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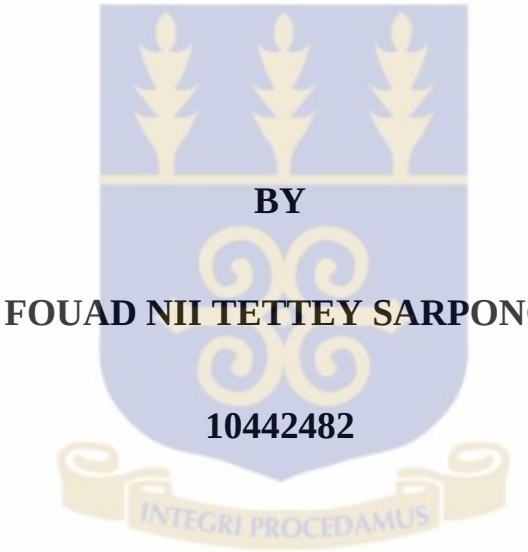
THE RELATIONSHIP BETWEEN INNOVATION, PERFORMANCE AND COMPETITIVE ADVANTAGE AMONG BANKS IN GHANA



BY

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THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MPHIL IN FINANCE

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DECLARATION

I, FOUAD NII TETTEY SARPONG do hereby declare that, except from the references made to other people's work which have been duly cited, this dissertation is the result of my own research. I hereby declare that this dissertation has neither been presented in whole or in part for an award of another degree elsewhere.

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(Supervisor)

DEDICATION

I humbly dedicate this research to my mum, Hajia Iklimatu Otoo and my grand mum, Hajia Umulkhuthum Odartey, for the kind of love and support they have shown me throughout this masters' programme. May Allah in His infinite mercy bless and grant them their heart desires.

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LIST OF ABBREVIATIONS

ATM	AUTOMATED TELLER MACHINE
SEM	STRUCTURAL EQUATION MODEL
CFA	CONFIRMATORY FACTOR ANALYSIS
GSE	GHANA STOCK EXCHANGE
GCB	GHANA COMMERCIAL BANK
PER	PERFORMANCE
COMP	COMPETITIVE ADVANTAGE
INN	INNOVATION

ABSTRACT

This study assesses the relationship between innovation, performance and competitive advantage among Ghanaian banks. It uses the subjective way of customer perception to measure innovation, performance and competitive advantage with questions based on theory. The customers involved are mainly retail customers who visit their respective banks. The research is carried out in Accra and encompasses banks listed on the Ghana Stock Exchange. A Structural Equation Model (SEM) with respect to Confirmatory Factor Analysis (CFA) is used as an analytical tool. Findings show that; there exists a positive relationship between innovation, performance and competitive advantage. However, the relationship between performance and innovation is not that significant. This might be because there are other factors that enhance performance apart from innovation.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter gives an insight into the purpose of the research. It provides the background of the study, the contribution it makes to previous studies, the objectives and questions of the research, its significance and finally its research limitations.

1.1 Background of the study

In connection with technological advancements like Electronic Banking and sophisticated ATMs, the banking business across the globe has improved tremendously. The banking industry is increasingly becoming the cornerstone of most economies, for which Ghana is of no exception.

Adams and Agbemade (2012) assert that; since the late 1980s, Ghana has implemented several financial sector reform programmes to revive the economy from previous periods of severe decline and distress. Liberalizing the control on banks, and the restructuring of insolvent banks are examples of reforms carried out. The essence of the reforms have been promote competition, and hence, efficiency in the financial sector. Obviously, the level of competition in the banking industry is of importance for the matter of stability in the production of financial services, the quality of financial products, and the degree of innovation in the sector. Adams and Agbemade assert that; having a competitive banking system is of importance to ensure that; banks operate as effective forces for financial intermediation. This is because; an uncompetitive market does not reflect the true position of the market and hence, financial liberalization will allow countries to reach the optimal productive frontier. An important characteristic of the financial liberalization

process for most of the developing world is the influx of new banks, which are mostly foreign. The Bank of Ghana report (2013) shows that, out of the 27 universal banks in the country, only 12 are Ghanaian owned. This isn't a bad thing at all, as the emergence of new domestic institutions to compete with the existing institutions of lending leads to greater efficiency, especially because foreign banks bring new expertise (Adjei & Chakravarty, 2012). In this regard, banks are increasingly innovating as a means to increase the efficiency of the production in financial services as well as the quality and variety of financial products.

Due to the wide usage of technology for advertisement, customers are able to know and predict the benefits they will derive or the losses they will suffer by either sticking to their present organization, or switching to other competing firms. Thus, the days of a customer sticking solely to the same product or the same organization for life, is long gone. This is one reason why most of the banks in Ghana are constantly innovating and providing superior products and services compared to those of their competitors. That is to say that, if the customers of a particular bank are satisfied, the bank tends to have a high customer base, high returns and a high competitive advantage.

In effect, the high level of competition has forced many banks to employ innovative ways to outperform their rivals with an urge of gaining a sustainable competitive advantage. This research is therefore being carried out to provide empirical evidence of the relationship between innovation, performance and competitive advantage among banks in Ghana. It employs the use of subjective measures mainly based on the opinion of retail customers who visit the bank during the day. The research was conducted in Accra among banks listed on the Ghana Stock Exchange

(GSE). A likert scale questionnaire of five was employed in the collection of data, in which the respondents could strongly agree, agree, be neutral, disagree or strongly disagree to statements posted on the questionnaire.

Questions on customer service was used to measure performance as some literature have empirically tested a positive correlation between customer service quality and performance of organizations (Hassan, 2013, Wiele, Boselie, & Hesselink, 2001)

Divandri and Yousefi, (2011) also define competitive advantage as the distinctive competencies that are identified and nurtured throughout a firm, allowing it to execute effectively so as to provide products or services that are of superior offerings to customers. Based on this, questions on how customers perceive their bank to other banks were used in measuring competitive advantage.

Lastly, customers' knowledge of how frequent their banks introduce or improve its products and services was used as a measure of innovation. Frei, Harker, and Hunter, (1998), explains the traditional innovation in retail banking as the organization getting new and improved products and services to the market.

A Structural Equation Model (SEM) in terms of a Confirmatory Factor Analysis (CFA) is used in the analysis. This method of analysis was chosen because, in using the questionnaire to measure innovation, performance and competitive advantage, the CFA, will determine whether the questions formulated on the questionnaire were well explained by these three variables. Also,

the SEM will show the kind of correlation that exists between the variables as well as their respective significance level. Lastly, the SEM is also a very good technique in explaining the relationships between constructs (Alias, Ismail, & Sahiddan, 2015)

1.2 Problem statement

Like any other business, the main aim of banks is to provide products and services to the satisfaction of their customers. In the service industry, successful companies need more than just a competitive advantage in customer service. They need to have unwavering loyalty from their customers. The customer loyalty in banking has seen a major concern to practitioners due to severe competition and higher customer expectations and thus, one way to enhance customer loyalty in banking is by focusing on offering excellent services and meeting the needs of customer (Jumaev, Kumar, & Hanaysha, 2012). Customers evaluate products and services based on the level of satisfaction they derive in consuming them. This means that; to them a product or service is of good quality when it meets their needs and expectations. Usually, there is always a positive feedback from a happy and satisfied customer in the sense that; they patronize the organizations products and services regularly and also recommend the organization to others. Thus, the reliability and quality of any organization's products and service will enhance a high level of customer satisfaction.

Due to the importance attributed to customers in knowing the actual performance of organizations, this research sought to use the customers' perception as the sole measurement tool for the research variables. Substantial studies have been made in this area of research. However, most of these studies conform to the objective way of using proxies in the measurement of innovation, performance and competitive advantage. Studies like Sarpong, Winful, and Owusu-

Mensah, (2014) & Kumi, Amoamah, and Winful, (2013) used financial ratios to proxy for bank performance in Ghana. Also, researchers who measure innovation, usually use Research and Development (R&D) as a proxy. Others make use of a questionnaire which is usually directed to top level officials (Atalay et al., 2013; Santos & Brito, 2012). In terms of measuring competitive advantage, studies like Divandri and Homayoun (2011) also apply the use of objective measures like the balanced score card.

Clearly, using the perception of customers in measuring these three variables is something most researchers' have not done. Doing this will mean adding to the few studies that have used the perception of the customers as a measurement tool.

Measuring the relationship between innovation, performance and competitive advantage is another gap to be filled. Studies like Hassan (2013), Wiele et al.(2001) and Divandri and Yousefi (2011), had their research conducted on either of these variables. Other researches such as Atalay et al.(2013), establish relationships between just two of the variables. Researchers either find a relationship between innovation and performance, or between performance and competitive advantage, or between competitive advantage and innovation. So far as can be ascertained, no research establishes relationships among these three variables.

Furthermore, all these studies mentioned above except Sarpong et.al (2014) and Kumi et.al (2013), were conducted outside Ghana and also outside the banking industry. That is to say that little has been done to establish any empirical evidence of the relationship among these three

variables in this part of the world. Not just that, but locating a research of this nature among banks doesn't come easy. Thus, doing this study will be filling a contextual gap in research.

Lastly, the use of SEM as an analytical tool and a methodology contributes to the extant literature.

1.3 Research questions

- Do customers generally consider their banks innovative?
- Does the level of innovation in banks reflect in their respective performance and competitive advantage?

1.4 Objectives of the study

The objective of this study is

- To investigate whether customers generally consider their banks innovative
- To investigate the kind of impact innovation has on performance and competitive advantage

1.5 Hypothesis

- H_o= *customers do not consider their banks innovative*
- H_0= *there is no impact of innovation on performance and competitive advantage*

1.5 Significance of the study

The significance of this research can be viewed in three ways. Firstly, this research goes beyond other researches by empirically bringing out the relationship that exists between innovation, performance and competitive advantage. Secondly, this research will provide guidelines to various banks on how to survive and prosper in this era of global competition. Lastly, it will

provide feedback to policy makers on how innovation can aid performance and competitive advantage.

1.6 Limitations of the study

Due to data availability, the researcher used only banks listed on the GSE as samples for the research. Secondly, the customer base of the respective banks was not used in determining the sample representative of each bank. This is because of the reluctance of the banks in giving out such information. Thus, the interest income of the various banks was used.

In conclusion, this research provides a basis to which banks can strategize to improve performance and gain competitive advantage.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter provides an analysis of previous related studies. It does this by focusing on the theoretical reflections of the problem under investigation and reviews literature with regards to the relationship that exists between innovation, performance and competitive advantage.

2.1 Competitive advantage

In the past, most of the banks in undeveloped nations, like Ghana, were traditionally owned and controlled by the government. They all had different reasons for being established across various sectors of the economy. However, some of these state owned banks became inefficient and insolvent over time due to some levels of negative challenges they faced (Sebe-Yeboah &Mensah, 2014). This forced the Ghanaian banking sector to undergo several restructuring process and transformations, as part of the country's restructuring and transformation program to enable the sector offer first class services within the globalised financial system. These reforms moved the banking sector from a regime characterized by state ownership, to that characterized by collaborations between government and private investors. The central bank shifted gradually from a direct system of monetary controls to an indirect system that utilized market-based policy instruments. This liberalized the entry of new banks and encouraged foreign banks and investors to enter the Ghanaian financial services industry. The resultant effects were healthy competitions and the introduction of efficient business practices, technology, products and risk management systems.

Thus, Ghanaian banks now cannot operate in isolation, since they form part of a larger global banking industry and therefore must adopt strategies that will enhance their technical, operational and resource allocated efficiencies. This will enable them compete better if they are to survive in the global competitive environment (Sarpong et al., 2014).

Due to these rapid changes in the Ghanaian banking environment, banks which were able to evolve and develop with respect to their strategic actions, achieved success. According to Demitras (2013), the determinants of any bank's success includes: the ability to act fast, willingness to change, a clear formulation of objectives, and the ability to the act in an outstanding way as compared with competitors. In view of this, banks usually formulate objectives to show their level of aspiration and the kind of direction they are taking. Every bank starts aiming for survival and formulates strategies to that effect. Mintzberg and Waters (1985), argue thatsurvival strategies are the kind of strategies that are not intentional but carried out, and also, must keep updating themselves in the course of achieving intended objectives.

Soloducho-Pelc (2014), on competitive advantage, showed an indication of different sources of competitive advantage, such as:

- resources and capabilities of the organization
- innovativeness and creativity, quality
- time and speed of acting
- success in implementing the strategy
- ability to learn and manage the knowledge
- unique technology

- organizational culture
- organizational freedom
- reputation
- brand, know-how and,
- the role of human capital and networking (Itami, & Roehl 1991; Stalk,& Hout 1990; Senge 1990; Barney 1991; Hall 1992; Sołoducho-Pelc 2013, Meyer, Allen,& Smith 1993; Feurer,& Chaharbaghi 1995; Nohria, & Gulati 1996; Barney 1986; Barney 2001, Greve 2009, Sołoducho-Pelc, & Radomska 2012, Singh 2012)

Even with knowledge of all these sources of competitive advantage, a bank still needs to know for whom and for what purpose will a competitive advantage be a matter of importance. The answer always comes down to the satisfaction of the customer. If a bank has monopoly power, there will not be any need for most of these sources of competitive advantage. This is because; demand for their product will be highly inelastic, irrespective of whatever they do. There wouldn't have been a choice for the customer. However, in this case where the customers always have an opportunity of choosing which bank to deal with, banks are always threatened with the possibility of losing their customers to competitors. They therefore embark on various strategies towards competitive advantage in order for them to gain more customers, than losing customers.

Kotler (2000) defines competitive advantage as the capability of a firm or organization; to do things in ways that a will cause competitors serious challenges to imitate. Papulova and Papulova (2006) also describe companies with competitive advantage as the ones that are able to satisfy customer needs more effectively than their competitors. To be successful, a business must add

value to its operations, and the important elements in adding value is by understanding and being close to the customers. This will help the business to know their perception of value, have a strong commitment to providing quality products and services, and react to threats and opportunities in a speedy way. Simply put, a firm can only enjoy competitive advantage by making use of its core competencies in a distinctive way to arrive at its mission or objectives. A study by Baaij, Greeven, and Dalen, (2004), assert that; gaining a sustainable competitive advantage is dominated by two perspectives. These are; industrial-organization economics and the resource based view of the firm. With the industrial organization economics, sustainable competitive advantage is based on positioning the firm strategically throughout industry, as mobility barriers within an industry is considered the first major factor that sustains competitive advantage. Secondly, the resource-based view of sustainable competitive advantage is utilizing organizations' core competencies in an efficient way. These are competencies that are valuable, rare, and difficult to imitate, trade, and substitute, constitute the basis of sustainable competitive advantage. To Baaji et al. (2004), gaining competitive advantage is being unique among your competitors. It comes with understanding why customers should deal with you or be interested in your organization's products and services instead of those of your competitors.

Known as the father of competitive advantage, Michael Porter, a Harvard Business School professor in the year 1985, wrote the definitive business school textbook on the topic called "Competitive Advantage". In his book, he explained the three major ways organizations can achieve sustainable advantage. These were: cost leadership, differentiation and focus. Achieving cost leadership means providing a reasonable value at a lower price. Firms can do this by either paying workers less or by providing intangible benefits like stock options benefits, in order to

continuously improve operational efficiency. Achieving differentiation means having a strong brand that will clearly communicate how customers will benefit more in dealing with your organization instead of others. A bank can do this by providing products and services with high qualities, in a distinctively different way. Instead of being a cost leader, a bank with a differentiation strategy can have higher profit margins, since they have the edge to charge premium prices. That means they usually have higher profit margins. Meeting the same needs of customers in a new and improved ways is a channel an organization can use in achieving differentiation. Lastly, the Focus strategy deals with understanding and servicing your target market better than anyone else. Cost leadership or differentiation strategy can be applied here, but the focus must be on a specific target market (referenceforbusiness.com). According to Amoako-Gyampah and Acquah (2008), Porter's view of competitive advantage overlaps with other competitive strategy typologies. For example, Porter's strategy of cost leadership is similar to Miles and Snow's (1978) "defender strategy" and Hambrick's (1983) "efficiency strategy." Porter's differentiation strategy is also similar to Miles and Snow's prospector strategy. Lastly, Porter's typology has been linked to many organizational, environmental, and performance-related variables. In addition these, Amoako-Gyampah and Acquah (2008) also thought that, Porter's framework proposes that; firms pursuing any of these competitive strategies would develop a competitive advantage that would enable them to outperform competitors in their industry. However, for a firm to earn superior profits and outperform its competitors, it must make a clear choice between a cost leadership and differentiation strategy in order to avoid ''the inherent contradictions of different strategies.

According to Feng, Sun, and Zhang, (2010), there are five dimensions to gaining a competitive advantage. These are product quality, delivery reliability, process flexibility, customer service and cost leadership. Among these five, they reported customer involvement has a significant impact on all the dimensions, except cost leadership. Their findings suggest that; involving customers in the development of firms' new products, leads to a high product quality, delivery reliability, process flexibility and a better customer service. The knowledge and skills possessed by customers are very necessary in dealing with dynamic environments like the banking industry. Seeking the involvement of customers is usually seen as a way of getting access to critical information regarding customer needs (Salomo, Steinhoff & Trommsdorff, 2003). This enhances the reduction of lead time, the provision of better customer service, and the achievement of good delivery performance. Secondly, involving customers in this era of information technologies facilitates the creation of goods and services that meets customer's needs and expectations. Finally, involving customers in the process of product testing and continuous improvement enables firms to detect product flaws early in the development cycle and to minimize redesign and rework cost.

In conclusion, it can be seen that, a bank with unique products and services that sets it apart from its rivals, in line with the expectations of the customer, is said to have gained a competitive advantage. Logically, this cannot happen if the bank is not performing. And in this global era of competition, a bank cannot do that without evolving. This is because; the evolvement of a bank is the only way the bank can keep up with the changing needs and expectations of customers. From what it seems like, a bank cannot gain a competitive advantage without performing, and cannot perform without innovating. Thus, knowing the exact relationship that exists in

innovation, performance and competitive advantage is a matter of great importance. That is all this research is about, knowing the kind of relationship in innovation, performance and competitive advantage.

2.2 Innovation

Over the past decades, the economic authorities in Ghana have taken steps to liberalize the banking sector through the deregulation of the interest and the opening of the sector to foreign competition, among others. These structural changes have changed the structure and the competition in the banking sector. This has significant implications on the efficiency and the stability of the sector (Kouki and Al-Nasser, 2014). In a reasonable way, most of the banks are faced with the challenge of varying their ways and means of production, as a means of meeting the frequently changing needs of the customers they serve. Indeed, for many organizations, using their resources and skills to change in ways that will create value for stakeholders, and perhaps especially customers, is becoming increasingly difficult (Ireland & Webb, 2007).

Research done by Abor (2005) on Technological Innovations and Banking in Ghana reported that, later in the 1980s, the use of the personal computer (PC) among Ghanaian banks got common, with each bank trying its possible best to beat competition. According to him "Ghanaian banks begun to use these PCs in back-office operations, and later tellers used them to service clients. The report went on to say that; advancements in computer technology saw the banks networking their branches and operations, thereby making the one-branch philosophy a reality. Barclays Bank (Gh.) and Standard Chartered Bank (Gh.) pioneered this very important electronic novelty, which changed the banking landscape in the country." Abbor (2005) went further to speak of the Automated Teller Machines (ATM) as the most revolutionary electronic

innovation in Ghana. With the use of the ATMs, banks were blessed with the ability to network their operations, thus increasing their utility to customers. From 1995 to 2001, banks like Ghana Commercial Bank, The Trust Bank Ghana, and the Agricultural Development Bank (ADB), started using the ATM offering as a means of gaining competitive positions. Through that, the medium of delivery of customer banking in the country became very easy. For this reason, customers considered the ATM offering as an important factor in choosing among banks. Thus, banks that delayed in installing ATMs suffered an irreparable damage of losing a chunk of their customers.

Arguably, the greatest effect of this intense competition in the banking industry is the issue of increased innovation. Due to the emergence of increased competition in the banking environment; banks now face the need to increasingly adapt to changes when the need arises. Most often, the level of performance of these banking firms is based on the existing level of technologies they possess. Thus, not being able to be nimble and adaptive leads most organizations to failure (Ireland & Webb, 2007). An investigation by Yamin, Mavando, Karen, and Sarrus, (1997) on Australian manufacturing companies showed that; many organizations are encountering competitive challenges due to the rapid pace of technological change. The reliance of industries on sophisticated technologies in order to be globally competitive, have led them to a level of vulnerability for continuous and rapid alterations to their organizational activities. Due to these developments, management theorists and practitioners have called for more creativity and innovation in product lines management practices and production processes. According to them, acknowledging the fact that; organizations do not always have the luxury of selecting a design for innovation that provides a tight fit with all contingencies is very important. Thus, this

requires a firm to keep developing new capabilities. Having a tight fit is a desirable goal. However, with this kind of dynamic environment, a constant effort and investment is required. And with a liberalized banking industry like the Ghanaian banking sector, it is a must for each bank to be constantly innovating in order to beat the competition.

According to Frei et al., (1998), innovation in banking lies more in the process and organizational changes than in new product development in a traditional sense. To them the forces that have caused these calls of rapid change by each bank within the banking industry are, regulatory change and consolidation, technological innovation, and the changing customer.

Regulatory change and consolidation: According to them, changes regarding reserve limits, bank powers, and geographic restriction on product offerings have fuelled merger activity. Mergers and acquisitions are now being used as a powerful force of change in the banking industry, impacting not only the geographic scope and product variety of the organization, but also affecting the underlying technological and managerial infrastructures of the banks. An example of mergers in the banking industry of Ghana was the merger between Ecobank Ghana and The Trust Bank. According to the Ghana News Agency's report on 19th April 2013, Ecobank Ghana's merger with The Trust Bank (TTB) and efficient cost management contributed to the bank's strong growth in earnings in 2012. This was said by the Board Chairman, Lionel Van Lare Dosoo, when he addressed shareholders at the bank's annual general meeting. According to him, the synergies of the merger, coupled with the momentum established in recent years, had resulted in the phenomenal growth for 2012 (mordernghana.com).

Technological innovation: with respect to their analysis, Frei et al., (1998) also proved that, information technology plays a key role in the performance of banks and thus, most banks now

invest a huge amount of their non-expense on information technology. Although information technology comes along with a huge cost, the benefits derived from it, in terms of speed and accessibility far exceeds the costs.

The changing consumer: The changing needs of consumers in this era of competition are by far the most important force of change in the banking industry. The taste and preferences of consumers are constantly changing rapidly in this transformational period. Thus, it is now very necessary for every bank over time to vary its ways of activities in order to survive.

Baaji et al. (2004) defines innovation in accordance to Schumpeter (1934) as ‘‘changes in the methods of supplying commodities, such as introducing new goods or new methods of production; opening new markets, conquering new sources of supply of raw materials or semi manufactured goods; or carrying out a new organization of industry, such as creating a monopoly or breaking one up’. According to Atalay, Sarvan, and Anafata,(2013), Schumpeter defines innovation within these five manifestations stated above. Another definition of innovation comes from the Oslo manual by Atalay et al. (2013) was described as “the implementation of a new or significantly improved product (good or service), process, a new marketing technique or a new organizational method in business practices, workplace organization or external relations.” According to them, the Oslo manual classifies innovation in four types, which are briefly defined below;

Product innovation: A product innovation is the act of introducing new products and services with significantly improved characteristics or intended uses. An example of such improvement can be in the form of product quality, new components and software, or even the user friendliness of the product.

Process innovation: This is the introduction of improved of production and delivery methods.

Marketing innovation: this can also be viewed as the process of starting a new marketing method which involves obvious changes in product design, packaging, product promotion and pricing.

Organizational innovation: Lastly, an organizational innovation is the introduction of new methods of improving firm performance, such as reducing administrative cost as well as improving work place satisfaction

From the above, it can be seen that, innovation is not an issue for one only department. It involves all the functional areas of the organization. This is confirmed by Bordia, Kronenberg, and Neely (2005) in their analysis of a research by Booz Allen Hamilton. They assert to that; innovation works well when carried out cross- functionally among departments. This means that, products and for that matter any kind of innovation touches every part of the company. Usually, functional areas like R&D and engineering are characterized with innovation. However, other functional areas like strategic planning, sales, operations; customer support, purchasing, and finance are just as important for any innovation to be successful. The way and manner these different functions work together determines how successful the organization will be in carrying out innovative activities. The betterment of the company's innovation is thus, linked with its ability to generate value and growth. Bordia et al. (2005) went further to say that, performance differences of organizations can be traced to how they deliver their fundamental requirements of innovation. They then outlined three organizational characteristics that are needed to create and sustain successful innovation. These are explained below;

Speed: Due to the increasing pace of innovation, it is required for organizations to be fast with their innovative activities. Making decisions in a fast manner allows companies to be ready as new opportunities pop up. It also enables them to respond quickly to changes in customer taste and preferences.

Transparency: Transparency in knowing the organizational direction is also very necessary. It improves effectiveness by developing priorities aligned with strategic objectives. For effective innovation, transparency ensures that development of priorities and efforts is aligned with strategic priorities. It also helps in the exchange of information between functions. This is very critical to organizational innovation.

Accountability: as a cross-functional process, there must be a mechanism for innovation to be taken seriously. Thus, the establishment of personal ownership for performance and outcome is one way of ensuring that.

All said and done, some benefits that banks have derived in this era of competition from current technologies are improved efficiency and effectiveness of their operations. Overall, this leads to a significant improvement in bank performance. It also enables customers to enjoy benefits they wouldn't have enjoyed if the situation was otherwise.

Despite these developments in the banking industry, customers are still seen queuing in banking halls, handling too much cash and hardly talking of electronic products in banking (Adeoye & Lawanson, 2012). This shows the need to know whether the innovative activities of banks will automatically guarantee them better service with an improved performance, and the sustainable

competitive advantage they need. Conducting this research will be a way of answering this question.

2.3 Performance

In the recent kind of economic environment, the measurement of business performance is very important to practitioners, as well as researchers (Zulkiffli & Perara, 2011). Organizational performance is seen as a relevant construct of research. However, reaching a consensus on accurately defining and measuring business performance is still a problem (Santos & Brito 2009).

Usually, people consider the financial performance of organizations such as banks as the true performance of the organization. However, joining the definitions of organization and performance together from the Oxford dictionary, James (2012), defined organizational performance as "how successfully an organized group of people with a particular purpose perform a function." This means, performance can only be achieved when every corner of a firm works together to attain organizational objective. These results are then measured in terms of the value delivered to customers. As reported by Ataley et al., (2013), "organizational performance indicators can be departmental, such as pertaining to production, finance or marketing, or consequential such as pertaining to growth and profit, and can be measured with objective or subjective indicators." Organizational performance in terms of financial performance, employee performance, management performance or even shareholder performance can be measured by the value products and services the organization delivers to its customers. According to Alshamari et al., (2014), studies such as Walker and Ruekert,(1987), and Wiklund and Shepherd, (2005) described organizational performance as a multidimensional construct. It often informs

the organization on how well they are doing in terms of meeting their goals, and satisfying customers. Thus, the main role of performance measurement is to know whether the current position of the organization is going according to its planned objectives of satisfying the needs and requirements of customers (Ivanov & Avasilcai, 2014).

According to Smith and Reece (1999, p. 153), organizational performance is defined as "the operational ability to satisfy the desires of the company's major shareholders". In analyzing this definition from an obvious point of view, the desires of the shareholders can be attained by providing customers with the kind of products and services they desire in order to gain their trust and confidence. This will be an image booster, which will attract prolific investors to the business. The organization will succeed if the needs and the requirements of the stakeholders are well catered for. Adeoye and Lawanson, (2012) also attests to the fact that, organizations are not likely to succeed without their customers since customers are recognized as the most important stakeholders in any organization. Hence, emphasizing research in the area of consumer behaviour is very important to marketers. Knowing how customers behave really helps in ensuring effective marketing policies towards the interest of improving customer satisfaction and organizational performance as a whole.

2.3.1 Customer satisfaction and bank performance

Customers in general cannot see the value of products and services being offered by their banks unless they are satisfied. The study by Adeoye and Lawanson (2012) on the behavior of banking customers in Nigeria describes the satisfaction of the customer as the way customer's values products or services being offered by the banks. This has to do with whether the products and services meet the customers' needs and expectations. This means customer satisfaction is derived

largely from the quality and reliability of the firms' products and services offered. According to them, service quality is what reflects the customer's perception of elements of service such as interaction quality, physical environment quality, and outcome quality. These elements are in turn evaluated based on specific quality dimensions: reliability, responsiveness, assurance, empathy and tangibles. Satisfaction, on the other hand, is more inclusive as it is influenced by perceptions of service quality, product quality, and price as well as situational factors and personal factors. This shows that, the perception of the customer can tell whether an organization is performing or not.

Customer satisfaction is also described by Ambroz and Praprotnik (2008) as the ability of the organization to secure the trust of more customers and thus retaining them. It can also mean the improvement of the relationship between the customer and the organization. It is often seen as the satisfaction with an organization's products or services and considered the key to success and long-term competitiveness. This means that, understanding and taking the perception of customers seriously will help the bank and for that matter any other organization to know its own strengths and weaknesses as well as how to improve overall organizational performance over time. This inherently shows there is a relationship between customer satisfaction and organizational performance. So in this era of competition within the banking industry, on major way a bank can use to gain the upper hand over competitors is by providing customers with level of satisfaction they desire.

Hassan (2013) investigated how customer service is related to organizational growth in ten selected computer enterprises in Somalia Mogadishu. In his analysis, he found the relationship

between customer service and organizational growth to be positive. Thus, having a high service quality, effective service speed and responsiveness will lead to a high level of firm performance. In other words, there is a positive relationship between customer service and organizational growth or performance. Wiele, Boselie, and Hesselink (2001) also researched how customer satisfaction is related to an organizational performance data of a Flex company in the Netherlands. Their results confirm the positive relationship between customer satisfaction (quality service) and organizational performance. According to them, service quality is significantly correlated with the sales margin in the same time period and in the next year period. Also, behavioural items like complaints from customers are significantly positively correlated with the organizational performance indicators. This indicates that, the more the level of complaints by customers rises, the higher the tendency of using other Flex companies. Thus, the ways the complaints are handled are positively correlated with quality perceptions and with organizational performance indicators in the same time period.

From the above, it can be seen that, the customer's perception is a way of finding out how well a bank is performing. The more satisfied customers are, the more likely they will patronize the banks products and service. The effect of a bank with satisfied customers is a large chunk of loyal customers that will create more sales which will eventually increase the profit margins of the banks. As the adage goes, customers are the lifeblood of organizations, without them, the organizations cease to exist.

With the current level of globalization within the banking industry, banks are forced to provide customers with the products and services they need. Failure to do that on the part of any bank

will lead to irreparable consequences of the bank losing a chunk of its customers to competitors. Thus finding innovative ways and methods of providing products and services is one major way banks can exploit in order to improve performance to achieve a sustainable competitive advantage. Once again, the issue of the kind of relationship that exists between innovation, performance and competitive advantage comes into play, and finding the answer to that is still eminent. This however, is what this research seeks to achieve.

2.4 Innovation and competitive advantage

According to Atalay et al. (2013), one way a company can gain a sustainable competitive advantage within an increasingly changing environment is by innovating. This is because, innovation leads to product and process improvements, makes continuous advances that helps firms to survive, allows firms to grow more quickly and be more efficient, and ultimately helps the firm to be more profitable than non-innovators. According to Goksoy, and Alayoglu (2013), an organization can develop a competitive advantage in a highly dynamic business environment by keeping up with the speed of change in areas of customer demands, technology, and global competition. In doing this, an organization can maximize its ability of competing, and thus, improving its level of performance and efficiency. High customer demands and increased competition has forced so many companies to evolve by holding fewer inventories, reacting faster to market changes and reducing their cost of production. They do this to be able to operate competitively.

Gentet, Mishra, and Mishra (2012), also attest that, with the fierce and unrelenting levels of competition, a company can only survive by having an advantage over the competition. According to them, a company that operates efficiently in a higher-quality manner better its

competitors is said to be enjoying competitive advantage. Creating a sustainable competitive advantage is important in order for a firm to be successful. They state the emergence of two major views of competitive advantage, both of which agree on the importance of innovation in achieving competitive advantage. These views are the Structural approach and the Resource based view. In the structural approach, innovation is seen as a facilitator of competitive advantage in the three strategies that produce it: Cost Leadership, Product Differentiation and Focus. In the resource approach, innovative ideas and products provide a unique resource that other firms have a difficult time copying. They went on further to say that, innovations can only guarantee success when it is in line with the organizations overall competencies. In their view, innovation still remains one of the significant means of attaining competitive advantage, even though it might be risky at times. They concluded that, motivating innovation is a key role that managers should play in an organization in order to achieve competitive advantage.

According to Abou-Moghli, Al Abdallah, and Al Muala,(2012), one way banks can have their own customized products and services is by taking up innovative ways of carrying out their activities. Being innovative gives banks the ability to provide products and services in response to competition.

Studies like Baaji et al. (2004) on the other hand, had their results showing that; the Schumpeterian innovation may destroy sustainable competitive advantage and hence persistent superior performance. This have raised eyebrows and created more confusion in defining the relationship between innovation and competitive advantage. Conducting this research will be a way of solving that problem.

2.5 Innovation and Performance

In accordance with the study conducted by Datche and Wambua (2013), innovation on the channels of distribution leads to risk reduction as a bank enters into different markets. Thus, the risk of depending on a single market is diminished when a bank innovates. As banks enter new markets, they begin to develop expertise in key areas over time in a distinctive way. This goes a long way of improving bank performance. These areas of expertise may be in any area but are most likely to develop in the critical, central areas of the bank where most value is added to its products and service delivery.

Atalay et al. (2013) investigated the relationship between innovation and firm performance. In their study, they cited various studies on the relationship between these two variables. Some of these studies were Schumpeter's work from 1934. According to Schumpeter, there is a limit to direct competition when new innovative products are first introduced to the market. This normally results in firms enjoying a relatively high performance over competitors, which are likely to erode with time due to imitations and competitions. However, firms that continue introducing innovative new products and services may be able to achieve continues high performance for a sustainable period. Another study is by Calantone, Cavusgil, and Zhao, (2002), who developed a framework for studying the relationships between learning orientation, firm innovativeness and firm performance in the U.S. manufacturing and service industries. Their study revealed that firm innovativeness is positively related to firm performance. Cho and Pucik (2005) also examined the relationship between innovativeness, quality, growth, profitability and market value at the firm level in the U.S. finance industry by using the structural equation modeling method. Their study indicates that innovativeness mediates the relationship

between quality and growth; quality mediates the relationship between innovativeness and profitability. Lastly, Gunday, Ulusoy, Kilic, and Alpkan (2011) explored the effects of product, process, organization and marketing innovations on different aspects of firm performance, including achievements in production, marketing and finance, through an empirical study covering Turkish manufacturing firms in different industries. Their study revealed that product innovation, organization innovation and marketing innovations have positive effects on firm performance in manufacturing industries

However, Rosenbusch, Brinckmann, and Bausch (2011) in their study of "is innovation always beneficial?" found the relationship between innovation and performance to be context dependent. This means, the results derived from the relationship between the two variables can vary from context to context. According to their analysis, factors such as the age of the firm, the type of innovation and the cultural context affect the impact of innovation on firm performance to a large extent. This shows that, investigating the relationship between innovation and performance in the banking industry of Ghana might present different results from those of the above studies. Thus it will be a very good addition to literature.

2.6 Performance and competitive advantage

A study by Majid (2011) cited several research papers which have found a positive relationship between performance and competitive advantage. For example, Morgan, Leech, Gloeckner, and Barrett (2004) who argued that companies can only have an advantage over their competitors when they have a relative better performance. Another example is by Raduan, Jegak, Haslinda, and Alamin,(2009). According to them, there is a significant relationship between an

organizational competitive advantage and its success. Thus, a competitive edge over rivals can significantly predict the variance in the performance of the organization.

However, having studies prove the positive relationship between these two variables doesn't mean a further study isn't that important. This is because; firstly, all these studies listed were conducted outside the African continent and outside the banking industry. Doing this research from Ghana, within the banking sector will fill a gap in research. Secondly, some banks are also known to enjoy competitive advantage even when they have recorded the worst performance. The reason being that, they are still living on a reputation built on past superior performances, and it will take time for customers to adjust and move to other competing banks.

2.7 Subjective measurement

According to Zehir, Altindag, and Acar, (2011), two approaches can be employed in the measurement of business performance. These are the objective and the subjective measures of performance. Using the objective approach means taking the absolute values of quantitative performance measures such as profitability. The subjective measure of performance also has to do with a situation where respondents are interviewed face to face or by means of a questionnaire.

An investigation by Santos and Brito (2009) on the dimensionality of firm performance concludes their research stating that; a firm is as efficient as its ability to respond to stakeholders' requirements. Seven performance aspects, namely, profitability, growth, market value, customer satisfaction, employee satisfaction, and environmental performance and social performance were mapped in their literature. They found that, conceptualizing performance measures based on

stakeholders" allows one to define firm performance with financial and social aspects, as suggested by Venkatraman and Ramanujam (1986) and Combs et al., (2005). Thus, it is meaningful to measure firm performance and other variables using subjective measurements like stakeholder perceptions.

In their analysis of business performance, Zulkiffli and Perara, (2011), writes their performance measurement models to include, the balanced score card, customer perspective, financial perspective, internal process perspective and the learning and growth perspective. According to them, the balanced scorecard model is a useful tool for managers to obtain competitive advantage. The customer perspective indicates the needs of the customer in terms of quality, costs and distribution, and the most important thing, what they want in the future from the organization. The financial perspective stems from knowing how to attract money and invest. Understanding how internal processes work in terms of the internal perspective will also help the organization achieve its objectives. And lastly, the learning and growth perspective uses results from other perspectives such as the customer, internal processes and financial perspective to train and develop human resource towards the attainment of organizational objectives.

From their analysis, apart from the balanced score card and the financial perspective, all the other measurement models are subjective measurement models. The definition they gave to the customer perspective indicates that, the perspective of the customer can also be a good measure for innovation, performance and competitive advantage of the firm. This because, as stakeholders of the banks, customers are usually concerned about everything their respective banks are engaged in.

In conclusion, Zulkiffli and Perara, (2011), confirm that; subjective measures are acceptable, and have a high positive correlation with that of objective measures. They recommend subjective measures as the appropriate measurement of organizational performance when dealing with small firms as small firms are usually characterized by rarely keeping accurate account of objective data, and even when they do, they usually do not them out.

Another study by Dess and Robinson (1984) on privately owned firms and conglomerate business units in the absence of objective measures also concluded that; subjective measurements are strongly correlated with objective measurements in terms of absolute changes in return on assets and sales over the same time period. According to their study, researchers usually encounter various difficulties in obtaining objective measures accurately. In focusing on economic dimensions of organizational performance, return on asset and growth in sales are two popular measurements related to economic aspects of organizational performance that exemplify this measurement problem.

Concluding from the above studies, it can be seen that, irrespective of the type or size of an organization, using subjective measurements as a measure of performance as well as other variables will have a positive correlation with the objective measurements of performance. To this effect, this research used the subjective mode of measurement in terms of customer perception as a measurement tool in measuring innovation, performance and competitive advantage.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes how the research was carried out. It explains the design of the research, the determination of sample size, and the sample frame and target population of the research, the sampling techniques, and finally the mode of date collection.

3.1 Research design

This research is designed with a survey methodology of sampling individual units of customers from a population. It makes use of a questionnaire construction as the survey data collection techniques. The various ethical rules of administering questionnaires were taken account of in the collection of data. A structural equation model was used in analyzing responses of questionnaires, from which conclusions and recommendations were drawn.

3.2 Sample frame

This research made use of banks listed on the Ghana Stock Exchange (GSE). These banks are, Cal bank, Unique Trust Bank, Trust Bank (The Gambia), Eco bank, HFC bank, Ghana Commercial Bank, Standard Chartered Bank, and Societé Generale. The study was conducted in Accra.

3.3 Target population

The target population were retail customers of the banks listed on the GSE, who ply their banking activities durinsg the day.

3.4 Sample size

The research used the A-priori Sample Size Calculator for Structural Equation Models. This calculator helps in computing the required sample size for studies involved Structural Equation Modeling (SEM). In calculating the sample size, the calculator makes use of the number of observed and latent variables in the model, the anticipated effect size, and the desired probability and statistical power levels. After all the above information has been provided, the sample size calculator then provides an answer comprising the minimum sample size required to detect the specified effect, and the minimum sample size required given the structural complexity of the model.

Latent variable: The latent variables are three (3). They are the variables which are not directly observed in the research, but are measured by observing other factors. They are innovation, performance and competitive advantage. Thus the measurement of innovation, performance and competitive advantage are carried out by analyzing the responses customers gave to the observed variables.

Observed variables: For this research, the number of observed variables is three (9). These variables are the variables that are directly measured. They are variables measured by the researcher that are used to infer a latent variable. In this instance, they are the three questions posed to each of the latent variables for respondents to answer.

Anticipated effect size: The range of anticipated effect size given by the software calculator is 0.1, 0.3, and 0.5. The first (0.1) is considered a small anticipated size effect. The second (0.3) is considered a medium anticipated effect size, and the latter (0.5) means a large anticipated effect size. For the purpose of this research, a medium anticipated size effect was chosen. This was

because; the researcher deemed it fit to be in the middle instead of either having the highest or lowest anticipated size effect.

Desired statistical power level: The value for the statistical power level is 0.8 or more. When a higher number than 0.8 is chosen, the sample size recommended reduces and vice versa. This research chose 0.8 as its desired statistical power level in order to have the highest sample size with respect to the statistical power level.

Desired probability: Also known as the p-value, alpha level, or type I error rate. By convention, this value should be less than or equal to 0.05 to claim statistical significance. This research chose to use the conventional value of 0.05 as its desired probability level.The results from the calculator are as follows;

- Minimum sample size to detect effect: **28**
- Minimum sample size for model structure: **200**
- Recommended minimum sample size: **200**

3.5 Sampling technique

Three sampling techniques were used for the research. They are, Stratified Proportional Sampling, Systematic Random Sampling, and Simple Random Sampling.

Stratified proportional sampling: A stratified proportional sampling was used to know the number of representatives of each bank required. Thus, the interest income (sales) of these banks for the year 2013 was chosen to represent the size of each of the banks due to data availability. These figures are then weighted proportionally with respect to total of the interest incomes and multiplied by the required sampled size of 200. This can be seen in the table below;

Table 3. 1: Stratified sampling of banks

BANKS	Interest income (GHC)	Stratified value	Representative sample
Cal	266,731,000	0.125	25
Unique Trust	187,888,000	0.088	18
Trust (The Gambia)	46,207,260	0.022	4
Eco	457,803,000	0.215	43
HFC	115,623,273	0.054	11
GCB	552,063,000	0.259	52
Standard Chartered	375,526,000	0.176	35
Societe Generale	131,936,515	0.062	12
	2,133,778,048		**200**

Systematic random sampling: a systematic random sample was then used in selecting respondents across banks. A period between 9am in the morning to 3pm in the evening was chosen. This is because; most of the banks in Accra start working at 8am and closes at 4pm. Although the respondents selected at each time were the same, the starting point from choosing respondents varied everyday with every bank to ensure a fair selection of respondents. Below was how it was carried out;

- The first 10 customers that arrived at the bank at 9:00am
- The first 10 customers that arrived at the bank at 11:00am
- The first 10 customers that arrived at the bank at 1:00pm
- The first 10 customers that arrived at the bank at 3:00pm

To ensure fairness, every bank was visited once a day at a particular starting time. For instance if I went to Ecobank at 9am, I do not return to Ecobank again on the same day, but rather, I used the rest of the time for different banks to ensure a unique day and time for each of the banks selected.

Simple random sampling: Per stratification, some of the banks selected had less than 10 representatives to be selected. Due to that, a simple random sampling was used to select the required number of representative out of the 10. Taking The Trust Bank as an example, the number of representatives required were just 4. So after getting the 10 representatives for that bank, a simple random sample was conducted to select the required 4 out of that 10.

3.6 Data collection

An official letter of introduction was obtained from the University of Ghana Business School. In addition, I sought permission from the respective banks through a formal request letter, to collect data from the customers queuing in the banking hall. A brief introduction was made to each customer before asking him or her to fill the questionnaire.

3.7 The questionnaire design

The questionnaire was designed in two sections. The first section was meant to collect data of the respondents, which, although not needed, was meant to keep them at ease. The second section consisted of questions pertaining to the three latent variables i.e. innovation, performance and competitive advantage. The questionnaire was a five likert-scale type, where respondents were either to tick or mark if they strongly agree, agree neutral, disagree or strongly disagree. The questions and the reasons for choosing them are explained below.

3.7.1 Performance

The questions selected were based on knowledge derived from various researches done by Hassan (2013), Wiele et al. (2001) and Adeoye and Lawanson (2012). According to Hassan (2013), a high service quality, effective service speed and responsiveness lead to high levels of organizational growth or performance. In other words, their research reported a positive relationship between service quality and organizational growth. Wiele et al. (2001) also confirmed the positive relationship between customer satisfaction (quality service) and organizational performance. According to them, service quality is significantly correlated with sales and margins in the same time period and in the next year period. Also, behavioral items like complaints from customers are significantly positively correlated with the organizational performance indicators. This indicates that, the more the level of complaints by customers rises, the higher the tendency for the customers to move to other companies. Furthermore, they conclude that; the ways the complaints are handled are positively correlated with quality perceptions and with organizational performance indicators in the same time period. Lastly, Adeoye and Lawanson (2012) also concluded that, a customer spending a lot of time in banks due to network problems and other factors negatively affects the performance of banks. In addition to that, the way and manner customers are handled can negatively affect bank performance.

(Refer to Appendix A)

3.7.2 Competitive advantage

According to Porter (1985), an organization, or a firm can gain competitive advantage through differentiation, cost leadership and focus. The differentiation comes with providing goods and

services distinct or unique from that of competitors. Secondly, cost leadership is the act of providing goods and services of value at reduced prices without compromising on quality. This is because, irrespective of how cheap your product or service is, customers will not patronize if it's of low quality. Lastly, focus is the act of concentrating on a particular group of customers and providing them with the products and service they need. It is satisfying a niche in the market that has been ignored or overlooked. Divandri and Yousefi (2011) also reported on gaining competitive advantage though distinct competence. According to them, these are competencies that the entire organizations are accustomed to, and that leads to the production of goods and services superior to that of competitors. According to Porter, gaining a competitive advantage is doing things that will make customers want to deal with your organization instead of others. This builds a kind of momentum, which leads to customer loyalty. (Refer to Appendix B)

3.7.3 Innovation

In respect of innovation, Baaji et al. (2004) define innovation according to Schumpeter (1934) as ''changes in the methods of supplying commodities, such as introducing new goods or new methods of production; opening new markets, conquering new sources of supply of raw materials or semi manufactured goods; or carrying out a new organization of industry, such as creating a monopoly or breaking one up'. Atalay et al. (2013) also define it in accordance with the Oslo manual. They defined innovation as "the implementation of a new or significantly improved product, good or service, process, a new marketing technique or a new organizational method in business practices, workplace organization or external relations." According to them, this is usually seen in product innovation, process innovation, marketing innovation and organizational innovation. (Refer to Appendix C)

3.8 Data analysis

In analyzing the data, this study employs a special case of the Structural Equation Modeling in respect of a Confirmatory Factor Analysis (CFA). The confirmatory factor analysis is a technique that allows the researcher to test the hypothesis and also to test a relationship between observed variables and whether their underlying latent constructs exist. The CFA makes use of multiple regression models in explaining relationships that exists between the latent variables and the observed variables. The observed variables are the questions posed to the respondents. They are questions that are formulated from intuitions derived from theories and empirical evidence related to the latent variables. Questions posed from this research are theoretically based. The latent variable or constructs are the variables which are not directly observed by the researcher. In relation to this research, the latent variables are innovation, performance and competitive advantage. There is also the use of the error term to explain the fact that, there might be other observed variables which could have been equally used to explain the latent variables, but which for one reason or the other have been omitted or ignored.

The questionnaire collected was coded in the following manner,

- Strongly agree =5
- Agree = 4
- Neutral=3
- Disagree=2
- Strongly Disagree=1

3.81 Model specification

The specified models of this research are as follows;

For Performance, the equations are;

$P_1 = \mu_1 + \phi 1 * PERF + \varepsilon_1$

$P_2 = \mu_2 + \phi 2 * PERF + \varepsilon_2$

$P_3 = \mu_3 + \phi_3 * PERF + \varepsilon_3$

The P_1, P_2 and P_3 represent the way each respondent will answer questions 1, 2, and 3 under performance. In other words, they represent the respondent's response to the questions under performance. μ_1, $\mu_{2,}$ μ_3 represents the constants of the equations. They can also be referred to as the intercept of the dependent variables. The ϕ_1, ϕ_2, and ϕ_3 are the weight factors. They indicate the kind of relationship between each of those indicators and the underlying construct. Also, each of the weights has different values indicating the quality of indicators that the research has formulated. The ε_1, ε_2, and ε_3, are the error terms for each question posed. This means, in addition to the indicators selected, there are other indicators which have been ignored for one reason or the other. And the numbers attached to these error terms, indicates that, the number of indicators omitted varies from construct to construct. The PERF represents the true score of the underlying construct of Performance for each set of equation.

For innovation, the equations are:

$I_1 = \beta_1 + \Upsilon_1 * INN + \varepsilon_1$

$I_2 = \beta_2 + \Upsilon_2 * INN + \varepsilon_2$

$I_3 = \beta_3 + \Upsilon_3 * INN + \varepsilon_3$

From the above, I_1, I_2, and I_3 are the responses for questions under innovation. $þ_1$, $þ_2$, and þ3 are the constants of the equations. $ϒ_1$,$ϒ_2$, and $ϒ_3$, are the weight factors of the equation. INN is the representation of the true score of the underlying constructs, and lastly, $ε_1$, $ε_2$, and $ε_3$ are the error terms.

For Competitive Advantage, the equations are:

$C_1 = Ɒ_1 + ɣ_1 * CA + ε_1$

$C_2 = Ɒ_2 + ɣ_2 * CA + ε_2$

$C_3 = Ɒ_3 + ɣ_3 * CA + ε_3$

With regards to the above, C_1, C_2 and C_3 represent responses to questions under competitive advantage. $Ɒ_1$, $Ɒ_2$, and $Ɒ_3$ are representation of the constants of the equations. $ɣ_1$, $ɣ_1$, and $ɣ_3$ are the weight factors. CA represents the true score of the constructs, and finally the $ε_1$, $ε_2$, and $ε_3$ are the error terms.

From the above, it can be seen that, this section has dictated the kinds of research methodologies it used to carry out the work and methods to collect data. It has also expatiated on the way and manner the data collected is analyzed.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This chapter presents the findings of the study. It discusses how customers perceive innovativeness of their respective banks. Secondly, it analyses the CFA diagrammatical results of data collected. It also shows whether the constructs or questions chosen to collect the data are significantly explained by the set of latent variables (innovation, performance and competitive advantage). Lastly the correlations and significance levels among the three latent variables is also discussed.

4.1 The level of innovativeness of the banks

The first objective of this research was to find out if customers perceive their respective banks as innovative. In finding the answer to this objective, the responses by respondents at the innovation part of the questionnaire was used to derive their perception on their respective banks. The results of the strongly agree and agree where added together and titled “Agree” whereas that of strongly disagree and disagree were also joined and title “Disagree”. The neutral was however, unchanged. The table below shows the responses by customers;

Table 4. 1 : Customers response of how innovative their respective banks are;

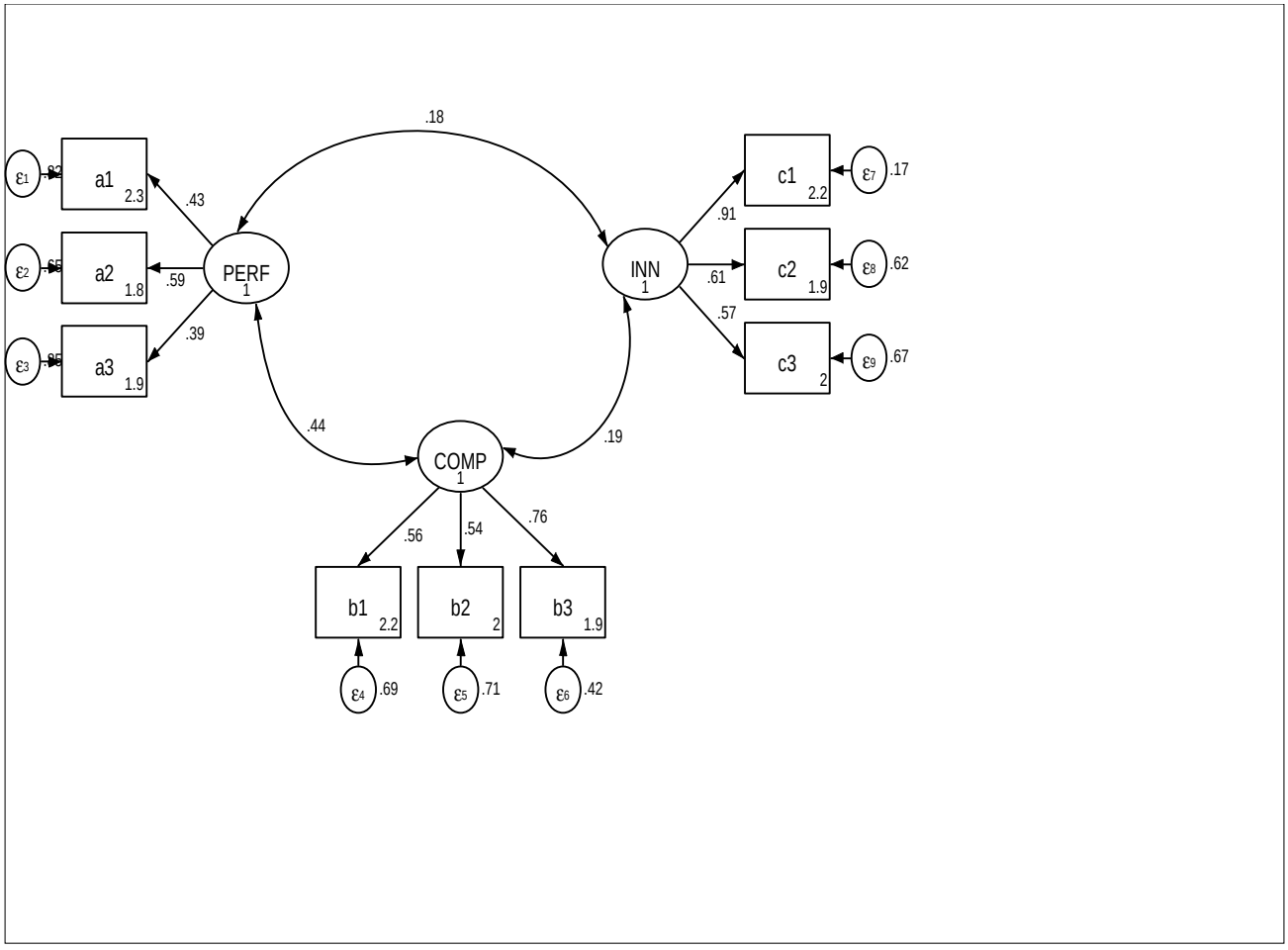
INNOVATION	AGREE	NEUTRAL	DISAGREE
This bank improves upon the products and services it offers to you regularly	**73**	**46**	**81**
This bank often introduces new products and services to improve customer satisfaction	**80**	**50**	**70**
There are now better and improved ways of accessing my account details without having to visit the banking hall.	**95**	**34**	**71**
TOTAL	**248**	**130**	**222**

- The figures reported shows that on the average, 82.6 (248/3) believes their banks are innovative, 43.3 (130/3) were indifferent and 74 (222/3), disagreed to the fact that their banks are innovative. Thus this study rejects the null hypothesis that, customers do not consider their banks innovative (i.e) H_o= *customers do not consider their banks innovative*

Diagrammatical results of the CFA

Below are the results of shown on a Confirmatory Factor Analysis diagram.

Figure 4. 1 Relationships between latent variables and observed variables



From the above, the latent variables of performance, innovation and competitive advantage are represented respectfully as PERF, INN and COMP in round circles. These circles are connected or joined by bi-directional arrows representing the correlation coefficients. So the figures found on these bi-directional arrows are the coefficients of correlation. Thus, the coefficient of correlation between innovation and performance is .18, the one for performance and competitive advantage is .44 and finally, .19 between competitive advantage and innovation. The observed variables of a1, a2, a3, b1, b2, b3, c1, c2, and c3 are represented in squared boxes. Apart from

these observed variables in the squared boxes, there are also figures representing the constants of the regression equation.

From the diagram, it can be seen that, the causation moves from the latent variables to the observed variables. This is because, according to the CFA, the observed variables will only exists if the organization exhibit qualities of the latent variables. For example, per the questions asked, banks can only provide new goods and services for customer satisfaction when they are innovative, and not the other way round. The directional arrows from the latent variables to the observed variables are known as the factor loadings, and the figures shown on them are the regression coefficients between the latent and observed variables. The letters shown in the oval circles are the error terms representing omissions of constructs in the model.

4.3 Introduction to the analyses of results in tabular form

The table below represents standardized estimates of the Structural Equation Model. It contains the regression and correlation coefficients, Standard error, Z statistics, the Probability value (P-value) and the confidence interval. The regression coefficients are used to explain the relationships between the latent variables and the observed variables. The correlation coefficients are used to explain the relationship that exists between the latent variables. The p-values are used to check the significance levels of both the relationships between the latent variables and the observed variables as well as the relationships between the latent variables. The table also presents results on the fitness of the entire model.

Table 4. 2 : Regression coefficient and standard error between latent and observed variables.

OBSERVED VARIABLES (OBSVA)	PERFORMANCE (PERF)	COMPETITIVE ADVANTAGE (COMP)	INNOVATION (INN)
OBSVA 1	.4283 **** (.0945)	.5561 **** (.0680)	.9137 **** (.0636)
OBSVA 2	.5930 **** (.1149)	.5411 **** (.0771)	.6125 **** (.0597)
OBSVA 3	.3857 **** (.1031)	.7619 **** (.0764)	.5700 **** (.0628)

NB. ******** represents p- value at significant levels of 0%

4.3.1 Relationship between latent variables and observed variables

As explained earlier, the observed variables are the questions posed to respondents to answer, where as the latent variables are the variables which are not observed directly (innovation, performance and competitive advantage). The results from the table above explain whether or not the questions posed are really explained by the latent variables based on the analysis of responses. For instance, they explain whether, spending too much or too little time in the banking hall is as a result of the level of performance of the bank or whether the rate at which the bank improves upon its products or services regularly is as results of the innovativeness of the bank. The relationships between the observed

The table above is made up of the observed variables with a generic name of OBSVA. From the table OBSVA 1, OBSVA 2, and OBSVA 3 represent questions 1, 2, and 3 respectively of the questions posed to measure each of the latent variables. OBSVA 1, comprises a1, b1, and c1, OBSVA 2, comprises a2, b2 and c2, and finally, OBSVA 3, comprises a3, b3, and c3. The latent variables as stated earlier are represented as Performance (PERF), Competitive Advantage

(COMP) and Innovation (INN). The relationship that exists between the latent variables and innovation are explained below.

4.3.1a the relationship between performance and observed variables under performance

From the table, it can be seen that, the regression coefficient between performance and the observed variables is positive throughout and are significant to 0%. For instance, the regression coefficient between a1 and PERF is positive at .4283, and the P-value between the two is significant at 0.00. This shows that, the performance of the bank significantly explains a1 and thus the bank can only exhibit a1 when it is performing. The relationship between a2 and PERF is also positive and significant. Meaning, PERF is significant in explaining a2. With a positive regression coefficient and a significant p-value, PERF is said to be also significant in explaining a3.

4.3.1b The relationship between competitive advantage and observed variables under competitive advantage.

In the section of Competitive advantage (COMP), it can be seen that competitive advantage has a positive regression coefficient and a significant p-value with all the observed variables (b1, b2, and b3). That is, the regression coefficients showed a positive value of .5561, .5411, and .7619 of b1, b2, and c2 respectively. Likewise, they all showed significance levels of 0.00 each. This means, competitive advantage significantly explains all its observed variables.

4.3.1c The relationship between innovation and observed variables under innovation

Likewise, in the innovation section, innovation also has a positive regression coefficient and a significant p-value in explaining the observed variables of c1, c2, and c3. This is also seen with the positive regression coefficients of which all were significant at .9137, .6125, and .5700, of

c1, c2, and c3 respectively. This proves that innovation significantly explains the observed variables used in its measurements.

4.3.2 Analyzing relationships between latent variables and their hypotheses

The latent variables are innovation, performance and competitive advantage. The table below

Table 4. 3 Relationships between latent variables

LATENT VARIABLES	CORRELATION COEFFICIENT	STANDARD DEVIATION
PERF, COMP	.4418 ***	.1309
PERF, INN	.1792 *	.1083
COMP, INN	.1888 **	.0951

LR test of model vs. saturated chi2 (24) = 32.91 Prob > chi2 = 0.1062
H_0 = the model is fit when chi2 > 0.05

NB. ***represents p- value at significant levels of 1%
** represents p- value at significant levels of 5%
* represents p- value at significant levels of 10%

4.3.2a the relationship between performance and competitive advantage

From the table, the correlation coefficient between performance and competitive advantage is positive and their relationship is also significant as the P-value of 0.001 is less than 0.05. This means that, they both move in the same direction. Thus an increase in performance of a bank will mean an increase in its competitive advantage and vice versa. This shows that the relationship between performance and competitive advantage is significantly positive.

4.3.2b the relationship between performance and innovation

Secondly, the correlation coefficient between performance and innovation is positive at .1792. Their relationship is also significant to 10 percent. That is, although significant, their relationship is not strong enough. Thus, although they will move in the same direction because of a positive

correlation, this might not always be the case as their relationship isn't strong enough. Thus, I fail to reject null hypotheses since the relationship between innovation and performance is strong and moderately significant.

4.3.2c the relationship between innovation and competitive advantage

Lastly, from the above, the coefficient between innovation and competitive advantage is positive and significant. According these results, innovation and competitive advantage also moves in the same direction, meaning that, if innovation increases, competitive advantage will also increase and vice versa. This is in consonance with the H3 below;

H_3= there is a positive relationship between innovation and competitive advantage

I fail to reject the hypothesis since the relationship between innovation and competitive advantage is significantly positive.

4.4 Overall model fit of the data

In a nutshell, the research fits with a chi2 = 0.1060. This is because, per the null hypothesis the model fits when the chi2 is greater than 0.05.

Conclusion

Findings from the results have shown that, observing the variables chosen to measure innovation, performance and competitive advantage will provide a clear view of whether these banks possess the qualities of the latent variables in the first place. This is because; the analyses have shown that the latent variables significantly explain the observed variable. Secondly, it can be concluded that; generally, there is a positive relationship between innovation, performance and competitive advantage.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The major findings and results of the study are summarized in this chapter. It also draws conclusions to the study as well as recommendations. The aim of this study was to examine the relationship between innovation, performance and competitive advantage among banks in Ghana. The questions it sought to answer were as follows;

- To investigate whether customers generally consider their banks innovative
- To investigate the kind of impact innovation has on performance and competitive advantage

5.1 Summary of findings

The findings from the analysis show that, customers of banks in Ghana generally do not consider their banks innovative. The majority of them were either indifferent about the innovativeness of the banks, or did not believe their respective banks were innovative at all.

The results have also shown that;

- Firstly, the performance of banks affects the amount of time customers spend in the banking halls, the way and manner reports and requests are handled by the banks, and also the attitude of front line workers towards customers.
- Secondly, the competitive advantage enjoyed by the various banks affects the way a bank is able to provide unique and better quality products and services than competitors,

the level of loyalty shown by customers to their respective banks, and the cost of dealing with each respective bank.

- Thirdly, it also proves that, the innovativeness of the banks affects their ability to constantly provide new, and improve upon the products and services offered to customers, as well as the methods of delivering these products and services.

All this is because; the analysis proved that, performance, competitive advantage and innovation significantly explain these observed variables chosen.

Lastly, findings from the analysis have also shown a positive relationship between innovation, performance and competitive advantage among banks in Ghana. All these relationships are significant. However, the relationship between innovation and performance of the banks is not significant enough.

5.1a Customers view of how innovative the banks are

Generally, customers of the banks in Ghana do not consider their banks as innovative enough. This is seen in the analysis of their responses to the questions relating to innovation. Out of the 200 respondents, it was only an approximate number of 83 who had confidence in their respective banks as innovative. The rest were either indifferent or disagreed to the fact that their banks are innovative. This might be because probably, the innovative products and services of the banks do not match the satisfaction and expectation of the retail customer, or probably, most of these retail customers are unaware of the availability of these products and services.

5.1b Subjective way of measuring innovation, performance and competitive advantage

Secondly, the results suggest that, the latent variables of innovation, performance and competitive advantage significantly explain each of their observed variables. This means that, using the subjective mode of measurement in terms of customer perception in measuring these variables is reliable. Thus, a customer's perception of the bank can really affect a banks' reputation.

5.1c Relationships between innovation, performance and competitive advantage

It can also be seen that, there is a significantly positive relationship between innovation and competitive advantage, performance and competitive advantage, and innovation and performance. However, the relationship between innovation and performance, although positive, isn't that strong. This means that, an innovative bank has a high chance of gaining competitive advantage; similarly, a well performing bank can automatically gain competitive advantage within the industry. Lastly, an innovative bank also has a high chance of improving its performance. However, in order for a bank to perform, more needs to be done in addition to offering innovative products and services.

5.2 Conclusion

Major implications drawn from the study have shown that, the innovativeness, performance and competitive advantage of Ghanaian banks, move in the same direction. This means that, a bank can either improve performance or gain competitive advantage by innovating, or can have an increase in innovation and competitive advantage just by improving performance. Also, the way and manner banks handle issues relate to their customers can paint a picture of whether they are innovative, performing or having a considerable competitive advantage. This is because, the opinions of customers have been proven to matter a lot.

5.2 Recommendation

From the conclusion, it can be recommended that;

- Banks should always consider customers very important when making decisions regarding the provision of goods and services, as the essence of providing products and services cannot be achieved if they do not satisfy the targeted consumers. This means, if the targeted customers are not satisfied, then the products and services together with the bank's reputation will not be recognized. The value of banks usually lies in the kind of products and services they provide to their customers. From the analysis, this research has confirmed customers to have the ability of determining whether a bank is performing, innovating or attaining a level of competitive advantage over its rival. Thus, it will be prudent for banks to nurture the attitude of respect for the customer's needs and desires throughout the organization.
- Secondly, the research has justified the fact that, innovative banks have a very high chance of securing a high level of competitive advantage. Likewise, a well performing bank also has an equally high chance of securing a high level of competitive advantage. However, being a highly innovative bank does not guarantee a high level of organizational performance. More factors needs to be put in place in order to secure the required level of performance from an investment in innovation. One way a bank can achieve performance with innovation, is by researching adequately on its customers to know their expectations, before investing in innovative products and services. Secondly, banks need to really create awareness of the existence of their innovative products and services. They can do this by organizing public exhibitions and talk shows, and also

making products accessible to all customers. In addition, they should improve their service delivery to justify the benefits of their innovative banking products and services. This way, customers' interest will be aroused. There might be more ways to achieve performance from an investment in innovation. This will be a lucrative area for future studies, as it will throw more light on the relationship between innovation and performance.

- Finally, there is still a need for further research in other banking areas as well as industries to further test the relationship between innovation, performance and competitive advantage.

In conclusion, this chapter has provided evidence of the relationship between innovation, performance and competitive advantage among banks in Ghana, as well as whether customers consider these banks as innovative or not. It further draws conclusions and suggest recommendations per findings.

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APPENDIX

Appendix A;

PERFORMANCE	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Customers normally spend too much time in the banking hall					
Problems reported and requests made are promptly dealt with					
Frontline workers exhibit positive attitude towards customers					

Appendix B;

COMPETITIVE ADVANTAGE	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
From your point of view, the products offered in your bank is better than other banks					

I will definitely change from this bank to another in the near future					
This bank is cheaper to deal with than other banks					

Appendix C;

INNOVATION	Strongly Agree	Strongly Disagree	Neutral	Disagree	Strongly Disagree
This bank improves upon the products and services it offers to you regularly					
This bank often introduces new products and services to improve customer satisfaction					
There are now better and improved ways of accessing my account details without having to visit the banking hall.					

APPENDIX D

Raw results of analysis;

Standardized	OIM Coef.	Std. Err	z	P>|z|	95% Conf.	Interval]
Measurement						
a1 <- |PERF	.4283316	.0944507	4.53	0.000	.2432116	.6134517
_cons	2.26579	.1335459	16.97	0.000	2.004045	2.527535
a2 <- |PERF	.593033	.1149145	5.16	0.000	.3678047	.8182613
_cons	1.752379	.1125925	15.56	0.000	1.531702	1.973057
a3 <- |PERF	.3856635	.1030941	3.74	0.000	.1836027	.5877243
_cons	1.854596	.116614	15.90	0.000	1.626037	2.083155
b1 <- |COMP	.556128	.0679809	8.18	0.000	.4228879	.689368
_cons	2.199983	.1307663	16.82	0.000	1.943686	2.45628
b2 <- |COMP	.5411286	.0770776	7.02	0.000	.3900592	.692198
_cons	2.022426	.1233917	16.39	0.000	1.780583	2.264269
b3 <- | COMP	.7618734	.0764179	9.97	0.000	.612097	.9116498

_cons	1.911019	.1188696	16.08	0.000	1.678039	2.143999
c1 <- |INN	.913682	.0635665	14.37	0.000	.7890941	1.03827
_con	2.191169	.1303958	16.80	0.000	1.935598	2.44674
c 2 <- |INN	.6124866	.0597041	10.26	0.000	.4954687	.7295044
_cons	1.929828	.1196269	16.13	0.000	1.695364	2.164292
c3 <- | INN	.5700883	.0628477	9.07	0.000	.4469091	.6932675
_cons	1.955721	.1206736	16.21	0.000	1.719205	2.192237
var(e.a1)	.816532	.0809125			.6723962	.991565
var(e.a2)	.6483119	.1362962			.429372	.9788907
var(e.a3)	.8512636	.0795193			.7088439	1.022298
var(e.b1)	.6907217	.0756121			.5573443	.8560175
var(e.b2)	.7071798	.0834178			.5612075	.8911202
var(e.b3)	.4195489	.1164416			.2435231	.7228114
var(e.c1)	.1651852	.1161591			.0416295	.6554512
var(e.c2)	.6248602	.0731359			.4967697	.7859783
var(e.c3)						

var(PERF)	.6749994	.0716575			.5482017	.8311249
var(COMP)	1	.			.	.
var(INN)	1	.			.	.
	1	.			.	.
cov(PERF,|COMP)	.441763	.1308524	3.38	0.001	.1852971	.6982289
cov(PERF,INN)	.1791595	.1083386	1.65	0.098	-.0331803	.3914994
cov(COMP,|INN)	.1888092	.0950977	1.99	0.047	.0024212	.3751972

LR test of model vs. saturated: chi2(24) = 32.91, Prob > chi2 = 0.1060

Standardized	OIM Coef.	Std. Err	z	P>|z|	95% Conf.	Interval]
Measurement						
a1 <- |PERF	.4283316	.0944507	4.53	0.000	.2432116	.6134517
_cons	2.26579	.1335459	16.97	0.000	2.004045	2.527535
a2 <- |PERF	.593033	.1149145	5.16	0.000	.3678047	.8182613
_cons	1.752379	.1125925	15.56	0.000	1.531702	1.973057
a3 <- |PERF	.3856635	.1030941	3.74	0.000	.1836027	.5877243
_cons	1.854596	.116614	15.90	0.000	1.626037	2.083155
b1 <- |COMP	.556128	.0679809	8.18	0.000	.4228879	.689368
_cons	2.199983	.1307663	16.82	0.000	1.943686	2.45628
b2 <- |COMP	.5411286	.0770776	7.02	0.000	.3900592	.692198
_cons	2.022426	.1233917	16.39	0.000	1.780583	2.264269
b3 <- | COMP	.7618734	.0764179	9.97	0.000	.612097	.9116498
_cons	1.911019	.1188696	16.08	0.000	1.678039	2.143999

c1 <- | INN	.913682	.0635665	14.37	0.000	.7890941	1.03827
_cons	2.191169	.1303958	16.80	0.000	1.935598	2.44674
c1 <- |INN	.6124866	.0597041	10.26	0.000	.4954687	.7295044
_cons	1.929828	.1196269	16.13	0.000	1.695364	2.164292
c1 <- | INN	.5700883	.0628477	9.07	0.000	.4469091	.6932675
_cons	1.955721	.1206736	16.21	0.000	1.719205	2.192237
var(e.a1)	.816532	.0809125			.6723962	.991565
var(e.a2)	.6483119	.1362962			.429372	.9788907
var(e.a3)	.8512636	.0795193			.7088439	1.022298
var(e.b1)	.6907217	.0756121			.5573443	.8560175
var(e.b2)	.7071798	.0834178			.5612075	.8911202
var(e.b3)	.4195489	.1164416			.2435231	.7228114
var(e.c1)	.1651852	.1161591			.0416295	.6554512
var(e.c2)	.6248602	.0731359			.4967697	.7859783
var(e.c3)	.6749994	.0716575			.5482017	.8311249

var(PERF)	1	.			.	.
var(COMP)	1	.			.	.
var(INN)	1	.			.	.
cov(PERF,|COMP)	.441763	.1308524	3.38	0.001	.1852971	.6982289
cov(PERF,INN)	.1791595	.1083386	1.65	0.098	-.0331803	.3914994
cov(COMP,|INN)	.1888092	.0950977	1.99	0.047	.0024212	.3751972
LR test of model vs. saturated: chi2(24) = 32.91, Prob > chi2 = 0.1060						