UNIVERSITY OF CAPE COAST

AN EVALUATION OF ACCOUNTING INFORMATION SYSTEMS AND PERFORMANCE OF SMALL SCALE BUSINESSES IN GHANA.

BY

MAURICE NANG

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NOVEMBER, 2017
DECLARATION

Candidates Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidates Signature ………………………… Date……………………..

Name: Maurice Nang.

Supervisors Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines of dissertation laid down by the University of Cape Coast.

Supervisors Signature…………………………… Date……………………

Name: Mr. Emmanuel Arhin.
ABSTRACT

Over the years, the business environments are increasingly becoming highly integrated and more complex due to a sudden rise to the numerous business functions and operations at the various work places. At the same time, the management function is undoubtedly faced with the challenge of keeping track of all the diverse organizational resources, numerous business activities, together with monitoring the entire business processes and the huge order-turnover processes. In light of the foregoing, this study explored the relationship between Accounting Information Systems adoption and performance of Small Scale Businesses in the Wa Municipality. Employing descriptive cross-sectional research design, purposive sample of 96 were recruited for the study. The findings revealed that services undertaken by the Small Scale Business men and women were super market operation, table top trading, market trading, and boutique services. Some challenges faced in seeking credit included their inability to meet all requirements for financial assistance, untimely delivery of credit by financial institutions and their inability to understand the terms and conditions of loans. Consequently, it is recommended that financial institutions must reduce the requirements needed to qualify someone for financial assistance as well as the need for business men and women to employ qualified staff to manage their accounting information systems. Also, financial institutions must be timely in offering financial assistance to the business men and women.
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DEDICATION

To my Mother, Wife and Siblings.
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CHAPTER ONE
INTRODUCTION

Background of the Study

Worldwide, Micro, Small and Medium Enterprises (MSMEs India, 2006) have been considered as the driving force of economic growth for promoting equitable development. The major advantage of the sector is its employment potential at low capital cost. MSMEs constitute over 90% of total enterprises in most economies and are credited with generating the highest rate of employment growth and account for a major share of industrial production and export.

Over the years, the business environments are increasingly becoming highly integrated and more complex due to a sudden rise to the numerous business functions and operations at the various work places. Essentially, large volumes of data that is being generated on daily basis, along with managers challenges in making effective decisions due to these difficulties (Leidner & Elam, 1994; Goodman, 1993). Additionally, the management function is undoubtedly faced with the challenge of keeping track of all the diverse organizational resources, numerous business activities, together with monitoring the entire business processes and the huge order-turnover processes. In response to these challenges, a number of modern businesses have established information systems (computer based), which aid micro, small, medium scale enterprises in keeping track of all their activities right from the planning to the delivery of value to the final consumer in the product market (Allingham & O'connor, 1992).
Studies on small and large businesses have progressively become an important issue to most entrepreneurs, policy makers, economists, financial analysts, politicians and governments of both developing and developed countries of which Ghana is no exception (Buckley & Casson, 2016). Millions of these companies throughout the world now have imperative advantages over one another. In this era of globalisation, the international marketing of services have become a topic of discourse for various constituencies, including governments, private enterprises, academics and individuals alike (Stohl & Townsley, 2007; Robinson, 2004; Javalgi & White 2002).

According to Sharma and Bhagwat (2006), recent research findings suggest that information flow is the bloodline of any business-operating unit irrespective of its size and the scope of its operation. In the present customised and globalised business environment, where geographical distances are of no consequence to customer-supplier relationships, an organisation's competency in information systems (IS) has become one of the key measures of its survival (Shuman, 2013; Sharma & Bhagwat 2006). There is emerging consensus that, globally, businesses are growing faster than ever before. Rising trade and investments are creating national wealth and consumer affluence – especially in developing countries. Convergence of tastes and preferences of consumers across the globe is increasing demand for global brands and services. Technological advancement - especially in information technology - is making the world more and more borderless and increasingly competitive.
Within Sub-Sahara Africa, about 95% of small scale industries in Africa account for its employment rate and about 43% of the value added of the entire industrial sector. Meanwhile, many of these small scale industries found in Africa are mostly traditional and generate both higher output and large amount of employment per unit of scarce capital than large scale industries (Liedholm, Carl, Chuta & Enyinna 2010). The literature also point out, access to quality business information are essential for conducting business. However, access to quality business information, to a large extent, is dictated by the existence and exploitation of effective accounting information systems and services by business entrepreneurs.

China for instance, provides a lesson and success story of the effective exploitation of accounting information system and service. In China, the development of British Overseas Trade Intelligence Services (BOTIS) and other interventions have resulted in an efficient provision of information related to companies, products, markets, business opportunities and technical data for business communities worldwide (Bughin, Chui, & Manyika, 2010). The provision of business information has facilitated trade and business operations and created multiple employment opportunities.

Central to the global trend in handling business activities, however, is the context in which information is valued or rated. Undeniably, economies of different countries are becoming more and more economically interdependent - creating a dominant, powerful economic force in which individual nations might not be as potent as they are collectively. This new force of the global economy is
forcing firms into goods and services to adapt to a new international order where 
access and utilisation of information is critical (Savitz, 2013; Javalgi & White 
2002; Westphal, 2002).

Micro, Small and Medium Enterprises (MSMEs) in Ghana are considered 
to contribute about 85% of manufacturing employment of Ghanaians (Aryeetey, 
2001). At the same time, MSMEs are also believed to contribute about 70% to 
Ghana’s Gross Domestic Product (GDP) and account for about 92% of businesses 
considers firms with less than 10 employees as small scale businesses. In northern 
Ghana, there are various small-scale industries such as Pito brewing, smock 
weaving, basketry, soap making, Shea butter processing among others. In the 
Upper West region of Ghana, one cannot talk of the contribution of small scale 
businesses without making mention of the accounting information systems and 
small scale businesses performance. Following the foregoing, there is the need to 
explore the relationship between accounting information system adoption and 
performance rate of small scale businesses in the Wa Municipality.

Statement of Problem

The advent of globalisation has resulted in increased competition 
among firms and this has compelled managers of today to increasingly seek 
different ways and approaches to achieve, improve, and sustain organisational 
performance and competitive advantage (Kim & Mauborgne, 2014; Benn, 
Dunphy & Griffiths, 2014). This competition brings to fore the essence of 
strategic management, accounting information systems and various dynamics
adopted by small scale businesses to beef up their businesses. However, extensive study has not been conducted specifically on the accounting information systems and performance of small scale businesses in Ghana over the years.

Despite the fact that a number of studies have been conducted in line with accounting information systems and performance, may focused on banking and organization. For example Amoako, (2012) studies focused on impact of ICT in banking, Laudon & London, (2007) also focused on Business information systems. Mia, Rahman, & Debnath, (2007) research was on customer behaviour online banking with Andoh, (1998) studies focusing on computing in banking. Meanwhile limited information as well as studies is realized in the field of accounts information system of small scale business firms, large and medium scales business cross the globe specifically Ghana. Those studies that have focus on accounts information systems lack some basic knowledge on financial management combined with the uncertainty of the business environment. This has led to many serious problems regarding financial performances (Beal, 2000). Coupled with the insufficiency of knowledge, many small scale businesses fail or fear to adopt information technology to help beef up production (Fauster, 2014). Adding to that, studies on small scale businesses within Upper West Region concentrated on impact of micro-credit and performance (Simon, Junior, Okyere, Amoako & Elvis, 2014). Little is known about accounting information systems and performance of SSBs in Wa Municipality. As such, there is the need to investigate accounting information systems and performance of SSBs in order to enhance the knowledge of strategic management’s impact on firms.
This study therefore explored the nexus between accounting information systems adoption and performance rate of small scale businesses in Wa Municipality

**Purpose of the Study**

Accounting information system is a part of the overall information systems in organizations. It plays a significant role in providing all levels of decision-making with relevant and reliable information. Since this is important for all organizations, it is more important for SSBs which need these information systems to deal with a higher degree of uncertainty in the competitive market especially in the upper west region. Therefore, the research established that a relationship exists between AIS and performance rate of SSBs.

**Objectives of the Study**

Whilst the main objective was to explore the relationship between accounting information systems adoption and performance rate of SSBs in the Wa Municipality, the specific objectives were to:

1. Identify the various accounting information systems adopted by small scales in their operations.
2. Determine problems that small scale businesses in Wa Municipality face in accessing and utilizing accounting information systems.
3. Suggest appropriate accounting information system (AISs) designs for the effective and efficient provision of business information to small scale businesses in Wa Municipality;
4. To recommend appropriate measures to boost accounting information systems adoption and performance of SSBs in the Wa Municipality
Research Questions

Based on the objectives of the study, these research questions are formulated to guide the study:

1. What are the various accounting information systems adopted by small scales businesses in their operations?
2. What problems do small scale businesses in Wa Municipality face in accessing and utilizing of accounting information systems?
3. What appropriate accounting information systems (AISs) designs are available for the effective and efficient provision of business information to small scale businesses in Wa Municipality?
4. What measures can be put in place to help beef accounting information systems adoption and performance of SSBs in the Wa Municipality?

Significance of the Study

The outcome of this study added to the existing stock of knowledge on the subject serve as a catalyst for further research on innovative ways of financing SSBs to gain the requisite competitive advantage for the overall academic well-being of the nation. It is useful as a source of reference to researchers, academics, students, policy makers, marketing professionals and other stakeholders interested in the financing challenges being faced by SSBs.

The study helps management of various firms, entrepreneurs and similar organizations to identify the current financing challenges of SSBs so as to meet their needs and expectations. The findings and results also provide a more reliable scientific measure and perspective for describing and evaluating the level of
efficiency of the new system and its effects on corporate performance as well as customer satisfaction.

Delimitation of the Study

The study area was limited to Wa Municipal Assembly in the upper west region. The choice accessed the influence of AISs among SSBs performance rate in the region. The study was conducted at Wa Municipal Assembly because of its economic activities which can be accessed by larger population of the region. However, there are many registered small scale businesses in Ghana but only registered small scale businesses in Wa Municipality were considered. The research design was solely descriptive which employed questionnaires as the research instrument for data collection.

Limitation of the Study

The study was not a generalized representation for evaluating how accounting information systems influence performance rate of small scale businesses of the entire country because of the sample size. The limitation of descriptive survey research is that it depends on the co-operation of respondents. When data collection procedures are erroneous, the responses given may be inaccurate and hence, the whole study may be flawed, requesting information which is considered secret and personal may also encourage incorrect answers.

Organization of the Study

This dissertation comprised of five chapters. Chapter one deals with background to the study, statement of the problem, purpose of the study, research
objectives/questions, significance of the study, delimitations, limitations and definition of terms. Chapter two focuses on the review of related literature while the research methods of the study is the subject of chapter three. The chapter entails the study area, study design, data and sources, target population, sample size, sampling procedure, research instruments, pretesting of instruments, data processing and analysis and ethical issues involved.

In chapter four, results and discussion of the findings are presented. Finally, the summary of findings, conclusions, recommendations and implications of the study for further research form the conclusion chapter as chapter five.

Chapter Summary

It is importance to note that, the above chapter looks at the various economic contributions of accounting information systems and small scale businesses by a few researchers. Also, the numerous business functions of AISs and its operations at the various work places. Challenges bedeviling the adoption of AISs are not left out. At this chapter, the purpose of the study, objectives and research questions, significance of the study and many others that relates to the chapter are stated.
CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter is devoted to the review of literature. Literature has been reviewed based on the following themes; the concept of small scales business, accounting information systems adopted by small scale businesses in their operations, uses of accounting information systems (AISs) and the problems small scale businesses (SSBs) face in accessing and utilising accounting information systems. Again, the chapter received some given theories underpinning the study.

The Concept of Small Scale Business

A research conducted by the national board for small scale industries in Ghana in 2012, revealed that most of the SSBs in the country practiced inaccurate, inadequate and below standard accounting information system and internal control systems as a tool for monitoring and checking fraud. Furthermore, reports from the Business Advisory Centre (BAC) of the NBSSI have shown that, accounting information system is a major problem facing the country’s SSBs. The report went further to state that the manner in which those who practice basic accounting information system are done could not support any effective financial management of these businesses (2004 NBSSI/ BAC, annual report). Made further division of small scale businesses into three categories; Micro businesses referring to those employing less than 6 people, very small scale businesses for those employing 6 to 9 people and small scale businesses for those with employees between 10 and 29 people.
According to Harun (2010), classification is on critical financial information that is mostly needed by the small scale businesses to increase their competitiveness or success into; taxation financial accounting, management accounting and strategic planning and these services differ between “fast growth stage” and “enterprise companies”.

Abor and Quartey (2010), indicated that the issue of what constitutes a small or medium enterprise is a major concern in the literature. Different authors have usually given different definitions to this category of business. SSBs have indeed not been spared with the definition problem that is usually associated with concepts which have many components. The definition of firms by size varies among researchers. Some attempt to use the capital assets while others use skill of labour and turnover level. Others define SSBs in terms of their legal status and method of production. Storey (1994) tries to sum up the danger of using size to define the status of a firm by stating that in some sectors all firms may be regarded as small, whilst in other sectors there are possibly no firms which are small.

According to Flora (2003), an African economist, she sees Small Scale Business as a small-scale enterprise that employs a small number of workers and does not have a high volume of sales. An alternate criteria used in defining small and medium enterprises is the value of fixed assets in the organisation. However, the National Board of Small Scale Industries (NBSSI) in Ghana applies both the ‘fixed assets and number of employees’ criteria. It defines a small scale enterprise as one with not more than 9 workers, has plant and machinery

According to Atijosan (1998), a small scale business is any manufacturing, processing or servicing industry that satisfies any or all of the following conditions:

1. Capital, but excluding cost of land and not exceeding N750,000
2. Staff strength not exceeding 50 persons and wholly Nigerian owned.
3. A manufacturing, processing or servicing industry, exceeding the units of investment stated is relatively small compared to prevalent size of plant and the technology is fairly labour intensive.

The International Accounting Standard Board (IASB) (2002), refers to small scale businesses or entities as those entities that do not have public accountability and do not also publish general purpose financial statements for external users. Australian Bureau of statistics (2001), defined small scale business as a business (excluding agriculture) that employs not more than 200 people.

Central Bank of Nigeria, defined small scale business as all businesses with a total assets investment of less than one million, an annual turnover of less than one million and with a total number of employees of less than fifty (World Bank Mapping 2005). According to Ademola (2012), small scale businesses are catalysts for world’s economic growth and development which have dominated the industrial sector of both developed and underdeveloped countries.
Steel and Webster (1990) in defining small scale businesses in Ghana used an employment cut off point of 30 employees to indicate small scale enterprises. The latter however dis-aggregated small scale enterprises into 3 categories: (i) micro -employing less than 6 people; (ii) very small, those employing 6-9 people; (iii) small -between 10 and 29 employees. In the case of Malawi, the official definition of enterprise sizes dates back to 1992. The definition is based on three criteria, viz.: the level of capital investment, number of employees and turnover.

Again, Steel and Webster (1990), an enterprise is defined as small scale if it satisfies any two of the following three criteria, that is, it has a capital investment of US$2,000 - US$55,000, employing 5 - 20 people and with a turnover of up to US$110,000 (using 1992 official exchange rate). For manufacturing enterprises, capital investment is taken to mean the cost of plant and machinery, including working capital and the cost of land and buildings. It may be observed that since this official definition was given in 1992, the economic situation in the country has changed drastically, with the value of the kwacha falling from an official rate of MK3.60 to US$1 in 1992 to MK15.30 to US$1 in 1996 and to MK43.15 as of January 1999. The implication is that the existing official definition is out of date and needs to be revised. Such enterprises are generally privately owned and operated sole proprietorships, corporations or partnerships. And depending on the country and the industry, a small-scale company employs between 250 and 1,500 people. Anything above that is a large-scale company.
Ghana Statistical Service (GSS), (2004) in their report, the Ghana Statistical Service (GSS) considers firms with less than 10 employees as small scale businesses and their counterparts with more than 10 employees as Medium and Large-Sized Enterprises. Ironically, the GSS in its national accounts considered companies with up to 9 employees as Small and Medium Enterprises.

**Concept of Accounting Information System (AISs)**

Nicolau (2000), defined accounting information system as a computer based system that increases control and enhances cooperation in the organization. Although information technology was within reach of only large companies years back, small scale businesses are gradually taking advantage over the development to improve upon their competitiveness.

According to Boame (2014), when an organization adopts e-accounting, they usually discover that even though computerized accounting systems handle financial data efficiently, their time value is that they are able to generate immediate reports regarding the organization.

Financial managers need the financial and accounting data provided by AISs to evaluate the firm’s past performance and to map future plans. AIS is a system of managing and processing transactions, disseminating required reports, and ensuring an appropriate control environment relating to business financial transaction. The outcomes of AISs, the financial reports, are required at numerous levels of detail at different levels of management and by other stakeholders. In fact, the outcomes of an AISs feeds into various decision streams at operational, tactical, and strategic levels of the organization. Users require financial and
related information with various degrees of detail and with various levels of 
analysis (Lalin & Sabir, 2010).

Beke (2010), noted that, there is an improvement in accounting quality 
and decision making associated with using accounting information system. 
Quality decisions occur since accounting information system records ensure easy 
access to information. The writer further stated that accounting information 
system tend to have standardized forms of data analysis provided by information 
system.

According to Maesono (2011), business information is information which 
helps a company manage and market itself in a competitive environment. More 
specifically, it is understood to cover three broad types of information: marketing 
research information, company information and financial information. Business 
information is sometimes used interchangeably with “commercial information” to 
mean processed data that can be used to profitably increase the production of 
goods and services for financial transactions; guard against business risks; and 
promote the economic development of a country. Again, National Archives of 
Australia (2000), also posit that “Business Information System” (BIS) refers to a 
set of processes, policies and procedures designed to capture evidence of business 
activities undertaken by an organisation. An accounting information system 
provides for the creation, capture and management of - and access to - an 
organisation's records, documents and other business information over time. More 
specifically, Okello-Obura (2009), define an accounting information system as a 
set of interrelated components that collect/retrieve, process, store, and distribute
information to support decision-making and control in an organisation. In addition to supporting decision-making through coordination and control, accounting information systems may also help managers and workers analyse problems, visualise complex subjects and create new products.

**Accounting Information Software System (AISS)**

An accounting information system (AIS) is a software package that is operated on a computer system and used to accomplish all accounting tasks, including recording, storing, retrieving, sorting, analysing, presenting and transferring accounting information to different stakeholder groups. It enhances the quality of accounting information and promotes transferring efficiency between organisations’ departments and between organisations’ branches and their different users or stakeholder groups (Hunton, 2002; Spathis, 2006).

Along with the improvements in the technology, information systems have been computerized. Improvements in this technology have replaced manual bookkeeping systems with computerized ones. The revolution in the information systems, which started in the early 1950s when the first business computers became available, is still in progress (Dalci & Taniş, 2004). Large mainframe computers have been replaced by small and fast personal computers at lower costs. As a result, accounting information systems that were previously performed manually are now performed by computers in most companies. Companies can now capture, process, store, and transmit data with the help of computers. Whereas data collections and processing were performed manually in historical systems, on-line collection and processing of data are performed by computerized
systems (Grabski & Marsh, 1994). In manual accounting information systems, processing of data is slow and subject to error. Fortunately, improvements in the technology have enabled companies to collect, process, and retrieve data quickly. In addition, there is less likelihood for error when data are processed with computers.

**Accounting Software**

Accounting software is an application that records and processes accounting transactions within functional modules such as accounts payable, accounts receivable, payroll, and trial balance. It is a part of the accounting information system. Nowadays, simple accounting software can be acquired online. For software used in large companies they contact their trusted programming entities. These programs are used for organization and centralization of data. There are three basic types of commercial accounting information system software. These are the turnkey systems, backbone systems, and vendor supported systems (Amidu, 2011). Turnkey systems are completely finished and tested systems. These are ready for implementation in the business process. Examples of this system are Enterprise Resource Planning (ERP) systems, Oracle and SAP. Backbone Systems consist of basic system structures on which to build. In this approach, the primary logic is preprogrammed and vendor will be the one to design the user interface that suits client needs. Vendor-supported systems are referred to as customized systems. In this system, the software vendor designs, implements and maintains the system for its client.
Audit software.

Since computers were integrated with the accounting process, auditors can also audit in a computerized environment. There are available auditing software packages only for auditors. Computer technologies also provide digital audit trails to be used by the auditor.

Word Processing Software

This is the computer program used for the creation of word documents. Under this, textual data can also be edited, stored and printed. Accountants and other entity employees use word processing software in communicating information. They use word processing software in preparing reports, billings, memos and financial statements (Ghasemi, Shafeiepour, Aslani & Barvayeh, 2011).

Spread Sheets

A spreadsheet is a form of an interactive computer application program usually used for organization and analysis of data in tabular form. This developed as computerized simulations of paper accounting worksheets. Today, the two most popular spreadsheets are Excel and SPSS. This can be for virtual or any task that requires computations (Ragsdale, 2014). A company’s end-off period financial statements could be exported to a spreadsheet and presented graphically to the board of directors.
Graphics Software

This software creates photos, graphs and charts from data input in order to facilitate better understanding of the topic. This is usually used in financial reporting.

Electronic data interchange (EDI)

This is the intercompany exchange of computer-processed business information in standard format. It is an inter-organizational endeavor for there are two or more entities engaged. There is no presence of human intermediaries to approve or authorize transactions in a pure EDI environment.

Security

Information technology is used widely in accounting security. The use of identifications and passwords provides a strong control in accessing confidential information about the entity. Instead of binders and papers lying around, security greatly enhanced with the proper computer programs. Using a program, accounting information can be encrypted in a way to prevent unauthorized use, making it quite safe. For instance, a lost, stolen or misplaced laptop or desktop computer can be tracked using the security software acquired by the entity (Romney & Steinhart, 2012; Spears & Barki, 2010).
Internet

The Internet provides vast sources of information that can be used by business, especially in the accounting area. Through this, documents can be shared, research can be conducted and taxes in some countries can be filed-all online (Dandago & Rufai, 2013; Tan & Teo, 2000). Connection to the Internet can be wireless and simple. The Point-of-Sale (POS) system is commonly used by malls and department stores. Internet helps in the payment procedure of customers through real-time connection of their credit card to their respective banks. The use of barcodes helps in the improving sales transaction time and automatically updating of their inventory records (Amidu, 2011).

Cloud

Web hosting off-site or called as cloud is the latest trend with accounting applications. Instead of installing a program onto the entity’s computer and saving data there, the program resides on a server in a different location. This cloud technology also uses the Internet to connect and save their information or documents online. This can also be referred to as "working in the cloud." In this way, businesses can save money in software and hardware purchases by just signing up with a cloud provider and using its programs and space for saving data. Through this, there is no need to get a bigger hard-drive or worry about program versions. The other advantage of the cloud is that you have access to your information anywhere you may be. This new cloud technology is also associated with the improved security of accounting information. Information is not open to all citizens, the administrator can restrict access to the information.
Usage of Accounting Information Systems (AISs)

Access to electronic information is becoming an increasingly important issue as more and more information is provided in electronic format (Ellen 1998).

Antohi and Tismaneanu (2000), explains a range of business information needs which include information on market prices, exchange rates, and where to import and export at fair prices. Morant (1995), agrees with Antohi and Tismaneanu (2000), by pointing out that the information needs of the majority of businesses fall into two categories: general information, such as phone numbers, travel timetable and road information, and specialized information, like information on the inflation rate, government taxation policies, local and international markets and business management skills. Whatever the categorization of accounting information system, all business enterprises need business information for different business activities.

Larvin and Zelko (2003), point out that the most needed information by the business enterprises include:

1. Business contacts - information on business and marketing partners, technology providers, public incentives bodies, etc.
2. Available market opportunities - procurement and marketing opportunities; markets for products or goods; and services and research information. There is, therefore, a need for business firms to know about the existence of markets and where they can get raw materials at cheaper prices.
A study on accounting information systems has acknowledged the use of accounting information systems to accomplish different tasks at different stages and time. According to Capron, (1996) and Bohl, (1990), the system development life-cycle can be described in six phases:

1. Preliminary investigation – carrying out a feasibility study
2. Analysis
3. Design – planning/proposing the new system
4. Development – working to bring the new system into being
   Implementation/test/maintain – enactment of the plan or converting to the new system
5. System evaluation – reviewing the system that has been developed to determine how well it meets its objectives.

Relevance of Accounting Information Systems Used In Small Scale Businesses

There are a vast number of information services available, today, and it is a recognised fact that information is a crucial element in any successful market economy (De Lange, Britz & Boon, 1993) reveals that accounting information systems resource require for monitoring environmental trends, products, services, markets, regulations, customers, for forecasting future events, for countering competitors’ strategies; and for developing new products (Ikoja-Odongo, 2002). The success or failure of business activities depends on how information is handled and utilised.
In the context of SSBs, Accounting Information System is important as it can help the firms manage their short-term problems in critical areas like costing, expenditure and cash flow, by providing information to support monitoring and control (Mitchell, Reid & Smith, 2000 & Son, Marriot & Marriot, 2006). Accounting information systems for that matter information system are responsible for analyzing and monitoring the financial condition of firms, preparation of documents necessary for tax purposes, providing information to support the many other organizational functions such as production, marketing, human resource management, and strategic planning. Without such a system it will be very difficult for SSBs to determine performance, identify customer and supplier account balances and forecast future performance of the organization. The primary purpose of an accounting information system (AIS) is the collection and recording of data and information regarding events that have an economic impact upon organizations and the maintenance, processing and communication of such information to internal and external stakeholders (Stefanou, 2006).

**The concept of Performance and their Indicators**

Global Entrepreneurship Monitor (GEM) (2004), defined Performance as the act of performing; of doing something successfully; using knowledge as distinguished from merely possessing it. However, performance seems to be conceptualised, operationalised and measured in different ways thus making cross-comparison difficult. Cooper et al (1997), examined various factors which influence business performance such as: as experience, education, occupation of parents, gender, race, age, and entrepreneurial goals. While, Lerner and Hisrich,
(1997), conducted a study on Israeli women entrepreneurs and categorised the factors that affect their performance into 6 five perspectives, that is, motivations and goals, social learning theory (entrepreneurial socialization), network affiliation (contacts and membership in organizations); human capital (level of education and skills) and environmental influences (location, sectorial participation and socio political variables). Thibault and Kanetkar (2002), suggest that factors influencing business performance could be attributed to personal factors such as demographic variable and business factors such as amount of financing, use of technology, age of business, operating location, business structure and number of full-time employees as important factors in examining the performance as small scale business operators. The most comprehensive summary of factors influencing performance was noted in a literature review by Theo et. al. (2007) to include: individual characteristics, parental influence, business motivation and goals, business strategies, goals and motives, networking and entrepreneurial orientation. Others include environmental factors.

**Management Capacity**

Entrepreneurs put their faith in common sense, overestimate their managerial skills, or believe that hard work alone can ensure success. If a small business manager does not know how to make decisions and does not understand the basic management principles, there, he is likely to face managerial challenges in the long run if not failure to progress with business activities (Griffin & Ebert, 2006). Small businesses managers need to have experience in the field they want to enter. The experience will provide practical understanding as well as
knowledge about the nature of the business, which will spell out the difference between failure and success (Scarborough & Zimmerer, 2008).

**Control System and Inventory**

Effective control system keeps the business in track and alert managers of any potential danger. If any control does not signal any impending problems you may seriously be troubled, then such controls are ineffective (Griffin & Ebert, 2006). Scarborough and Zimmerer (2008), argue that; the largest investment a small business makes is in inventory yet inventory control is one of the most neglected managerial responsibilities. Insufficient inventory levels results in shortages and stock outs causing customers to become disillusioned and leave. More common situation is that the manager has too much inventory, but also too much of the wrong type of inventory. Many small businesses that fail due to poor inventory control, have excessive amounts of cash tied up in an accumulated useless inventory.

**Government Regulations**

Government regulations like taxation are regularly well intended and they benefits without question. However their costs to small businesses are relatively higher as a result small businesses normally do shift the burden of those costs to customers. Government regulations have been accused of distorting free markets by impending competition (Susman, 2007). Tanzania Government Sector Study of the Effective Tax Burden (2006), suggests that tax and incentive policies are key parameters in defining a business climate. Taxes are essential for the financing of government activities such as social and economic development.
programs in the country, but at the same time, they should be set and administered to be as growth enabling as possible. In Tanzania the revenue raising authorities are the Ministry of finance that set tax policies and Tanzania Revenue Authority (TRA) that administers tax collection practice. Various laws and legislations have been enacted to guide the administration and collection of different taxes within the country and country that constitute the East African Community.

**Access to Capital and High Cost of Finances**

During the early stages of starting business many owners commit themselves to taking any sources of finance they have available to them. This can be disastrous as high interest rates and unfavorable payment schedules are overlooked due to pressure of financing their business. For the entrepreneurs taking high risk borrowing is simply a choice between starting a business and never starting the business. The best source of finance to small scale businesses can often be family and friends contributions but pay back in time. Small scale businesses are particularly vulnerable in periods of high interest rates because they rely heavily on financial institutions for seasonal borrowing (Susman, 2007; Lambing & Kuhl, 2007).

**Financial Controls**

Are the written ‘rule’ and procedures that let everyone know what should happen-who can do what, when and how. These include for example, who can sign cheques, which maintain the cashbooks, and how the petty cash is administered. Some of these rules will be laid down by the constitution or memoranda and articles of association, in the case of registered companies and
others may simply be unwritten understandings, or ways of working traditionally adopted by the management committee (MC) or staff of the organization/business. All organization should have financial controls to ensure effective financial management (Basis Project Team, 2008).

**Location and Pricing**

For many small scale businesses choosing the location is partly a science. Too often business locations are chosen without proper study and planning. Location is much too critical to be left to chance. Some beginning owners choose a particular location just because they have seen a vacant place or building (Scarborough & Zimmerer, 2008; Lambing & Kuhl, 2007). Entrepreneurs need to establish prices that will earn necessary profits by first understanding what it costs them to make, market, and deliver their products and services. Small scale businesses owners often underprice their goods and services resulting to losses that ultimately cause their failure (Tootelin & Gaedeke, 2002).

**Problems Faced by Small Scale Businesses (SSBs) in their Operations**

SSBs development is hampered by a number of factors, including finance, lack of managerial skills, equipment and technology, regulatory issues, and access to international markets (Lamptey, 2016; Francis & Willard, 2016; Lopez-Gracia & Aybar-Arias, 2000). The lack of managerial know-how places significant constraints on SSBs development. Even though SSBs tend to attract motivated managers, they can hardly compete with larger firms. The scarcity of management talent, prevalent in most countries in the region, has a magnified impact
In terms of technology, many SSBs often have difficulties in gaining access to appropriate technologies and information on available techniques (Kavadias, Ladas & Loch, 2016; Appiah, 2016). In most cases, SSBs utilize foreign technology with a scarce percentage of shared ownership or leasing. They usually acquire foreign licenses, because local patents are difficult to obtain. Regulatory constraints also pose serious challenges to SSBs development and although wide ranging structural reforms have led to some improvements, prospects for enterprise development remain to be addressed at the firm-level. The high start-up costs for firms, including licensing and registration requirements, can impose excessive and unnecessary burdens on SSBs. The high cost of settling legal claims, and excessive delays in court proceedings adversely affect SSBs operations. In the case of Ghana, the cumbersome procedure for registering and commencing business are key issues often cited. The World Bank Doing Business Report (2006), indicated that, it takes 127 days to deal with licensing issues and there are 16 procedures involved in licensing a business in Ghana. Meanwhile, the absence of antitrust legislation favours larger firms, while the lack of protection for property rights limits SSBs’ access to foreign technologies (Appiah, 2016).

However, their limited international marketing experience, poor quality control and product standardization, and little access to international partners, continue to impede SMEs expansion into international markets (Appiah, 2016). They also lack the necessary information about foreign markets. One important problem that SSBs often face is access to capital (Ahiawodzi & Adade, 2012). Lack of adequate financial resources places significant constraints on SSBs
development. Most small scale firms or entrepreneur usually has access to better information concerning the operation of the business and has considerable leeway in sharing such information with outsiders. However, the entrepreneur is also likely to have less training/experience in business than those in a larger company, although more adapted to operating in an uncertain environment. Hence, it may be difficult for the outside provider of financing to determine whether the entrepreneur is making erroneous decisions or for the outsider to understand the business adequately. In addition, the entrepreneur may have incentives to remain opaque, not only in dealings with financiers, but also with other outsiders such as regulators and tax authorities (Saani, 2012; Ahiawodzi & Adade, 2012; Abor & Quartey, 2010).

One challenge faced by SSBs arises from the fact that most of them lack of knowledge of financial management combined with the uncertainty of the business environment often lead SSBs to serious problems regarding financial performances (Winborg & Landström, 2001). Regardless of whether owned manager or hired-manager, if the financial decisions are wrong, profitability of the company will be adversely affected. Consequently, SSBs profitability could be damaged because of inefficient financial management. SSBs have often failed due to lack of knowledge of efficient financial management. Moreover, undercapitalization and uncertainty of the business environment cause SSBs to rely excessively on equity and maintain high liquidity and these financial characteristics probably affect SSB profitability (Abdullah & Azam, 2017). Kayanula and Quartey (2000), also identified certain constraints to the
development of SSBs in Ghana: Access to finance remained a dominant constraint to small scale enterprises in Ghana. SSBs have difficulty with gaining access to appropriate technology and information on available techniques. Distribution channels, which are not efficient and are often dominated by larger firms, pose important limitations to market access for SSBs. In Ghana, demand constraints limited the growth of SSBs.

**Empirical Literature Review**

A study by Yuan and Kazuyuki (2012), using a sample of Chinese listed companies showed that total debt ratio had a negative impact on fixed investment. This implies that high proportion of debt in the capital structure of a firm can harm investment using internal funds. This is because a firm with a high debt ratio can potentially channel most of its income towards debt servicing thereby forgoing investment through internal funds. Therefore the risk of a small scale businesses increases when more debt is employed in its capital structure. It will become increasingly difficult to attract more debt for investment purposes as creditors will charge high interest rates to compensate for the high business risk. Yuan and Kazuyuki, therefore argued that creditors will be reluctant to lend more funds to a highly indebted firm which resulting in underinvestment. As such, firm operations can be affected if insufficient investment is undertaken.

A study by Ahmad (2012), in Malaysia which sought to investigate how capital structure impacts on a firm’s performance by analysing the relationship between return on assets (ROA), return on equity (ROE) and short-term debt and total debt established that short-term debt and long-term debt had significant
relationship with ROA. It was also established that ROE had significant relationship with short-term debt, long-term debt and total debt. A similar study by Ebaid (2009), partially agreed with the findings of Ahmad (2012). In the study Ebaid sought to establish the nexus between debt level and financial performance of companies listed on the Egyptian Stock Exchange. The study used return on assets, return on equity and gross profit margin as dependent variables. It also used short-term debt, long-term debt and total debt as independent variables. The study found that the relationship between short-term debt and total debt on return on assets (ROA) is negative. It therefore concluded that there was no significant relationship between long-term debt financing and ROA.

Soumadi and Hayajneh (2012), studying the nexus between capital structure and corporate performance in Jordanian shareholdings firms used multiple regression models by least squares (OLS) to establish the link between capital structure and corporate performance of firms over a period of 5 years. The study found that capital structure was negatively and statistically associated to the performance of the firms. The study concluded that there is a negative relationship between capital structure and firm performance for both high and low growth firms.

Maritala (2012), examined the optimal level of capital structure which enables a firm to increase its financial performance. The study found that there was a negative relationship between the firm’s debt ratio and financial performance measured by return on assets and return on equity.
Fosu (2013), also conducted a similar study in South Africa to investigate the relationship between capital structure and corporate performance with focus on the degree of competition. The study established that there was positive relationship between capital structure and corporate performance.

Ogebe (2013), investigated the impact of capital structure on corporate performance in Nigeria from 2000 to 2010. The study paid particular attention to macroeconomic variables (Gross Domestic Product and inflation) on firm performance. The study concluded that there was a strong relationship between leverage and corporate performance. The negative relationship was also confirmed by Mumtaz (2013), in their study in Pakistan that sought to establish the relationship between leverage and firm.

Morris (2014), researched on the impact of accounting information on profitability of small scale business in Kampala city in Uganda East Africa. The study used qualitative analysis on data collected for the study. The research found positive relationship between accounting information system and profitability level of small scale businesses.

Though this study was conducted on the impact of accounting information system on small scale businesses, it was done in Uganda which findings cannot be applied in Ghana due to differences in economic and geographical factors which variously affect the operation of small scale businesses. This justify why the need for this research in Ghana.

Okeli (2011), researched into the relationship between proper record keeping and profitability of small scale businesses in Nigeria. The study used 148
respondents and came to the conclusion that due to inadequate record keeping, the small scale operators could not assess their performances effectively. He argues that in order to enhance the profitability of small enterprises and their continuity, there is need for adequate record keeping which will help the proprietor’s track the performance of these enterprises.

This was a relevant and well conducted research however, the differences in geographical location makes it problematic for it to be replicated in Ghana and therefore the need for an independent research to evaluate the effects of accounting information system on small scale businesses in Wa municipality in the upper west region.

Ikhatua (2013), conducted a study to ascertain if accounting information contributes to stock volatility in the Nigeria capital market. The study investigated the effect of accounting information on the volatility of stock market returns in Nigeria using CARCH model. The result from the study showed that, accounting information explain and account for stock volatility in the Nigerian stock market, specially, information on book values earning per share and dividend per share is found to be related to stock volatility.

This study conducted in Nigeria provides useful information for the stock market in Nigeria but cannot be representative in the Ghanaian market. In addition, the study failed to look at how the accounting information system impact on small scale businesses in Ghana. It is with respect to these limitations this research is conducted.
Khurramand (2014), tested for the value relevance of accounting information systems and its impact on stock prices, a case study of listed banks at Karachi stock exchange in which the pooled regression technique was used on nineteen (19) private banks. The findings show that earning per share is more value relevant than book values, while accounting data explains a high proportion of the stock price. The findings show that accounting information system influences the economic decision of users by helping them evaluate past, present and future events.

Again, this relevant study is outside Ghana and with differences in locations, its results cannot be applied in Ghana. The study did not also make reference to how accounting information system impact on growth of small scale businesses and the need for this particular study.

Haddad and Ahmah (2007), studied the factors relating to information technology and environment affecting the role accounting information system in decision making strategy in Jordanian industrial companies. The research distributed 114 questionnaires to key offers in the Jordanian industrial companies. The statistical method was used and the t-test employed. Spearman correlation and R-square were also applied to the study. The study found that there is a positive relationship between information systems but did not find a relationship between accounting information and strategy decision making. This study failed to examine the impact of information system on small scale businesses and the need for this research
Siamak (2012), conducted a study on the usefulness of accounting information system for effective organizational performance. The ANOVA statistical approach was employed to test the relationship between the independent variable and dependent variable and the simple regression analysis used to test the study hypothesis. The study concluded that accounting information system has effect on organizational performance of listed companies in Duseni financial market, but there was no relationship between accounting information system and performance management.

The research looked at the relationship between accounting information system and organizational performance and performance of management. It however, failed to evaluate the effects of accounting information on small scale businesses and the need for this research.

Al-Hiyari, Al-Mashre, and Mat (2013), examined the factors that affect accounting information system implementation and accounting information quality in university Ultara in Maleysia. Questionnaires were used as data collection instrument. The Croah bar Alpha was used to measure internal consistency and regression analyses employed to test hypothesis.

The study found management commitment and data quality are not significantly related to accounting information quality but significantly related to accounting information systems and human resources. This study did not look at the effect of accounting information system on the growth of small scale businesses and there is the need for a study for policy and why this study is significant.
Perez, Raquel, and Clara (2011), examined the relationship between the use of accounting information system on performance of small and medium sized enterprises in Spain. Samples were taken from four Small and medium enterprises. The research used ANOVA analysis to compare samples. The result was found that there is a positive relationship between the small and medium enterprises that use AIS for fiscal and bank management and better performance measures.

This study looked at the relationship between accounting information system and small scale business performance but was conducted outside the source of our country Ghana.

Sarai, Zariyawati, and Annuar, (2010), accounting information system had been widely used by many corporations to automate and integrate their business operations. Many organizations adopt the information system to improve their organizational efficiency and increase competitiveness ability. In achieving their study objective which was the information system impact on firm’s performance in Malaysian small medium enterprises, they used panel data to analyze firms performance which they said was more relevant because it contains the necessary mechanism to deal with both inter-temporal dynamic behavior and the individualistic of the firms. Based on their findings, they found that adoption of accounting information systems could provide SMEs with the right capabilities and resources in achieving their objectives, and also found out that the Malaysian governments have allocated special grants to assist SMEs to acquire these systems. Hence they suggested that SMEs should use the opportunity on the
grants provided by government to acquire AISs and other more advance systems to make them more competitive. Therefore, result from their study revealed that SMEs that use accounting information system do increase their firm’s performance and therefore this research in Ghana.

Omar and Ali (2012), conducted a research on “the impact of Accounting Information System in planning, controlling and decision making processes in Jodhpur hotels”. The descriptive analytic method has been used to collect data by means of a questionnaires distributed to various hotel accountants. After the statistical analysis of the questionnaires, appeared several key findings most of which are that hotels in Jodhpur didn’t use the method of accounting information system in planning, control and decision making processes. The study shows that there is no relationship between accounting information system and planning, controlling and decision making in four and five star Jodhpur hotels. The study recommends an increase in the rehabilitation of all cadres and develops the information system at Jodhpur hotels towards the efficient application of accounting information system. The study also recommend that the Jodhpur hotel management should use accounting information system in controlling information to get more relevant, cost effectiveness, accuracy, timeliness and clarity.

The study do not look at the relationship between accounting information system and small scale businesses in Ghana but the relationship between accounting information system and planning, controlling and decision making in four and five star Jodhpur hotels and thus, this study.
The study by Sajady, Dastgir, and Najed, (2008), under the title “evaluation of the effectiveness of accounting information systems of the finance managers of the listed companies at Tehran stock Exchange” was evaluated, the results indicate that the implementation of accounting information systems of these companies caused the improvement of manager s decision–making process, internal controls and the quality of the financial reports and facilitated the process of the company’s transactions. The results did not show any indication that performance evaluation process had been improved.

This study was limited to only listed companies at Tehran Stock Exchange and do not cover all small scale businesses in Ghana. This looked at registered small scale businesses with the NBSSI in the Wa municipality.

According to research findings by Cushing and Romney (1984), profitability is the only realistic measures of return from funds invested in the business. It is measured in terms of market share which has been gained over a given period of time. David (1983), asserts that profitability ratios like return on sales or profit margin are neglected by small scale businesses because of lack of technical know-how which are normally used by business enterprises to ascertain profit proportions on income. It is noted that small scale businesses have difficulties in making performance compares with other firms to assess its competitiveness.

According to research findings by Ogah (2013), and Saudani (2012), many small scale businesses do not use accounting information system which resulted in poor performance levels as a result of lack of business information records
keeping. Furthermore, issues like fluctuation, in demand, or change in customers’ attitudes towards certain product or services cannot be easily forecasted or easily determined by management by Dwinvedi, (2002) and Mwangi, (2011).

Research findings also show that, accounting information systems (AIS) has a direct impact of profitability level of small scale businesses as it speeds in processing data, data is easily classified in more detailed fashionable way which resulted into time saving (Rahena, Perez & Munoz, 2011). Accounting information systems are mainly used by many organizations to improve efficiency of business activities by automating existing operations. Past researches showed that by adopting accounting information system, firm performance can be improved. There is always significant improvement in firm’s performance whenever they adopt the AISs. Accounting information system is a superior system that focuses on user orientation. Core objective of AISs is to collect and record data and information that is concern with event that can economically impact on firms. It processes information and communicate this information to both external and internal stakeholders.

A study on information systems implementation in India has been conducted by Sharma and Bagwig (2003). They measured and evaluated AISs performance from six perspectives; operational efficiency of AISs function, downtime of AISs, responsiveness of AISs, timeliness of information, accuracy of information, and overall competitive position. This Cross-sectional survey was based on a questionnaires and personal interviews of 147 Indian SMEs. The results suggest that AISs performance measurement framework can be the
foundation for SMEs strategic growth in the globalization. The proper management of AISs and its performance measurement are necessary for SMEs that want to remain competitive in global economy.

Samira, Zariyawati, and Annuar (2010), examined accounting information system and firm performance of Malaysian SMEs using panel data. Questionnaires were also sent out to various SMEs. Financial statement data for a five years period commencing from year 2004-2008 were gathered. Sample for the study comprised of 205 firm-years. Regression was used for data analysis. Results from the research revealed that SMEs adopting AISs improve significantly in performance compared to non-adopters.

Olatunji (2013), examined the impact of sound accounting system on corporate performance of small and medium scale enterprises using a survey research with analysis of variance (ANOVA) as the statistical tool. The results of the study showed that adoption of sound accounting system enhances performance of SMEs. The study recommended that accounting professionals should customize accounting systems and audits to the need and capacity of these categories of business, provide accountancy services for a fee, and adherence of small business operators to internal controls.

Gerba and Viswanadham (2016), and Gebreeyesus (2007), attempted to provide some theoretical justification, that assumed to use growth rate in sales (increase in sales), increase in capital assets and profits as more precise and potential offer more objective measurement as compared to other measures of performance of firm. However, in practice they reported these measures tends to
be susceptible, problematic and not credible as firms hesitate to report the true value of their sales and profit in fear for high tax burden from the government and the factors that influence one growth measure (for instance, increase in profits) may not necessarily influence another (for example, increase in employment), moreover, firms may unable to accurately report their sales and profit as they do not keep records and fixed assets could also not indicate proper measures of performance, as it could have possibility to be affected by inflationary conditions of the country hence this may leads to measurement errors and resulted incorrect inferences from the study.

**Theoretical Issues Underpinning the Study**

Two main theories were reviewed to help conceptualized the study. They include; the consistency theory and the agency theory.

**The Contingency Theory**

Pike (1986) explained the contingency theory in relation to business management to mean that the efficiency of resource allocation is not simply a matter of adopting complex, theoretically higher investment techniques and procedures but also attention must be given to the fit between the corporate setting and the design and operation of the capital budgeting system. Three characteristics of the corporate setting which are assumed to be related with the design and operation of a firm’s capital budgeting system have been emphasised by Pike.

According to Kitonga, (2013), identified firm’s organisational characteristics as the first of such aspects. In this regards, Pike argued that large
companies are characterised by decentralisation and a more administratively oriented control plan concerning a higher degree of standardisation. Moreover, smaller and less complex organisations tend to adopt interpersonal and simple control systems. However, Akas, Gordon and Pinches (1985) have a contradictory view and argued that firms will experience more benefits from using complex capital budgeting methods. This idea, according to Kitonga (2013), was based on findings of a study conducted by Sundemin (1980), which found out that the use of sophisticated capital budgeting methods is inversely related to environmental uncertainty.

Pike (1986), recognised environmental uncertainty as the second feature of firms and argued that the more mutable and random the context of operation is, the less suitable will be the highly bureaucratic, mechanistic capital budgeting arrangements. According to Pike, businesses working in highly indeterminate environments are assumed to benefit from complex investment approaches, mainly in appraising risk. Finally, Pike was concerned about behaviour characteristics of firms. In terms of behaviour characteristics, Pike recognises three characteristics, namely degree of professionalism, the history of the organisation and the management style. According to Kitonga (2013), Pike explained that an administratively-oriented capital budgeting control policy is assumed to be consistent with analytical style of management, a high degree of professional competence and a history of ordinary investment outcomes.
Agency Theory

Agency theory has been one of the most important theoretical paradigms in accounting during the last 20 years. The primary feature of agency theory that has made it attractive to accounting researchers is that it allows us to explicitly incorporate conflicts of interest, incentive problems, and mechanisms for controlling incentive problems into our models. This is important because much of the motivation for accounting and auditing has to do with the control of incentive problems, (Kaplan & Norton, 1993). It is generally assumed that the principal is risk-neutral and the agent is risk- and effort averse. The principal and agent are assumed to be motivated by self-interest, often leading to conflicting objectives. Compensation contracts bring these conflicting objectives into equilibrium (David, Julie & Smith 1999). The sharing rule that determines the allocation of outcome between the principal and the agent is called a contract, whether it is written or not. Thus, agency theory provides a vehicle for formal, direct analysis of the economic elements of incentive compensation contracts based on effort levels or surrogates of effort levels. In conclusion agency theory is used in this research to address two questions; how do features of information, accounting, and compensation systems affect (reduce or make worse) incentive problems and how does the existence of incentive problems affect the design and structure of accounting information systems? Agency theory provides a framework for addressing these issues and rigorously examining the link between accounting information systems, incentives, and behavior.
Chapter Summary

The chapter discussed the various concepts reviewed based on AISs and SSBs by other researchers. It also looked at accounting information software systems (AISS), uses of AISs, relevance of AISs used in small scale businesses, empirical studies reviews and the theories of contingency and agency underpinning the study.

Since in Ghana, little has been done to evaluate the impact of AISs adoption by SSBs, the study aims at evaluating the impact of AISs adoption on the performance of SSBs including lack of training, resources and competent accountants as well as auditor to ensure effective uses of AISs.
CHAPTER THREE
RESEARCH METHODS

Introduction

This chapter focuses on the procedures used to collect and analyse data for the study. It entails the study area, study design, data and sources, target population, sample size, sampling procedure, research instruments, pretesting of instruments, data processing and analysis and ethical issues involved.

Study Area

The Wa Municipality is the only one among the eleven (11) Municipalities and Districts in the Upper West Region of Ghana. It is located in the center of the region. Figure 1 below shows the study area:

Figure 1: Map showing the study area, Wa Municipality.

Source: Department of Geography and Regional Planning, UCC (2017)
The Wa Municipal assembly was created out of the then Wa district assembly in 2003 with legislative instrument (LI) 180 in pursuance of the policy of decentralization which started in 1988. In accordance with the local government Act 1993 (Act 462), the Wa Municipal assembly is composed of the Municipal chief executive, the parliamentarian and assembly members. The assembly has a total membership of 28, 2/3 elected from the electoral areas in the Municipality involved adult suffrage and 1/3 appointed by government in consultation with traditional authorities and interest groups (Wa Municipal Assembly, 2013).

Wa Municipality shares administrative boundaries with Nadowli-Kaleo district assembly to the north, the Wa East District to the east and to the south is the Northern Region. It has a landmass area of approximately 234.74 square kilometers, which is about 6.4% of the region, (Wa Municipal Assembly, 2013).

According to the 2010 Population and Housing Census (PHC), the Wa Municipality has a total population of 107,214. In the Wa Municipality, the population structure has revealed a preponderance of dependence over the active working class and females over males (Children 49%, potential working force 47%, and the aged 4%). This means a high dependency ratio since the economically active population is 47% compared to the dependent population of 53%. The population is also a female dominated one that is 54,218 females representing 50.6% against 52,996 males representing 49.4% males (Ghana Statistical Service, 2010).
The economy of the Municipality is dominated by agriculture, followed by commerce and industry. Other key sectors of the economy are transport, tourism, communication and energy. Sources of income for livelihood depend on the economic activities they undertake, the level of diversity and the technology used. Comparatively, the diversity of the economy of the Municipality is very limited and dominated by agriculture, which is equally not diversified. However, the market or trading facilities do not meet the volume of trade. Shopping malls and one-stop shopping centres are absent. A lot of time is therefore spent in shopping for goods. To facilitate trade, investment is required in areas of trading shops, stores and storage facilities, transits terminals, cold storage rooms, local and regional delivery services, road and rail haulage. Currently, major goods traded include agricultural produce and products, construction materials, textiles, consumer goods, petroleum products, agricultural equipment, ICT products among others (Wa Municipal Assembly).

**Study Design**

This study adopted the descriptive cross-sectional research design to examine the various accounting information systems adopted by small scale businesses or firms to help increase business performance in the Wa Municipality of Ghana since adoption of these technological systems saves time, reduce wastage and boost productivity. The study was conducted within eight weeks. This duration of the study was affirmed by Cowell (2014), who postulated that cross-sectional research design is a method that is used to collect data over short and fixed period of time on a population. Sarantakos, (2005), also posits that
cross-sectional research design enables researchers to collect a large amount of data from a large number of people on a wide variety of respondents. This makes it useful for students who are yet to develop the skills or obtain the time and resources necessary to execute more sophisticated research designs. Cross-sectional research design can be cost-effective. However, as the size of the sample or the number of variables increase, so does the cost of executing the project.

The cross-sectional research design was chosen because the sampled variables that are being studied are simply being observed as they are without making any attempt to control or manipulate them. Despite the benefits cross-sectional research offers, it has some shortcomings. For instance, cross-sectional research designs do not allow researchers to assess facts about time in terms of exposure and effect (Manheim, 1977).

**Data and Sources**

Primary data and secondary information were used for the study. The primary data was obtained from the respondents in the field using questionnaire while the secondary information too was acquired from the Wa Municipal assembly’s records, magazines, journals and other relevant information that treat different aspects of the study under investigation.

**Target Population**

The study focused on owners of registered small scale business entrepreneurs aged 18 years and above in the Wa Municipality. The age of 18 years and above was chosen because it is the age of maturity and consent in Ghana according to the 1992 Constitution of the Republic of Ghana. The
population encompasses small scale business entrepreneurs who have been engaged in micro-credit activities for at least three years. The choice of the three years is guided by the fact that, three years in operating a SSBs was enough to adopt various accounting information systems which could either lead to higher performance of the business or under-performance. Therefore, the target population of the study was 100 entrepreneurs based on the number of small scale businesses register in the Municipality.

**Sample Size**

A list of 320 registered Small Scale Businesses were obtained from the National Board for Small Scale Industries (NBSSI) in the Municipality served as the sample frame for the study. Out of that number (320), 96 respondents were to be selected and recruited as the sample size for the study. The sample size of 96 Small Scale Business entrepreneurs were determined using Thumb Principle which states that, population less than 1000 are sampled by 30%(Van Belle, 2011; McNamara, 1997). This is calculated as follows:

\[
30\% \text{ of Target Population} \\
\frac{30}{100} \times 320 \\
= 96
\]

**Sampling Procedure**

Probability sampling technique was used for the study. The channel of arriving at 96 respondents was simple random sampling. The tottery method was employed to arrive at the sampled 96 respondents from 320 registered small scales businesses. With this method, “Yes or No” was written and mixed in a
basket for respondents to choose from. Out of the 320 registered small scales businesses, only 96 “Yes” was written and Mix with the remaining 224 “No”. Respondent who was pick “Yes” was predisposed to the study while the No’s was denied access. With this sampling technique, a researcher chooses respondents who are thought to be of relevant to the survey. Thus, small scale business owners in the Municipality was sampled. This meant to find out from small scale business owners in the Municipality their accounting information systems which they adopt which could either lead to higher performance of the business or under-performance. The choice of simple random for the study was because a complete coverage of the population is not possible, also complete coverage may not offer substantial advantage over a sample survey. On the contrary, it is argued that sampling provides a better option since it addresses the survey population in a short period of time and produces comparable and equally valid results, also sampling is less demanding in terms of labour requirements, since it requires a small portion of the target population, and finally simple random sampling is thought to offer more detailed information and a high degree of accuracy because they deal with relatively small numbers of units.

**Research Instrument**

The study adopted interview schedule to facilitate the study. The interview schedule was chosen for the study because most of the respondents in the area are illiterates and unlikely to respond to questionnaires qualitatively. This position was affirmed by the report reveal by Ghana Population and Housing District Analytical report (2010), Female Literate in Wa municipal constitute 22,569
(44.2%) and that of the non-literate (not literate) is 17,232(63.3%). As such the interview schedule will enable the researcher and the field assistants to translate questions into the Waale, Brefo, Dagaare and the Twi languages which are widely spoken at Wa. It help to avoid irrelevant answers from respondents, and it made inputting into the computer fairly easy (Sarantakos, 2012).

**Pretesting of Instrument**

The instrument was pretested at Jirapa to evaluate its effectiveness. Jirapa was considered for the pre-testing because it has similar characteristics such as economic activities just as the study area. Three locations were selected for the pretesting. Out of the three locations, four small scale businesses were selected to pretest the instrument. The rationale for the pretest was to identify lapses which were likely to show up during the actual field data collection. The feedback from the pretesting were used to restructure some of the questions on the instrument whereby some went well sequenced, misplaced were rearranged and clarified. This whole process aided the study to ascertain the validity and reliability of the instrument to be used for the actual data collection.

**Data Processing and Analysis**

The data collected from the field will be first cross checked to ensure the accuracy of responses. The quantitative data was analyzed using statistical package for service solution (SPSS) version 21 (Emory & Cooper, 1991). Descriptive statistics such as graphs, tables, percentages and frequencies was used to present the quantitative data. The five point Likert scale was adopted by the
study to measure performance. Respondents expressed their perception in diverse ways by either strongly agreeing, agreeing, strongly disagreeing or disagreeing.

**Ethical Issues Involved**

The study ensured that all ethical issues in social sciences research such as confidentiality, anonymity and privacy are religiously followed. More so, the study’s objectives were explained to the respondents before the study commenced.

**Chapter Summary**

The study used descriptive cross sectional research design to examine the various accounting information systems adopted by small scale businesses to help increases performance. Simple random sampling was used for this study. Closed ended questionnaire based on the objectives used for the data collection as instrument. The data was analysed using statistical package for social science (SPSS).

The major limitation of the study was that, it is difficult to make general conclusion based on a particular phenomenon.
CHAPTER FOUR
RESULTS AND DISCUSSION

Introduction

This chapter presents findings of the study and conducts discussion based on the findings. The findings have been presented under the sub headings Socio-demographic characteristics of respondents, services undertaken by the SSBs Man or woman, challenges faced by small scale business operators, uses of accounting information system (AIS) and the types, challenges in adopting (AISs) and among other sub headings. This is ensued by the discussion where the findings are discussed in tandem with earlier findings.

Socio-Demographic Characteristics of Respondents

On the type of businesses operated by entrepreneurs, majority of the respondents (75.0%) indicated that they were into sole proprietorship business followed by 13.5 percent who were also into Limited Liability Companies. Few (11.5%) were into partnership whilst almost all (95.8%) of the respondents did not have branches of their business elsewhere. It was again realised that 54.2 percent of the respondents had less than three employees with 19.8 percent of SSBs having their employees ranging from 4-6 whilst only 9.4 percent of them had more than ten employees. A significant proportion of the businesses (44.8%) had operated within the last 1-3 years as indicated in Table 1. On education, the study revealed that 34.4 percent of the operators or owners had attained secondary education. In most cases, the managers were not different from the businesses (84.4%).
Table 1: Background of Businesses

<table>
<thead>
<tr>
<th>Background of Business</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Firm</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sole Proprietorship</td>
<td>72</td>
<td>75</td>
</tr>
<tr>
<td>Partnership</td>
<td>11</td>
<td>11.46</td>
</tr>
<tr>
<td>Limited Liability Company</td>
<td>13</td>
<td>13.54</td>
</tr>
<tr>
<td><strong>Number of Branches</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>92</td>
<td>95.83</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>4.17</td>
</tr>
<tr>
<td><strong>Number of Employees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than three</td>
<td>52</td>
<td>54.17</td>
</tr>
<tr>
<td>4—6</td>
<td>19</td>
<td>19.79</td>
</tr>
<tr>
<td>7—9</td>
<td>16</td>
<td>16.67</td>
</tr>
<tr>
<td>10 and above</td>
<td>9</td>
<td>9.37</td>
</tr>
<tr>
<td><strong>Number Years in Operation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1---3</td>
<td>43</td>
<td>44.79</td>
</tr>
<tr>
<td>4—6</td>
<td>27</td>
<td>28.13</td>
</tr>
<tr>
<td>7 years and above</td>
<td>26</td>
<td>23.08</td>
</tr>
<tr>
<td><strong>Level of Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>21</td>
<td>21.88</td>
</tr>
<tr>
<td>Basic/JHS</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Secondary education</td>
<td>33</td>
<td>34.38</td>
</tr>
<tr>
<td>Diploma</td>
<td>18</td>
<td>18.74</td>
</tr>
<tr>
<td><strong>Is the manager different from the owners</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>15</td>
<td>15.62</td>
</tr>
<tr>
<td>No</td>
<td>81</td>
<td>84.38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>96</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field work, Nang (2017)
Businesses Undertaken by the SSB Man or Woman

The study sought to ascertain the kind of business the respondents are operating. Figure 5 presents the findings. From the figure, a relative greater share of the respondents (32.0%) were into supermarket business, with 22.1%, 19.3%, 9.2% and 9.1% of the respondents also into table top businesses, market trade, boutique operation and artisan respectively. Few of them (8.3%) were into provision store operation.

Services Undertaken by the SSB Men and Women

Figure 2: Businesses undertaken by the SSB man or woman
Source: Field work, Nang (2017)

Research Question 1: What are the various accounting information systems adopted by small scales businesses in their operations?

The main purpose of this research question is to ascertain the various accounting information systems adopted by small scale business in their operations. To achieve this percentage analysis was performed to ascertain the
usage and various accounting information systems adopted by these SSBs. The result of this analysis is presented from Table 2.

**Usage of Accounting Information System (AIS) and Types**

Upon inquiring whether they used accounting information systems (AISs) in their operations, it was realized that few were using accounting information systems and they made up 23.9 percent. Further probing revealed that the dominant AIS used was Excel thereby constituting 34.8 percent. Other AIS used were noted to be Pastel (26.1%), Tally (21.7%) and Quick books (17.4%) as indicated in Table 2.

**Table 2: Usage of accounting information system (AIS) and the types**

<table>
<thead>
<tr>
<th>Use Accounting Information System</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>23</td>
<td>23.9</td>
</tr>
<tr>
<td>No</td>
<td>73</td>
<td>76.1</td>
</tr>
</tbody>
</table>

**Accounting information systems**

<table>
<thead>
<tr>
<th>Accounting Information Systems</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pastel</td>
<td>6</td>
<td>26.1</td>
</tr>
<tr>
<td>Tally</td>
<td>5</td>
<td>21.7</td>
</tr>
<tr>
<td>Excel</td>
<td>8</td>
<td>34.8</td>
</tr>
<tr>
<td>Quick books</td>
<td>4</td>
<td>17.4</td>
</tr>
</tbody>
</table>

**Total** 23 100

*Source: Field Survey, Nang (2017)*

**Research Question 2:** What problems do small scale businesses in Wa Municipality face in accessing and utilizing of accounting information systems?

The main objective of this research question was to determine the problems faced by small scale businesses in accessing and utilizing of accounting information systems. To achieve this, the frequency and percentage were employed to
examine the challenges faced by small scale businesses in their operations. The result of this analysis is presented in Table 3.

**Challenges Faced by Small Scale Business Operators**

From Table 3, while majority of the respondents (42.6%) indicated that they are unable to meet all the required documents needed to seek the Loan, Untimely delivery of credit by the Financial Institutions (27.8%) was also pronounced by some of the business operators. At the same time, 31.3 percent of the operators faced difficulty in understanding the terms and conditions of the loan and only 8.2 percent indicated financial institutions’ unwillingness to provide funds.

**Table 3: Challenges faced by small scale business operators**

<table>
<thead>
<tr>
<th>Challenges faced by SSB Operators in seeking Credit</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks and Non-banks unwillingness to provide funds</td>
<td>5</td>
<td>8.2</td>
</tr>
<tr>
<td>Inability of the SSB Man or Woman to understand the terms and condition of the Loan</td>
<td>13</td>
<td>21.31</td>
</tr>
<tr>
<td>Untimely delivery of credit by Financial Institutions</td>
<td>17</td>
<td>27.87</td>
</tr>
<tr>
<td>Inability of SSB man or woman to meet all the required document to seek the Loan</td>
<td>26</td>
<td>42.62</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Field work, Nang (2017)*
How the adoption of these accounting information systems (AIS) improved your business performance over the years?

All the respondents who adopted these accounting information systems attested to the fact that these systems have really boosted their profitability, reduced their work burden as well as fast tracking local and international transactions.

Challenges in adopting accounting information systems (AIS)

The study also identified some possible challenges that obstruct small scale business operators from adopting AISs. A considerable proportion of the entrepreneurs (34.3%) admitted that they lack skill personnel in such field to manage issues of AISs while 26.8 percent reported that some of the customers do not understand how AISs operate even upon explaining, thereby making adherence difficult. Again, 22.3 percent also attested that frequent breakdowns of channels were some of the challenges they face in adopting the innovation. Only 16.4 percent posited that their non-adherence is due to the high cost of maintenance.

Table 4: Challenges in adopting AISs

<table>
<thead>
<tr>
<th>Challenges in adopting AIS</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High cost of maintenance</td>
<td>11</td>
<td>16.41</td>
</tr>
<tr>
<td>Frequent breakdowns of channels</td>
<td>15</td>
<td>22.39</td>
</tr>
<tr>
<td>Lack of skilled personnel in this field</td>
<td>23</td>
<td>34.33</td>
</tr>
<tr>
<td>Some customers don’t know how to use them</td>
<td>18</td>
<td>26.87</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>100</td>
</tr>
</tbody>
</table>

NB: frequency is more than 23 because is a multiple Responses

Source: Field work, Nang (2017)
Research Question 3: What measures can be put in place to help beef accounting information systems adoption and performance of SSBs in the Wa Municipality?

This research question sought to establish the measures that can be put in place to beefing accounting information systems adoption and performance of SSBs in the Municipality. To achieve this, the mean and standard deviation analysis were employed to examine the recommendation to beefing the uses of AISs among SSBs. The result of this mean and standard deviation is presented in Table 5.

Recommendations to beefing the uses of AISs

Respondents through this study suggested various ways through which AISs businesses can be enhanced, out of the series of recommendations mentioned by the respondents, the dominant among them were customer education on AIS (56.3%). Also, more than 50 percent of the respondents strongly suggested that policy makers should channel much resources to educating customers in some business dealings since some of them have low knowledge to these dealings. Significant proportion of them (28.1%) suggested that, small scale business operators should employ qualified staff to respective positions to manage AISs. Few of the respondents, constituting 15.6 percent, also advised that service system used to beefing AISs should frequently be serviced to avoid breakdowns as indicated in Table 5.
Table 5: Recommendation to beefing the uses of AISs

<table>
<thead>
<tr>
<th>Recommendation to beefing the uses of AISs</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employ qualified staff to manage the AISs</td>
<td>9</td>
<td>28.1</td>
</tr>
<tr>
<td>Educate Customers on AISs</td>
<td>18</td>
<td>56.3</td>
</tr>
<tr>
<td>Service machine frequently to avoid breakdown</td>
<td>5</td>
<td>15.6</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100</td>
</tr>
</tbody>
</table>


NB: frequency is more than 23 because is a Multiple Responses.

Research Question 4: What appropriate accounting information systems (AIS) designs are available for the effective and efficient provision of business information to small scale businesses in Wa Municipality? To achieve this, the frequency and percentage were employed to examine the appropriate AISs designs available for efficient and effective provision of information to SSBs, The result of this analysis is presented in Table 6.

The results in Table 6 with the overall mean and standard deviation (M = 1.8762, SD = 0.4428) gives strong indication that SSB had a negative perception towards performance of their business. On whether Entrepreneurial capital is contributing to SSB performance, respondents agreed (M=2.1875). Respondents also agreed that, entrepreneurial capital is contributing to SSB performance (M=2.1875) in addition to assenting that access to infrastructure is contributing to
SSB Performance (M=2.6979) and directly influencing small scale business performance. Again, respondents posit that their relationship with their suppliers has increased their sales’ turnover (M=2.1354). On the other Control System and Inventory contributes to SSB Performance Government Regulations contributes to SSB performance (M=2.0000).

Despite the views shared by small scale business operators, a significant number of them consented that, some variables do not necessarily influence performance of their business. Among the specific variables they alluded to were the contribution of entrepreneurial knowledge being a contributor to SSB Performance (M=1.8854) as well as their relationship with customers (M=1.0000). Again, financial controls not necessarily contributes to SSBs Performance (M=1.4896) as well as the location and pricing (M=1.4896) as indicated in Table 6.

**Table 6: Factors influencing performance in small scale businesses**

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>Standard dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial capital is contributing to SSBs performance</td>
<td>96</td>
<td>2.1875</td>
<td>0.39236</td>
</tr>
<tr>
<td>Entrepreneurial capacity is contributing to SSB performance</td>
<td>96</td>
<td>2.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Entrepreneurial knowledge is contributing to SSBs Performance</td>
<td>96</td>
<td>1.8854</td>
<td>1.11327</td>
</tr>
<tr>
<td>Access to infrastructure is contributing to SSBs Performance</td>
<td>96</td>
<td>2.6979</td>
<td>0.76941</td>
</tr>
</tbody>
</table>
My relationship with my supplier has increased my sales turnover  

My relationship with my customers has increased the growth rate of my business  

Control System and Inventory contributes to SSBs Performance  

Financial controls contributes to SSBs Performance  

Location and Pricing contributes to SSBs Performance  

Overall mean and Standard Deviation  

| Source: Field work, Nang (2017) |

Summary and Interpretation of Findings  

Considering the fact that little is known about accounting information systems (AISs) and performance of SSBs in Wa Municipality, this study investigated the relationship between accounting information systems and performance in order to advance the knowledge base of strategic management’s impact on businesses. The study revealed that services undertaken by the SSBs men and women included supermarket, table top, market trading, artisan, boutique and provision. This is an indication that they are involved in diverse services in the industry and as such have varied experience and expertise.  

These services might have been prompted by the needs of their customers. Meanwhile, Thibault and Kanetkar (2002), opined that factors influencing business services could be attributed to personal factors such as demographic
variable and business factors such as amount of financing, use of technology, age of business, operating location, business structure and number of full-time employees as important factors in examining the performance as small scale business operators.

It was noted that few of them were using accounting information systems (AISs) and the systems being used included excel, pastel, tally and quick books. A considerable proportion of them were not using any system possibly as a result of limited knowledge in the software or maybe they are simply not comfortable with using the AISs. However, using such software has the potency to greatly facilitate their operations making them more efficient and effective in their operations. Similarly, Antohi and Tismaneanu (2000), explain that a range of business information needs are facilitated by such systems and some of these needs include information on market prices, exchange rates, and where to import and export at fair prices.

In the context of SSBs, some researchers have acknowledged that accounting information systems are important as it can help the firms manage their short-term problems in critical areas like costing, expenditure and cash flow, by providing information to support monitoring and control (Mitchell, Reid & Smith, 2000 & Son, Marriot & Marriot, 2006). All the respondents who were using accounting information Systems admitted that the adoption of the systems have extremely boosted their profitability, reduced their work burden as well as fast tracking local and international transaction.
It is worthy of note that a little above half of the respondents had ever accessed credit from various financial institutions in furtherance of the operations. That is, the business men and women made good use the available financial institutions in order to grow their business operations. This might originate from a possible good relationship existing between the businesses and the various financial institutions. It could also possibly imply that these financial institutions have flexible terms with regards to repayment and collateral required for the financial assistance. This is because all things being equal, businesses are more likely to seek financial assistance especially loans if associated conditions are favourable to them.

The study revealed that respondents encountered a number of challenges in their quest to access credit facilities. The major challenges acknowledged among other issues included their inability to meet all the required documents needed to seek loan, untimely delivery of credit by financial institutions, their inability to understand the terms and conditions of the loans and unwillingness of some financial institutions to provide funds. Such challenges have the tendency to compromise the smooth operation of the businesses in several ways such as slowing them in the discharge of their core functions.

This coincides with the findings of Lamptey (2016), as well as Francis and Willard (2016) when they realized that development of SSBs is hampered by a number of factors, including finance, lack of managerial skills, equipment and technology, regulatory issues, and access to international markets (Lamptey, 2016; Francis & Willard, 2016). Also, Ahiawodzi and Adade (2012), similarly
noted that one important problem that SSBs often face is access to capital. Undoubtedly, lack of adequate financial resources therefore places significant constraints on SSBs development.

However, Winborg and Landström (2001), were of the view that the financial challenge of SSBs is not as a result of limited access to credit, instead, it arises from the fact that most of them lack knowledge of financial management combined with the uncertainty of the business environment often leading SSBs to serious problems regarding financial performance.

Some challenges were identified to be associated with adoption of AISs and these included customers’ ignorance about usage, lack of skilled personnel in this field, frequent breakdowns of channels and high maintenance cost. This finding is not surprising in light of the fact that some previous studies have realized that in terms of technology, many SSBs often have difficulties in gaining access to appropriate technologies and information on available techniques (Kavadias, Ladas & Loch, 2016; Appiah, 2016).

**Chapter Summary**

This chapter discussed the findings in line with the objectives, the evaluation of accounting information system and performance of small scale businesses in Wa Municipality. These objectives are the various accounting information systems adopted in line with the businesses undertaken by SSBs, challenges faced by SSBs operators, usage of AISs, how the adoption of AISs improved businesses performance, challenges in adopting AISs, recommendation to beefing the uses of AISs and factors that influence performance in SSBs.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This happens to be the last chapter of the study and it is demarcated into three sections. Specifically the chapter covers issues bordering on summary and conclusions drawn from the study. The chapter also presents relevant recommendations drawn from the findings of the study that are worth implementing to bring to light the nexus between accounting information systems (AISs) adoption and performance rate of SSBs in Wa Municipality.

Summary

This is a pure quantitative study that aimed at exploring the nexus between accounting information systems (AISs) adoption and performance rate of SSBs in the Wa Municipality of the Upper West Region. The specific objectives that guided the study were to identify the various AIS adopted by small scale businesses in their operations and to determine problems that small scale business enterprises in Wa Municipality face in accessing and utilising accounting information systems. Additionally, the study aimed at suggesting appropriate AIS for the effective and efficient provision of business information to small scale businesses in Wa Municipality. Questionnaire was the instrument used in soliciting respondents’ views to address the research objectives based on the set objectives, the following key findings emerged:
The services undertaken by the small scale business men and women were super market operation, table top trading, market trading, artisans, provisions and boutique service.

It is worthy of note that only few of the respondents were using AISs. The specific AISs they were using are Pastel, Tally, Excel and Quick books. They noted that they encounter some challenges in using AISs and some of these challenges were ignorance about usage and frequent breakdown of channels.

Acknowledged that, accounting information systems are important as it can help the firms manage their short-term problems in critical areas like costing, expenditure and cash flow, by providing information to support monitoring and control.

Some challenges were identified to be associated with adoption of AIS and these included customers’ ignorance about usage, lack of skilled personnel in this field, frequent breakdowns of channels and high maintenance cost.

Conclusions

Based on the findings, the following conclusions have been drawn by the researchers:

Wa business men and women are involved in diverse activities. This indicates that they all do not trade in same products but there is diversity with regard to the services they render.

The business men and women in Wa make use of financial assistance in their routine business operations. This indicates that not all business men and women in the Wa Municipality operate with their own finances and this was indicated by
the fact that a greater share of them had ever sought financial assistance from various financial institutions. They principally sought financial assistance from NIB, ADB, Sinapi Aba Trust, Sonzele, and Multi-Credit among others.

Accounting information systems would significantly influence the performance of small and medium scale enterprises. Also, accounting information systems bear relevance to the size and need of small and medium scale enterprises. Lastly, it can as well be concluded that accounting information system would significantly influence the performance of small and medium scale enterprises.

**Recommendations.**

Based on the findings of this research, the following recommendations are made:

1. In order to facilitate the usage of AISs, there is the need for business men and women to employ qualified staff to manage their AISs.

2. It is also recommended that the level of computerization of SSBs activities should be improved in line with the current level of advancement in technology for SSBs that already adopted accounting information system.

3. Additionally, there is the need to service computers frequently in order stop breakdowns as this has the tendency of boosting the use of AISs.
4. Similarly, SSBs should ensure that the cost of acquiring AISs does not outweigh the benefits the company would gain from using them given the perceived cost of AISs adoption.

5. Further research direction could be geared towards the analysis of the effectiveness of accounting information system as a part of management information systems and other contingency factors that could affect AISs adoption such as competency of personnel and level of enterprise innovation.

**Implications of the Study**

The potency of the finding is premised on the research settings. On one hand, the findings of this study hold prospects of enhancing the performance of small scale enterprises with additional frontiers for such businesses to expand their operation. On the other hand, by bringing to fore the need for small businesses to embrace technology, the study places the issue of performance and access to finance as a prime area in staying competitive among their peers.

The study also proves that though contingency factors; computerized accounting information systems and effective inventory control systems; the performance of small business entities are improved upon thereby surmounting the odds associated with obtaining funds needed for expansion purpose. The study also has implications for prompting and sustaining a robust contingency based tradition in management accounting research in Ghana and beyond. It may even stimulate the search into developing or including more contextual variables in
understanding the relationship between AISs and performance of small scale enterprises.
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APPENDIX A
UNIVERSITY OF CAPE COAST

DEPARTMENT OF BUSINESS (ACCOUNTING STUDIES)

QUESTIONNAIRE

AN EVALUATION OF ACCOUNTING INFORMATION SYSTEM AND PERFORMANCE OF SMALL SCALE BUSINESSES: A STUDY OF WA MUNICIPALITY.

The purpose of this questionnaire is for academic research and all information provided would be treated with the confidentiality it deserves. Kindly be as frank as possible. Thank you for your response

NOTE: SSBs is Small Scale Businesses and AISs is Accounting Information Systems.

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<thead>
<tr>
<th>NO.</th>
<th>QUESTIONS</th>
<th>RESPONSES</th>
</tr>
</thead>
</table>
| 1   | What type of organisation is your business? | Sole proprietorship ..................1  
Partnership ...........................2  
Limited liability company .......3 |
| 2   | How many branches does the company have in Ghana? | .................................. |
| 3   | How many employees does the | .................................. |

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<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>4 For how many years has the business been in operation in Wa Municipality?</td>
<td>..........................................................</td>
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<tr>
<td>5 What services do you provide?</td>
<td>..........................................................</td>
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</tbody>
</table>
| 6 What is the highest educational level of the owner/manager?           | a. No formal education ..........1  
|                                                                       | b. Basic/JHS.........................2  
|                                                                       | c. Secondary education ..........3  
|                                                                       | d. Diploma .........................4  
|                                                                       | e. First degree .................5  
|                                                                       | f. Masters’ degree ..............6  
|                                                                       | g. Doctorate .................7     |
| 7 Is the manager different from the ownership of the business?          | Yes .........................1  
|                                                                       | No .........................2       |
| 8                                                                        | .......................................................... |
| 9 Yes .................1  
<p>|                                                                       | No .........................2       |
| 10                                                                      | .......................................................... |</p>
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</table>
| 1 | Yes ..........................1  
   | No ..........................2 |   |   |
| 1 |   |   |   |
| 2 |   |   |   |

**VARIOUS ACCOUNTING INFORMATION SYSTEMS ADOPTED BY SMALL SCALE BUSINESSES IN THEIR OPERATIONS**

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</table>
| 1 | Do your business use any accounts information systems in the management of your business? | Yes ..........................1  
<p>| No ..........................2 | If no, end but yes contr’n Q 14 |
| 1 | What accounts information systems do you use in the management of your business? |   |   |
| 1 | What services do you use the Accounts information services for? |   |   |</p>
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<td><strong>1</strong></td>
<td><strong>6</strong></td>
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</table>
| **Has the adoption of these Accounts information systems improve your business performance over the years?** | Yes ........................1  
No .................2 |
| **PROBLEM IN USING THE ADOPTED ACCOUNTING INFORMATION SYSTEMS** |
| **1** | **7** |   |
| **If yes Q13 Which problem(s) are associated with adopting?** | High cost maintenance……..1  
Frequent breakdowns of channels........................2  
Energy crisis .................3  
d. Lack of skilled personnel in this field .....................4  
e. Transactions can’t be done through e-medium...................5  
f. Some customers don’t know how to use them......................6  
g. Others .........................7  

*Tick as many as you can* |
| **1** | **8** |   |
| **What in your opinion can be adopted to improve Business Information System Design (BISD) for the effective** | .................................................................................................  
  
  

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and efficient provision of business information to small scales business enterprises?

Please indicate your position on the following statement by ticking (√) the appropriate option NB: SA =Strongly Agree, A=Agree, SD=Strongly Disagree, D= Disagree. Kindly tick the appropriate response to any of the questions below.

Factors influencing performance in small scale businesses

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>SDA</th>
<th>DA</th>
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<tbody>
<tr>
<td>1.</td>
<td>Entrepreneurial capital is contributing to SSBs performance</td>
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<td>2.</td>
<td>Entrepreneurial capacity is contributing to SSBs performance</td>
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<td>3.</td>
<td>Entrepreneurial knowledge is contributing to SSB Performance</td>
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<td>4. Access to infrastructure is contributing to SSBs Performance</td>
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<tr>
<td>5. Access to infrastructure is contributing to SSBs Performance</td>
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<td>6. My relationship with my supplier has increased my sales turn over</td>
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<td>7. My relationship with my customers has increased the growth rate of my business</td>
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<td>8. Control System and Inventory contributes to SSBs Performance</td>
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<td>9. Financial controls contributes to SSBs Performance</td>
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<td>10. Location and Pricing contributes to SSBs Performance</td>
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<td>11. Number of employees contributes to SSBs Performance</td>
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**Thank you**