention that they do not visit internet café at all and coupled with the above mention problems affect the rate of adoption of internet banking in the study.

5.2.2 Compatibility

Compatibility refers to the degree to which an innovation is consistent with customers’ current values, cognitions and behaviours (Evans et al. 2006). Generally, the bank uses English in the design of the website for the internet banking. This situation serves as a cultural and linguistic barrier when it comes to the use of internet and internet banking (Nii Quaynor, undated). This makes it difficult for customers in the study to use internet even though English is the official language. This is due to the fact that, most businesses in the metropolis is conducted in local language. As a result the use of other language than the local language is considered as not compatible with the needs and aspirations of some of the customers. According to Grönroos (2007), it is easy for customers to become antisocial when communicating by using information technology. This means that, when customers start using internet banking the close relationship that exists among the customers and the employees of the bank would no more be there. As mention by most respondents, adoption of internet banking may deprive them of their social interaction. As a result, most customers prefer the old ways of transacting business than adopting the internet banking especially when it comes to interaction with the bank staffs and also when customers need assistance. This situation is impacting negatively on the internet banking internet adoption in the study.

Unfamiliarity with the use of internet is found to be a critical factor among the customers willingness to adopt an innovation. Since most of our respondents are not familiar with using computer and consequently the use of internet facilities for other purposes. Hence this situation affects the rate of adoption of internet banking by the customers in our study.

5.2.3 Complexity

Complexity is the degree to which an innovation is relatively difficult to understand and use (Rogers, 2003) Thus, an innovation which does not require complicated assembly and extensive training for the customer to use may have higher rate of adoption and vice versa.

From the empirical findings it can be inferred that most of the respondents have little knowledge in computing resulting in difficulties to use computer. Thus, the perceived ease of use of a product/service influences customers to adopt or reject the innovation. According to Davis (1989) the perceived ease of use is the degree to which a person believes that a particular system would increase his/her job performance. The implication is that, the customers are more likely to
adopt a technology if it could be easily used. Also, when customers perceive a technology to be hard to understand and difficult to use, the more likely such customers may not adopt. In addition, the perceived usefulness of by Davis (1989) could be used to explain customers’ behavior towards adoption of information technology in the study. Davis (1989) defines the perceived usefulness as the degree to which a person believes that using a particular system would increase his/her job satisfaction. The intention of the customers to use a new technology is due to the fact that, such customers may acquire some satisfaction in using that technology. As a result, customers in study are more likely to adopt a technology if they perceive it to be of help in the performance of their work had adopted.

Grönroos (2007) is of the view that the use technology in the creation of physical goods and services must be user-friendly. This would make it easy for the customers to use the facilities without having any difficulty. However, it was found that, most of the customers in or study have little knowledge in computing and therefore find it difficult to use computers. This situation is worsened with high cost incurred by customers when visiting internet café. According to Rogers (2003), new ideas complexity is an important barrier to adoption whereas a technology which is easy to use and understand has higher rate of adoption. It may be stated that, most of the respondents in our study found it difficult to use computer and this situation is acting as a barrier to the adoption of internet banking. On the other hand, that few respondents who consider adopting internet banking would facilitate their transaction and would increase their satisfaction have adopted the service. However, it can be stated that, most respondents in our study consider using computers as a difficult and hence do not motivate them to adopt the internet banking.

5.2.4 Observability

The more customers can observe the potential benefits innovation, the quicker the rate of adoption (Blythe, 1997; Rogers, 2003). According to Evans et al. (2006), innovations that are public are normally discussed among the potential adopters which ultimately increase the rate of adoption. It should be noted that majority of our subjects have not seen other people using internet banking. It can be stated that few of the few of respondents that have seen people using internet banking with its associated benefits, has greater impact on customers’ decision to adopt internet banking. Since most of the customers have not seen the benefits of internet banking, a respondent point out that she had no intention of adopting it. In Rogers (2003), such customer may be regarded as laggard while few respondents mention that they may adopt internet banking. However, such respondents could not give any specific time period would be classified as late adopters (Evans et al. 2006; Rogers, 2003). This is because such customers are waiting for other people to adopt internet banking before also adopting. Thus, internet banking unlike other physical products where the benefits are easily visible, we found out that most respondents have not seen other people using internet banking and its associated benefits. This situation therefore limits the rate of adoption of internet banking among the customers in the study.

5.2.5 Trialability

Trialablity is the degree to which an innovation can be experimented on limited bases by the customers. According to Blythe (1999), normally services cannot be tested before a customer agrees to purchases and use it. The only way to test is actually to use the service by the customer. It can be stated that, internet banking unlike a product or service whereby it can be broken into
pieces for customers to trial and if they like, purchase and use it. Besides, most customers are not even aware of the existence of internet banking let alone try to adopt the new service. As a result of lack of trialability of internet banking, customers in the study find it difficult to evaluate the performance of this service since internet banking is not trialable. Since internet banking cannot be broken into pieces for the customers to try, thereby making it difficult for most customers in our study to make informed decision. Hence, this situation limits the adoption internet banking by the customers in our study.

After carefully analysis the factors in our model, we can therefore draw a conclusion between the drivers and barriers to the adoption of internet banking. Even though this conclusion is not exhaustive and is subjective to our own interpretation and understanding since some of the factors are intertwined. This makes the categorization a bit complex.

Table 1 Drivers and barriers to the adoption of internet banking

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Perceived risk</td>
</tr>
<tr>
<td>Need</td>
<td>Complexity</td>
</tr>
<tr>
<td>Information</td>
<td>Trust and security</td>
</tr>
<tr>
<td>Relative advantage</td>
<td>Compatibility</td>
</tr>
<tr>
<td>Observability</td>
<td>Trialability</td>
</tr>
<tr>
<td>Age</td>
<td>Relative advantage-operating cost</td>
</tr>
</tbody>
</table>
6 Conclusions

The research has shown that internet banking is less preferred mode of transacting business by customers in our study. It can be concluded from the study that, the most customers prefer the traditional banking to internet banking.

In carrying out this study, the diffusion of innovation and hierarchy of effects models are used as the theoretical background and the conceptual framework is developed based on this. It may be said that internet banking has many benefits over other alternative regarding the affordable low cost and convenience.

The study has identified customer’s level of education, needs, credible information source and relative advantage as some of the factors that may drive customers to adopt internet banking. However, it can be stated that, few customers who operate business to business see internet banking as a need which facilitates their work, thereby leading to adoption by such customers.

In addition, the study also identified perceived risk, complexity, lack of trialability, trust and security issues as well as insufficient internet facilities are some of the barriers which hinder the adoption of internet banking among the customers in the study. On trust and security issues, the study has identified the recent increase in internet fraud as one of the major factors contributing to the low adoption of internet banking in the study.

On awareness, the study has identified that, most in our study are not aware about the existence of this internet banking offered by the bank. This may be due to the fact that, internet banking is new in the banking sector.

It is therefore imperative that to overcome these barriers, education and awareness creation should be intensified among the customers about this technology. These measures when implemented may increase the rate of adoption of internet banking by the customers in bank. Besides, customers may be educated about the use of encryption technology which protects users when transacting financial business online. This ensures that, sensitive information given by the customers would not be revealed to third parties. It is hoped that, improvement in the internet facilities and a drop in the internet prices may also help in diverse ways to make to increase the adoption of internet banking. In addition, making computers available to customers at an affordable prices and also improve network connectivity will make it easy for more and more customers to become used to the computer and also get connected. In the long run this may increase the use of computers and ultimately the adoption of internet banking among the customers at the bank and Ghana as a whole.

Hence, in order to increase and motivate customers to adopt internet banking, information and communication technology should be integrated into the country’s educational curriculum. This would make it easier for both high school and graduate holders to be conversant and familiar with the use of computers. This would ensure that, the people in the country to be integrated into this global technology world. This would make it easy and successful when information and communication technology is introduced in other sectors of the economy. In addition, companies and other organization that wants to introduce information technology should access the level of the target population so as to make its introduction fruitful.
We are therefore suggesting that future studies can be carried out by those who are interested in this area of study by using quantitative research method to test Rogers (2003) classification of adopters’ categories which is used to identify the customers’ innovativeness and also to determine the time frame used by customers to adopt an innovation.
References


Appendixes

A

Map of Ghana showing our Study Area

http://syddghana.org/syddimages/ghana_map.jpg
Appendix B
Models of five stages in the innovation-decision process by Rogers (2003)

Communication Channels

Prior conditions
1. Previous practice
2. Felt Needs/Problems
3. Innovativeness
4. Norms of the Social systems

Characteristics of the Decision making Unit
1. Socio-economic characteristics
2. Personality variables
3. Communication behavior

Perceived Characteristics of innovation
1. Relative advantage
2. Compatibility
3. Complexity
4. Trialbility
5. Observability
Appendix C

Marketing Managers interview

1. Do you have segments of your customers who qualify for the internet banking and if how does it cost a customer? And what marketing communications do you employ?

2. How is the internet banking operated and how can you ensure the security of customers given the recent rise in internet fraud in the country?

3. Is it possible for customers to transfer money to different accounts at different banks and how much?

Appendix D

Dear respondent,

We are students at Mälardalen University, conducting research on factors militating against the adoption of internet banking in Ghana. As a customer of this bank, we would be grateful if you could answer these questions for us. We would like to assure you that, the information provided would be treated as confidential and used for academic purposes only.

Section A

Socio-economic and enhanced factors

1. Name :                  2. Gender :                    3. Educational level:                    5. Age:
6. For how long have you been operating accounts with this bank?
7. What is your level of computing?
8. Do you have personal computer? Yes ( ) No ( )
9. If yes, do you have internet at home?
10. If No, can you give some reasons for not having personal computer? And how often do you visit internet café?

Section B

Customers’ perception of the banks services and perceived attributes of internet banking

11. Can you mention some of the services rendered by your bank to you?
12. Are you satisfied with the current services rendered? Why are you saying that?
13. Do you know that your bank offer internet banking? If yes, where did you hear from?
14. Have you adopted the internet banking service? Yes ( ) No ( ) If your answer is no, then go to Q 17
15. Have you seen anyone using internet banking? Yes ( ) No ( )
16. If yes, what important criteria did you consider before adopting it?
17. If no, can you give us some reasons why you are not adopting it?

Thank you