Customer Perceived Value in Internet Banking in Ghana

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Customer Perceived Value in Internet Banking in Ghana

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ABSTRACT

Customer perceived value has come up strongly in recent studies as the basis of competitive advantage in the New Economy. On another hand, internet banking has emerged as the trend in modern banking and a more effective model than traditional banking in creating customer value. Against this backdrop, this study examines customer value perceptions in internet banking in Ghana.

Internet banking providers were interviewed to ascertain the level of banking products and services that are offered to customers. Questionnaires were administered to customers to investigative, through a descriptive data analysis, their value perceptions of the products and services they access from internet banking.

The study shows that internet banking offered customers some level of value and satisfaction in terms of location and time convenience as well as cost saving but it is also fraught with teething problems ranging from limited internet access, limited service (non-transactional), occasionally slow internet connectivity and website downloading. Still, the customers are enthused by the service and express expectations of improved and advance services.

The study concludes that banks need to promote internet banking by having an active stake in the development of the internet infrastructure and offering more incentives to customers. They must also match the internet technology with robust software and networking systems, customer-value-perception-based strategies, benchmarking and adequate training of staff and overall develop core competences in the face of an increasingly dynamic industry.

Keywords: Internet banking, Customer value, Ghana
CHAPTER ONE

INTRODUCTION

1.0 Introduction
Chapter one sets the context for which the study is motivated. It looks at developments, implications and trends that characterize internet banking. It finally identifies and discusses the problem statement and research questions.

1.1 Background of the study
The internet technology, a major driver of the global village phenomenon (Ngini et al 2002), has shaped and continues to shape business models—from bricks and mortar to bricks and clicks or pure play. The internet offers strategic market opportunity once it can be tapped into. It offers 24/7 exchanges, real-time responsiveness, interactivity, an efficient collation of customer data and environmental scanning among others. “The potential of providing innovative services over the Web” according to Chaudhury and Kuilboer (2002), “is limited only by one’s imagination” (Page18).

The growth of internet use is exponential. Mary Mecker, an authority in e-commerce, reports Rayport and Jaworski (2001), conducted an early and famous observation of the growth of internet use. According to the study, it took other major media technologies decades to hit a fifty-million user population but the internet took about 5 years. Internet use is estimated to double in every 100 days (Khan, 2007). Current figures put internet use, in June 2008, at 1,463,632,361–up from 360,985,492 in 2000–constituting 21.9% of the 6,676,120,288 world population (Internet World Stats 2008).

Indeed, the internet, together with other technological advancements, has ushered in what many analysts term as the New Economy—a global transformation of commerce. Since the internet took shape as a strategic business tool in the nineties, it has been contended in many quarters that it has unleashed a revolutionary era for businesses (Rayport and Jaworski 2001).

The internet saw many of its early adopters grinding to a halt and much expectation of an internet boom was dashed. Notwithstanding this, the internet remains a strategic force that can not be ignored. As we traverse our communities, we will not fail to see websites printed on billboards, newspapers, televisions and other media stimulating constant attention to the internet (Rayport and Jaworski 2001). The effects of internet on economy in the future, according to Siegel (2006), are difficult to predict but it is impacting more rapidly on businesses than any other technology known to man. Komulainen et al (2004) observe that development in information technology is one of the forces changing value creation in professional services. Many commercial interactions have been moved onto the internet creating new areas of specialization such as e-commerce, e-government and e-banking to provide the prospects for greater economic efficiency (UNCTAD 2007/2008 Report on Information Economy).
The internet, if structurally understood, can prove an even more valuable tool for business, education and government among others in the future (Sexton et. al. 2002). Bradley and Stewart (2002) observe that the effect of the internet on business, together with other digital media, has been widely discussed in literature.

Entertainment, communication, information and commerce serve as the drivers of internet usage with an explosive growth rate of access (Sexton et. al. 2002). The following table gives a recent statistics on the diffusion of the Internet across the globe by Internet World Stats (2008):

<table>
<thead>
<tr>
<th>REGION</th>
<th>POPULATION</th>
<th>PENETRATION (%)</th>
<th>USAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>3,776,181,949</td>
<td>15.3</td>
<td>39.5</td>
</tr>
<tr>
<td>Europe</td>
<td>800,401,065</td>
<td>48.1</td>
<td>26.3</td>
</tr>
<tr>
<td>North America</td>
<td>337,167,248</td>
<td>73.6</td>
<td>17</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>576,091,673</td>
<td>24.1</td>
<td>9.5</td>
</tr>
<tr>
<td>Africa</td>
<td>955,206,348</td>
<td>5.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Middle East</td>
<td>197,090,443</td>
<td>21.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Oceania &amp; Australia</td>
<td>33,981,562</td>
<td>59.5</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Table 1 Global Internet Diffusion Rate

Source: Internet World Stats (2008)

Indeed the impact of the internet is not only pervasive but also progressive as depicted above. Even though Africa has the lowest penetration and access rate per population, its developing economies, such as Ghana, are expanding the technology to bring it to the doorstep of even rural
dwellers through many programmes in collaboration with international organizations such as UNDP, USAID and ITU (Ngini et al. 2002; Osei-Bonsu, 2000).

1.2 Internet Banking
Singh (2004) purports that the impact of the internet on business is revolutionary; this has set in motion a revolution in banking in what is referred to as internet banking (Abor, 2004). According to Wang et al. (2003), the internet technology is rapidly changing the design and delivery of personal financial services. Laukkanen (2007) concur that banking is one of the areas most affected by the internet and has undergone changes unprecedented in the history of financial services. Internet banking is fast catching up with banking practices around the world and holds some advantages for both service providers and customers (Qureshi et al., 2008). Its bounties will enjoy huge acceptance with time and education (Ibid).

Internet banking represents a paradigm shift in marketing (Bauer et al. 2004); it enables new channels and new ways to collaborate and communicate (Fetscherin and Lattemann 2008).

“Each Internet banking and bill payment transaction represents an opportunity, repeated over and over each day, for financial institutions to construct in-depth profiles of individual consumers, build stronger, more extensive relationships, and increase their profitability” (Online Resources Corporation 2007). Research in banking is now shifting from technological development to user-focused investigation spurred by heavy investment in internet technology (Wang et al 2003).

Liao and Cheung (2003) declare that the extension of banking to the internet was inevitable. Singh (2004) adds that the nature of banking makes it fit naturally and perfectly on the internet. Bradley and Stewart (2003) explain this in the light that banking services are easily digitized and automated.

Recent studies give the indication that internet consumer banking may be more effective than traditional consumer banking with higher profits (Williamson 2006). Ho and Ko (2008) project that internet banking shall be the mainstream banking function in the future. Hutchinson and Warren (2003) report that statistics indicate that other forms of electronic banking such as ATMs, telephone banking and home banking presently constitute over 50 percent of all banking transactions. They identified four drivers of internet banking:

1. customers’ increasing demand
2. increased competition
3. banks exploitations of new ways to reduce cost and achieve efficiency
4. global deregulation of financial markets

Tan and Teo (2000) predict that internet banking will grow to be so pervasive that it will become a competitive necessity even though it is now facing teething problems. Jayawardhena and Foley (2000) believe that internet banking is the answer to the inherent problems of traditional banking as it has the potential to expand banking business and that technology, especially the internet platform, is a key driver of internal changes in the banking sector.
Wu et al (2006) compare traditional banking or bricks-and-mortar banking to electronic banking and the level of technology that characterizes both models in the following table:

<table>
<thead>
<tr>
<th>Factors</th>
<th>Bricks-and-mortar banking</th>
<th>E-banking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IT-infrastructure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network architecture</td>
<td>Wired networking</td>
<td>Wired and wireless networking</td>
</tr>
<tr>
<td></td>
<td>Proprietary network: WAN, VAN</td>
<td>Public network: Internet</td>
</tr>
<tr>
<td></td>
<td>Data-oriented transmission</td>
<td>Multimedia data transmission</td>
</tr>
<tr>
<td></td>
<td>Quarantined bandwidth</td>
<td>Abundant bandwidth</td>
</tr>
<tr>
<td></td>
<td>Communication: EDI</td>
<td>Communication: WWW</td>
</tr>
<tr>
<td>Application platform</td>
<td>Desktop computing</td>
<td>Internet computing</td>
</tr>
<tr>
<td></td>
<td>Mainframe-centric platform</td>
<td>Web-based platform</td>
</tr>
<tr>
<td></td>
<td>Platform dependency</td>
<td>Open interoperability</td>
</tr>
<tr>
<td></td>
<td>Transaction process system</td>
<td>Multifunctional hypermedia system</td>
</tr>
<tr>
<td></td>
<td>Inefficient user interfaces</td>
<td>Rich user interfaces</td>
</tr>
<tr>
<td><strong>Transaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transaction</td>
<td>Branch-based banking</td>
<td>On-line banking</td>
</tr>
<tr>
<td>mechanism</td>
<td>Over-the-counter</td>
<td>Anywhere-anytime</td>
</tr>
<tr>
<td></td>
<td>Physical facilities, processes, payments</td>
<td>Virtual facilities, processes, payments</td>
</tr>
<tr>
<td></td>
<td>Location and time critical</td>
<td>Overcome geographic or time limitations</td>
</tr>
<tr>
<td><strong>Security schema</strong></td>
<td>Mainly cash or check</td>
<td>Digital medium of exchange</td>
</tr>
<tr>
<td></td>
<td>Bank-self audit and database security systems</td>
<td>Standardized security systems</td>
</tr>
<tr>
<td></td>
<td>Paper-based and face-to-face confirmation</td>
<td>Security protocols: SET, SSL, WTLS, wireless PKI.</td>
</tr>
<tr>
<td><strong>Service</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service delivery</td>
<td>Geographic banking</td>
<td>Virtual banking</td>
</tr>
<tr>
<td></td>
<td>Bricks-and-mortar operations</td>
<td>Online self-services</td>
</tr>
<tr>
<td></td>
<td>Transactional and administrative services</td>
<td>Transactional, administrative, informational, financial portal, and self-help services</td>
</tr>
<tr>
<td></td>
<td>Channel: mainly telephone or branch counters</td>
<td>Internet channel</td>
</tr>
<tr>
<td>Customer service</td>
<td>Person-to-person interaction</td>
<td>Online interaction</td>
</tr>
<tr>
<td></td>
<td>Passive customer services</td>
<td>Active customer services</td>
</tr>
<tr>
<td></td>
<td>Articulated customer needs</td>
<td>Articulated and unarticulated customer needs</td>
</tr>
<tr>
<td></td>
<td>Standardization</td>
<td>Customization</td>
</tr>
</tbody>
</table>

Table 2 Traditional banking versus electronic banking


1.3 Ghana and Internet Banking

With the huge prospects of internet banking recounted from the foregoing, what does the internet hold for Ghana (About Ghana: see appendix B) especially in the banking industry in a global village driven by the speed of digital technology? Some works such as the ones accomplished by Abor (2004) and Boateng (2006) have highlighted the rate of diffusion of digital technology in the Ghanaian banking sector. Recent adoption of online banking services in the country brings the phenomenon into focus especially in the face of a new landscape in the banking industry.

The banking industry in Ghana is undergoing rapid growth with the liberalization of the financial sector by the Bank of Ghana and a positive economic environment. Not only has the bank introduced Universal Banking\(^1\) but has also introduced the Ghana Interbank Payment and Settlement System enabling common electronic platforms for payments across financial institutions (Bank of Ghana 2008). One of these platforms, the National Switch and Smartcard Payments System dubbed ‘E-Zwich’, currently, is vigorously being promoted by the Bank of Ghana.

Banks in Ghana are vying, through many commercials and a range of products and services\(^2\), for customers. Products and services, such as prestige account, cash passport, executive loan, child account, telephone banking, electronic cards and ATMs, which were hither to offered by a few banks, are now offered by most of the banks. Many products and services are now a matter of

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\(^1\) Banking license that gives a bank the right to offer investment services in addition to the general services of savings and loans.

\(^2\) Products and services may be used interchangeably. More specifically, products are the various account types and services refer to activities such as checking of account balance, withdrawals, transfers, etc.
competitive necessity rather than a competitive advantage (William et al. 2005). With many banks offering common products and services, the focus of competition is now moving towards speed, customization of products and services and the opening up of more branches (branch banking) to add value to the core banking products and services (Agbor, 2004).

The competitive landscape in banking in Ghana has become highly dynamic with relatively newer banks wresting banking awards from old brands and multinationals in recent banking awards (Bank of Ghana 2008). Digital technology assumes a focal tool in strategy among the banks (Agbor, 2004). Wide Area Networks have been incorporated by almost all the banks to create business value. Door-to-door sale of bank products has become a norm (Bank of Ghana 2008). Yet, according to William et al. (2005) the banking customer in Ghana is far from satisfied.

The internet is now emerging as a new marketplace in Ghana with a few banks already hitting the airwaves in many commercials and business interviews promising optimal customer value in their new internet delivery channel.

Ghana, notwithstanding, is one of the African countries with the lowest internet patronage with only 1.8% of the country’s population accessing the internet (Internet World Stats 2008). The full impact of the internet has not been felt in Ghana yet, especially in e-commerce and banking. The level of e-readiness of the Ghanaian community is low. Intsiful et al. (2003) identify high cost of subscription and infrastructure as well as poor service quality by the service providers as the reasons for poor incorporation of ICT in education, research and development in Ghana.

According to the UNCTAD Report (2007/2008 Report on Information Economy), internet banking has achieved a high level of penetration in developed and emerging economies but dawdling in the majority of developing countries. The report also demonstrates the importance of adopting the internet technology as a viable distribution channel in the financial supply chain to achieve efficiency gains in an integrated global economy. The implication of banking on the internet can be far-reaching—“Since online banking services can be accessed with equal ease almost anywhere in the developed world, this raises the possibility of banking networks operating without regard to national boundaries, with consequent regulatory problems” (Microsoft Encarta Encyclopedia, 2003). The internet can provide an excellent platform to open up personalized “branches” by carrying banking to the comfort of the customer’s home or office.

These developments have implications for marketers in the financial sector and academics seeking to understand customer value in digital banking. To leverage the internet platform, decision makers ought to map out internet use among customers and the kind of value that the platform can add to financial products and services and how customers perceive the total value offering. A good grasp of electronic banking is therefore crucial for banks willing to take advantage of the model to survive in the New Economy. The new paradigm in a competitive world is the crafting of higher customer value (Woodruff 1997).

In their study, Nah and Davis (2002) conclude that the human-computer interaction platform with the increasing new technologies added to the platform underscore a phenomenal amount of research and that a good understanding of this interaction is crucial for websites strategies. Boateng (2006) notices that research on e-banking in Sub-Sahara Africa is scanty even though the region stood in dire need for development and therefore more need for research attention.
1.4 Problem Discussion

What are therefore the developments and implications of internet banking in Ghana? Banks in the country are increasingly gravitating towards digital technology to create value for their customers and in competing for market shares. Still, banking in the country is beset by long queues, energy exacting and time-consuming, and on the whole costly (Appiah and Agyemang 2005). It defeats the purpose of customer service to see the hard time that many customers go through to access banking services around the end of every month when most salaries are paid through the banks. This has resulted in the loss in potential exchanges as many people simple keep money outside the banking system to avoid the ordeal meted out to them by the banks (William et al 2005; Appiah and Agyemang 2005).

Physical cash and paperwork still characterize most of the payment systems in Ghana and remain popular in spite of the introduction of digital payment cards. The main focus of adopting digital technology by the banks, as it appears to us from our own experiences as bank customers, is to network customer accounts information across branches to create business value (operational excellence) rather than customer value.

In eliminating time, space and distance constraints, customizing products and services, effecting payment or cross-selling, the internet stands out as the biggest digital platform for businesses that leverage the technology. In addition, compression technologies are converting the internet’s platform, the web, into a multimedia platform (Chaudhury and Kuilboer, 2002) making the internet channel a holistic interactive platform. Ho and Ko (2008) also identify labour cost for banks as an incentive to introduce technology-based self-service offer to customers.

With these advantages for both providers and consumers in online banking, only five banks of the 26 banks in Ghana extend their services onto the internet (Bank of Ghana 2008). Most Ghanaian bank customers also appear to be more comfortable with over-the-counter banking services than online banking and give it little or no attention although utilizing ATMs and other digital services is a way of life for many bank customers.

Indeed, leveraging a new technological platform is not a guarantee for success as learned the hard way by many early dotcoms during the internet boom. The customer, who is at the centre of strategic planning, must be understood from his or her perspective of the value offered by a given technological platform. Woodruff (1997) puts forth that the strategy of inward approach by organizations seeking improvement through quality management, reengineering and downsizing among others to gain competitive advantage must be extended to include an outward orientation towards the customer–an emerging source of competitive advantage. Williamson (2006) also observes that the focus of research in internet banking is shifting from technological development to the user. Many an academic literature has demonstrated that a customer knowledge process enhances a business’ competitive advantage (Cooper, 1992). Customer loyalty is improved through offers of superior value relative to competition (Salem Khalifa 2004).

In addition to the traditional banking activities, namely, savings, money transmission services and credit services in all their variations, the internet interface holds a lot of ‘goodies up its sleeves’ that can be harnessed to create a range of added value for customers.
Internet banking can boost growth and profits for a bank but it necessitates considerable resources for both banks (Williamson 2006, Bauer et al. 2004) and bank customers in Ghana. Therefore banks offering online banking need to continually evaluate the value they offer to their customers by taking into account customers’ value perceptions in order to be reactive or proactive (Kotler and Keller 2006) and to identify factors that affect those value perceptions to achieve a customer-centric management strategy.

“Customer Value needs to be seen from the customer’s viewpoint in terms of the value s/he sees in interacting with the organization” (Customer Value Foundation 2007). Ho and Ko (2008) think that online banking service providers should focus more on existing customers and possibly sign them up even when they open traditional accounts stressing the importance of taking into account customer preferences. Bauer et al. (2004) argue that customer satisfaction and customer retention prove to be key success factors in electronic banking. Customer satisfaction is intertwined with customer value perception (Setijono and Dahlgaard 2007). Ultimately, it is by understanding what kind of value that online banking provides for customers that providers are better enabled to create the actions that will enhance customer adoption of the service (Laukkanen 2007).

Stressing the need for managers to bring internal operations of their organizations in line with customer value, Woodruff (1997) raises some general questions regarding a customer value delivery orientation as:

1. What exactly do customers value?
2. Of all the things customers value, on which one should we focus to achieve advantage?
3. How well do customers think we deliver that value?
4. What customers value change in the future?

He also presents a cyclical model of how an organization can translate customer value learning into action:
Examine e-banking in Ghana, Boateng (2006) emphasizes “the need for African Banks to understand customers’ needs; the corresponding services to offer; the resources and partnerships required to offer it; and develop appropriate e-banking strategies that maximize value for both customers and banks” (page 10).

Customer value perceptions of internet banking hinge not on only the products and services accessible to the customer on the internet platform but also the value of the platform to the customer. Laukkonen (2007) concurs that electronic channels are value in themselves in that they are added value. Thus, the customer’s overall evaluation of value of internet banking can be understood in terms of:

- Customer value perception of internet banking products and services
- Customer value perception of the internet banking channel

1.5 Research Purpose
The purpose of this study is to advance scholarly work on the subject and to give a better understanding of the value that early adopters of internet banking in Ghana perceived from the service. Such an understanding can be used to model customer satisfaction (Modirghomi and Sarshar (2005)), Customer Lifetime Value (Woodall 2003) and Customer Value Analysis (Desarbo et al. 2001) in online banking. More precisely, it will provide an outlook for internet banking in respect of the competitiveness that characterizes banking in Ghana.
1.6 Research Questions
The research questions that will guide the research are:

1. What are the products and services that internet banking providers in Ghana offer to their online banking customers?
2. What are the values that such customers perceive in internet banking in Ghana?

1.7 Scope of Study
This study will be limited to customer perceive value in internet banking. Investigation will focus on the customers (b2c) of three leading internet banking service providers in Ghana as well as staff of the banks.

1.8 Outline of Study

Figure 3: Outline of Study

Chapter 1 includes a background of the study, problem formulation, research purpose and research questions.

Chapter 2 examines previous literature and designs a frame of reference.
Chapter 3 presents the methodology for the research.

Chapter 4 gives a structure to the results of investigation and deals with issues of credibility and validity.

Chapter 5 discusses the results.

Chapter 6 summarizes the study, draws conclusions and makes recommendations.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction
This chapter collates pertinent concepts, theories and findings from previous works upon which the study will be anchored. It will explore concepts and theories on value, customer value, the internet as a strategic tool in creating customer value to map out a range of customer value that can be offered or inherent in online banking and against this backdrop develop a frame of reference for data collection and analysis of customer value perceptions in internet banking in Ghana.

Internet banking or electronic banking\(^3\) has attracted many researchers whose works cover different areas of electronic banking. The phenomenon of internet banking has a face in every country. Most of the literature on the phenomenon focuses on industrialized nations (Maugis et al. 2004). In Ghana, the phenomenon is largely fallow in terms of research even though it is at its incipiency. This work is a pioneer study concerned with the phenomenon in terms of the value that customers in Ghana, who may be aptly describe as early adopters, perceive from internet banking.

2.1 The Customer
To examine customer value, a working definition of the term customer is sorted out from literature to help in the conceptualization of the term.

Modirghomi and Sarshar (2005) in their study present a very broad definition of a customer by Noel Capon et al as: “Any person or organization involved in the channel of distribution or decision (other than competitors) whose action can affect the purchase of the firm’s product and services. It encompasses both the firm’s existing customers and those potential customers it seeks for the future. It focuses on those persons or organizations that can influence the decision to purchase the firm’s products and services. Thus, the notion of customer is broadened far beyond the entity (person, family, or organization) [sic] the exchange money (or goods ad [sic] services) for the firm’s products or services” (Page 22). Butz and Goodstein (1996) consider a customer to include all those who affect the “buy decision” especially in a b2b context.

The online resource, KnowThis.com (2008) gives a more definite explanation of the term customer as a person who benefits from a good or service provided by a supplier. It provides three categorizations of customers:

- Existing customers: these are customers who have patronized a product or service within a certain period relative to the kind of organization. For example, a coffee shop may perceive an existing customer to be one who has made a purchase within the last three months whiles a television manufacturing company may view a customer as one who, after his/her last purchase, has not done any purchase even for a few years.

\(^3\) The two terms, internet banking and electronic banking are used interchangeably although the latter is generic.
• Former customers: this group is made up of customers who have done a purchase or have had a relationship with an organization in such a long time that the organization no longer feel they are existing customers. The implication here is that these customers purchase from competitors.

• Potential customers: this includes consumers who have not yet carried out a purchase with the organization. A potential customer is one who has a need for the product of the organization and possesses the financial means and authority to make a purchasing decision (Kotler and Keller 2006). Potential customers hold the key to an organization’s growth. They also replace former customers.

Existing customers are the most important of the three since they are the ones with whom the organization has a relationship and current business. Existing customers represent the best market for the future and if they are satisfied with the organization, they will constitute a Customer Capital (Customer Value Foundation 2007) for the organization. Serving and retaining existing customers has been widely theorized to boost profits (Pfeifer and Farris 2004).

This study will dwell on the concept customer as an existing customer in the b2c context.

2.2 The Concept of Value
With a working definition of the term customer, we now take a diagnostic view of the term value. Value is at the centre of marketing. Indeed, various definitions of marketing revolve around the creation and exchange of value (Eggert and Ulaga 2002). According to Kotler and Keller (2006), for exchange, which is the core concept of marketing to take effect, there must be at least two parties and each party must have something of value to offer the other party.

Laitamaki and Kordupleski (1997) observe that “Most business schools teach that the purpose of a business is to create value for the shareholder. Shareholder value, however, is really the outcome of the business organization’s success—not its intrinsic reason for being. The real purpose is ‘to create and provide products and services for customers that are of value to them’. In the long run, a business organization can produce shareholder value only if it first provides competitive customer value added” (page 158). Roig et al (2006) relate that financial services literature indicates that banks should focus on three fundamental types of value—shareholder value, employee value and customer value.

Kotler and Keller (2006) expound that value is marketed in ten forms. This includes goods, services, events, experiences, persons, places, properties, organizations, information and ideas. In the course of marketing a product or service, marketers pick and choose strategies that, in addition to the product or service, add accompanying value (Osterwalder and Pigneur 2003). Consumer products are produced from a chain of activities, from primary industries to secondary industries, from one location to another and from one firm to another in what marketers describe as the value chain (Kotler and Keller 2006) with each firm capturing part of the value chain (Osterwalder and Pigneur 2003).
Kortler and Keller (2006) present a conceptual model for a Holistic Marketing Orientation that provides insight into creating and capturing value. This model integrates three key issues:

- **Value exploration**
- **Value creation**
- **Value delivery**

Value exploration underscores the dynamic and competitive nature of value that flow within and across markets, and an understanding of the relationships and interactions among three spaces including (1) **the customer cognitive space** which essentially reflects existing and latent needs (2) **the company’s competence space** referring to the overall capabilities and strategy of a firm (3) **the collaborator’s resource space** which involves how horizontal partnership can exploit market opportunities or how vertical partnership can integrate value creation.

Value creation follows from value exploration by matching information about customer needs with the employable capabilities of the company and that of its collaborative networks to create value for the customers.

Value delivery further tasks the competences of the company and its networks. The company’s **customer relationship management**, **internal resource management** and **business partnership management** must be well aligned to deliver and capture value.

Chaudhury and Kuilboer (2002) concur that all the activities of a company are coordinated to achieve and deliver some value. They draw an important dichotomy between **Business value** and **Customer value**. Business value includes the activities that, on the firm’s side, help to achieve goals, namely, operational excellence, customer intimacy and product and service leadership. Customer value refers to the value that the customer gets in patronizing the product or service of a company.

According to Evans (2002), the term **customer value** also applies to the value that a customer brings to an organization or the worth that a firm places on a customer (Pease and Wright 2001). This concept has given impetus to many models that have been adopted to maximize the value of customers to a firm such as **Customer Lifetime Value** (Woodall 2003), **Customer Satisfaction** (Modirghomi and Sarshar 2005) and **Customer Value Management** (Daniels 2000; Evans 2002).

Woodruff (1997) explains that the term value has many contextual meaning. He identifies **High-value customer** as a concept of value from the firm’s perspective, **Value of an organization** as a firm’s worth to its owners and **Customer value** as what customers desire and believe they get from buying and using a firm’s product.

This study focuses on customer value referring to the value that a customer perceives in a product or service and this is commonly identified by many scholars as **Customer Perceived Value** (Kortler and Keller (2006); Setijono and Dahlgard (2007)).
2.3 Customer Perceived Value
Roig et al. (2006), Lin et al. (2005), Salem Khalifa (2004) and Woodruff (1997) observe that
customer perceived value is of high strategic relevance to organizations but marketers and
researchers are hard-pressed for a common operational definition of the term. The term value,
customer value and customer perceived value are used interchangeably by scholars and
marketers to refer to the value that a customer is said to perceive and derive from a product
(Woodall 2003), as will be examined in the following. One of the theories about customer value
is that it leads to customer loyalty (Woodruff 1997).

BusinessDictionary.com (2007-2008) defines the value offered by a firm as: “Extent to which a
good or service is perceived by its customer to meet his or her needs or wants, measured by
customer's willingness to pay for it. It commonly depends more on the customer's perception of
the worth of the product than on its intrinsic value.”

Kotler and Keller (2006) define customer perceived value as “the difference between the
prospective customer’s evaluation of all the benefits and all the costs of an offering and the
perceived alternatives” (page 141). They further develop that Total Customer Value is “the
perceived monetary value of the bundle of economic, functional, and psychological benefits
customers expect from a given market” (page 141) and that Total Customer Cost is “the bundle
of costs consumers expect to incur in evaluating, obtaining, using, and disposing of the given
market offering, including monetary, time, energy, and psychic costs” (page 141). Desarbo et al.
(2001) observe that perceived value as a function of perceived quality and perceived price has
been widely recognized.

Woodruff (1997) examines some definitions of customer value from which he sorts out some
convergences and divergences. He deciphers from the definitions that value is (a) inherent in a
product (b) determined by the customer (c) a trade-off between what the customer receives
(utilty) from the product and what he sacrifices (resources) to acquire the product.

The divergences, he points out, emanate from equivocal constructs. For example, by customer
value, is it quality, worth or a benefit that is implied? And by benefit, is it understood to be
intrinsic in the product or is it what the customer experience as the result of using the product in
a use context?

Synthesizing these definitions, Woodruff (1997) puts forward the following definition:
“Customer value is a customer’s perceived preference for and evaluation of those product
attributes, attribute performances, and consequences arising from use that facilitate (or block)
achieving the customer’s goals and purposes in use situations” (page 142). He further cited value
drivers as the customer’s learned perceptions, preferences and evaluations.

Yang and Peterson (2004) however argue that customer perceived value is rooted in equity
theory, a theory that refers to the ‘fairness’ of an exchange in which the monetary and non-
monetary costs of the consumer is commensurate to value received from the provider.

Komulainen et al. (2004) observe that it is a general view of many researchers that customer
value is a subjective perception of the trade-off between multiple benefits and sacrifices relative
to competition. Setijono and Dahlgaard (2007) corroborate this general view by re-stating
customer value as the summation of benefits minus the sacrifices entailed in using a product or service. Pihlstrom and Brush (2008) name functional, convenience, emotional, social, conditional, and epistemic value as the multiple dimensions of value. Yang and Peterson (2004); van der Haar et al. (2001) cite monetary and non-monetary sacrifices such as time, effort and energy consumption as the sacrifices the customer makes in exchange for the benefits. Goodstein and Butz (1998) argue out that price is not the only thing that matters in customer value.

Salem Khalifa (2004) in his extensive review and re-conceptualization of customer value, attempts to identify the different facets that bundle up to give value to the customer. He prefaces his study with the acknowledgment that the concept is not only subjective and ambiguous in constructs but also dynamic (van der Haar et. al. 2001). Flint and Woodruff (2001), writing from a b2b context, add that businesses have had to grapple with changing customer value and that gauging such changes is crucial for competitive advantage.

Salem Khalifa (2004) reports three models for defining customer value, namely value component models, utilitarian or benefits/costs ratio models and means-end models. These models, however, are not mutually exclusive; they overlap each other and emphasize a dimension of the concept.

Value component models refer to the customer’s esteem value (want), utility value (need) and the exchange value (worth) of a product. These are concerned with the customer’s desirability for and interest in a product and its measurable benefits. One or a combination of all three drive consumer’s buying decision.

Benefits/costs ratio is the utilitarian model that holds that customer value is the difference or ratio between total benefits and total sacrifices (Setijono and Dahlgaard 2007). The benefits include tangible and intangible attributes of the offering. Total sacrifice includes monetary cost, time cost, search cost, etc. as well as the risks that may be involved in accessing the offering. Desarbo et al (2001) similarly report that customer value is an integration of factors such as perceived quality and perceived price; perceived quality emanates from the tangible aspects of a product or service.

Flint and Woodruff (2001) observe that most research on customer value adopt the received value conceptualization, i.e., the customer’s tradeoff of received total benefits and sacrifices. Salem Khalifa cite many works that recognize the utilitarian model as the basic consideration of customers in making purchasing decisions, that is, the cost/benefit analysis.

Means-ends models, typified in many consumer literature, assume that customers purchase and use products to achieve favourable ends (Setijono and Dahlgaard 2007). This model links value to a personal gratification from a use situation. Woodruff (1997) adds that customers grow to prefer those consequences in a product that help to achieve their goals and purposes.

Salem Khalifa notes Kano’s value component model of customer value perception based on the disconfirmation model. The components of this model are:

- **Dissatisfiers (must be)** – the features or characteristics that are basic and expected in a product or service whose fulfillment are a routine expectation of the customer but whose deficiency annoys him. These can be describes as features of value that are explicitly expected. For example, having your laundry not ironed from a laundry service.
• **Satisfiers** (more is better) – these are features of a product that are requested by the customer with the expectation to have them. The customer is disappointed if the features are poorly met or inadequate but satisfied or even delighted if they are met. Providing these features are often considered the minimum standards in staying in business. Such features are implicit. For example, a time-abiding bus service.

• **Delighters** (exciters) – customers are satisfied when their expectations are fully met in a product or service, and when they get more than what they expected in an innovative way, they become delighted even though there is no negative effect on the customer when he does not get it since he was not expecting that much. In this case the seller recognizes a latent need and satisfies it. For example, providing babysitting service with a cinema operation will delight movie-loving parents with small children.

Salem Khalifa also notes Horovitz (2000) arguments that the customer receives value when the benefits of a product or service outweigh the cost to access and use it. Such benefits can be improved, extended or expanded. *Improving benefits* (enhancing functionality) means focusing and increasing one or more benefits beyond the current benefits of the product or service, e.g., including excursions to a game reserve in a course in ecology.

*Extending benefits* (offering solutions) means boosting the benefits of a product by providing supplementary services before, during or after use situation, e.g., a warranty for a piece of electronic appliance.

*Expanding benefits* (delighting the customer) means managing the customer’s total experience by adding intangibles to the tangible, i.e., to delight the customer by concurrently providing value independent of the product or service sought for, e.g., providing internet services aboard a bus. When the customer utility needs are satisfied and in addition, his psychic needs are satisfied, a value buildup arises.

Salem Khalifa draws a summary that: “The customer value accumulates as the satisfied needs advance from utility to psychic, as the customer benefits offered transcend tangibles to intangibles, as the nature of the relationship between the customer and the supplier develops from transaction to interaction, and as the customer treatment shifts from being a consumer to being a person. This accumulation of value may take one of four distinct forms that can be arranged from low to high as follows: functionality; solution; experience; and meaning” (page 657).

The highest point of value accumulation, “meaning”, “magnifies the worth to the experience” (page 657). At that point, the product’s worth to the customer is not just a matter of satisfaction or delight but a matter of deep personal conviction of the highest value and a way of life. At this stage, customer bonding occurs and bonded customers become advocates or ‘missionaries’ for the provider (Butz and Goodstein 1996).

Salem Khalifah (2004), in the final analysis, presents a value dynamics model (fig 2) which seeks to incorporate the various dimensions of customer value. Extending his model beyond Kano’s and Horovitz’s, he recognizes two extremes. Customer value at its lowest ebb causes an outrage as a result of value destroyers. In contrast are value magnifiers, which bring about customer delight. These two levels of customer satisfaction are based more on emotions and usually stem
from added value–positive or negative other than core value. When it is positive, customer loyalty may result and when negative customer defection becomes likely.

Expected value (neutral) is typically related to product performance. Its presence (explicitly expected) leads to satisfaction; their absence, to dissatisfaction; when increased to cover additional customer preferences (implicitly expected) or extended beyond customers expectations (unexpected), it results in customer delight.

Figure 4: Customer value dynamics

Source: Salem Khalifah (2004)

Similarly, Butz and Goodstein (1996) present a model for value levels. They define expected value as the basic level normal to an industry or business and at which the company provides products or services that customer have come to accept, e.g. a postal service where parcels are delivered in average time. In other words, expected value constitutes competitive necessity. A second level of customer value is desired value. Desired value is the features that add value beyond industry standards and addresses customer preferences, e.g. expedite postal delivery and an alert phone contact with the customer prior to final delivering. This constitutes competitive advantage. The third and final level is unanticipated value. This is the level where customer value goes beyond their expectation or even desires. This presupposes an innovation, e.g., customer tracking system of a parcel delivery process via customers’ mobile phones.

Comparing and contrasting the analysis of Horovitz, Kano, Salem Khalifah and Butz and Goodstein on customer value, there is the commonality that customer value stems from a basic component–the ‘must be’ or expected value–short of which the customer is dissatisfied. While Horovitz focuses on benefits outweighing cost, Kano, Salem Khalifah and Butz and Goodstein consider the intrinsic utility of a product as the expected value.
All of them further concur that beyond the expected value, customer value increases when customer basic expectation of the product is exceeded to include an unexpected benefit, a latent need, an innovation or a new experience. At the height of customer value is unalloyed customer loyalty.

Woodall (2003) conducts an in-depth study of customer value and presents a diagram of the major and sub elements of the benefits/sacrifices analysis. Net VC is ‘net value for the customer’–his term for customer value. Marketing VC is the customer value attributes being offered and Derived VC stands for the corresponding customer perceived value outcomes. Sale VC is customer value derived from cost effectiveness.

![Diagram of Benefits and Sacrifices](Figure 5)

**Figure 5: Benefits and sacrifices – Diagrammatic Form**


Woodruff (1997) suggests that customer value is relative to the circumstances within which the customer perceives the value such as when making the purchase decision or when actually
experiencing product performance during or after use. He presents an incremental value model (fig 2) based on attribute-based satisfaction (desired value), consequence-based satisfaction (value in use situation) and goal-based satisfaction (fulfilled goals). Here, he demonstrates that customer satisfaction emanates from the extent to which the customer savours value from a product and from the different junctures of acquisition, use and after-use situations.

![Figure 6: Customer value hierarchy model](image)

**Source:** Woodruff's (1997)

Woodall (2003) again presents a longitudinal perspective model for customer value or value for customer (VC). The model captures customer value in four different temporal forms. First, customers have certain value preconceptions or \textit{ex ante}/pre-purchase position when they plan a purchase. Secondly, \textit{at the point of transaction}, exchange or acquisition, the customer experiences value in real time. Thirdly, in an \textit{ex post} condition or in a post-purchase, received value is realized by the customer, and finally an \textit{after-use experience} of value. According to Woodall, these temporal stages are a cumulative depiction of customer value.
Figure 7: A longitudinal perspective of customer value


Setijono and Dahlgaard (2007) view customer value as existing in three ‘modes’, namely: added value, perceived value and received value. Added value, which may be described as indirect benefits, is value other than the utility of the product such as faster delivery, lower cost and high quality that is included to the offering of a product. Perceived value, which may be described as the psychological benefits, is the customer’s assessment of the utility of the product vis-à-vis the costs of securing the product. Received value, core value, or direct benefit, is the actual value derived in use situation or the value experience of the customer in using the product.

Flint and Woodruff (2001) argue that it is important for researchers, in assessing customer value, to incorporate not only received value—the value that a customer receives in a use situation but also desired value—the value that a customer want to received from a product or service.

van der Haar et al. (2001) reproduce a customer value model (developed by Zeithaml et al.) that depicts a value cycle that incorporates an intended value map of the provider and the desired value map of the customer. The model juxtaposes these two maps identifying the various gaps that may occur between the provider’s intended value and the customer’s desired value.

The information gap represents the insufficiency of information about customer desired value that may exist. The design gap arises when the provider’s (company) designed value mismatches with the intended value. Between desired value and expected value is the compromise gap. The smaller the compromise gap, that is, the closer what customers expects meets what they desire, the better the value offering of the provider. The perception gap shows the potential mismatch between the provider’s designed value and the customer’s perception of the value. The satisfaction gap reflects the difference between expected value and received value.
Figure 8: Customer value map

Source: van der Haar et. al. (2001)

Komulainen et al. (2004) conceptualize a downside dimension of customer value perception–if the customer perception is positive, it results in customer perceived value but if negative, it results in *customer perceived worthlessness*. Salem Khalifa (2004) from his analysis of various definitions isolates *negative added value* as added value that fails to meet its objective and rather causes some inconvenience to the customer, e.g., complicated value delivery systems, non-user friendly technology and unskillful employees.

It is important to note that customer perceived value is relative to competition (Eggert and Ulaga (2002); Yang and Peterson 2004; Evans 2002). Laitamaki and Kordupleski (1997) define customer value as “the relationship between the degree of customer satisfaction with the products and services received and the satisfaction with the price paid” (page 158). They develop further that customer value added is created when a firm’s value offering outweigh those of competitors. They present the equation:

\[
\text{Customer value added} = \frac{\text{Perceived worth of the company offer}}{\text{Perceived worth of competitive offers}}
\]

Butz and Goodstein (1996) demonstrate that feedbacks from customers about their value perceptions of a product, even when it is positive, without comparison to competition can be misleading. They noted that studies have shown that it is important to differentiate between what customers say about a product and how they behave.

The cost/benefit ratios can be recapitulated in the following three distinct levels in illustrative scales.

Figure 9: Cost/benefit depiction

Source: Authors own construction
It is important to observe a distinction between customer value and customer satisfaction according to Goodstein and Butz (1998). They believe that even though the two are intertwine, they are distinct concepts. They argue that customer value is linked to and predictive of customer behaviour while customer satisfaction is about customer attitude. They explain that “Satisfaction measures indicate how customers feel about products and services, while measures of customer value are indices of how customers will act” (Page 23). Evans (2002) asserts that any customer satisfaction measurement that does not incorporate customer value is simplistic and likely to fail. van der Haar et al (2001) ;Woodruff (1997) demonstrates that customer value is a precursor to customer satisfaction. Yang and Peterson (2004) also found out that customer satisfaction is influenced by customer perceived value.

Lewis and Soureli (2006) in identifying customer value and customer satisfaction as antecedents of customer loyalty link customer satisfaction to the customer’s accumulated purchase and consumption experiences with a provider. This view is shared by Laitamak and Korduplesk (1997) and Woodruff (1997). Woodruff holds that both concepts describe evaluative judgments about products and both place special importance in use context.

van der Haar et al (2001) contend that customer satisfaction data can only be analyzed to improve existing products while customer value data can be used to differentiate product offering for targeted customers. Eggert and Ulaga (2002) present a table highlighting such conceptual differences.

<table>
<thead>
<tr>
<th>Satisfation</th>
<th>Customer Perceived Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective construct</td>
<td>Cognitive construct</td>
</tr>
<tr>
<td>Post-purchase perspective</td>
<td>Pre-/post-purchase perspective</td>
</tr>
<tr>
<td>Tactical orientation</td>
<td>Strategic orientation</td>
</tr>
<tr>
<td>Present customers</td>
<td>Present and potential customers</td>
</tr>
<tr>
<td>Supplier’s offering</td>
<td>Suppliers (sic) and competitors offerings</td>
</tr>
</tbody>
</table>

Table 3 Conceptual Differences between satisfaction and value

Source: Eggert and Ulaga (2002)
Customer value is also affected by the volume of consumption. Economic theory of marginal utility holds that consumer’s utility, by extension customer value, diminish with increase in consumption (Lipsey and Chrystal 2007). In other words, customer value decreases with more consumption of a product or services. Other market forces also affect the level of consumer’s utility. (Ibid)

Customer value dimensions have different levels of emphasis and relative to the industry or market value offerings. Customer value perceptions of a physical product would differ from value perceptions in services or customer value in a b2c context would differ from a b2b situation. For example, safety is a crucial value in the airline industry in much the same way as privacy is in online shopping. Nasution and Mavondo (2007) write of reputation for quality, value for money and prestige as core customer value in the hotel industry.

2.5 Customer Perceived Value in Internet Banking
We now review customer value in internet banking by first examining what internet banking entails.

Khan and Shahzad (2005) define the internet banking “as the use of technology to communicate instructions to and receive information from a financial institution where an account is held” (Page 13). They further state that internet banking includes systems that enable businesses, financial institutions or customers to access their accounts, information, financial products and services or transact business through a public or private network including the internet.

This definition broadens internet banking to include other technological platforms; yet, in the same vain Khan and Shahzad (2005) refer to electronic banking as ‘almost generic in its nature’ (page 14) and expatiate that electronic banking includes traditional services such as telephone banking, credit cards, debit cards, ATMs as well as internet banking. Secondly, Khan and Shahzad’s definition of internet banking captures only the customer’s perspective to the concept.

Boating (2006) echoes a more coherent definition of electronic banking by Singh and Malhotra (2004) stating that: ‘E-banking can be defined as the deployment of banking services and products over electronic and communication networks directly to customers. These electronic and communication networks include Automated Teller Machines (ATMs), direct dial-up connections, private and public networks, the Internet, televisions, mobile devices and telephones’ (page 3).

Essinger (1999) defines internet banking as giving customers access to their bank accounts through a website and enable them enact certain transactions in compliance with stringent security checks.

The definition of electronic banking has been presented by various researchers to encapsulate all electronic platforms that have been leverage to deliver banking services including the internet. The term is also used and defined interchangeably with internet banking. For example, Yibin (2003) defines internet banking as: “Internet banking (e-banking) is defined to include the provision of retail and small value banking products and services through electronic channels as well as large value electronic payments and other wholesale banking services delivered electronically” (page1).
Boateng (2006) cites that the proliferation of personal computers, easier internet access and rise in mobile phone use has attracted many a bank to electronic banking. Lustsik (2003) attributes this condition to the high rate of internet banking in Estonia. He observes again that the need to pay frequent bills and to do so with minimum effort is one of the driving values that attract consumers to internet banking.

Boating traces an evolutionary development of electronic banking from ATMs, personal computer banking, telephone banking, internet banking, TV banking to mobile banking. He noticed however that electronic banking generally emerged in Africa with internet banking. He further outlines the value that is created in electronic banking to include:

(1) information-push where customer can access banking information (2) information-download where customer can access account information and (3) full-transaction where customers can actually carry out transactions with the bank such as money transfer, payments card and loan application or more recently, electronically save money. Yibin (2003) also identifies the same levels in internet banking as:

- Basic information e-banking
- Simple transactional e-banking
- Advanced transactional e-banking

From electronic banking, the study now focuses on internet banking vis-à-vis customer value. Jayawardhena and Foley (2000) identify the following as the reasons for the adoption of internet banking by banks:

1. Delegating tasks to the customer to save cost
2. Increased customer base
4. Marketing and communication
5. Innovation.
6. Development of non-core business

Buys and Brown (2004) enumerate common products and services that customer access from internet banking (page 46):

1. Balance enquiry
2. Statement of bank account
3. Account/Bill payments
4. Beneficiary set up
5. Short-term recurring payments
6. Stop and Debit order payments
7. Open and Manage Investment accounts
8. Cheque book request
9. Email branch or customer contact centre (secure messaging)
10. Funds transfers
11. Increase/Decrease overdraft
In discussing customer value in internet banking, it is important to keep in perspective that internet banking is a combination of a delivery channel (internet) and banking products and services in order to iron out an appropriate model for customer value in that context. We have already seen that the ingredients of customer value vary from one product or service to another. Assessing customer in internet banking should also take into cognizance what was before, i.e. traditional banking offering.

Electronic banking, and for that matter internet banking, is changing traditional banking activities such as payment mediums, physical transaction processes, delivery channels, and security systems. It has also come with novelty in information, customization and self-service offering differentiating itself sharply from traditional banking report Wu et al (2006). They present a contrast of the dimensions for traditional banking and electronic banking models as:

<table>
<thead>
<tr>
<th>Factors</th>
<th>Bricks-and-mortar banking</th>
<th>E-banking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value proposition</td>
<td>Localization</td>
<td>Efficiency</td>
</tr>
<tr>
<td></td>
<td>Risk reduction</td>
<td>Convenience</td>
</tr>
<tr>
<td></td>
<td>Comfortable services</td>
<td>Customized services</td>
</tr>
<tr>
<td></td>
<td>Enhanced trust</td>
<td>Market extension</td>
</tr>
<tr>
<td>Market scope</td>
<td>Physical marketplace</td>
<td>Virtual marketplace</td>
</tr>
<tr>
<td></td>
<td>General users</td>
<td>Users with Internet connection</td>
</tr>
<tr>
<td></td>
<td>Specialized geographic customer base</td>
<td>Wide customer base</td>
</tr>
<tr>
<td></td>
<td>Customers are passive participants</td>
<td>Customers are active participants</td>
</tr>
<tr>
<td>Cost structure</td>
<td>High entry and start-up costs</td>
<td>High technology investments</td>
</tr>
<tr>
<td></td>
<td>High operating costs</td>
<td>High contents creation and security management costs</td>
</tr>
<tr>
<td></td>
<td>High networking, transaction, production costs</td>
<td>Low entry, operating, networking, application development costs</td>
</tr>
<tr>
<td>Profit potential</td>
<td>Over-the-counter serving revenues</td>
<td>Transactional commissions, servicing charge, advertising revenue, and financial information subscriptions</td>
</tr>
<tr>
<td></td>
<td>Lower risks</td>
<td>Lower transaction, labor, premises, and service costs</td>
</tr>
<tr>
<td>Value network</td>
<td>Intermediation model</td>
<td>Re-intermediation model</td>
</tr>
<tr>
<td></td>
<td>Key stakeholders: mainly for consumers and financial institutions</td>
<td>Key stakeholders: Internet service providers, content providers, financial portal, online stores, retail outlets, etc.</td>
</tr>
</tbody>
</table>

Table 4 Contrast between traditional and electronic banking business models

Based on the adoption of two-dimensional model by Abernathy and Clark, and their analysis of technological knowledge dimensions and business models of traditional and electronic banking, Wu et al (2006) assert that the innovation from traditional banking to electronic banking is disruptive innovation.

Figure 10: A matrix of degree of innovation


On the value of delivery channels, Frambach et al (2007) comparing offline and online channels, take a middle position by arguing that businesses have generally thrived combining both channels as a matter of strategy. They assert that businesses however need to better understand a channel in terms of the value it can add to the delivery process before they employ it. They found out that pre-purchase, purchase and post-purchase are three stages of the buying process that influence customer channel choice especially in complex product or services. For example, a customer may find a channel suitable for the pre-purchase stage which primarily involves information seeking but unsuitable for the purchase stage. Strategically therefore, a business ought to be responsive to each channel choice.

Boehm (2008) however found out from his study of sampled internet users in retail banking that the internet channel impacted more on customer retention than the traditional channel. Johns and Perrott (2008) note that technology may either simplify or complicate the exchange process. If there are no face-to-face interactions, much will depend of the technological interface.

Frambach et al (2007) investigations also reveal that domain-specific experience impact heavily on customers’ channel preferences and evaluations (also Boehm 2008; Johnson (2007). Thus, a customer’s value perception of an online channel for example, is more positive if he has a high level of online experience than if he has not.

Wan and Chow (2004) identify four banking channels and in order of preference by customers in Hong Kong are: ATM, internet banking, branch banking and telephone banking. In terms of
customer convenience, internet banking was rated the highest while branch banking (traditional banking) was seen as the only channel that provides all banking services and the foremost in terms of transaction assurance.

Johnson (2007) also recognizes two key reasons for consumer’s adoption of internet banking:

1. **Technology-oriented identity** or **identity commitment to technology** (or **subjective norms**, Tan and Teo 2000) refers to the socio-psychological value that a consumer places on being perceived as technologically oriented or savvy. This view is given impetus by the domain-specific experience factor that explains the technology-user predisposition to adoption. “Identity commitment should motivate consumers to overcome reticence, clarify vulnerabilities, and substantiate the capabilities of electronic channels” (page 7).

2. **Calculative commitment** refers to the compelling value proposition or offering of the provider that attracts the consumer and in the case of electronic banking include 24/7 access, limitlessness of location, real-time transaction and automation.

Many works such as Laukkanen (2007) identify low costs, time saving, freedom from time and place as values customers harness from internet banking. Ease-of-use, speed of delivery, reliability, responsiveness and security are, on the other hand, inherent features of internet banking that give value to customers (Liao and Cheung 2008).

According to Jayawardhena and Foley (2000), “Time, privacy, control and economy are among the important aspects that customers are concerned with. People are becoming busier and hence are seeking to carry out transactions at a time of their convenience. This is confirmed by the increase in telephone assisted banking and also the widespread use of the now ubiquitous automated teller machines (ATMs). Todays’ (sic) customers are often conscious of the expenses associated with banking and are generally better informed about alternative options. Any service provided must be at minimal cost or competitive cost, and preferably at no cost”. (Page 23) Ho and Ko (2008) employed ease of use, usefulness, self-control and costs saved in investigating customers’ continued use of internet banking.

In concluding their paper, Jayawardhena and Foley emphasize that internet banking is the answer to the inherent disadvantages of traditional banking and that it is more than just a delivery channel; it can, apart from effecting payment systems, provide other opportunities such as shopping.

Internet banking researchers have generally identified many benefits that accrue to customers by enumerating the benefits rather than explaining them the in the context of customer value perceptions. Pihlstrom and Brush (2008), Roig et al (2006), Bauer et al (2004) and Heinonen’s (2004), however, have analyzed customer value in the context of self-service technology.

Pihlstrom and Brush (2008) in adopting a framework for customer value in the self-service, specifically in the mobile service context, included a number of dimensions. They included **monetary value** to refer to the time and money saved from electronic self-service; **convenience value** to also refer to the speed and ease of carrying out a task efficiently and effectively to save time and effort; **emotional value** refers to the pleasurable experiences or the fun that a customer derives from using technology; **social value** refers to the social approval or sense of social
belonging that emanates from the use of modern technology; conditional value refers to the independence of time or place from using self-service technology; epistemic value denote the novelty and the newness that is lent in accomplishing tasks.

Roig et al (2006), writing on customer value in banking services, identify customer value to encapsulate not only consumption experience but also purchase experience (Woodall 2003). Employing the GLOVAL scale developed by Sanchez et al. (2006), they explained that customer value breaks into functional value and affective value. The functional value consists of four dimensions – the establishment (installations), contact personnel (professionalism), service purchased (quality) and price. The affective value is a bundle of emotional and social values.

Bauer et al (2004) provide a more distinctive conceptualization of customer value in electronic banking. They identify three generic services of electronic banking portals as (1) basic services, security and trustworthiness and these represent the core services or core products demanded by customers. (2) The complementary services that mark electronic banking such as cross-buying services, an expansion of demand from initial core products, and other non-bank services that constitute added value represent additional services. (3) Problem-solving services refer to (a) the transactional support such as information provision and customer care, and (b) responsiveness such as availability, accessibility, personalization and complaint management.

To unify these conceptualizations, we observe Kang and James (2004) examination of the service quality dimensions of Gronroos’s service quality model. They note that Gronroos identify technical and functional dimensions of quality service and observe that the technical dimension refers to the perceive service quality in services or product features of physical product in consumption services. It represents “what” is provided. The functional dimension represents “how” the service is provided or the process that underpin the delivery of the service.

We infer from the preceding analysis on customer value in internet or electronic banking context that customer value has two important perspective—the core products or services (technical or tangible perspective) and the process, complementary services, installations, novelty as well as emotional and social value (functional or intangible values).

Heinonen’s (2004) develops the conceptualization even farther. She captures customer value to include temporal (time) and spatial (place) dimensions. These dimensions are concomitant with internet banking (Wu et al 2006). According to Heinonen’s findings, temporal and spatial dimensions were more valued by respondents than the traditional value perceptions of technical and functional dimensions. Heinonen argues that the technical and functional value dimensions, which represent the core services, were conceived in the context of the temporal and spatial dimensions. Jayawardhena and Foley (2000) recognize the spatial element as the rationale behind the opening up of more branches in traditional banking.

Below is a four-dimensional customer value model depicting the technical (what), functional (how), where (spatial) and temporal (when) value elements that underpin technology-based self-service and their attributes as presented by Heinonen(2004):
The utility of the internet cannot be over emphasized and the value online banking can bring to consumers has been documented by many researchers. There is, however, a downside to the story whose incorporation is important in analyzing customer value in internet banking. Baker (1999) and Williamson (2006) assert that the growth of the Internet has seen an increase in fraudulent practices. Security has been identified as a major bane of the internet. Hutchinson and Warren (2003) note that information security comes up in many research works as the number one concern for businesses and customers. They outline security requirements for internet banking as:

1. Identification and authentication
2. Authorization
3. Confidentiality
4. Integrity
5. Non-repudiation
6. Availability
7. Privacy
8. Auditability

On another downside, Jansson and Letmark (2005) note that internet banking increases the distance between the customer and the bank and as there is less or no human contact, the relation between the two will be more impersonal. Nordman (2004) buttresses this by stating that personal contact promotes deeper relationship.

Finally, we take a cue from the authority of McEachern (1998) who espouses that placing the customer at the centre of marketing activities is not enough; “a dialog with customers is essential to establishing true value–for both the customer and the organization. Without two-way communication, including feedback, an organization cannot be sure that it is really meeting customers’ needs and delivering value”. (Page 485)
2.6 Summary of Literature Review

Analyses of customer perceived value necessitated a discussion of the different components of the construct. The term *customer* presented a broad meaning but for our purpose we focused on the existing customer in the context of b2c. The construct *value* also presented multifaceted dimensions in the discussion and was narrowed down to represent the benefits, utility or solutions that a customer perceives or receives from a product or service as a ratio to the costs, in all forms, suffered by the customer.

Customer value has been explained with a number of models in the course of research. It has been found to be incremental, contextual and dynamic. After a review of the components of customer value, the review was extended to customer value in internet banking context. This revealed that a customer value assessment should cover the internet as a delivery channel in addition to banking products and services.

It also came up that the differentiating factor between traditional banking and internet banking is the self-service that manifests in limitlessness of location and time access to banking services. Contrasted with traditional banking, internet banking has been found to offer more innovative services, convenience and cross-buying opportunities. The products/services and the delivery process of internet banking has been conceptualized in the context of the technical and functional dimensions of customer value. Thus, the major theory/concepts of the review are:

**Theory**

- Customer value creates customer loyalty

**Concept of Customer Value**

- It is a trade-off between benefits and sacrifices
- It is relative to competition
- It is relative to product or service
- It is relative to customer expectation

**Customer Value in Internet Banking**

- is based on products and services
- and the delivery channel

2.7 Frame of Reference

Having explored the concept of customer perceived value, we now focus on ironing out a frame of reference based on the literature review. This will help us to collect and analyze data that will help address the research questions.

To consider an appropriate frame of reference for customer value in internet banking context, we break internet banking into two parts:
1. Banking products and services, e.g. loans, transfers, account information, payments, etc. (Buys and Browns 2004) represent core value (Bauer et al 2004) offered to the banking customer. These products and services take a different form from traditional banking (Wu et al 2006). Paper work and human interface is done away with. With the internet banking falling into three levels (Boateng 2006, Yibin 2003), an examination of the level of internet banking or the range of services, products and level of innovation is important.

2. Delivery channel. Internet banking is affected by internet connectivity, technological interface (banking website) and responsiveness (or feedback) of the system (Liao and Cheung 2008). As a self-service delivery channel, the internet offers the ‘anytime’ and ‘anywhere’ value (Wu et al 2006).

With these two dimensions of internet banking, we find Heinonen’s (2004) customer value concept particularly useful for analysis of customer perceived value in the internet banking context because her model captures the spatial and temporal dimensions of customer value (Pihlstrom and Brush 2008) in addition to technical and functional dimensions. With technology-based self-service, location and time dimensions are important factors that influence value perceptions (Heinonen 2004) and are also the factors that differentiate online banking from traditional banking Wu et al (2006).

Another advantage of Heinonen’s model is that the technical and functional value dimensions, which she describes as the traditional value dimensions, can be operationalized to encapsulate the various attributes of customer value in the traditional value concepts. Consequently, the four-value dimensional framework of Heinonen, based on the review of customer value in internet banking and self-service technology, is developed for the purposes of the study as follows:

1. Technical dimension: this refers to the essence of the product of some specific offering or the utility or core value of what is delivered (Gronroos 1990). In the banking context, the technical dimension of internet banking defines what products and services are offered. Banking products and services include loans, transfers, payments, savings, withdrawals and account information among others. This dimension is important in assessing value in internet banking because the internet platform can be used to create services and innovations that cannot be rendered through traditional banking (Liao and Cheung 2003; Jayawardhena and Foley 2000; Wu et al 2006).

2. Functional dimension: this refers to how products/services are delivered (Gronroos 1990). In traditional banking, products and services are usually rendered directly to the customer at fixed periods and locations, and involve interpersonal interactions. In internet banking context, products/services are delivered electronically, i.e. through the internet channel. The functional dimension is therefore conceptualized to include Ho and Ko’s (2008) construct of ease of use. They define this in the context of self-service technology as the provision of a clear and simple process that ensures effective and efficient use by customers. Next is the construct Usefulness. This refers to the relative advantage of leveraging internet banking (Lichtenstein and Williamson 2006) or the benefits that accrues to the self-service technology user in terms of accomplishing tasks (Ho and Ko’s 2008) such as the ability to print receipts, statements, etc. Other constructs include security and privacy (George 2004; Buys and Brown 2004; Jayawardhena and
Foley 2000) and reliability of internet connection and website (Southard and Siau 2004; Jayawardhena and Foley 2000).

3. Spatial and temporal dimensions are not value in themselves unless they translate into concrete benefits, namely, cost saving and convenience (Pihlstrom and Brush 2008). Cost savings include time cost and transportation cost (Globerson and Maggard 1991). Costs saving therefore refer to the amount of time and money saved (Ho and Ko 2008). The other value customers get from the spatial and temporal dimensions is flexibility (Heinonen 2004) or convenience which Lichtenstein and Williamson (2006) found to outweigh even risk.

This framework presents a cumulative-value concept represented diagrammatically bellow – the technical value of what is offered, the functional value in how it is delivered, the temporal value of when it is delivered and the spatial value of where it is delivered:
Figure 12: Frame of Reference based on Heinonen (2004)

Source: Authors own construction
Having developed a model for the frame of reference, we now proceed to identify the methodology for data collection and analysis that will help address the research questions and ultimately, the purpose of research.
CHAPTER THREE
METHODOLOGY

3.0 Introduction
Methodology typically refers to the techniques that are used to conduct research. This include data collection instruments such as questionnaires, interviews or observation as well sampling procedures and statistical techniques for organizing and interpreting unstructured data (Bryman 2008). This chapter spells out the approach to the research. It seeks to establish sound reasoning in linking the steps employed to answer the research questions and to achieve the objectives of the research. Sampling methods, data collection and data analysis are discussed. Issues of confidentiality and the validity and reliability of the study are stated.

3.1 Framework for Methodology

Figure 7: Framework for methodology adapted from Holme and Solvang

Source: Jung and Widmark (2005)
The methods for the study are depicted (as espoused by Holme and Solvang and reported by Jung and Widmark (2005)) in the schematic form above showing the sequential steps that will unfold in this chapter. We find it suitably elaborative for achieving our research goals. Each step will be explained in terms of our approach and justified in the light of methodology literature.

3.2 Research Purpose

Neuman (2006) states that when a researcher embarks on a study, he or she is contriving to explore a new topic, describe a social phenomenon or explain why something occurs. Research methodologists, such as Saunders et al (2007), generally classify the purpose of research into three – exploratory, descriptive and explanatory but authorities such as Cooper and Schindler (2006) present two research purposes – descriptive and causal (although they place exploratory study under a different heading) while Sullivan (2001), on another hand, names four goals of research – descriptive, predictive, explanatory, and evaluative. Each purpose or goal specifies a particular objective and format. Yet, according to the renowned marketing researchers, Malhotra and Birks (2006), the distinctions among them are not absolute. They observe that exploratory research is usually advanced by descriptive or causal research. A single study may incorporate more than one of these purposes (Sullivan 2001; Saunders et al 2007). For this study, we examine the exploratory, descriptive and explanatory purposes of research.

- An exploratory research is grounded on gaining fresh insights into a phenomenon or situation (Saunders et al 2007) to satisfy curiosity, to identify variables and provide leads to further research or in the words of Neuman (2006), to build, elaborate, extend or test a theory. According to Cooper and Schindler (2006), exploratory research is particularly used by researchers when they have no clear idea of the kind of problems they will encounter in the course of research. Such an exercise allows researchers to develop concepts more clearly, establish priorities, develop operational definitions and improve the final research design (Ibid). Exploratory studies are usually less structured allowing for the flow of information and enabling the researcher to gather more information (Saunders et al 2007).

- A descriptive purpose, according to Sullivan (2001), is an “attempt to discover facts or describe reality” (page 15). He evidently conceptualizes description to encompass exploration. Saunders et al (2007) consider descriptive research as an extension of exploratory research presupposing that the researcher of a descriptive study has a grasp of the phenomenon under investigation. This type of study focuses on profiling persons, events or situations. Descriptive studies are geared towards finding answers to questions other than cause and effect relationships. Sullivan continues: “It is a picture or account of what exists, sometimes summarized in numbers, percentages, or some other statistics”. (page 15). The descriptive research, explains Malhotra and Birks (2006), differs from exploratory research in that “descriptive research is characterized by the prior formulation of specific research question or hypotheses. Thus, the information needed is clearly defined. As a result, descriptive research is pre-planned and structured … a descriptive research design specifies the methods for selecting the sources of information and for collecting data from those sources” (page 65). Neuman (2006) report that
exploratory and descriptive study share many similarities and blur together in practice. “In descriptive research,” Neuman states, “the researcher begins with a well-defined subject and conducts research to describe it accurately. The outcome of a descriptive study is a detailed picture of the subject. For example, results may indicate the percentage of people who hold a particular view or engage in specific behaviours”.

- An explanatory purpose, otherwise causal study, is to investigate a relationship between variables (Saunders et al 2007; Sullivan 2001; Cooper and Schindler 2006). It goes beyond description by trying to establish causes of phenomena (Sullivan 2001). This presupposes a clear conceptualization of the variables involved in a theory and their how they affect each other.

Neuman (2006) summarizes the differences that characterize research purpose (page 34) in the following table:

<table>
<thead>
<tr>
<th>Exploratory</th>
<th>Descriptive</th>
<th>Explanatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Become familiar with the basic facts, setting and concerns</td>
<td>Provide a detailed, highly accurate picture</td>
<td>Test a theory’s predictions or principle</td>
</tr>
<tr>
<td>Create a general mental picture of conditions</td>
<td>Locate new data that contradicts past data</td>
<td>Elaborate and enrich a theory’s explanation</td>
</tr>
<tr>
<td>Formulate and focus questions for future research</td>
<td>Create a set of categories or classified types</td>
<td>Extend a theory to new issues or topics</td>
</tr>
<tr>
<td>Generate new ideas, conjectures, or hypotheses</td>
<td>Classify a sequence of steps or stages</td>
<td>Support or refute an explanation or prediction</td>
</tr>
<tr>
<td>Determine the feasibility of conducting research</td>
<td>Document a casual process or mechanism</td>
<td>Link issues or topics a general principle</td>
</tr>
<tr>
<td>Development techniques for measuring and locating future data</td>
<td>Report on the background or context of a situation</td>
<td>Determine which of several explanations is best</td>
</tr>
</tbody>
</table>

Table 5: Differences in Exploratory, Descriptive and Explanatory Purposes

Source: Neuman 2006

From the foregoing analysis, the study naturally falls under descriptive purpose. In answering the research questions, we need to describe the level of internet banking (products and services) vis-à-vis level of customer value perception by early adopters of internet banking in Ghana. Even
though there are two variables of concern, internet banking and customer value, the focus of the research questions is not to establish causality but to find out what there is about the two phenomena.

3.3 Research Approach

The research approach to the study is informed by a review of the forms of data approach – qualitative and quantitative data. Sullivan (2001) indicates that another step of refining the research problem is to decide whether qualitative or quantitative data or even both are appropriate for the research. He explains that qualitative data is data collected in the form of words, pictures, descriptions or narratives. Quantitative data involves numbers charts and measures of things. Cooper and Schindler (2006) take a semantic view to the distinction between the two: “Quality is the essential character or nature of something; quantity is the amount. Quality is the what; quantity is how much” Page 143. Thus, they define qualitative research approach as a set of techniques employed to describe, decode, translate or generate meaning from a phenomenon. They argue that it is a fundamental approach to exploratory research and include individual and group interviews, participant observation, videotaping, case studies, etc. Quantitative approach involves quantifying data or assigning measures to them to statistically test them for any relationship to increase understanding of a topic. Malhotra and Birks (2006) confirm that research based on qualitative data is unstructured, primarily exploratory, and aimed at breaking fresh grounds and giving insights while quantitative-data research employ techniques that quantify data and typically subject them to statistical analysis.

Neuman (2006) draw the dichotomy between quantitative and qualitative data approach to research from other works (page 13) reproduced in the following table:

<table>
<thead>
<tr>
<th>Quantitative Approach</th>
<th>Qualitative Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures objective facts</td>
<td>Construct social reality, cultural meaning</td>
</tr>
<tr>
<td>Focus on variables</td>
<td>Focus on interactive processes, events</td>
</tr>
<tr>
<td>Reliability is key</td>
<td>Authenticity is key</td>
</tr>
<tr>
<td>Value free</td>
<td>Values are present and explicit</td>
</tr>
<tr>
<td>Theory and data are separate</td>
<td>Theory and data are fused</td>
</tr>
<tr>
<td>Independent of context</td>
<td>Situationally constrained</td>
</tr>
<tr>
<td>Many cases, subjects</td>
<td>Few cases, subjects</td>
</tr>
<tr>
<td>Statistical analysis</td>
<td>Thematic analysis</td>
</tr>
<tr>
<td>Researcher is detached</td>
<td>Researcher is involved</td>
</tr>
</tbody>
</table>

Table 6: Quantitative and Qualitative Approaches

Source: Neuman (2006)
The choice between the two approaches, says Sullivan (2001), depends on these factors:

- The researcher’s disposition to human social behaviour
- When knowledge of the subject area is sketchy
- When there is theoretical understanding of the phenomenon

This study will adopt a qualitative data approach to answering the research questions which by their nature presuppose qualitative data analysis. Even though the questions reflect precise concepts – internet banking and customer value, they seek to throw light on them as they co-exist in a new environment (making the subject sketchy) rather than how they interact with each other – necessitating in-depth description of underlining issues.

3.4 Research Strategy
Research strategy refers to the plan that a researcher will pursue to execute an investigation to address the research questions. It specifies sources of data and constraints that may hamper the research and how they will be addressed (Saunders et al 2007). Cooper and Schindler (2006) argue that definitions of research design (or strategy) abound, yet, none of them convey the full range of the important aspects. They provide a number of definitions. We present this one: “Research design is the plan and structure of investigation so conceived as to obtain answers to research questions. The plan is the overall scheme or program of the research. It includes an outline of what the investigator will do from writing hypotheses and their operational implications to the final analysis of data” (page 138). Research strategy cover key issues such as those who will be studied, how they will be selected and what information will be gathered from or about them (Sullivan 2001).

One comes to realize from the various approaches to research strategy that it has no definite boundaries and from the definitions adopted by many works, can be extended to encapsulate the entire research process. Consequently, we choose and pick elements of research strategies espoused by research scholars that will help answer the research questions and consequently, the research objectives.

We present Cooper and Schindler’s (2006) framework for research design from which we frame our strategy (page 139):
### Category Options

<table>
<thead>
<tr>
<th>Category</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The degree to the research question has been crystallized</td>
<td>• Exploratory study</td>
</tr>
<tr>
<td></td>
<td>• Formal study</td>
</tr>
<tr>
<td>2. The method of data collection</td>
<td>• Monitoring</td>
</tr>
<tr>
<td></td>
<td>• Communication study</td>
</tr>
<tr>
<td>3. The power of the researcher to produce effects in the variables under study</td>
<td>• Experimental</td>
</tr>
<tr>
<td></td>
<td>• Ex post facto</td>
</tr>
<tr>
<td>4. The purpose of the study</td>
<td>• Descriptive</td>
</tr>
<tr>
<td></td>
<td>• Causal</td>
</tr>
<tr>
<td>5. The time dimension</td>
<td>• Cross-sectional</td>
</tr>
<tr>
<td></td>
<td>• Longitudinal</td>
</tr>
<tr>
<td>6. The topical scope – breadth and depth – of the study</td>
<td>• Case</td>
</tr>
<tr>
<td></td>
<td>• Statistical study</td>
</tr>
<tr>
<td>7. The research environment</td>
<td>• Field setting</td>
</tr>
<tr>
<td></td>
<td>• Laboratory research</td>
</tr>
<tr>
<td></td>
<td>• Simulation</td>
</tr>
<tr>
<td>8. The participants’ perceptions of research activity</td>
<td>• Actual routine</td>
</tr>
<tr>
<td></td>
<td>• Modified routine</td>
</tr>
</tbody>
</table>

**Table 7: A Framework for Research**

**Source:** Cooper and Schindler (2006)

1. A study can be classified as exploratory or formal. An exploratory study is loosely structured, geared towards discovering future tasks, formulating questions or developing hypotheses. A formal study begins with a research question or hypothesis, involves specific procedures and data source, and aimed at answering research questions or testing hypotheses. Formal studies may contain some elements of exploration. This study assumes a formal study insofar as the research questions require answers and the research is based on specific procedures.

2. Data collection can be based on either monitoring or communication process. The monitoring process refers to data collection or recording through observation other than direct questioning.
In the communication process, the researcher elicits direct response from the subjects through interviews and questionnaires in their various forms. This study is based on the communication process of data collection.

3. The level of the researcher’s control of variables classifies a study as experimental or ex post facto. In experiments the researcher manipulates or controls the variables, for example, by holding one variable constant in order to ascertain causal relationships. In an ex post facto procedure, the researcher does not and should not manipulate the variables in order not to introduce bias. He or she reports only findings. He can only limit the subjects for collecting data through rigorous sampling procedures and subject the data to statistical manipulation. The nature of the research questions of the study presupposes an ex post facto approach to data and variables.

4. In this framework, the research purpose, as mentioned earlier, is broadly categorized into two – descriptive and causal. Description, the purpose of this study, finds out who, what, where or how much. Causal research purpose seeks to find out why by establishing relationships between variables.

5. Research works are based on time dimensions. Cross-sectional research captures a snapshot of one point in time. That is, the observation is conducted at a particular point in time. According to Sullivan (2001), it focuses on a cross-section of the population at a point in time and can still be used to investigate the development of a phenomenon over time. Surveys are typically cross-sectional. Longitudinal studies cover an extended period and captures changes over time. It tracks trends such as public opinion polling (Sullivan 2001). Interposed between cross-sectional and longitudinal studies are cohort studies. This consists of multiple cross-sectional surveys carried out at appropriate time intervals (Malhotra and Birks 2006). Neuman (2006), however, classifies cohort studies, together with time series and panel studies as longitudinal research. Cross-sectional study embraces all three research purposes – exploratory, descriptive and explanatory but most appropriate for descriptive purpose. It can not however capture social change or processes.

6. The scope of a topic underscores one of these two strategies: Statistical and case studies. Statistical studies are crafted for breadth rather than depth. They are used to capture the characteristics of a population through statistical inferences based on a sample and validity of design. Quantifiable data are tested by hypotheses. Case studies on the other hand are concerned with depth for insights for problem solving, evaluation and strategy. They “place more emphasis on a full contextual analysis of fewer events or conditions and their interrelations” (page 142).

Woodside and Wilson (2003) also propose that the principal objective of case-study research is to acquire a deep understanding of the actors, interactions, sentiments and behaviours occurring for a specific process through time. Saunders et al (2007) support this notion adding that case studies are concerned with a single case or a small number of cases. de Weerd-Nederhof (2001) observe from what she calls a more “technical” definition of case study form the work of Yin that: “A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between the phenomenon and context are not clearly evident; and in which multiple sources of evidence are used” (page 513). She also notes that Yin and Eisenhardt agree that a case study can be used to achieve different goals. It can be used for description or, test or generate exploratory or explanatory theories. They also agree that a case
study involves qualitative or quantitative data or both. Neuman (2006) observe that most case studies involve qualitative data, and citing Ragin, he writes “almost all qualitative research seeks to construct representations based on in-depth, detailed knowledge of cases” (page 40). On the flip side, case studies are tainted with the notion of being unscientific (Saunders et al 2007) because they do not satisfy enough scientific requirements for comparison (Cooper and Schindler 2006). This, however, does not take away the fact that case studies have proved their worth. A case study, well designed and properly executed can challenge theory or provide sources of new hypothesis and concepts, argues Cooper and Schindler’s (2006).

Our study is predisposed towards case study by the parameters of the investigation – limited time, unknown customer population, contemporary events-focused and nature of research questions. To answer the research questions, we need to delve deep into the perceptions of customers as well as the operations of internet banking providers. We also elected to study three banks to get a sample frame that will adequately represent the population.

7. The research environment in which a study is conducted falls under field conditions, laboratory conditions or simulated conditions. This study is conducted under field conditions.

8. Participants perceptions are found to influence research when they perceive deviation from their daily routines. Deviation may or may not be caused by the observing researcher. Deviation can compromise the quality of research. Our study is based on field research where respondents are to express their perceptions under free conditions and thus, there is little chance of researcher influence.

3.4.1 Direction of Theory Building
Neuman (2006) report that researchers approach theory building and testing form two directions – deductive and inductive. Deductive direction is “the approach to developing or confirming a theory that begins with abstract concepts and theoretical relationships and works toward more concrete empirical evidence” (page 59). Sullivan (2001) observe that some social scientist argue in favour of this approach as the preferred. The inductive approach is defined by Neuman as “An approach to developing or confirming a theory that begins with concrete empirical evidence and works toward more abstract concepts and theoretical relationships” (page 60). Sullivan (2001) describes inductive reasoning as inferring something about a group from the knowledge of one or a few members of that group. He states further that; “The logic of scientific analyses involves an interplay between deduction (testable hypotheses) and induction (assessing theories based on observations)” (page 42). Saunders (2007) describes the deductive approach as developing from theory to hypothesis and to testing of the hypothesis and the inductive approach as developing from the collection of data to the developing of theory from the data. He agrees that the combination of the two is best for most research. Our study by its objective presupposes an inductive approach. From a small unit of subjects, the research will seek to generalize its findings and secondly, collect data from which it will seek to draw conclusions. We next focus on sampling methods that will help us collect pertinent data.
3.5 Sample Selection

“There is no hope of making scientific statements about a population based on the knowledge obtained from a sample, unless we are circumspect in choosing a sampling method” - Malhotra and Birks (2006). Sampling is a key component of any investigation and involves several considerations. The aim of most investigations is to obtain information about a population. A census or sample of the population is taken for analysis. A census enumerates all the members in a population while a sample refers to a subgroup of the elements of the population selected to participate in a research (ibid) to answer the research questions and or satisfy research objectives (Saunders 2007).

Researchers invariably propose two general methods of sampling, non-probability and probability techniques. Malhotra and Birks (2006) explain that non-probability sampling is based on the personal judgment of the researcher but not on chance selection procedures whereas in probability sampling each member of the population has a fixed probabilistic chance of being included in the sample. They hold that non-probability sampling can suffer from the arbitrariness of the researcher. It can yield a good reflection of the population but it does not allow for objective evaluation of the precision of the sample. It allows for the calculation of a confidence interval.

For qualitative researcher, Neuman (2006) asserts that sampling is focused on how a small collection of cases illuminates social life. He states that qualitative research hardly draws a huge sample – “it is their relevance to the research topic rather than their representativeness which determines the way in which the people are to be studied are selected – Flick” (page 220). He reveals that qualitative researchers tend to use non-probability sampling and do rarely determine the sample size in advance and have usually limited knowledge about the population size. Quantitative research on the other hand determines the sample size in advance using mathematical theory.

The main underlying factors of a consideration of these two are budget and time constraints. Regarding this, Malhotra and Birks (2006) issue the following questions:

1. Should a sample be taken?
2. If so, what process should be followed?
3. What kind of sample should be taken?
4. How large should it be?
5. What can be done to adjust for non-response errors?

The following describes the types of non-probability and probability samples culled from Neuman’s (2006) work (page 220):
<table>
<thead>
<tr>
<th>Types of Sample</th>
<th>Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haphazard</td>
<td>Get any cases in any manner that is convenient</td>
</tr>
<tr>
<td>Quota</td>
<td>Get a preset number of cases in each of several predetermined categories that will reflect the diversity of the population using haphazard methods</td>
</tr>
<tr>
<td>Purposive</td>
<td>Get all possible cases that fit particular criteria, using various methods</td>
</tr>
<tr>
<td>Snowball</td>
<td>Get cases using referrals from one or a few cases, and then referrals from those cases, and so forth</td>
</tr>
<tr>
<td>Deviant Case</td>
<td>Get cases that substantially differ from the dominant pattern (a special type of purposive sampling)</td>
</tr>
<tr>
<td>Sequential</td>
<td>Get cases until there is no additional information or new characteristics (often used with other sampling methods)</td>
</tr>
<tr>
<td>Theoretical</td>
<td>Get cases that will help reveal features that are theoretically important about a particular setting/topic</td>
</tr>
</tbody>
</table>

**Table 8: Non-probability Sample Methods**

**Source:** Neuman (2006)
Types of Sample | Technique
--- | ---
Simple Random | Create sampling frame for all cases, then select cases using a purely random process (e.g. random-number table or computer programme)
Systematic | Create a sampling frame, calculate the sample interval $1/k$, choose a random starting place, then take every $1/k$ case
Stratified | Create a sampling frame for each of several categories of cases, draw a random sample from each category, then combine the several samples
Cluster | Create a sampling frame for larger cluster units, draw a random sample of the cluster units, create a sampling frame for cases within each selected cluster unit, then draw a random sample of cases, and so forth

Table 9: Probability Sample Methods

Source: Neuman (2006)

3.5.1 Target Population

Before we discuss the sampling method, we take a cue from Sullivan (2001) by examining the populations for which samples will be taken for the study. He proposes that to select a good sample, a clear definition of the population is vital for unambiguous and accurate findings. A target population is a precisely specified group of cases from which a researcher studies a sample and to which the results from the sample are generalized (Neuman 2006). Sullivan (2001) points out that a population should specify four things: content, unit, extent and time. Content refers to the particular characteristics that bind members of a population together or that they have in common, i.e. the parameters of the population. Unit refers to the units other than individuals of population such as organizations that form the focus of analysis. The extent of a population is the spatial or geographical dispersion of its members. Time refers to the temporal period a unit or member of the population possess the defining characteristics of the population that qualify it for the sample. For example, a customer of internet banking who reverts to bricks and mortar banking no more qualifies for a sample frame for internet banking users; the sample frame being a listing of all qualified members of a defined population. Neuman (2006) presents a model of the logic of sampling (page 226):
What you would like to talk about is the **Population**. What you actually observe in the data sample is the **Statistic**. The **Sampling Frame** is the bridge between the two, and the **Parameter** is the characteristic we are interested in. The **Sampling Process** is the method by which we transition from the population to the statistic.

**Figure 8: Model for Sampling Logic**

**Source:** Neuman (2006)

With this model, Neuman raises very important issues in sampling procedure. He reiterates the importance of the characteristics that defines a group, the sample frame, stating that a good sample depends on a good sampling frame. A mismatch of the two can engender erroneous or misleading research. He stresses that determining the right sample frame is by no means an easy task. Therefore researchers work around this problem by determining the sample frame from information obtained from preliminary sample called a **Statistic** which he defines as: “A word with several meanings, including a numerical estimate of a population parameter computed from a sample” (page 226). Essentially, this is to ensure that the sample frame accurately represents the population. An illustration is drawing a sample frame of customers using a telephone directory listing of customers of a firm. Some customers may not have telephones and will be missed out or some of the customers in the directory listing may have switched to other firms and will be included in the sample frame. Two important lessons can be learnt from this, continues Neuman. One, the sample frame is fundamental; two, the size of the sample is not as important as its accuracy in representing the population.

Another attribute of good sampling is the sample ratio. It is the proportion of the population in the sample (Neuman 2006). This brings to the fore the appropriateness of the sample size for a
Neuman relates that a decision on the best sample size depends on: (1) the degree of accuracy required (2) the degree of variability or diversity in the population (3) the number of different variables examined simultaneously in data analysis. He also observes further that larger samples, other things being equal, generate high accuracy, and are needed when the population is significantly heterogeneous or when there is the need to simultaneously analyze many data variables. In contrast, smaller samples are sufficient when less accuracy is acceptable, when there is homogeneity in the population or when only a few variables are analyzed at a time.

To answer the research questions of the study, two populations are studied. The first population is defined by banks who offer internet banking services and the second population parameters are bank customers of the selected banks who access internet banking products or services. For both populations, we used purposive sampling. It must be noted that these banks run both traditional banking and internet banking channels. Internet banking should be seen as a complementary service as represented by the banks in their commercials and brochures.

Purposive or judgmental sampling, involves selecting cases when the researcher’s prior knowledge and judgment suggests “will best serve the purposes of the study and provide the best information”, page 209 (Sullivan 2001). Neuman (2006) adds that it is a valuable sampling method for special situations with specific purpose. It is suitable for unique cases that are especially informative. It may be also used in situations where cases are difficult to reach. The disadvantages of purposive sampling are that it cannot be used to study averages such as “average worker” or “typical school” and secondly, the researcher in this regard knows not whether the case selected represent the population (Ibid).

Three banks were sampled out of a hazy sample frame of 5 to 8 internet banking services providers. From our prior familiarization with the banks, we realized that some banks’ claim of internet services were either nominal or that they had their internet banking system jumbled and had suspended the service. It became apparent that some of the commercials on internet banking were gimmicks. Based on the level of online services offered, we selected three banks. Thus, our sample was based on preliminary investigations and judgment as well as a defined focus of assessing internet banking practices in terms of offering from pacesetters of the service in Ghana.

For the second population, internet banking customers, an initial sampling target of 50 respondents for each bank was changed to 50 for all three banks after initial interactions with the banks revealed that each bank had more b2b internet banking customers than b2c. Even though the banks would not give exact figures of their internet customer base, they indicated that for b2c, our sample was too large. From our analysis of the situation, we decided that 50 respondents reflected a good sample size from our own reckoning of the sample frame of the b2c population in the three banks put together. Since our goal was to measure utility in the form of customer value, we believe that the sample will be representative of the population based on the theory of rationality of a household in the utility function (Lipsey and Chrystal 2007). The theory holds that a single household will respond to utility in a rational and spontaneous manner.

The customers were met at random at the banks. We went to the banks’ premises on Fridays, when the banks usually receive more customers than any other day of the week, in a space of six weeks. We talked to as many customers as we could on each visit to find out if they accessed internet banking services. The sampling for this group was based on theoretical or targeted (Sullivan 2001) sampling to ensure that we sampled only internet banking users.
3.5.2 Ethics and Confidentiality

According to Sullivan (2001), social researchers are bound to ethical considerations in their studies. He mentions five expressions of values that make the researcher duty bound to observe ethical tenets espoused by writers of research process books.

1. The sanctity and worth of each human being should be respected.
2. People have a right to privacy.
3. People have a right to self-determination.
4. Fairness and equity in social relations should be maintained.
5. One should not do anything to internationally harm another person (page 58).

To observe such values, Neuman recognizes six prescriptions:

1. Informed consent – disclosing all aspects of the research to respondents that might influence their decisions to participate in a survey.
2. Deception – disguised observation or surveying respondents by withholding the true hypotheses from them implicitly or explicitly. This is a subject of controversy among researchers.
3. Privacy rights – safeguarding information whose disclosure might affect respondents’ sensibilities. This is achieved by according respondents anonymity, exercising confidentiality or destroying sensitive data on respondents.
4. Harm or distress – respondents must be protected from any form of harm or distress such as damaging findings. At least they must be given the opportunity to weigh the importance of the research against personal damage.
5. Protecting vulnerable groups – refers to not compromising the vulnerability of minority or underprivileged groups through the indiscreet communication of research findings, not coercing them in any form nor exposing them to harm.
6. Withholding treatment for research purpose – this happens when some presumed benefit or treatment is withheld from a subject to see if the benefit or treatment works. This is also an issue of controversy because some research necessitates control and comparison between the controlled and uncontrolled subjects.

Neuman (2006) states that ethics begins and ends with the researcher. He gives other dimensions of ethical issues such as scientific misconduct and legality versus ethics. Scientific misconduct refers to false information and plagiarism on the part of the researcher. The distinction between legal and ethical issues can pose considerable difficulty for a researcher. The important thing here is how a researcher ingeniously juggles ethical concerns, legality and reliable research results. The matrix bellow depicts the different situations that the researcher may confront in a research.
<table>
<thead>
<tr>
<th>LEGAL</th>
<th>ETHICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>Moral and Legal</td>
</tr>
<tr>
<td>No</td>
<td>Illegal but Moral</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Legal but Immoral</td>
</tr>
<tr>
<td></td>
<td>Immoral and Illegal</td>
</tr>
</tbody>
</table>

**Table 10: Legal and Ethical Matrix**

*Source: Neuman (2006)*

The banks under study required of us some confidentiality which we assured them. They however withheld information on their complete lists of internet banking customers by evasive or direct answers. Concerning the customers we sampled, there was nothing that bothered on compromising their privacy and that they were visibly comfortable when (some of them), in response to the question of appending their names to the questionnaires, we assured them of anonymity. We also did much not to direct attention of people in or outside the bank to the respondents. Normally, in Ghana, people shy away from questions from researchers in the glare of the public.

### 3.6 Data Collection

“Every method of data collection, including surveys, is only an approximation of knowledge. Each provides a different glimpse of reality; and all have limitations when used alone. Before undertaking a survey, the researcher would do well to ask if this is the most appropriate and fruitful method for the problem at hand. The survey is highly valuable for studying some problems such as public opinion, and worthless for others” – Warwick and Lininger (page 272) (Neuman 2006).

As part of the research design, a description of the type of data to be collected and how it will be collected is stated. Data collection constitutes the basic observations from which conclusions will be made (Sullivan 2001). Data collection procedure must be sound. Pretests and pilots studies are used to achieve this.
There are a number of methods for data collecting including documentation, archival records, interviews, direct observation, participant observation and physical artifacts – Yin (Opoku and Khan 2004).

Neuman (2006) observes that surveys are suitable for research questions on self-reported beliefs or behaviours. For our purpose, therefore, we examine survey research. “Survey researchers sample many respondents who answer the same questions, measure many variables, test multiple hypotheses, and infer temporal order from questions about past behaviour, experiences, or characteristics” – Neuman (page 276). More precisely, a survey is a data collection procedure in which information is gathered or elicited from respondents through questions or statements (Sullivan 2001).

Survey studies commence with a theoretical or applied research problem and ends with empirical measurement and data analysis (Ibid). To conduct a study, the researcher goes through a number of steps outlined by Neuman in the table below:
### Step 1:
- Develop hypotheses
- Decide on survey type – interview, mail, etc.
- Write survey questions
- Decide on response categories
- Design layout

### Step 2:
- Plan data recording
- Pretest survey instrument

### Step 3
- Define target population
- Define sampling frame
- Determine sample size
- Choose sample

### Step 4
- Locate respondents
- Conduct interviews/administer questionnaire
- Record data

### Step 5
- Enter data into computer
- Recheck data
- Perform statistical analysis on data

### Step 6
- Describe methods and findings in research report
- Present findings to others for critique and evaluation

**Table 11: Research Steps; Source: Neuman (2006)**
The first step brings us to issue of measurement and operationalization. Sullivan (2001) explains that the concepts and variables that are used in research cannot be directly observed normally. As an example, customer value and internet banking are abstracts that cannot be directly seen but inferred from certain indicators which are assumed to be evidence of the attributes or properties of these phenomena. Operationalization is the precise procedures to be followed in measuring a concept.

Definitions are used to operationalize such abstract concepts or assign them common meaning.

Measuring variables take three forms. In verbal reports, people give information by responding to questions or interviews. Observation measures variables by using the senses such as directly watching or listening to people in a setting and recording what they are saying or doing. Archival report refers to reviewing recorded information to find out about a variable (Ibid). To measure or collect information for processing and analysis, researchers collect primary data directly from the field of study. To analyze or review data, researcher utilizes information from other sources. Such information constitutes secondary data.

The study employs survey techniques, tools or instruments as they variously called in collecting primary data. Questionnaires and interviews are two basic tools for conducting a survey (Sullivan 2001). A questionnaire is a form that contains typed questions respondents respond to by filling the forms. This form can be given directly to the respondents or sent to them via mail or internet. An interview involves directly reading out questions to respondents and recording their response. It is conducted face-to-face or over the telephone (Ibid).

Exponents of research have place much emphasis on well crafted questions that can be answered by respondents without further clarifications or assistance (Sullivan 2001) and that will give the researcher valid and reliable data (Neuman 2006). Writing a question is more of an art than a science—asserts Neuman–It requires skill, practice, patience and creativity. He recounts ten principles to question writing.

1. Avoiding jargons, slang and abbreviation
2. Avoiding ambiguity, confusion and vagueness
3. Avoiding emotional language and prestige bias. Prestige bias is associating a statement with a prestigious person or group that may alienate or otherwise respondents whose response may then be bias
4. Avoiding double-barreled questions – two or more questions joined together
5. Avoiding leading or loaded questions which may lead a respondent to choose one response over another by its wording
6. Avoiding asking questions that are beyond the respondent’s capabilities to answer
7. Avoiding false premises
8. Avoiding asking about distant future intentions
9. Avoiding double negatives
Avoiding overlapping or unbalanced response categories

Questionnaires present questions in two forms—open-ended and close-ended. In open-ended questions, respondents are not restricted to a number of answers from which to choose, they are free to give any answer they wish to the question. In close-ended questions, respondents are restricted to a fixed set of questions from which to choose. Partially open-ended questions, in addition to fixed questions, include a final open choice of “other” allowing the respondent to give a different answer other than those in response to the fixed questions (Neuman 2006). Both question forms have their advantages and disadvantages. For open-ended questions, an important advantage is that they give in-depth response and unanticipated findings may be discovered and one disadvantage is that they are difficult to code. In close-ended questions, the questions are easier and faster for respondents to answer and easier to compare, code and analyze statistically by the researcher. As a disadvantage, close-ended questions may restrict respondents from giving in-depth response (Ibid).

Interviews have the highest response rate and allow longer set of questions and deeper probe. In face-to-face interviews, researchers get additional insights into answers through non-verbal cues. The main disadvantage of conducting interviews is cost (Ibid).

To achieve the objectives of the study, questionnaires and interviews were used. We used interviews to collect data from internet banking representatives, one for each bank. We administered questionnaires to the customers (respondents). An arrangement for a focus group exercise with 10 customers whose co-operation we had enlisted failed. Only two turned up for the discussion—one of them was very late. It became apparent that organizing a group again was not likely to be successful as most respondents live far off from the commercial centre of Accra or had tight working schedules coupled with the heavy traffic in the central district as well as a host of other reasons.

Before data collection, we visited the selected banks in order to familiarize ourselves with their operations and internet banking customers, build a rapport with the internet banking staff and explain the purpose of the study. Formal interview sessions were arranged at convenient periods with the respondents.

To ensure a good response rate and clarify any question that might arise, we endeavoured to appeal to our respondents to fill and submit the questionnaire in our presence. It was part of our strategy to directly explain the questions to the respondents before they filled in their responses. A few insisted on taking the questionnaires home and returning them to the banks or preferred to answer the questions for us to enter the responses. For both, we obliged. In all 84% of the questionnaires were either filled by us or filled by respondents in our presence. In the process we explained the questions to them taking care not to introduce any bias.

Our questions for both the interviews and questionnaires took open-ended forms to capture as much relevant information as possible. The last question in the questionnaire is in the form of a multiple-item scale to enable an easier coding and analysis of the satisfaction index (see appendix). From our personal experiences and views of former students who have conducted some research, will-be respondents are less enthused when they are presented with lengthy
questionnaires compared to short, typically one page questionnaire. In order to encourage the typically hurried banking customers to fill the questionnaires, we considered it prudent to keep the number of questions to a minimum of 8 but at the same time generate enough inquiries that will address the research questions. This necessitated having half of the questions as two-in-one. The interviews were conducted with one staff of the internet banking section of each bank within the premises of the banks. We wrote down their responses.

3.7 Data Analysis
Sullivan (2001) opined that data analysis can be the most challenging and interesting aspect of research. It refers to deriving meaning from the data that had been collected in a study. Data analysis assumes many forms. In qualitative data analysis, a researcher may use a summary description of the data collected from the field. Quantitative data analysis involves the use of statistical methods to assemble, classify, analyze and summarize the data to derive meaning (Ibid).

As indicated earlier, we conducted field research to collect data from the banks and their customers using interviews and questionnaires respectively. After the data collection, data reduction was conducted to select, arrange, refine, focus and summarize the data for onward analysis. We used summary description to analyze the data. Data was analyzed based on how each response reflects the associated research question. Conclusions were then be made.

In the analysis, the three interviews and 45 questionnaires were used. Three questionnaires were not retrieved from some of the respondents who had preferred to take them away and to return them to the banks after filling them. Two were rejected for incoherent language. Based on the assumption that the consumer was a rational being and made rational choices (Lipsey and Chrystal 2007), we felt that responses from 45 customers, representing 90% of the respondents (were as rational as the entire population), were reflective of the entire population which we had surmised to be less than 200 (b2c customers) for the three banks put together.

3.8 Validity and Reliability
The findings of a study take credence from its validity and reliability. Saunders et al (2007) observe that these two constitute the credibility of a study. Validity confirms if the findings actually represent what they purport (Ibid). Neuman (2006) refers to it as: “The ability to generate findings beyond a specific study” (page 265) writing in the context of quantitative data analysis. For qualitative data analysis, he refers to validity as how the researcher’s data and analysis accurately represent the realities in the field. He gives four points on the authentication and trustworthiness of a research project:

- Ecological Validity: how the researcher’s data represent the response of respondents and the extent to which the researcher serve to distract respondents
- Natural Validity: in-depth account of a logical procedure
- Member Validation: confirmation of researcher’s report by the elements he studied
Competent Insider Performer: researchers participation as an element of studied population

The validity of our study is rooted in the close alignment of the research questions, frame of reference and the design and purpose of the questions administered in both the interview with banking staff and questionnaires distributed to the customers. The data that was gathered directly addressed the issues raised in the research questions. With a well-calculated approach to sampling, the interviewing of banking staff and the administering of questionnaires to the customers, cross-checking of data and alignment of the research questions to respondents’ answers, the findings of the study reflects the general situation of internet banking in Ghana as it relates to customer value perceptions.

Ascertaining Internet banking products and services of the banks required direct inquiries from the banks. This was also cross-checked with their websites, brochures and responses from the customers. The three banks were sampled based on their relatively higher leverage of the internet in their operations. For customer value perceptions, the only way to assess this data was to survey the customers directly (McEachern 1998).

The reliability of a study refers to, according to Yin: “demonstrating that the operations of a study – such as data collection procedure – can be repeated with the same results” (Jung and Widmark 2005). In this regard, we first established rapport with the banks by visiting them on a few occasions and familiarizing ourselves with their internet services by interacting with them, reading their brochures on their products and services and browsing their websites. The interviews were rather a formal collection of data and corroborated our initial findings, and by this we minimized interview bias. We also enjoyed good co-operation from the interviewees. The respondents of the questionnaires were also treated with tact and we administered the questions meticulously so as not to influence any response. They generally showed a lot of interest and willingness to offer their responses. With the endorsement of the banks to the survey, we were more or less seen by the customers as working for the banks and that our survey was a means to improve internet banking services for them. We also used simple language in the questionnaire to facilitate understanding in addition to thorough explanation of the purpose of the questionnaire. Furthermore, respondents were quite educated in terms of their levels of expression of the English language.

Neuman (2006) identifies internal and external consistency as measures of reliability. Internal consistency refers to “whether the data are plausible given all that is known about a person or event, eliminating common forms of human deception. In other words, do the pieces fit together into a coherent picture?” External consistency is accomplished by verifying or cross-checking qualitative data using different sources of information (Ibid).

This study can be replicated to achieve the same results within the prevailing timeframe. The steps employed to gather data were coherent and reinforced each other –

- Initial interaction with the banks and a few internet banking customers
- Information scanning of the banks’ online banking portals
- Interview of banking staff
- Administering of questionnaires to customers.
Summary of validity and reliability:

<table>
<thead>
<tr>
<th>Validity</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Validity of data from different sources</td>
<td>Coherence of procedure</td>
</tr>
<tr>
<td>• Validity of data from literature review</td>
<td>Appropriate sampling frame</td>
</tr>
<tr>
<td>• Logical data collection procedure</td>
<td>Appropriate frame of reference</td>
</tr>
</tbody>
</table>
CHAPTER FOUR
RESULTS

4.0 Introduction
Here, we present the data collected from the two samples, i.e., the interviews with the internet banking staff of each bank and the collective response to the questionnaires by the customers. The presentation will be in two parts, data collected from the bank staff and that collected from the customers. Each set of data will be juxtaposed with the specific research question it seeks to answer for analysis.

4.1 Background of Banks
Before we sort out and analyzed the data collected, we present a background of the banks with regards to what the online products and services they offer. This information was gathered from their websites and brochures and compared with what was gathered from the interview and what customers confirmed they receive from online banking. The listing of the products and services would show the homogeneity of the banks and their qualification as members of the population under study.

4.1.1 Background of Respondents (interviewees)
Staff members of three banks represented the following banks: CAL Bank, Ghana Commercial Bank and Merchant Bank. They were made up of one female and two male respondents. All the three respondents have worked in their respective banks for over three years and were quite familiar with the operations of internet banking. They shared common views on internet banking and enumerated their products/services.

4.2 Major Internet base product/services provided by the three banks

<table>
<thead>
<tr>
<th>CAL Bank</th>
<th>Ghana Commercial Bank (GCB)</th>
<th>Merchant Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>CalNet</td>
<td>Commernet plus</td>
<td>Online Account Opening</td>
</tr>
<tr>
<td>Email subscription</td>
<td>smartPay</td>
<td>Online feedback forms</td>
</tr>
<tr>
<td></td>
<td>Remit International</td>
<td>Account services, etc.</td>
</tr>
</tbody>
</table>

Table 12: Sampled banks and their online products/services
CALNet

This is the online banking services of CAL Bank which offers a range of services and information to customers. It is designed to offer customers self-service access and management of personal and/or business account(s) from the comfort of their offices or homes.

With CALNet, customers can:
• Access account(s) from anywhere in the world
• View and verify transactions on account(s)
• Check Balances
• Reconcile entries in account with their own records
• Print Statements
• Download transactions for the month
• View & track investments with the bank
• Track inflows and outflows
• Monitor uncredited and unpresented cheques and many more

Email Subscription

This is a free internet service which allows customers to provide their names and email addresses to receive current offers from the Bank.

Commernet plus

This is an internet service provided by GCB which enables customers to access basic banking services such as checking balances and printing statements online.

SmartPay

This is a special service for students to pay their school fees in any branch of the bank.

Remit International

This is an online service of GCB that enables customers in other countries to send remittances to relatives and love ones in Ghana.

Online Account Opening

This service of Merchant Bank allows potential customers to open an account online. The process involves providing information, agreeing to the terms and conditions, printing, signing and sending the document to the bank before the account is opened. Thus, the opening of the account is completed physically at the bank. This service offer some convenience to customers in terms of reducing the time required for opening an account in the traditional way.

Online Feedback forms

This feedback forms allows customers of the bank to give suggestions or lodge complaints. Complaints are quickly acted upon by the banks.
Account Services

Under this section customers view their account information, download the account statement, request for a cheque book and ascertain the status of issued cheque online.

Newsletters subscription

The Newsletters provide information on various products, product launchings, new business policies and regulations, upcoming events, news about the achievements of the company and its employees and other pertinent issues.

Fund transfers

This online service enables a customer to make fund transfers from one account to another (of the customer). Customers can also set up standing orders to make the process simpler and faster.

Market watch

Customers can check out current exchange and interest rates.

Personal update

In this section, internet banking offers customers the online facility to manage their personal information – their password, address and all other personal information.

4.3 Summary of products and services

The products and services of the three banks are practically parallel. Referring to the three levels of internet banking as identified by Boateng (2006) and Yabin (2003) in the table below, we measure the level of internet banking offerings of the banks.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Information-push where customer can access banking information</td>
<td>Basic information e-banking</td>
</tr>
<tr>
<td>2</td>
<td>Information-download where customer can access account information and</td>
<td>Simple transactional e-banking</td>
</tr>
<tr>
<td>3</td>
<td>Full-transaction where customers can actually carry out transactions with the bank such as money transfer, payments card and loan application or more recently, electronically save money</td>
<td>Advanced transactional e-banking</td>
</tr>
</tbody>
</table>

Table 13: Levels of Internet banking
Assessing the level of the products and services of the banks from the levels of online banking in the table, we can describe the internet banking services as simple transaction e-banking. This includes information-push, information download and simple transactions. Needless to state, this implies that the internet banking services go hand in hand with traditional banking.

In contrast to traditional banking products and services, all the products and services of internet banking can be obtained from the traditional channel. The difference here therefore rests solely on the difference in the channel delivery.

4. Data collected from interview with bank staff to address the research questions: (1) What are the products and services that internet banking providers in Ghana offer to their online banking customers? (2) What are the values that such customers perceive in internet banking in Ghana?

1. What are the major internet base products/services your bank provides to it customers?

As cataloged and explained in the preceding heading, the respondents recounted the product and services that their banks offered online and this corroborated what we found on their websites, brochures, commercials and customers’ identification of the online products and services that they access from the banks. The feedback from the customers was especially important because some services could only be assessed with a customer password and cannot be confirmed by merely visiting the websites.

2. How has internet banking improved your bank’s productivity?

The respondents indicated that internet banking has increased the productivity of their banks as well as that of their customers. Both the banks and their customers save more time and cost, and in addition, they save more man-hours for the banks. As customers are spared long queues in the banks and the trouble they have to take in going through heavy traffic and long distances to reach their banks, correspondingly, the pressure on traditional banking outlets are reduced thereby improving services for a fewer number of customers.

3. What kind of feedback do you receive from your customers on the internet banking services?

According to the respondents, the customers were enthused by the novelty of the internet channel and the services they access from it. The complaints they receive centre on internet connectivity and the slow uploading of banking websites and links. They contend that their systems were robust but the poor internet services provided by ISPs affect the delivery of the channel. It was gathered that the banks had very manageable customer base.
4. What products/services do you plan to introduce into the internet banking in the future?

The banks are aiming at moving more products and services online and improving on existing services. These include:

- Getting real-time balances on clients’ accounts
- Online payments for goods and services
- Payment of bills to be extended to other areas such as water bills and telephone bills
- Viewing and downloading the last 3 months of customer account activities
- Cross-buying opportunities in insurance, mortgage, etc.

5. What is your general impression about internet banking?

The respondents opined that the model is progressively enjoying acceptance and would soon become fully-fledged in the sense that it will significantly reduce customer visit to the banks. They also believed that internet banking would grow with the expansion of internet connectivity and predicted that, as with other electronic banking platforms such as telephone banking and ATMs, internet banking will become an arena of keen competition among banks in Ghana.

From their responses, we also gathered that internet banking was presently considered by the banks as more of a product and service than a banking channel in its own right.

6. What exactly do you think customers value in terms of internet banking services?

All three interviewees cited cost saving in terms of time and location convenience in accessing some of the banking services online that gave customers real benefits. Easy access to a lot of information online was also cited as another area of benefits to customers. Compared with customer response to value perception, these answers confirm to some degree what customers recounted.

7. What are the challenges that your bank is facing in providing internet banking services?

The responses to this question are itemized as follows:

- Access to internet connection: The limited access to internet use is a major setback to the growth of internet banking which requires infrastructure and equipment for both bank and customer. Many customers have expressed interest in accessing online services but are constrained by access or cost to internet connectivity.
- Website problems: According to the interviewees, poor ISP services sometimes make customer access to internet banking portals very slow resulting in customer complaints.
Reluctance to change: The interviewees revealed that there was a clear sense of misgivings about internet banking among some customers who were offered online services because they either use the internet at home or in the office. This category of customers was mostly made up of older people. They simply prefer the traditional channel.

Two respondents cited security concerns as a major challenge because any breach of security could have a derailing effect on the progress of internet banking.

4.5 Data collected from internet banking customers from the questions posed in the questionnaires and based on the frame of reference to address the research questions.

We first present the distribution of internet banking customers based on sex, account type and age distribution. A total of 50 questionnaires were distributed among the three selected banks. However, 45 were retrieved out of which, 55.5% were male respondents and 44.5% female. 29% of respondents run a savings account, 11.1% current accounts and 67.5% run both savings and current accounts. 8.8% were below 25, 80% above 25 and 11.1% above 50.

Figure 9 Sex of respondents

Figure 10 Account type of respondents
1. Why did you subscribe internet banking? And what are the products/services that you can access online from your bank?

The two questions were meant to reinforce each other in that they were aimed at getting respondents to reveal the value they perceived before subscribing online services. Woodruff (1997) argues that customer perceived value is relative to the circumstances within which he/she makes the decision such as when making the purchasing decision.

Respondents indicated that they subscribed online service because they use the internet at home or office, because of its introduction by their banks, or because they perceived it as modern.

Regarding the question on the kinds of product and service that the respondents access from internet banking, they enumerated all the product and services that the banks offer online confirming what we gathered from the interviews, websites, brochures and advertisements.

2. How do the online products and services differ from traditional banking products and services that you know?

This question was aimed at identifying, if any, any product or service peculiar to online service and the how the internet channel shapes the products and services also offered through the traditional channel.

The respondents did not perceive differences between online products and services and those of traditional banking except in the self-service dimension of internet banking and the vast information that were readily available online. None of them identified any exclusive, innovative or a different product in the online service. They also stressed on the time and cost saving advantage of the online service.
3. How reliable or good is your internet connectivity and how does online banking save you in terms of monetary and time costs?

*This question was to find out the speed of internet connection and how it saves costs when respondents access banking services from it. This was to measure the spatial and temporal dimensions of customer value perceptions.*

77.7% of the respondents have problems with internet connectivity. Nonetheless all respondents felt that they were saving costs from using the internet in terms of time and money. They explained that by accessing online banking services from their homes or offices, they save time and money and the trouble they encounter in going to the banks, and also it gave them some control over their banking affairs.

4. How do you find the internet banking website or portal you use in terms of accessibility, appeal, navigation, content and responsiveness? Have your expectations been met?

*To assess the functional dimension of the customers’ value perceptions of internet banking, we posed this question.*

Accessibility and navigation of web portals: 55.6% of respondents complained about accessibility and navigation of the websites of their banks and that they sometimes have to resort to telephone banking or physical banking to access timely account information while 44.4% where satisfied. The possible explanation for the different perception is that some ISPs provide faster connectivity than others. Those who complained that at peak hours—within working hours (in Ghana, from 8:00am to 5:00pm) as well as early in the evenings—accessing and navigating the websites were rather very slow. They often do not get linked up to the websites. In the night or early morning, however, accessibility and navigation improves significantly. 86.7% felt that there were too many steps in accessing account information.

Appeal and content of web portals: Only 6.7% gave definite answers to appeal and content apparently because they had some technical appreciation. They felt that the web portals were not as appealing as they expected and that the banks were not giving them enough content. The rest of the respondents, upon further explanation of appeal and content felt they had no cause to complain.

Responsiveness: 77.8% respondents were positive about this. They get feedbacks for their requests within the stipulated time. 33.3% suggested that the banks should improve on their response time.

5. What benefits do you get or problems do you encounter with internet banking?
This question was designed to elicit any other benefits/value or problems not captured in the preceding questions.

Respondents reiterated the cost benefits they get in time and location using the internet and the control or self-service advantage. Regarding the problems they encounter, they again referred to slow connectivity and downloading during the day. 8.9% of them express strong feelings about the inadequacies.

6. Do you have any concerns regarding your security and privacy in accessing online banking?

We pose this question to gauge the issue of security and privacy as elements of the functional dimension of value.

On the whole, respondents had had no security threats or privacy violation. 77.8% however expressed concern that internet fraudsters might soon be attracted to online banking in Ghana.

7. What kind of additional online products/services would you wish were provided by your bank?

This question was to map out any additional benefits or value that respondents wish they could get from internet banking.

On the whole, respondents wished they could carry out full transactions with their internet banking portals with adequate security, and also cross-buy from other financial institutions and do some shopping. They felt that the present services provided by their banks were limited compared to what pertained in other parts of the world.

8. Overall, to what degree have your expectations and requirements been met? How satisfied are you?

To give an overall indication of the level of customer value, we elected to use a satisfaction index. Satisfaction, from literature, is a function of customer value which in turn is a function of customer expectation and requirements.

The chart below gives the satisfaction distribution of the respondents.
Figure 12: A histogram of satisfaction levels of respondents
CHAPTER FIVE
DISCUSSION OF RESULTS

5.0 Introduction
In this chapter, we discuss the results of the data we collected in relation to the frame of reference, concepts and theories that underpin the study. The discussion is presented in two parts according to the research questions.

5.1 Research Question One: What are the products and services that internet banking providers in Ghana offer to their online banking customers?

Woodruff (1997) espouses the theory that customer value leads to customer loyalty. Many researchers view customer value as a key element in achieving company success (Salem Khalifa 2004). Internet banking promises customer value in a highly dynamic and competitive world with Ghana not being an exception. With banks in Ghana venturing into internet banking, the study tries to identify the kind of products and services such banks are offering to deliver customer value and on the other side, the value perceptions of customers who access such services to give a perspective of how the two concepts, internet banking and customer value, interact in Ghana.

The study revealed that internet banking is a complementary service to traditional banking in Ghana and falls under the second category of e-banking—simple transactional e-banking (Yibin 2003). In identifying the products, we took a number of approaches. We examined the websites of the banks, read through their brochures and other advertising devices, interviewed representatives of the banks and matched the information gathered with customers’ responses regarding the products and services. We present the products and services in comparison to those outlined in literature as typical online products and services by Buys and Brown (2004):
<table>
<thead>
<tr>
<th>Internet Banking Products and Services offered in Ghana</th>
<th>Internet Banking Products and Services outlined by Buys and Browns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account opening (in part)</td>
<td>Account/Bill payments</td>
</tr>
<tr>
<td>Checking of accounts balance</td>
<td>Balance enquiry</td>
</tr>
<tr>
<td>Track inflows and outflows</td>
<td>Stop and Debit order payments</td>
</tr>
<tr>
<td>Money transfer</td>
<td>Funds transfers</td>
</tr>
<tr>
<td>Enquires</td>
<td>Email branch or customer contact centre (secure messaging)</td>
</tr>
<tr>
<td>Financial information</td>
<td>Open and Manage Investment accounts</td>
</tr>
<tr>
<td>Statement of Accounts download</td>
<td>Statement of bank account</td>
</tr>
<tr>
<td>Cheque book request</td>
<td>Cheque book request</td>
</tr>
<tr>
<td></td>
<td>Account/Bill payments</td>
</tr>
<tr>
<td></td>
<td>Beneficiary set up</td>
</tr>
<tr>
<td></td>
<td>Short-term recurring payments</td>
</tr>
<tr>
<td></td>
<td>Increase/Decrease overdraft</td>
</tr>
</tbody>
</table>

**Table 14: Comparison of Internet Products and Services**

The various products and services of the internet banking providers are listed in the first column of the table as above. The second column shows Buys and Browns’ listing of internet banking products and services. The services provided by the banks generally cover information-push where customers can access banking information, information download where customers can access account information (Boateng 2006) and simple transactional e-banking involving fund transfer (Yabin 2003).

The services that are not offered by the banks include full transactions such as account/bill payments and short-term recurring payments as well as advance services beneficiary set up and increase or decrease overdraft. So far, the products and services enumerated are purely banking services. Cross-selling is one of the key models of the internet platform. In banking, as we learned from literature, cross-selling include mortgage and insurance. Thus, the internet banking providers have a wide range of offering they can offer as they consolidate existing products and services.
5.2 Research Question Two: What are the values that such customers perceive in internet banking in Ghana?

As indicated already, the essence of internet banking was to provide products and services that will give customers value. The concept of customer value has been proposed to be multifaceted in literature. The general consensus was that customer value was a trade-off between benefits and sacrifices associated with a product or service. It was also found to be relative to competition, type of product or service and customer expectation. Customer value assessment for internet banking drew out a frame of reference based on four dimensions motivated in literature. It was conceptualized as a bundle of technical, functional, spatial and temporal dimensions. To evaluate customer value in internet banking, a survey of a sample of internet banking customers of the aforementioned three leading banks in internet banking based on the frame of reference was carried out.

The technical dimension of customer value was linked with the online products and services that the banks offer their customers. The study sought to identify any differences between value perceptions of the products and services of online banking and offline banking. Data collected showed that the online products and services were not only limited in comparison with those of the traditional outlet but were also complemented by the traditional channel. The question of the extent to which banking services can be channeled through the internet may then arise. Would it be savvy, or even possible, to provide all banking products and services to customers via the internet channel with no need for physical contacts? From literature review, we learned that customer physical interaction with the bank is important in relationship building but internet banking increases the distance between the two (Jansson and Letmark 2005). Nordman (2004) espouses the theory that personal contact promotes deeper relations. A pure-play internet banking would have many implications such as security, trust, demography, etc.

The functional construct of customer value was represented by the channel attributes. These included ease of use, usefulness, reliability of internet connection and website, security and privacy. From the survey, internet connectivity, website access and navigation were identified by just over half of the respondents as very slow during day time. This was attributed to the ISPs in Ghana by the bank staff. The nearly half who made no complain about connectivity were likely to be getting faster access from their service providers. Slow website connectivity and navigation can be linked to, in addition to slow internet connectivity, other causes such as website design. For those with slow connectivity, ease of use was compromised as they have had to resort to calling on their respective banks physically or by phone when the websites unduly delayed in uploading. The other aspects of the websites that were looked into were their appeal and content. Generally, respondents had no reservations about the two. 6.7% though thought that both the appeal and content needed improvement. Usefulness represented the self-service element of the functional element that has to do with customers’ control of the online services such as checking and printing account information. The customers affirmed the self-service utility of the channel in terms of the control they are able to exercise in accessing online services from the comfort of the homes or offices and at their convenience. Imbedded in usefulness is responsiveness. Responsiveness refers to response or feedback rate. The customers generally felt that their banks were responsive enough. The issue of security and privacy, contrary to our expectation, was not an immediate threat although most of the respondents were concerned about the growing internet
fraud reported by the media. The lack of security threat or infringement on privacy could be reconciled with the limited nature of the online services provided by the banks which attracted no major security breaches. The banks actually provide some security mechanism for the services they currently offer.

The spatial value of internet banking was fully conceived by the customers as cost-saving and convenience. This, in part, corroborates Heinonen’s (2004) findings on the importance of the spatial and temporal value dimensions which she also found to outweigh the technical and functional dimensions.

The temporal value dimension was also confirmed as inherent to the internet banking. Customers have had the leisure to access basic bank services around the clock. Both the temporal and spatial value dimensions were however affected by the slow internet and website connectivity experienced by some of the customers during daytime forcing them to occasionally phone or visit their banks.

From the data collected, customer value, though perceived, falls short of customer expectation because of the difficulty they face in connectivity curtailing their full control of accessing bank services. For the functional, spatial and temporal dimensions, customers expect unbroken online services whenever and wherever they may be. For the technical dimension, the customers desire more products and services.

5.3 Discussion of framework of customer value
The study has so far established that customer value is a bundle of costs and benefits encountered by the customer in consuming a product or service relative to competition, kind of product or service and customer expectation. To discover the level of customer value vis-à-vis the online products and services offered by the banks, the data collected was not based on competitive analysis. Again the cost of internet banking access was assumed to be fixed. The kind of products/services and benefits obtained from online banking were captured in the conceptual framework and weighed against customer expectations in the survey. The study was conducted to generalize findings.

5.4 General discussion
From the overall analysis of the data collected for the study, we surmise that the future holds a lot of prospects for internet banking even though the phenomenon in Ghana is beset with problems that can understandably be considered as teething problems. The banks have demonstrated amble zeal for internet banking and are taking measures to rope in more customers. The few banks that have taken up the challenge are chalking up some successes amid the problems, which can largely be ascribed to the problems of internet connectivity, they encounter. Once customers perceive value from the online services, it behooves the banks to close the gap between customer expectations and customer value.

To achieve this, the banks need to step up their technological capacity. On another hand, government policy ought to press for rapid infrastructural expansion of the internet platform to
improve the economic lot of the nation. Secondary data shows a slow rate of internet diffusion in Ghana.

The data also indicate a positive relationship between the development of internet banking and customer value. Abor (2004) observe that other elements of electronic banking such as ATMs and electronic cards are well patronized in Ghana and this presupposes the predisposition of bank customers to embrace internet banking if it is made more accessible and adoptable. Furthermore, the poor physical planning that characterizes town and city layouts in Ghana creates the problem of difficulty in accessing banks by customers either because of the sheer distance to the banks or heavy vehicular traffic cause by narrow streets.

From the responses of the banking staff, it was suggested that the older generation did not find internet banking attractive. In contrast, the younger generation, especially those engage in white-collar jobs found internet banking useful.

5.5 Summary of discussion

The study revealed that the level of internet banking in Ghana was largely at the information-download stage (Boateng 2006) or simple transactional e-banking (Yibin 2003) with no full-transactional services or cross-buying opportunities. Consequently, online product and service (technical dimension) have not developed much in value-added terms compared to the traditional products and services. The channel attributes (functional dimension) were found to deliver value in terms of self-service but were beset by slow internet connectivity and website downloading and navigation during peak hours of internet use–daytime. The slow connectivity also affected the location and time factors (spatial and temporal dimensions) which however came up strongly as cost-saving values.

It also became apparent in the analysis that to bridge the gap between customer value on one hand and customer expectation and latent demand on the other, the banks need to step up their products and services taking into consideration other implications—security, improved connectivity, improved technology, etc.
CHAPTER SIX
SUMMARY, CONCLUSION AND RECOMMENDATION

6.0 Introduction

The discussion will now veer to conclusion and recommendation. It will recapitulate the findings, look at theoretical and managerial implications, and finally recommend areas of further research.

6.1 Major points

The study traces the development of internet banking, its challenges, trends, implications and prospects as well as the concepts and theories that have emerged from various scholarly works. The internet technology has been reported by researchers to be well-suited for the financial sector. Some quarters however theorize that internet banking can not stand alone and must be seen to be rather complementary to bricks-and-mortar banking.

The study explored the concept of customer perceived value. Various conceptualizations were reviewed. Customer value was found to emerge from the intrinsic value of a product or service and the added value that is developed to form an offering mix. Customer value was analyzed in the review as a bundle of sacrifices/costs and benefits. If the benefits outweigh the costs of a product in the customer’s judgment, then he or she perceives value in the product. Customer value was influenced by competition. The competitor who produced more benefits over cost provided more customer value. Customer value perceptions also depended on customer expectation. The closer the perceived value was to the expectation, the higher the customer value. Finally, customer value dimensions differed from one product or service to another.

Customer value in internet banking was conceptualized based on literature to measure customers’ value perceptions of the online banking services in Ghana. Four dimensions were identified and developed in formulating the concept: technical, functional, temporal and spatial dimensions based on Heinonen’s model.

To measure customer value for online banking services, research questions were developed that sought to identify the value offering of the online banking and the corresponding value perceptions of customers. A survey was conducted using interviews and questionnaires to collect data from the banks and their customers. The analysis of data followed a descriptive summary of data approach.

It was found out that the online products and services were not only limited but also beset by slow internet connectivity for over half of the cases examined. Thus, customer value fell short of
expectation. Nonetheless, customers relished the advantages of the online services and expressed the desire for more services online.

6.2 Theoretical implications

Customer value creation was identified as the marketing strategy around which competition would revolve. This formed the basis of interest in the subject. Customer value was also found to be linked with customer satisfaction and customer loyalty. The two are also linked to customer retention and re-purchase decisions. Customer value therefore forms the foundation for which businesses attract and retain customers.

This study forms an element of the various interactions that underline the background to it. The keen competitiveness that has seized the banking sector has opened the doors to different strategies. Digital technology, branch banking, door-to-door marketing, and promotions among others are some of the strategies used by the banks to serve more customers. Internet banking is emerging as the next area of competition. This area is untapped in terms of research.

The study serves as a springboard for the testing of the theoretical linkages in customer research in the area of online banking in Ghana. It gives adequate contextual descriptions of the concepts of internet banking and customer value and how they co-exist. It lays the foundation for drawing hypotheses and for further theorizing.

6.3 Managerial implications

Internet banking clearly offers opportunities to banks in Ghana. The environment is however fraught with challenges which can translate into opportunities given the right approach to strategy. For the competitive bank, internet banking provides a ‘gold mine’ of customers. Managers must, in addition to short-term strategy, take a long view of strategy as the internet infrastructure expands. Already, there are a number of policy initiatives to increase internet access.

The literature review and data analysis unfold the different facets of internet banking around which managers can draw strategies. In addition to creating customer value, banks can also create business value via online services. Chiefly among the benefits identified by most researchers is cost saving.

Banks in Ghana have placed a lot of emphasis on the spatial and temporal requirement of their customers by opening up more branches and promising time limits in services for certain categories of their customers. For an effective, cost-effective and seamless strategy, the internet should be leverage so that instead of opening up more physical branches, banks can focus more on virtual branches in the numerous homes and offices of potential customers. The money that
will be saved from not putting up physical buildings can be channeled into developing internet infrastructure and service either directly by buying stakes or indirectly by providing loans to the industry.

Instead of spending huge sums of money building a single physical branch, a bank can set up a fully operational internet banking service that can reach a million customers. Booz and Allen are reported to have estimated that the cost of depositing a cheque with a real-live bank clerk over a branch counter was around 65 pence. By post and telephone, the cost of the same transaction is halved. With a dial-up PC banking service, it halves again to about 15p. With Internet banking, the cost drops to below 5p and in some cases as low as 1p.

It must not be lost on managers that competitive advantage is no longer a function of innovation, technology, quality, downsizing or restructuring but rather, they should focus on value perception from the perspective of the customer (Woodruff 1997). Thus internet banking should not be merely institutional or technical; it should be customer value sensitive. Indeed, successful internet banking is a convergence of many things—the internet backbone, network infrastructure, internet service, banking software, customer internet connectivity, reconfiguration, strategy and customer value.

Banks must also create the environment that will encourage customers to hook up. Many potential customers who cannot purchase personal computers and internet connectivity can be encouraged to acquire them through special bank loans payable through small monthly deductions from the customers’ account. They should first focus on existing bricks-and-mortar bank customers by giving them incentives to go online. On strategic channel focus, banks must leverage the synergy of both traditional and banking channels (Frambach et al 2007).

It is reasonable to predict that internet service will improve; many more banks will go online and competition will come into focus in this area. Wu et al (2006) strongly suggest from their findings that e-banking will prove disruptive to traditional banking and therefore core competencies and new ways of serving the customer must be developed. We hope that this work will set the stage for a rigorous approach to internet banking.

### 6.4 Limitations

- Time and resource constraints restricted the research to customer value analysis from B2C perspective.
- Since internet banking is not full-fledged in Ghana and implemented alongside traditional banking, the investigation into customer value perceptions were also limited in terms of the limited level of internet banking.
- Online access to some literature proved futile because of the limitation imposed by inadequate internet service.
6.5 Suggestions for Further Research

This work sought to increase the understanding of customer value perceptions in internet banking in Ghana. Other related areas of research that can be developed from this work and in the context of Ghana are:

- Business value in internet banking
- Impact of internet on banking
- Demographic analysis of potential internet banking users
- The rate of diffusion of internet banking.
REFERENCES


33. Khan, S. Adoption Issues of Internet Banking in Pakistani Firms. Department of Business Administration and Social Science, Division of System Sciences, Lulea University of Technology Sweden, 2007.


49. Microsoft Encarta Encyclopedia, 2003


59. Saha, Y. and Zhao, P., Relationship between Online Service Quality and Customer Satisfaction. A study in Internet Banking, Sweden: Lulea University of Technology, 2005


Appendix A
Interview Guide
Interview questions for banking staff

1. What are the major internet base products/services your bank provides to its customers?
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2. How has internet banking improved your bank’s productivity?
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3. What kind of feedback do you receive from your customers on internet banking services?
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4. What products/services do you plan to introduce into the internet banking in the future?
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5. What is your general impression about internet banking?
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6. What exactly do you think customers value in terms of internet banking services?
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7. What are the challenges that your bank is facing in providing internet banking services?
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Questionnaire for customers

Age: below 25 ☐ above 25 ☐ above 50 ☐

Sex: male ☐ female ☐

Account Type: ........................................................................................................................................

1. Why did you subscribe internet banking? And what are the products/services that you can access online from your bank?
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2. How do the online products and services differ from traditional banking products and services that you know?
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3. How reliable or good is your internet connectivity and how does online banking save you in terms of monetary and time costs?
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4. How do you find the internet banking website or portal you use in terms of accessibility, appeal, navigation, content and responsiveness? Have your expectations been met?
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5. What benefits do you get or problems do you encounter with internet banking?
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6. Do you have any concerns regarding your security and privacy in accessing online banking?
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7. What kind of additional online products/services would you wish were provided by your bank?
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8. Overall, to what degree has your expectations and requirements been met? How satisfied are you?
   a. Extremely satisfied □
   b. Satisfied □
   c. Somehow satisfied □
   d. Dissatisfied □
   e. Extremely dissatisfied □
Appendix B

ABOUT GHANA

Ghana is the first African country south of the Sahara to achieve independence. This was in 1957. The colonial power was Britain. The Portuguese were the first to arrive in Ghana and they named the place where they settled as the Gold Coast. This became the name of the country until independence when it was changed by the founder and first president, Kwame Nkrumah, to Ghana. The British were not the first Europeans to arrive in Ghana but they were the last to leave. The capital of Ghana was moved from Cape Coast to Accra by the British in 1876.

With a population of about 22million, Ghana is divided into ten geographical and administrative regions namely Greater Accra, Volta, Eastern, Western, Central, Ashanti, Northern, Upper East, Upper West and Brong Ahafo Regions and with about 79 dialects spanning these regions. The major languages spoken are Twi, Fante, Ga, Hausa, Dagbani, Ewe and Nzema. English is the official language of Ghana.

Ghana has the highest percentage of Christians in West Africa, but the belief in traditional animist religions is still extremely common. 60% Christian, 15% Muslim, 25% traditional African religions.

Well endowed with natural resources, Ghana has roughly twice the per capita output of the poorer countries in West Africa. Even so, Ghana remains heavily dependent on international financial and technical assistance. Gold, timber, and cocoa production are major sources of foreign exchange. The domestic economy continues to revolve around subsistence agriculture, which accounts for 35% of GDP and employs 60% of the work force, mainly small landholders. Policy priorities include tighter monetary and fiscal policies, accelerated privatization, and improvement of social services. Receipts from the mining and tourism sectors also help in sustaining the GDP growth of Ghana.

At the time of independence, the banking industry consisted of 3 banks. This has grown over the years to 23 banks with a network of some 600 branches, 123 rural banks, and 13 savings and loans companies. These operate alongside an array of non-bank financial institutions, insurance companies, and other micro-credit institutions. The banking industry is reasonably competitive and well capitalized, sound and liquid, having withstood the pressures of rapid disinflation over the past years.

To respond to changing domestic conditions and developments in central banking and monetary policy worldwide, the Bank of Ghana Act (2002) was passed which bestowed independence on the central bank, leaving it free to re-focus its policies on price and financial stability as a principal mandate. E-banking is now catching up in the industry and the country for that matter. The following table captures some important economic indicators of Ghana.
<table>
<thead>
<tr>
<th>GDP</th>
<th>Purchasing power parity - $44.44 billion (2004 est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP - real growth rate</td>
<td>4.7% (2004 est.)</td>
</tr>
<tr>
<td>GDP - per capita</td>
<td>Purchasing power parity - $2,200 (2004 est.)</td>
</tr>
</tbody>
</table>
| GDP - composition by sector              | Agriculture: 35.4%  
industry: 25.4%  
services: 39.2% (2004 est.) |
| Investment gross fixed                   | 24.5% of GDP (2004 est.)                         |
| Population below poverty line            | 31.4% (1992 est.)                                |
| Household income or consumption by percentage share | lowest 10%: 2.2%  
highest 10%: 30.1% (1999) |
| Inflation rate consumer prices           | 26.7% (2004 est.)                                |
| Labor force                              | 10 million (2004 est.)                           |
| Labor force by occupation                | agriculture 60%, industry 15%, services 25% (1999 est.) |
| Agriculture products                     | cocoa, rice, coffee, cassava (tapioca), peanuts, corn, shea nuts, bananas, pineapple; timber |
| Industries                               | mining, lumbering, light manufacturing, aluminum smelting, food processing |
| Industrial production growth rate        | 3.8% (2000 est.)                                 |
| Electricity production                   | 8.801 billion kWh (2001)                         |
| Electricity production by source         | fossil fuel: 5%  
hydro: 95%  
nuclear: 0%, other: 0% (2001) |
<p>| Electricity consumption                  | 8.835 billion kWh (2001)                         |
| Electricity exports                      | 300 million kWh (2001)                           |
| Electricity imports                      | 950 million kWh (2001)                           |
| Exports                                  | $2.642 billion f.o.b. (2004 est.)               |
| Exports commodities                      | gold, cocoa, timber, tuna, bauxite, aluminum, manganese ore, diamonds |</p>
<table>
<thead>
<tr>
<th>Imports</th>
<th>$3.24 billion f.o.b. (2003 est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports commodities</td>
<td>capital equipment, petroleum, foodstuffs</td>
</tr>
<tr>
<td>Reserves of foreign exchange gold</td>
<td>$1.469 billion (2004 est.)</td>
</tr>
<tr>
<td>Currency</td>
<td>cedi (GHC)</td>
</tr>
<tr>
<td>Currency code</td>
<td>GHC</td>
</tr>
<tr>
<td>Fiscal year</td>
<td>calendar year</td>
</tr>
</tbody>
</table>

Source: www.ghanaweb.com