

**MONITORING PRACTICES OF PRIVATE VENDORS IN
REVENUE COLLECTION AT ELECTRICITY COMPANY
OF GHANA: ACCRA-WEST REGION**

by
KNUST

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DECLARATION

I hereby declare that this submission is my own work towards the Commonwealth Executive Masters in Public Administration and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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DEDICATION

The researcher dedicates this work to her mother Madam Theresa Otoo and daughter Thelma Carr who gave me the needed encouragement and support throughout my study and in undertaking this study.

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My deepest thanks go to the Almighty God for giving me the wisdom, protection and strength in carrying out this study successfully.

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ABSTRACT

This study assessed the monitoring practices adopted by Electricity Company of Ghana in the sale of power in the Accra West Region. This study was necessitated by the fact that Electricity Company of Ghana has introduced prepaid metering system to replace the old postpaid system and has engaged the services of private vendors in the sales of power to prepaid meter users. The main aim of this study is to determine the monitoring practices used to regulate private vendors and the problems private vendors have in the sale of power. The study employed the descriptive methods by using the qualitative methods of collecting and analyzing data, both primary and secondary sources of data were used for the study with questionnaire being the main instrument for collecting primary data. Simple random sampling method was used to select the sample size for the study. The list of all private vendors in the Accra West Region was certain from the regional office. A sampling frame for all the 97 vendors was developed after which the lottery methods were used to select the respondents randomly. Two third of the total population was used to calculate the sample size of the study, (65). Data collected was presented using table and analyzed using descriptive methods. Major findings of the study include; the main monitoring practices in regulating private vendors are keeping proper records of vending activities, daily collection of proceeds of vendors and submission of monthly financial reports while minor monitoring practices including unannounced inspections and weekly monitoring of vending activities.

Major conclusions of the study include; E.C.G. management should place premium on all monitoring activities irrespective of whether it is minor or major in order to ensure efficiency in monitoring private vendors.

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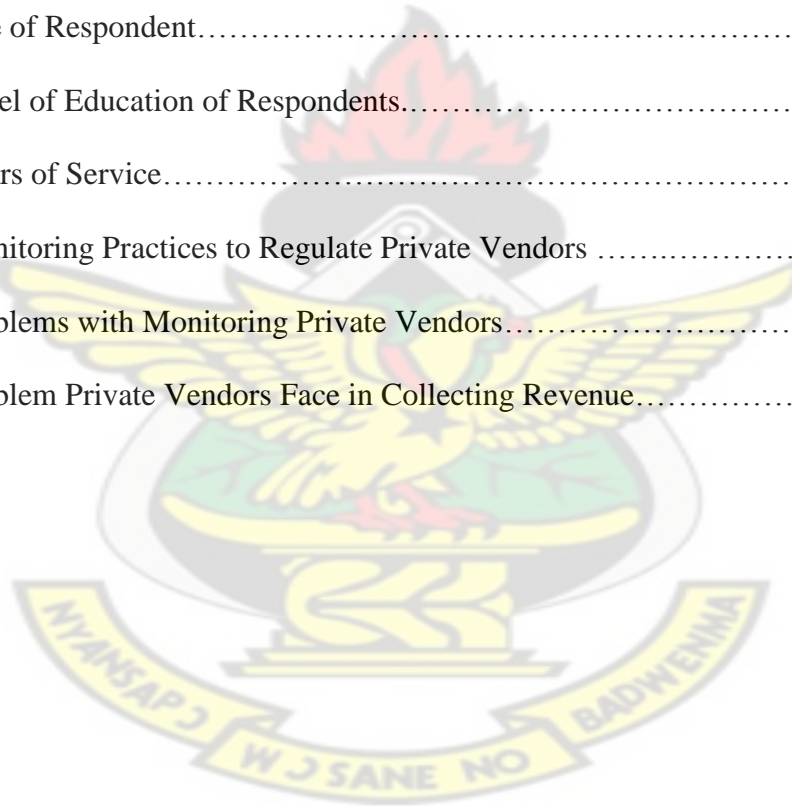
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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Electricity Company of Ghana has introduced the prepaid metering system to replace the traditional credit based system of electricity delivery where the customers consume electricity continuously and make periodic payments to the utility producer. The amount consumed is measured by an electricity meter. Representatives of the Utility Company periodically inspect the meter and the consumer is invoiced for the energy consumed. Depending on the terms of payment consumers have various periods of times to settle their bills. Non Payment may result to consumers being disconnected (Ilieu 2005)

The basic principle of pre-payment system is the reverse of the credit metering system, where customers decide how much energy they required before they consume it, and pay the relevant amount to the utility company before hand. The household is then credited with the purchased amount of electricity. After the prepaid electricity is consumed, electricity automatically is disconnected, unless the consumer makes a further repayment (Antonell; 2003)

Consumers purchase electricity from the Vending stations also called the cash dispensing unit (CDU). The CDU effectively acts as a vending outlet on behalf of ECG (Burger et al, 1992).

The system can operate continually where a good communication network is available, but if necessary data can be transferred through the use of floppy disk, the system master

station consolidates the pooled information on the various CDU's activities and uploads it to Electricity Company's main frame computers where credit and tariff management systems and its information and billing system consolidate and reconcile the figure of the electricity consumed and the amount paid (Eskom, 2002)

1.2 Statement of the Problem

The Accra West Regional Office of Electricity Company of Ghana has replaced most of its credit based meters with prepaid meters for both residential and non-residential purposes. According to Western Regional Public Relations Officer for Electricity Company of Ghana, Adjei-Larbi, the main aim for the introduction of the prepaid meters is to cut down on the high debt burden and ensure effective revenue mobilization in order to provide more reliable services.

To achieve these aims of introducing the prepaid metering system (PPMS) called for effective audit internal control systems in order to reduce fraudulent practices, waste and excesses and to ensure that accounting standards are met. Internal control systems in ECG are very crucial in an era where the company has sublet one of its core functions of revenue collection to private vendors.

It is also necessary to determine how the private vendors comply with the audit standards that govern their operations. It is in this respect that the researcher explorer how ECG undertakes internal controls on private vendors in revenue collection at Accra West Region.

1.3 Objectives

The general objective of the study is to explore how ECG internal audit section conducts internal controls on private vendors in revenue collection at Accra West Region.

The specific objectives include;

- 1) To find out the types of internal control practices ECG audit section adopts in regulating private vendors in revenue collection.
- 2) To identify the problems with the internal control practices adopted at the Audit Section\
- 3) To find out and analyse the problems private vendors have in collecting revenue.

1.4 Research Questions

- 1) What are the types of internal control practices used to control private vendors at ECG?
- 2) What problems does the audit section have with the internal control practices in monitoring the activities of private vendors?
- 3) What problems do private vendors of ECG have in the provision of their services?

1.5 Significance of Study

This study which assesses Electricity Company of Ghana's Internal Control Systems on Private Vendors in Revenue Collection at Accra west Region is very significant because it can help reduce fraudulent practices at the vending points since this study will serve as a reference material which will spell out internal control practices required for monitoring

private vending activities in the study area. This Study can also help increase revenue mobilization in Electricity Company of Ghana, since it can lead to better internal control practices and help in the mobilization of internally generated funds for the organization.

This Study can serve as a blue print or a standard for the monitoring the efficiency and output of private vendors. This could be achieved because the guidelines governing the operations of private vendors will be monitored by the Accounts Examination Unit. Maintaining accounting standards in the institution by strengthening the internal control practices could enhance the image of Electricity Company of Ghana, Accra West Region.

1.6 Scope of the Study

The Study is limited to staff of the Accounts Section, Accounts Examination Unit, the Customer Service Section of Electricity Company of Ghana and the private vendors in Accra West Region.

1.7 Limitation of the Study

A major limitation of the study is the unwillingness of Management of Electricity Company of Ghana in giving out report on private vendors for the study.

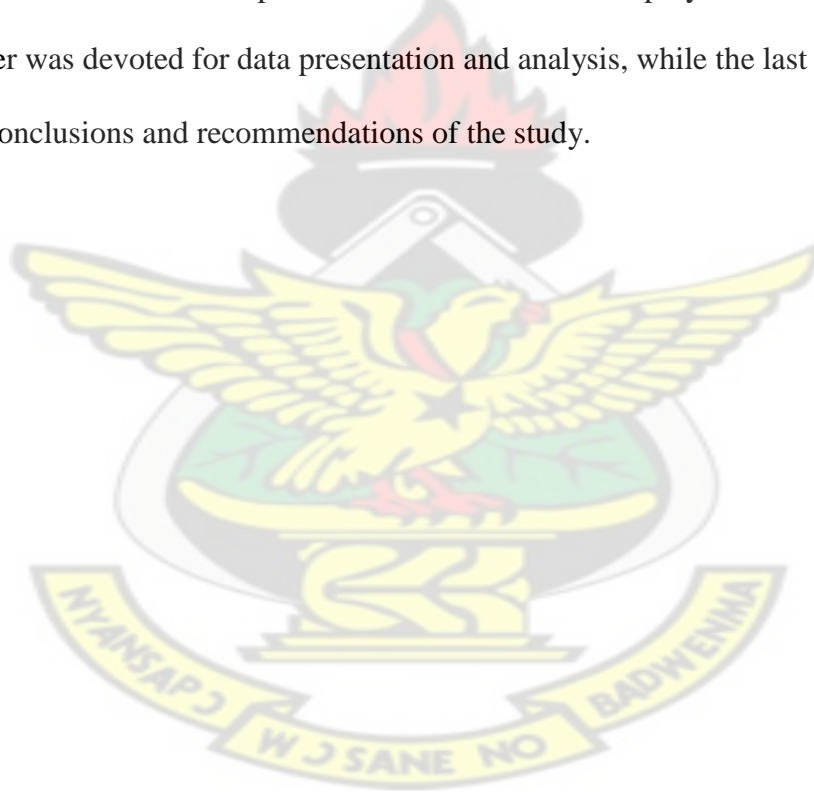
Management unwillingness is based on the fact that it is a classified information and as such unethical for the consumption of non Electricity Company of Ghana staff.

Difficulty in getting private vendors for interviews due to their tight schedules delayed the data collection process, which invariably lead to increase cost in data collection.

1.8 Organisation of the Study

The study was organized into five chapters.

Chapter one which is the introduction highlighted the following sub-themes, Background, Statement of the Problem, Objective of the Study, Significance of the Study, Scope of the Study and Limitations of the Study. The second chapter highlighted the review of relevant literature. The third chapter looked at the methods employed in the study. The fourth chapter was devoted for data presentation and analysis, while the last chapter, five considered conclusions and recommendations of the study.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter deals with the review of related literature. It looks at Nature of Internal Controls, Internal Control Systems, Components of Internal Control and Management of Internal Control Systems

2.2 Definition and Nature of Internal Controls

Revenue refers to the monetary event of asset values increasing in the firm due to the physical event of production or sales of the products or services. Some companies also receive revenue from interest, dividends or royalties paid to them by other companies. Revenue may also refer to the amount in a monetary unit received during a period of time. Revenue is associated with products or services of the firm as the source of the expected cash receipts the asset value increasing in the firm occurs because the firm undertakes certain activities or there is performance by the firm. The above may not be achieved without a sound internal control system in that organization or company (Kam, 1989).

Thus in Kam (1989) FASB defined revenue as inflows or other enhancements of assets of an entity or settlements of its liabilities (or combination of both) during a period from delivery or producing goods, rendering services or other activities that constitutes the entity's ongoing major or central operations.

The concept of internal control is still being viewed by many people from a narrow perspective as being the steps taken by a business to prevent employee's fraud. Actually such measures are rather a small part of internal control. It is a fundamental aspect of managements' responsibility to provide interest parties with reasonable assurance that their organization is effectively controlled and that the accounting data it receives on a timely basis are accurate and dependable. This assurance is provided by developing a strong system of internal control.

In accounting and auditing, internal control is defines as a process effected by an organization's structure, work and authority flows, people and management information systems designed to help the organization accomplish specific goals or objectives it is a means by which an organizations resources are directed, monitored and measured. It plays an important role in preventing and detecting fraud and protecting the organizations resource both physical and intargetablee.g trademark .Millichamp (1992:79) says that internal control system refers to the whole system of controls financial and otherwise, established by the management in order to carry on the business of the enterprise in an orderly and efficient manner, ensure adherence to management policies, safeguarded assets and as far as possible the completeness and accuracy of the records the individual components of an internal control system are known as controls or internal controls.

In addition Meig's et al (1982:139) further refers to internal control system as consisting of all measures employed by an organization to:

- i. Safeguard assets from waste fraud and inefficient use.
- ii. Promote accuracy and reliability in accounting records.

- iii. Encourage and measure compliance with company policies and
- iv. Evaluate the efficiency of operation.

2.3 Internal Control

Internal Control extends beyond the accounting and financial functions. Its scope is company indent and touches all activities of the organization. It includes the methods by which top management delegates authority and responsibilities. It should be concerned with the efficient use of resources to achieve a previously determined objective or set of objective. The need to perform audit engagement in accordance with Companies and Allied Matters Decree (CAMD) of 1990 and strict adherence to Generally Accepted Auditing Standard (GAAS) has prompted the need for internal control in organizations.

The internal control system consists of two main categories;

- a. Administrative control
- b. Accounting control

2.3.1 Administrative Controls

Defliese, et al (1975) says administrative control is not limited to the plan of the organization and the procedures and records that are concerned with the decision processes leading to management authorization of transactions. As a management function, authorization is directly associated with the responsibility for achieving the objectives of the organization and is the starting point for establishing account control of transactions.

The importance of administrative control is reflected in the fact that the prime responsibility of management is to operate the organization within the available resources, it must be able to operate at acceptable cost, and use its limited resources in an efficient manner.

To accomplish the above, management must develop the requisite policies needed to promote efficiency in every area of activity. These policies must be implemented through proper personnel selection, training and management.

2.3.2 Accounting Controls

These comprises the plan of organization and the procedures, measures and records that are concerned with the safeguarding of assets and the reliability of financial records and consequently are designed to provide reasonable assurance that transactions are executed in accordance with management general or specific authorization.

The above definitions indicate that accounting control is designed to bring about accurate and suitable recording and summarization of only authorized financial transactions. Failure by Power Holding Company of Nigeria Management to install and effectively maintain such a control means that the objectives implicitly in the above definition would not be achieved. A direct consequence of this is the high incidence of loss or error.

Internal Control Systems generally have certain characteristics that give the organization reasonable assurance that administrative and accounting controls are functioning properly.

2.4 Components of Internal Control

According to Bodnar et al (1998) and county of orange internal audit department (2003) an organizations internal control system consist of five interrelated components as follows: control environment, Risk assessment, control activities, information and communication and monitoring. All the five internal control components must be present to conclude that internal control is effective.

2.4.1 Control Environment

An organizations control environment is the foundation of all other components of the internal control system, it is sometimes referred to as the tone at the top of the organization. The control environment is the collective effect of various factors on establishing, enhancing or mitigating the effectiveness of specific policies and procedures.

In otherwords, the control environment sets the overall tone of the organization and influences the control consciousness of the employees. Factors that characterize the control environment are as follows:

2.4.1.1 Organizational Structure

This is defined by the patterns of authority and responsibility that exists within the organization. The formal organization structure is often denoted by an organizational chart, which indicates the formal communication patterns within an organization. An informed organization structure exist where regular communication pattern do not follow the lines indicated by the formed organization structure.

2.4.1.2 Commitment to Competence

There should be procedures to ensure that personnel have the capabilities commensurate with their responsibilities. Inevitably, the proper functioning of any system depends on the competence of those operating it. The qualifications, selection and training as well as the innate personal characteristics of the personnel involved are important features to be considered in setting up any control system.

2.4.1.3 Integrity and Ethical Values

A control environment should be fostered that encourages the highest levels of integrity, personal and professional standards. Many organizations have adopted ethics, codes of conduct that specify guidelines for conducting business in an ethical manner.

The code of conduct is often written in legal style language that focuses on land that might be broken potential ethical violations present a significant loss exposure for the organizations. Such exposures include the possibility of large fines or criminal prosecution against both the company and its executives.

2.4.1.4 Management Philosophy and Operating Style

Effective control in an organization begins with and ultimately rests with management philosophy. If management believes that controls are important, then it will see to it that effective control policies and procedures are implemented. This control conscious attitude will be communicated to subordinates through the management operating style.

Management enhances the control environment when they behave in an ethical manner creating a positive “tone at the top” and when they require that same standard of conduct

from everyone in the organization. When the Management pays only lip service to the need for control, then control objectives will not be achieved.

2.4.1.5 Attention and Direction Provided By the Board of Directors and Its Committees.

An organization's board of directors is the interface between the stockholders who own the organization and the organizations operating management. Stockholders exercise control over management through the functions of the board of directors and its committee.

Typically, the board of directors' delegate's specific functions to various operating committees such as the audit committees, which should be independent of an organization management. It is composed primarily of outside members of the board of directors. The audit committee is usually charged with overall responsibility for the organizations financial reports, including compliance with existing laws and regulations. The audit committee nominates public accountants discusses the scope and nature of audits with public accountants review and evaluates reports prepared by the organizations public accountants.

2.4.1.6 Manner of Assigning Authority and Responsibility

A formal organization chart, a written document is often used to indicate the overall assignment of authority and responsibility in an organization. The organization chart is often accompanied by a formal job descriptions and statements of work assignment.

Written memoranda policy manuals and procedure manuals are other common means used to formally assign authority and responsibility within an organization.

Budgeting: This is a management activity set for the entire organization as well as for each subunit. Detailed operating budgets are prepared for subunits to evidence management's plan concerning operating of each subunits and to serve as the device by which managements plans are commence to subunits.

Budgeting data are used to plan and control the activities within a firm. A budget is a control that sets forth a financial plan and /or an authorized amount of resources that may be utilized by a sub unit in performing its functions.

2.4.1.7 Human Resource Policies and Procedures

Personnel are the key components in any control system personnel should be competent with capabilities and training commensurate with their duties.

Segregation of Duties: Responsibility for specific tasks in an organization should be clearly designated by manuals, jobs description or other documentation. Effective segregation of duties depends to a considerable extent on the precise and detailed planning of all procedures and the careful assignment of functions to various people in the organization. The details of the procedures should be set forth in a memorandum that also shows explicit assignment of duties to individuals department and employees.

Written procedures, instructions and assignments of duties will prevent duplication of work, overlapping of functions, omission of important functions, misunderstandings and

other situations that might weaken the internal accounting controls. Such notes typically form the basis of a formal manner or procedures and policy.

Supervision: This is the direct monitoring of personnel performance by an employee who is so charged. Proper supervision is necessary to ensure that duties are being carried out as assigned.

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Job Rotation and Forced Vacations: This allows employees to check or verify the operations of other employees by performing their duties for a period of time irregularities that may have been committed by an employee may be disclosed while the employee is on vacation with his or her duties assumed by another employee.

Job rotation allows more than one employee to become familiar with certain duties and procedures so that the replacement of employees in cases of emergency is less difficult. It serves as a general check on the efficiency on vacation or who has been rotated to another job.

2.4.2 Risk Assessment

This is the second of the five components of internal control system concerned with identifying, analyzing and managing risks that affects the company's objective.

2.4.2.1 Determine Goals and Objective

The central theme of internal Control is (1) to identify risks to the achievement of an organizations objective and (2) to do what is necessary to management those risks. Thus,

setting goals and objectives is a precondition to internal controls. If an organization does not have goals and objective, there is no need for internal control.

At the organization level, goals and objectives are presented in strategic plan that includes a mission statements and broadly defined strategic initiatives. At the department level, goals and objectives must support the organizations strategic plan. Goals and objectives are clarifies in the following categories.

Operations:The risks and related objectives pertain to the achievement of the basic mission(s) of a department and the effectiveness and efficiency of its operations, including performance standards and safeguarding resource against loss.

Financial Reporting:These risks and related objectives pertain to the preparation of reliable financial reports including the prevention of fraudulent public financial reporting.

Compliance: These risks and related objectives pertain to adherence to applicable laws and regulations. The following table illustrates these concepts.

Table 2.1: **Classification of a department’s goal and objective**

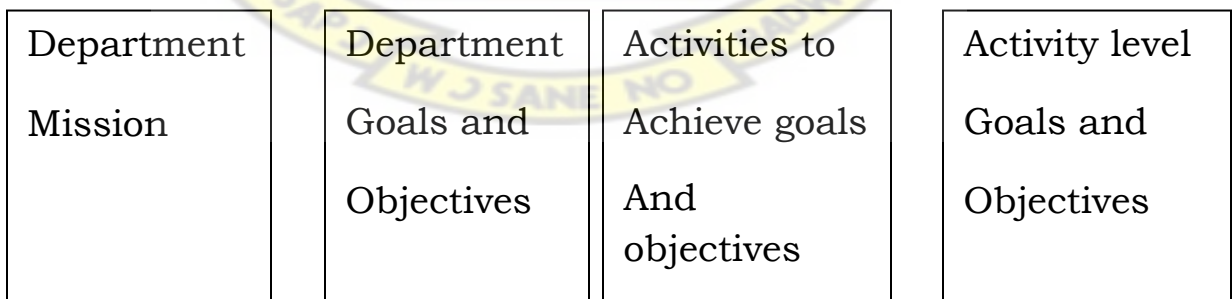
	Objectives	Classifications
i.	Payroll: provide service and support to the organization	
ii.	Processing: Compensation/withholding; Compensation rates and payroll deductions should be accurately and properly entered into the payroll system	Operations (O)

Iii	Each accounting period prepare journal entries for payroll deductions and related adjustments.	Financial (F)
Iv	Processing: Authorization; personnel management should properly and accurately maintain all compensation documentation	Compliance (C)
v.	An employee master file that is accurate and complete should be maintained	O, F, C,

Source: Understanding internal controls, country of Orange internal audit department, California, March, 2003; p.11.

From the above it is obvious that a clear set of goals and objectives is fundamental to the success of a department. Specifically, a department of work unit should have;

- i. A mission statement
- ii. Written goals and objectives for the department as a whole and
- iii. Written goals and objectives for each significant activity in the department (see diagram below).



Furthermore, goals and objectives should be expressed in terms that allow meaningful performance measurements. There are certain activities, which are significant to all departments such as budgeting, purchasing goods and services, hiring employees, payroll, evaluating employees and safeguarding property and equipment.

Thus all departments are expected to have appropriate goals and objectives, policies and procedures and internal controls for these activities.

2.4.2.2 Identify Risk after Defining Goals

Risks assessment is the identification and analysis of risks associated with the achievement of operations financial reporting and compliance goals and objectives. Thus in turn, forms a basis for determining how those risks should be managed.

To properly manage their operation, managers need to determine the level of operations, financial and compliance risk are writing to assume. Risk assessment is more of management's responsibilities and enables management to act proactively in reducing unwanted surprises. Failure to consciously manage those risks can result in reduced assurance that goals and objectives will be achieved.

Risk identification: A risk is anything that could jeopardize the achievement of an objective. For each of the departments' objectives risk should be identified. Asking the following question helps to identify risks.

- What could go wrong?
- How could we fail?
- What must go right for us to success?

- Where are we vulnerable?
- What arrest do we need to protect?
- How could someone steal from the department?
- How could someone disrupt out operations?
- How do we know if our objectives are being achieved?
- On what information do we mostly rely on?
- On what do we spend the most money?
- How do we bill and collect revenue?
- What is our legal greatest exposure?

It is important that risk identification be comprehensive at the department level and at the activity or process level for operations financial reporting and compliance objectives considering both external and internal risks factors. Usually several risks can be identified for each objectives.

Using the previous example, the following table illustrates the concepts discussed so far.

The identified risks relates to the goals and objectives previously determined.

Table 2.2: Classification of department objectives and related risks;

	Goals and objectives	Business objective classification	Risks
i.	Payroll. Provide services and support to the organization		Transactions may not be processed or processed incorrectly.

ii.	Processing: Compensation/ withholding: compensation rates and payroll deductions should be accurately and promptly entered into the payroll system	Operations (O)	Statement may be misstated due to entry omission, incorrect coding, duplicate journal entries or improper cut-offs.
ii.	Each accounting period prepare journal entries for payroll, payroll deductions and related adjustments	Financial (F)	Employment laws and regulations may be violated resulting in five penalties and litigation
iv.	Processing: Authorizations Personnel Management should properly and accurately maintain all compensation documentation	Compliance (C)	Incorrect data in the master file could result in incorrect wage payment
v.	An employee master file that is accurate and complete should be maintained	O, F, C	Payroll withholdings may be incorrect award incentives recognition etc may not be reflected on the master

			file.
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Sources: Understanding internal control, county of orange Internal Audit Department, California. March, 2003; P.14

Quantitative and Qualitative cost: When evaluating the potential impact of risk, both quantitative and qualitative cost needs to be addressed. Quantitative costs include the cost of property equipment, or inventory, cash naria loss, damage and repair cost, cost of defending a lawsuit etc.

Qualitative costs can have wide ranging implications to the organizations. These costs may include loss of public trust loss of future grants, gifts and donations, injury to the organizations reputation, violation of laws public health and safety and also default on a project.

Risk Analysis: After risks have been identified a risk analysis should be performed to priorities those risks:

- Estimate the potential impact if the risk were to occur consider both qualitative and quantitative cost.
- Assess the probability of risk occurring.

- Determine how the risk should be managed decide what actions are necessary.

Prioritizing helps department focus their attention on managing significant risks (risks with reasonable likelihoods of occurrence and large potential impacts).

The following Factors are to guide a Department through its Risk assessment:

- Make sure the department has a mission statement with written goals and objectives.
- Assess risks at the department level and activity at process levels.
- Complete a business control worksheet for each significant activity or process in the department prioritize these activities or process which are most critical to the success of the department and those activities which could be improved the most.
- Make sure that all risks identified at the department level are addressed in the business controls work sheet.

2.4.3 Control Activities

Control activities are actions supported by policies and procedures that help assure management directives to address risks are carried out properly and closely. In the same way that managers are primarily responsible for identifying the financial and compliance risks for their operations, they also have live responsibility for designing, implementing and monitoring their internal control system.

There is the need to distinguish between preventive and detective controls for better understanding of control activities. The indent of these controls is different. Preventive controls attempt to deter or prevent undesirable events from occurring. They are proactive controls that help to prevent a loss. Examples of preventive controls are separation of duties proper authorization, adequate documentation, and physical control over assets.

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Detective controls, on the other hand, attempt to detect undesirable acts. They provide evidence that a loss has occurred but do not prevent a loss from occurring. Examples of detective control are reviews, analysis, reconciliation, physical inventories and audits.

Both types of controls are essential to an effective internal control system. From a quality stand point, preventive control are essential because they are proactive and emphasis quality.

However detective control plays a critical role providing evidence that the preventive controls are functioning and preventing losses.

Control activities include; Approvals, authorities, verifications, reconciliations, review of performance security of assets, segregation of duties and control over information systems and are further explained as follows:

2.4.3.1 Approvals/Authorization (Preventive)

An important control activity is authorization approval. Management authorizes employees to perform certain activities and to execute certain transactions within limited

parameters. In addition, management specifies those activities or transactions that need supervisory approval before they are performed or executed by employees.

Authorization is the delegation of authority it may be general or specific. Giving a department permission to expand funds from an approved budget is an example of general authorization. Specific authorization relates to individual transactions, it requires the signature or electric approval of a transaction by a person with approval authority.

Approval of a transaction means that the approver has received the supporting documentation and is satisfied that the transaction by a person with approval authority is appropriate, accurate and complies with applicable laws regulations, policies and procedures. Approvers should review supporting documentation, question unusual items and make sure that necessary information is present to justify the transactions before they sign it. Signing blank forms should not be done.

Approval authority may be linked to specific naira levels. Transactions that exceed the specified naira levels would require approval at a higher level. Under no circumstance should an approver tell someone to sign on behalf of the approver or share this password with another person. To ensure proper segregation of duties the person initiating a transaction should not be the person who approves the transaction. A departments approval levels should be specified in a department policies and procedures usual.

2.4.3.2 Reconciliations (Defective)

Broadly defined, reconciliation is a comparison of different sets of data to one another, identifying and investigating differences and taking corrective actions when necessary to

resolve differences. Reconciling monthly financial reports of files copies of supporting documentation or departmental accounting records is an example of reconciling one set of data to another. This control helps to ensure the accuracy and completeness of transactions that have been charged to a departments account.

To ensure proper segregation of duties, the person who approves transactions or handles cash receipts should not be the person who performs the reconciliation. A critical element of the reconciliation process is resolved differences. It does not do any good to note differences and do nothing about it. Difference should be identified, investigated and explained. Corrective actions must be taken when necessary if expenditure is incorrectly charged to a departments' account, then the approver and reconciler should ascertain that the correcting journal voucher was posted. Reconciliation should be documented and approved by management.

2.4.3.3 Review of Performance (Detective)

Management review of reports, statements, reconciliations and other information is an important activity. Management should review such information for propriety, consistency and reasonableness.

Reviews of performance provide a basis for detecting problems. Management should compare information about current performance of budgets forecasts, prior periods, or other benchmarks to measure the extent to which goals and objectives are being achieved and to identify unexpected results or unusual conditions, which require follow-up.

Managements review of reports, statements, recon and other information should be documented as well as the resolution of items noted for follow-up.

2.4.3.4 Asset Security (Preventive and Detective)

Liquid assets, assets with alternative uses, dangerous assets vital documents, critical system and confidential information must be safeguarded against unauthorized acquisition, use or disposition. Typically, access controls are the best way to safeguard these assets. Examples of access controls are as follows; locked door, keypad system, and key system, badge system locked filing cabinet, guard, computer password, menu protection and data encryption.

Departments that have capital assets or significant inventions should establish perpetual inventory control over these items by recording purchase and issuances. Periodically, a person who is independent of the purchase authorization and asset custody functions should physically count the items. The counts should be compared to balances per the perpetual records. Missing items should be investigated, resolved timely and analysed for possible control deficiencies, perpetual records should be adjusted to physical counts if missing items are not located.

2.4.3.5 Segregation of Duties (Preventive and Detective)

Segregation of duties is critical to effective internal control. It reduces the risk of both erroneous and inappropriate actions. In general no one person should initiate transaction, approve the transaction, record it, reconcile balances, custody or handle assets and review reports. All the functions should be separated among employees. When these functions

cannot be separated, detailed supervisory review of related activities is required as a compensating control activity.

Segregation of duties is a deterrent to fraud because it requires collusion with another person to perpetrate a fraudulent act. Specific examples of segregation of duties are follows:

- The person who requisitions the purchase of goods or services should not be the person who approves the purchase.
- The person who approves the purchase of goods or service not be the person who reconciles the monthly financial reports.
- The person who approves the purchase of goods or services should not have custody of checks.
- The person who opens the mails and prepares a listing of checks received should not be the person who makes the deposit.
- The person who opens the mail and prepares a listing of checks received should not be the person who maintains the accounts receivable records.

2.4.3.6 Information Systems

Organization employees use a variety of information system mainframe computers, local areas and wide areas networks of mini computers and personal computer single user workstations and personal computers, telephone systems etc.

The need for internal control over these systems depends on the importance and confidentiality of the information and the complexity of the application that reside on the systems. There are basically two categories of control over information systems.

General Control and application controls are as follows;

General Control (Preventive and Detective): General controls apply to entire information systems and to all the applications that reside on the systems. General control consists of practices designed to maintain the integrity and availability of information processing functions, networks and association application systems. These controls apply to business application processing in computer centers by ensuring complete and accurate processing. These control ensure that correct data files are processed processing diagnostics and errors are noted and resolved, application and functions are processed according to established schedules, file backups are taken at appropriate intervals recovery procedures for processing features are consistently applied and actions of computer operators and system administration are system administrators are reviewed.

Additionally, these controls ensure that physical security and environmental measures are taken to reduce the risk of sabotage vandalism and destruction of networks and computer processing centers.

Finally, these controls ensure the adoption of disaster planning to guide the successful recovery and continuity of networks and computer processing in the event of a disaster.

Applications Control (Preventive and Detective): Applications are the computer programs and processes that enable us to conduct essential activities, buying products,

paying people, accounting for revenues and expenditures and forecasting and monitoring budgets.

Application controls apply to computer application systems and include input controls (e.g edit checks) processing controls (e.g record counts) and output controls (e.g error listing), which are specific to individual applications. Application controls consist of the mechanisms in place over each separate computer system, which ensure that authorized data is completely and accurately processed. They are designed to prevent, detect and correct errors and irregularities as transactions flow through the business system. They ensure that the transactions and programs are secured, the systems can resume processing after some business interruption, all transactions are corrected and accounted for when errors occur and the system process data in an efficient manner.

When a department decides to purchase or to develop an application, department personnel must ensure the application include adequate controls:

- (1) Input Control
- (2) Processing controls and
- (3) Output controls

Input control: Ensure the complete and accurate recording of authorized transactions by only authorized users, identify, rejected, suspended and duplicate items and ensure resubmission of rejected and suspended items. Examples of input control are error listings, field checks, limit checks, self-checking digits, sequence checks, validity checks, key verification, matching and completeness checks.

Processing Control: Ensure the complete and accurate processing of authorized transactions. Examples of processing controls are run to run control totals, posting checks, end of file procedures, concurrency control, controls files and audit trails.

Output Control: Ensure that a complete and accurate audit trail of the results of processing is reported to appropriate individuals for review. Examples of output control are listing of master files changes, error listings, distribution registers and review of output.

2.4.3.7 Balancing Risks and Controls

To achieve goals, management needs to effectively balance risks and control. By performing this balancing act “reasonable assurance can be attained as it relates to financial and compliance goals being out of balance causes the following problems:

EXCESSIVE RISKS

Loss of assets

Poor business decisions

Non compliance

Increased regulations

Public scandals

EXCESSIVE CONTROL

Increased bureaucracy

Reduced productivity

Increased Complexity

Increased cycle time

Increase of non-value activities

In order to achieve a balance between risks and controls, internal controls should be proactive value added and cost effective.

2.4.4 Information and Communication

Information and communication are essential to effecting control, information about an organization's plans, control environment, risk, control activities and performance must be communicated up, down and across an organization.

Reliable and relevant information from both internal and external sources must be identified captured, processed and communicated to the people who need it in a form and time frame that is useful. Information systems procedure reports containing operational, financial and compliance related information that makes it possible to run and control an organization.

Information and communication systems can be formal or informal.

Formal information and communication systems which range from sophisticated computer technology to simple staff meetings should provide input and feedback data relative to operations, financial reporting and compliance objectives such systems are vital to an organization success. Just the same informal conversations with customers' supplies, regulation and employees often provide some of the most critical information needed to identify risks and opportunities.

When assessing internal control over a significant activity (or process) the key questions to ask about information and communication are as follows:

- Does our department get the information it needs from internal and external sources in a form and time frame that is useful?

- Does our department get information that alerts it to internal or external risks (e.g legislative, regulatory and developments)?
- Does our department get information that measures its performance information that tells the department whether it is achieving its operations, financial report and compliance objectives?
- Does our department identify, capture and process and communicate the information that others need (e.g information used by our customers or other department) in a form and time frame that is useful?
- Does our department provide information to others that alerts them to internal or external risks?
- Does our department communicate effectively internally and externally?
- Nevertheless, communicating with people and gathering information to people in a form and time frame that in useful to them is a constant challenge. When completing a business controls work sheet for a significant activity or process in a department evaluate the quality of related information and communication systems.

2.4.5 Monitoring

Monitoring is the assessment of internal control performance over time it is accomplished by on-going monitoring activities and by separate evaluations of internal control such as self-assessments peer reviews and internal audits. The purpose of monitoring is to determine whether internal control is adequately designed, properly executed and effective.

Internal control is adequately designed and properly executed if all five internal control components are present and functioning as designed. Internal control is effective if the board of directors, the management and departmental management have reasonable assurance that;

- They understand the extent to which operations objectives are being achieved.
- Published financial statements are prepared reliably.
- Applicable laws and regulations are being complied.

While internal control is a process, its effectiveness is an assessment of the condition of the process at one or more points in time. Just as control activities helps to ensure that actions to manage risks are carried out, monitoring helps to ensure that control activities and other planned actions to effect internal control are carried out properly and timely and that the end result is effective internal control.

On-going monitoring activities include various management and supervisory activities that evaluate and improve the design, execution, and effectiveness of internal control. Separate evaluations on the other hand such as self-assessments and internal audits are periodic evaluations of internal control components resulting in a formal report on internal control. Self-assessments are performed by department employees internal audits are performed by internal auditors who provide an independent appraisal of internal control.

2.5 Levels of Internal Control Management

Information systems in organizations are conceptualized to be working at three levels in an organization and so does internal control management program (Dhillon, 2006). These levels are: formal (messages from all external parties are interpreted and communicated for effective operations of the organization, example business strategies, corporate board, financial planning, human resources and marketing planning), informal (means to support the formal systems example subgroups formed within organizations, belief system of employees, implicit knowledge about work procedures, power and politics equation amongst groups) and technical (presumes a formal system exists and automates parts of it, example includes information technology automating business process workflow). Management of Electricity Company Ghana has to be an integrated approach at all the three levels. Controls have to operate at all the levels simultaneously to ensure comprehensive revenue collection effectiveness.

Ouchi (1979) argues that design of organizational control mechanisms focuses on achieving cooperation among individuals having divergent objectives. Goal congruity is a central mechanism of control in an organization (Ouchi, 1980). Based on the scope of the control, there are three modes of control that work in different ways to achieve cooperation amongst people who share partially congruent objectives (Ouchi, 1979). The market mode of control acts through its ability to precisely measure and reward individual contributions. It is applicable to tasks that are accurately measurable. The second mode of control, Bureaucratic control relies on mixture of close evaluation of performance and reward. It is achieved through formal structure of organizations, which

acknowledges the work and rewards through incentives. The third mode of controls, Clan control relies completely upon socialization process, which effectively eliminates goal incongruence through shared beliefs and objectives. Clan control attains cooperation by socializing individuals such that individual objectives align with organizational objectives.

Markets, bureaucracies and clans are three distinct mechanisms, which are present in differing degrees in any real organization (Ouchi, 1980). The design problem of defining the control objectives is of assessing the social and information characteristics of each division, department or task and analyzing what would be the scope of control that needs to be emphasized in each case (Ouchi, 1979). Conceptually, it can be argued that the three modes of controls (market, bureaucratic, clan) are similar to the three levels of management in an organization (technical, formal, informal) because of similar informational requirements in each (Kirsch, 2002; Ouchi, 1980). In classifying controls, we use formal, informal and technical taxonomy for the sake of clarity.

Based on the attributes of the production process that control mechanisms are intended to influence or the target of controls, Cardinal et al (2004) suggest three forms of controls.

These forms of controls are:

Input: Input controls are aimed at managing resources acquired by firms, which constitutes of resources such as human, financial and material (Cardinal et al, 2004). Input mechanisms involve aligning individuals with interest of firms through selection and training (Snell, 1992).

Behavioral: Behavioral control structures the transformation process of work (Snell, 1992). It is usually initiated top down in the form of articulated operating procedure. Behavioral controls require an understanding of business activities to manage tasks that transform inputs into outputs. These controls determine how work gets done in an organization (Cardinal et al, 2004).

Output: Controls used to manage products and services outcomes and regulate results of the process are called output controls (Cardinal et al, 2004). Output controls measure the results of the transformation process from input through behavioural to the end result. It encourages subordination discretion by focusing on desired result and not on the process of achieving the result (Snell, 1992).

The scope dimension of the controls highlights the levels of management where the controls can be placed or specified. The target dimension of the control specifies the stage of business process where a particular control is targeted. Based on the particular business process state (input, behavioral, output) where a control is placed, the role of the control can be defined. Both the dimensions are complimentary and combining them provides a detailed picture of the nature, scope and role of a control and how a control can guide action. Overall this conceptualization represents organizational controls as the following matrix. A nuanced understanding of control strategies in the context of information systems security is highlighted through this matrix of controls (Table 1). A discussion of the controls requirements along each of the row of the matrix is provided:

Technical controls: All the controls are technical in scope and are targeted at the different stages of the business processes. These controls targeted at input of informational resources within an organization are primarily based on data input methods such as document design, screen design, batch controls and validation of data input in the organization. Research in technical controls targeted at the business processes is concerned about issues pertaining to access controls models (Jaeger and Zhang, 2003; Iwaihara and Hayashi, 2007), architecture controls, and authorization mechanisms (Thompson et al, 2003; Ferrari et al, 2002). Technical controls targeted at information resources interacting with outside environment, revolves around batch output controls and distribution controls. Some of the specific controls include: encryption (Bellare and Kohno, 2004; Rogaway et al, 2003), cryptography (Rothe, 2002; Mayers, 2001), filters (Herlocker et al, 2004; Hofmann, 2004), sniffers (Bapna, 2003), back up and disaster recovery plans (Choy et al, 2000).

Formal controls: All controls are formal in scope and are targeted at the different stages of the business processes. The formal controls at the input level of formal security decision-making and the scope is organizational structure and management. Research in this area entails formal decision points such as security budgets (Gordon and Loeb, 2006; Bodin et al, 2005), risk assessment models (Tiwana and Keil, 2004; Iversen et al, 1999; Lewis et al, 2003) physical security and recruitment rules, security strategy (Langfield-Smith, 1997); Snell, 1992). Controls targeted at the process level of formal security methods includes standards (Siponen, 2006), policies, procedures, internal audit (Hogg,

1992; Hansen and Hill, 1989) and training (Aeran, 2006). Formal controls targeted at the output or results of formal security methods and its interaction with the environment and the scope is organizational structure and management.

Research in this area includes compliance mechanisms (Aeran, 2006), external audit and governance efforts for legitimacy (Moultan and Cole, 2003: CISA Review Manual, 2004).

Informal controls: All the controls are informal in nature. Informal controls targeted at the input level of business process emphasizes the importance of values (Galloway, 1994; Dhillon and Torzedeh, 2006), motivations (Nidumolu and Subramani, 2003), behavior (Klein, 1989), culture, trust (Hoffman et al, 2006, Das and Teng, 1998) and awareness issues (Siponen, 2001). Research in informal controls targeted at the business process level of the organization include informal responsibility and accountability expectations (Pierce et al, 2001; Dhillon, 2001), power and politics issues in security decision making. Research in controls targeted at output of business security decisions and its impact on the environment includes alignment of business and individual goals (Alavi et al, 1986) business continuity (Roberts, 2006) and identifying.

Table 2.2: Research in information systems security domain based on conceptual matrix

	Target of Control		
	Input	Behavioral	Output
	1	2	3
Technical	Different types of data	Controls of	Batch output

1		input methods such as document design, data entry screen design, batch controls, validation of data input, instruction input	physical components, topological controls, channel access controls, architecture controls, Access control models, Authorization mechanisms	production and distribution controls, online output production and distribution controls, Encryption, Cryptography, Filters, Sniffers
2	Formal	Application system processing controls, Risk assessment models, Security investment budgets, Physical security, Recruitment rules, Business strategy	Long term policy design, Procedures, Audit, Training	Compliance, security management, data resource management, operations management controls, quality controls, Back up, Disaster recovery

	Informal 3	Values, Motivations, Culture, Trust, Sense of Ownership	Responsibility and Accountability structures	Individual and business goal alignment, Business continuity, awareness, control consciousness
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The purpose of this control matrix is to understand the business requirements based on intersection of scope and target of control mechanisms. Internal control objectives, based on the business requirement of each cell should be able to reflect the security needs in that cell.

2.6 Models in Internal Control Implementation

While the academic literature on controls focuses on aspects of classification and theoretical models developed models that help in implementing controls irrespective of their nature and scope. Control Objectives for Information and related technology (COBIT) is the most widely used framework for information systems controls and related good practices (ISACA, 2004).

COBIT primarily guides organizations for better information technology governance, control structures and means of providing assurance. It divides IT processes into four domains and 34 broad control objectives through the entire business process cycle.

Similarly there is the COSO framework. COSO stands for the "Committee of Sponsoring Organizations of the Treadway

Commission," a non-profit commission that in 1992 established a common definition of internal controls. The COSO framework views internal controls as consisting of the following five interrelated components: control environment ("setting the tone" of the organization or the broad ethical values of the management), risk assessment (process of identifying and mitigating risk activities in the organization), control activities (identifies internal control activities to mitigate risks defined in prior domain i.e. risk assessment), information and communication (create reporting processes that help in assessment of the technology environment), monitoring (assessment of the quality of a company's internal control over time). COSO and COBIT frameworks are widely used as guidelines for Sarbanes-Oxley compliance, systems audit in organizations and also for information technology governance purposes.

Most of the best practices are based on "gut feel", experiences of a few and are atheoretic in nature. The guidelines thus provided are mechanistic and have "one size fits all" orientation. The frameworks are also broad in nature and do not specifically address issues regarding internal controls for security. Control is a central problem in the study of hierarchical organization as opportunities for distortion and misalignment of goals are rich (Ouchi, 1978). Bulk of the research in the controls area is technical and has a formal scope and targeted more at behavioral and output.

In summary, the research stream in controls area is characterized by three problems: lack of theoretical basis for defining internal control objectives, inadequate emphasis on

individual values in control design and lack of research in information systems security domain about internal control design. This paper fills this gap by suggesting value focused thinking as a means to incorporate individual values into control objectives and provides a theoretical framework of means and fundamental objectives for internal controls in information systems.

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CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter talks about the following; research design, sources of data, instruments of data collection, sampling methods, sample size determination, methods of data presentation and analysis

3.2 Research Design

The study will employ cross-sectional descriptive design. It will employ quantitative method data collection and analysis

3.3 Sources of Data

Two main sources of data were used for the study, namely primary and secondary sources.

Questionnaires were used as the main source of primary data collection while reports in journals on internal control practices on private vendors were used as the secondary source.

3.4 Instruments of Data Collection

The main instrument of data collection was through the use of questionnaires. The questionnaires comprised of both open ended questions and close ended questions. The

close ended questions were intended to restrict the responds on the options given while the open ended questions gave them the room to freely express themselves.

3.5 Sampling Method

Simple random sampling method was used to select the sample size for the study. The list of all the private vendors in the Accra West Region was ascertained from the Region. The list formed the basis of the construction of the sampling frame, which was used in selecting the unit of analysis of the study. Simple random sampling was chosen because the study is quantitative in nature and a probability sampling method is required.

3.6 Sample Size Determination

According to Ratary (1957), a study involving a homogenous population can best be represented by $\frac{1}{3}$ of its population as the sample size. There are 97 private vendors who are collecting revenue on behalf of the Accra West. $\frac{1}{3}$ of the 87 is 32.5 To increase the precision of the study, the figure will be doubled. The total sample size will be 65 private vendors.

3.7 Methods of Data Presentation and Psychoanalysis

The quantitative data collected was summarised and presented using tables and charts. The data presented was analysed using percentages.

3.8 Brief Profile of Electricity Company of Ghana (ECG)

The Electricity Company of Ghana Limited (ECG) was incorporated under the Companies Code, 1963 (Act179) in February 1997 and succeeded the then Electricity Corporation of Ghana which was set up in 1967 by the Government (NLCD 125). Its mandate is to distribute electric power in Ghana. Currently, the company distributes electric power in Western, Central, Greater Accra, Eastern, Volta and Ashanti regions of Ghana. The Northern Electricity Distribution Company which used to be part of the Volta River Authority distributes electric power in Brong Ahafo, Northern, Upper East and Upper West regions of Ghana.

Electricity Company of Ghana recognizes the fact that revenue is what keeps the company going and therefore there is no arguing that the survival of the Electricity Company of Ghana centers on effective and vigorous revenue mobilization. However, revenue mobilization starts with effective and accurate metering, production of error free bills and effective collection exercises (ECG Report, 2010).

Monthly energy consumption of customers is determined by taking readings from the traditional credit or postpaid meters and bills produced for customers to pay within 28 days. Over the years, the Electricity Company of Ghana has struggled with employing effective means to collect the huge amount of money owed it by some of its customers.

Technological advancements gave birth to prepayment metering system and ECG adopted this technology in metering in the middle 1990, specifically in 1995 to address billing anomalies and then improve revenue mobilization.

CHAPTER FOUR

ANANLYSIS, DISCUSSION AND REPRESENTATION OF RESULTS

4.1 Introduction

This chapter presents the data collected from the field and the analysis made. The socio-characteristics of respondents are also analyzed since they help in understanding behaviors influencing monitoring of E.C.G. prepaid vendors.

4.2 Socio-Demographical Characteristics

The socio demographical characteristics considered for this study are; sex of respondents, age, level of education and service.

4.2.1. Sex of Respondents

The finding on the sex of respondents indicated that 56.9% of the respondents are males and the remaining 43.1% are females. These findings suggest there is more male staff in E.C.G. than females. The reasons for this might be due to the fact most of the field officers as well as the accounts and audit staffs are males. The details are presented in table 4.1.

Table 4.1: Sex of Respondents

Sex	Frequency	Percentage
Males	37	56.9
Females	28	43.1

Total	65	100
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4.2.2. Age of Respondents:

Analysis on the age of respondents indicates that staff ages between 40 and 49 were very dominant. They constitute 43.1%. This is followed by the age category of 30 – 39 and they are 24.6%. The age group with the least representation was 20 – 29 years with only 9.2%. This implies that majority of the workers are middle aged. The details are presented in Table 4.2.

Table 4.2: Ages of Respondents

Age group	Frequency	Percentage
20 – 29	6	9.2
30 – 39	16	24.6
40 – 49	28	43.1
50 – 59	15	23.1
Total	65	100

4.2.3. Level of Education of Respondents

Findings on the level of education indicated that the level of education is high in the study area. It was found that majority of the staff (35.4%) holds a bachelors degree, (27.7%) diploma, and (16.99%) master’s degree and (12.3%) holds their professional qualifications. The details are presented in table 4.3.

Table 4.3: Level of Education of Respondents

Level	Frequency	Percentage
SHS	5	7.7
Commercial/ technical	0	0
Diploma	18	27.7
Bachelors' Degree	23	35.4
Masters' Degree	11	16.9
Professional qualification	8	12.3
Total	65	100

4.2.4. Years of Service

It was found that the retention rate at E.C.G. is very high and that 30.8 percent of the staff have been working between 15 and 19 years. Those who have worked between 10 and 14 years constitute 26.2 percent and those between 5 and 9 years, 16.9 percent. The details are presented in table 4.4.

Table 4.4: Years of Service

Years	Frequency	Percentage
Less than 1 year	3	4.6
1 – 4	8	12.3
5 – 9	11	16.9
10 – 14	17	26.2
15 – 19	20	30.8
20 years and above	6	9.2
Total	65	100

4.3. Monitoring Practices to Regulate Private Prepaid Vendors

To bring efficiency and to increase access to vending points in the sale of power for those using prepaid meters. Management of E.C.G. has sublet part of its major activity of selling power to prepaid meter users to private vendors. This section seeks to explore how E.C.G. monitors the activities of the prepaid vendors, and the details are presented in table 4.5.

Table 4.5: Monitoring Practices to Regulate Private Vendors

Monitoring practices	Frequency	Percentage
Daily collection of proceeds to bank	14	21.5
Keeping of proper records on vendor activities	21	32.3
Weekly monitoring of vendor activities	5	7.7
Monthly audit of accounts	4	6.2
Submission of monthly financial report	13	20
Unannounced inspection	8	12.3
Total	65	100

From table 4.5 it was found that the main monitoring activity of E.C.G. on the private vendors is to ensure that vendors keep proper records on their sales activities. This constituted 32.3 percent of the responses. It was found that E.C.G. has supplied all the private vendors with daily analysis sheet from which all daily sales including the number of customers for the period are recorded. The main idea behind this is to track the sales operations at the vending points and also to reconcile sales made with the records on analysis sheet. The study found that E.C.G. has a scheduled officer whose main responsibility is it to go round to ensure that the vendors enter their daily sales activity right on the analysis sheet. The study found that when the scheduled officer is satisfied

with the daily sales analysis, the officer then signs to authenticate the correctness of the record, after which a copy of the analysis sheet is given to the vendor and the E.C.G's scheduled officer also takes a copy in addition to the pay slips of the daily lodgments which is used to reconcile with the sales activity for the day. The finding is consistent with Hudson 2012 findings that ineffective monitoring of sales operation can result in fraudulent activities and loss of funds.

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Another major monitoring practice is to ensure that vendors lodge their daily sales at a specified bank. This constituted 21.5%. E.C.G. has entrusted this duty to the care of the supervising cashier who requires that receipts of daily sales lodgments are properly accounted for and receipts sold on daily basis. The ability to do this prevents the vendors from using E.C.G's money for other things. It is a requirement that a pay slip of any amount paid to the bank should be submitted to the supervising cashier who uses the pay slip of the bank in entering in E.C.G accounting software for future reconciliation with the bank statement.

Submission of monthly financial report on the operations of the private vendors to management is another major monitoring activity of E.C.G. this constituted 20.0 percent of the responses. The study found that management meets monthly to access district reports. This includes reports on sale of power and as part of the sale of power private vendors activities are also considered. At such a meeting, decisions on whether sales vendors are keeping faith to the activities of E.C.G. in terms of sales of power are determined. Again, the decisions to terminate or suspend the operations of non-

performing vendors as well as those involved in fraudulent activities are also considered. The study further found that at such monthly meetings, the activities of supervising cashiers and field officers involved in supervising vendors are also evaluated for those to be reprimanded conceded for an action to be taken as well as those who need to be appreciated to be considered.

Unannounced inspection by the Account Examination Units was also found to be a practice used to regulate private vendors. This constituted 12.3%. The study found that this group is the audit team which goes round unannounced to have a spot check to determine whether all officers involved in the processes of selling power follow the required procedures and standards set. The unannounced inspection is very important because it puts the vendors and all related officers on their toes. It also helps to reduce fraudulent practices and collusion between prepaid vendors and field officers. The Account Examination Units reports directly to the Regional Accounts Manager who also presents his reports monthly to management to be discussed.

Weekly monitoring of vendors activities was also seen to be another practice to monitor private vendors, (7.7%). The District Accounts Officer as part of his schedule to visit the private vendors examine their accounts and to advise them on any challenges they face as far as sales and keeping of proper accounting standards at the vending stations. The findings made by District Accounts Officer on private vendors are reported to the Regional Account Manager to be incorporated into his reports for monthly discussion at the management level.

Monthly audit of accounts of private vendors (6.2%) was seen as a minor monitoring practice at E.C.G. The study found that the Account Examination Units (AEU) examined every private vendor account and makes a recommendation on every vendor whether they are in good standing or they owe the company or have discrepancies to be reconciled in the accounts. The Accounts Examination Units report sales as a major input on the status of every private vendor. The monthly audit of account of private vendors is also a final activity usually conducted to close the account of private vendors at the end of every period.

It can be inferred from the above that E.C.G. uses a number of monitoring practices to regulate private vendors in order to ensure that power entrusted into their care for sales are properly accounted for. Among the major monitoring practices include: Keeping of proper record of vendor activities.

4.4. Problems with Monitoring Private Vendors

In order to understand the behavior of private vendors in the sale of power to prepaid meter users, the researcher explored the problems E.C.G. have with monitoring private vendors and the details are presented on the table 4.6.

Table 4.6: Problems with Monitoring Private Vendors

Reports	Frequency	Percentage
Inadequate logistics	12	18.5
Inadequate auditors	21	32.3

Mistrust between vendors and monitoring team	13	20
Unreliable financial report of vendors	10	15.4
Non-compliance with laws and regulations	7	13.8
Total	65	100

Analysis on the problems with monitoring of private vendors revealed that inadequate auditors (32.3%) was a major problem E.C.G. has in monitoring private vendors. It was found that there are over 90 private vendors involved in the Accra West Region. These private vendors are not in one location but scattered in the various suburbs. The study also found that there is only a four member audit team (AED) who periodically have to visit the private vendors and ensure that they are keeping to standards, but are not able because of their small number. This suggests that the AEU team was overstressed with a lot of work; in terms of monitoring the activities of private vendors. Due to these, unannounced inspections are scarcely undertaken at vending stations. The study further found that another tasks of the audit team is to audit the books of the Supervising Cashiers and the District Account Officers. There are six districts in the Accra West Region and this small account team has to visit each district to have monthly audit of the accounts. This was found to be a huge task for such a small team as such most often the audit team is not able to complete this task within a month, implying that they are not able to present a full report on monthly basis for management discussion.

Another problem with monitoring was the mistrust between vendors and monitoring team which constituted 20% of the responses. It was found that most often vendors and monitoring team are not on a healthy relationship due to the high level of suspicion. It was found that vendors think that the monitoring team is coming to check whether they have stolen any money; because of this perception, they do not often open up. The monitoring team on the other hand sees the vendors as being difficult to work with and as such do not also relate well with them. These poor working relations between the vendors and the monitoring team normally delays a simple monitoring activity since both parties normally take entrenched positions.

Inadequate logistics (18.5%) is a major problem affecting monitoring of private vendors. District Account Officers do not have vehicles to monitor the activities of the vendors to observe for themselves problems vendors have in the sale of power and recording of accounts. The audit team also does not have enough vehicles to undertake auditing activities in the various vending stations. No field officer (audit team, supervising cashiers, DAO) have been given lap tops and camera scanners for field monitoring activities. Inadequate logistics in the form of field recording accessories often delays capturing on the spot data which is needed as evidence to support a claim on any wrong doing at a point. Lack of such inputs from management makes the work difficult.

Unreliable financial report of vendors (15.4%). Most often the daily analysis sheet of private vendors does not reflect the actual sales made for the day. This often takes an

experiences field officer to detect. When this goes undetected, makes the financial report prepared on vendors unreliable because of the inherent errors concealed by the private vendors. The study also found that inability of the audit team to do. Private vendors can also be a contributing factor affecting the reliability on the financial reports of vendors.

The inability for private vendors to comply strictly with the rules and regulations governing sale of power for prepaid meter users was a problem for E.C.G. officials. This constituted (13.8%) of the responses. The study found that it is a rule that there should be daily lodgment of any sales made, but it is found that most vendors do not comply to this directly; they accumulate funds and pay at any day convenient to them. It was also found that instead of paying daily sales directly into E.C.G. account, some vendors rather prefer paying into their personal accounts and thereafter issue E.C.G. a cheque to cover the amount. The inability to submit report on vendors on time to management due to logistic challenges can partly be attributed to vendors' non-compliance with laws and regulations. It can be concluded that E.C.G. has numerous problems in monitoring private vendors, and a major problem is inadequate auditors to undertake periodic audit of private vendors' activities.

4.5 Problems Private Vendors Have in the Sale of Power

In order to have a smooth sale of power there is the need to identify the problems private vendors have. It is also important to identify the problems private vendors have so that field officers will be abreast with such problems whenever they visit the vending stations. The problems of private vendors have been summarized in table 4.7 below.

Table 4.7: Problem Private Vendors Face in Collecting Revenue

Responds	Frequency	Percentage
Frequent power outages at vending stations	13	20
Frequent network failure at vending stations	22	33.8
Remote vending stations	6	9.3
Poor attitude of customers	5	7.7
Inability to run 24 hour service	16	24.6
Poor security	3	4.6
Total	65	100

From table 4.7, it was found that frequent network failure at vending stations (33.8%) was a major problem affecting the sales of power. The study found that, when there is no internet connectivity between the vending stations and the prepaid vending points, information on the quantity being sold to each customer cannot be relayed to the regional office for the prepaid meter card to be loaded on. Most vending stations are found to have unreliable networks because there are a lot of distractions to the satellite being used.

Inability to run customers services throughout the day in most vending stations is a problem for customers. This constituted 24.6% of the responses. The ideal situation is to have all vending stations running 24 hourly services, but unfortunately all the vending station at Accra West Region mainly operate during the day and close after 9pm each

day. This makes customer who would want to buy power in the night not able to do so. Reasons for inability of all the vending stations to run 24 hourly services are the high cost involved and security threats. It was found that it is costly to run 24 hourly services because one needs to engage the services of more than one sales person who will be running a shift but most vending stations are not comfortable with this arrangement and only want to sell during the peak period. That is the day and before 6pm. The study also found that working deep in the night has its own security threats since sales persons fear that they could be attacked at a time where a lot of people are asleep.

Another major problem facing prepaid vendors is the frequent power outage in the study area. The study found that, there are frequent power outages and this disrupts the sale of power because all the equipment used in the process of selling depends on power and when there are outages, it becomes impossible to work. An alternative to this is to get a generator but most vending stations do not have because of the high cost of purchasing and not maintaining.

Inaccessibility to vending stations (9.3%) was found to be a problem affecting customers of prepaid. It was found that there are few vending stations in the Accra West Region making people walk long distances before getting to the vending stations. This situation creates inconvenience for prepaid meter users whenever they want to purchase power for use. There is the need to ensure that there is access to vending stations so that the problem of having to walk long distance can be solved.

The study found that poor attitudes of customers to prepaid vendors were also a problem. This constituted (7.7%). It was found that most often customers are impatient with vending especially when the network is either slow or down, or when a customer has a damaged card and needs to get to E.C.G for a replacement. The study also found that most customers get offended when they come around break time and the cashier is on break. The study further found that some vendors are also disrespectful to customers on the slightest issues or challenge based on these, some customers do not want to buy from specific stations and some cashiers do not want to sell to some customers creating problems for the sale of power for E.C.G.

Poor security at vending point (4.6%) was seen as another problem facing vendors. The study found that some areas in Accra West Region are noted to have high incidence of robbery cases, as such vending staff do not want to work late to attract the attention of such people. The study also found that apart from the few vending points located in supermarkets, the rest who operate as standalone facility are not able to engage the services of security guards making them vulnerable especially when they have collected a lot of money during the peak working hours. It can be concluded that private vendors have numerous problems in the sale of power and the main problems are frequent network failures, and frequent power outages at the vending stations.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study assessed the monitoring practices adopted by E.C.G. power in the Accra West Region. This study was necessitated by the fact that E.C.G. has introduced prepaid metering system to replace the old post paid system and has engaged the services of private vendors in the sales of power to prepaid meter users. The main aim of this study is to determine the monitoring practices used to regulate private vendors and the problems private vendors have in the sale of power.

The study employed the descriptive methods by using the qualitative methods of collecting and analysis, both primary and secondary sources of data were used for the study with questionnaire being the main instrument for collecting primary data. Simple random sampling method was used to select the sample size for the study. The list of all private vendors in the Accra West Region was certain from the regional office.

A sampling frame for all the 97 vendors was developed after which the lottery methods were used to select the respondents randomly. Two third of the total population was used to calculate the sample size of the study, (65). Data collected was presented using table and analyzed using descriptive methods.

5.2 Summary and Findings

The following findings were made in line with the conclusions drawn.

- 1) There is more male E.C.G. staff than females involved in the monitoring of private E.C.G. vendors.
- 2) Majority of the monitoring team are aged between 40 – 49yrs.
- 3) The educational level of the monitoring team is high with majority holding bachelors degree.
- 4) The monitoring team has worked with E.C.G. for a long time with majority between 15 to 19 years.
- 5) The main monitoring practices in regulating private vendors include; keeping of proper records of all vending activities, daily collection of proceeds from vendors, and submission of monthly financial reports.
- 6) Minor monitoring practices used in regulating E.C.G. vendors include; unannounced inspections, weekly monitoring of vendor activities and monthly audit of vendor accounts.
- 7) Problems inhibiting effective monitoring of private vendor activities include; inadequate auditors, mistrust between vendors and monitoring team, inadequate logistics and non-compliance of guidelines regulating vending activities.
- 8) Problems private vendors have in the sale of power include frequent network failures at vending stations, validity to run 24 hourly services and frequent power outages at vending stations.

5.3 Conclusions

Based on this findings it can be concluded that there are a lot of monitoring practices E.C.G. Accounts Examination Units adopts in regulating private vendor activities in E.C.G. and the main monitoring practices include; keeping of proper records of vending activity, daily collection of proceeds to bank and submission of monthly financial reports, with minor monitoring practices including unannounced inspections and weekly monitoring of vendor activities.

It can also be concluded that the main problems associated with monitoring E.C.G. private vendors are inadequate auditors, mistrust between vendors and audit team, inadequate logistics, unreliable financial reports from vendors and non-compliance of guidelines regulating vending activities.

Another conclusion is that private vendors have numerous problems associated with the sale of power to prepaid meter users, key amongst such problems are; frequent network failures at vending stations, inability to run 24 hourly services, frequent power outages at vending stations.

5.4 Recommendations

The study found that E.C.G. relies mainly on 3 monitoring practices namely; keeping of proper records on vending activities, daily collection of sales and submission of vendor reports, placing premium on the other monitoring practices such as;

- 1) Unannounced inspection, monthly audit of accounts and weekly monitoring of vendor activities. It is therefore been recommended that all monitoring activities should be taken seriously by the field staff to enhance effective monitoring of vendors.
- 2) It was found that the main problems associated with monitoring private vendors are; inadequate auditors, mistrust between vendors and monitoring team and inadequate logistics. There is therefore the need for management to recruit more auditors to strengthen monitoring activities.
- 3) Private vendors have a number of problems in the sale of power and it includes; frequent network failures at vending stations, inability to run 24 hourly services, and frequent power outages at vending stations. To help solve these problems, management must help provide reliable internet network to enhance vending activities. In addition to this, the provision of standing generators should be a pre-requisite for giving a contract to private vendors to operate in the sale of prepaid power.
- 4) Management should ensure that prepaid vendors run 24 hourly services, to ensure flexibility on access of power by prepaid meter users. This also calls for intensified security, especially at night for both the vending officer and the prepaid buyer.

REFERENCES

- Ahrens, T. and Chapman, C.S. (2004). Accounting for Flexibility and Efficiency: A Field Study of Management Control Systems in a Restaurant Chain, *Contemporary Accounting Research* 21.
- Akroyd, C. and Kober, R. (2011). The emergence and utilisation of management control systems in a high growth firm, The University of Auckland Working Paper
- Allen, et al (2004). Cases in Management Accounting and Control Systems, 4th Edition, Prentice Hall.
- Anderson, E. and Oliver, R. L. (1987). Perspectives on Behavior-Based versus Outcome-Based Sales force Control Systems. *Journal of Marketing*, 51 (4).
- Anderson, E. and Oliver, R. L. (1987). Perspectives on Behavior-Based versus Outcome-Based Sales force Control Systems. *Journal of Marketing*, 51 (4).
- Ansari, et al (1996). Activity-Based Management (ABM): Module, McGraw Hill Higher Education.
- Anthony, R. (1965). Planning and control systems: A framework for analysis, Harvard Business Press, Boston
- Anthony, R. N. and Govindarajan V. (2003). Management Control Systems. McGraw-Hill/Irwin.
- Anthony, R. N. and Young D. (2002). Management Control In Nonprofit Organizations, McGraw-Hill/Irwin.
- Ashbaugh-Skaife, et al (2009). The effect of SOX internal control deficiencies on firm risk and cost of equity. *Journal of Accounting Research* 47(1)
- Bach, S. and Sisson K. (2000). Personnel Management: A Comprehensive Guide to Theory and Practice. Blackwell Publishing.
- Baughman, J. P.
- Baylis, J., Wirtz J. J. and Gray C. S. (2010). *Strategy in the Contemporary World: An Introduction to Strategic Studies*, 3rd edition. Oxford University Press, USA.
- Beneish, M., Billings M. and Hodder L. (2008). Internal control weaknesses and information uncertainty. *The Accounting Review* 83(3).
- Birnbaum, P. H. (1987). Review: *The Behavioral Science of Leadership: An Interdisciplinary Japanese Research Program*, *Administrative Science Quarterly* 32(3).
- Cameron, K. and Quinn, R. E. (2006). *Diagnosing and Changing Organisational Culture: Based on the Competing Values Frame work*, Rennin University Press, Beijing- China.

Cardinal, L.B., Sitkin, S.B., and Long, C.P., (2004).balancing and rebalancing in the creation and evolution of organizational control, *Organizational Science* 15 (4).

Chenhall, R.H. (2007).Theorizing contingencies in management control systems research, *Handbook of Management Accounting Research* 1

Cooper, R. and Kaplan R. S. (1998).The Design of Cost Management Systems: Text Cases and Readings, Prentice Hall.

Costa, A. C. and Bijlsma-Frankema, K. (2007), Trust and Control Interrelations, *Group and Organization Management*, 32 (4)

Dekker, H.C., (2004). Control of inter-organizational relationships: Evidence on appropriation concerns and coordination requirements, *Accounting, Organizations and Society* 29

Della Sala, S. (ed.) 2006. Tall Tales about the Mind and Brain: Separating Fact from Fiction. Oxford: Oxford University Press.

Denson, R. and Rousseau, D (1995). Towards a Theory of Organisational Culture and Effectiveness, *Organisational Science*, 6(2)

Doyle, J., Ge W. and McVay S. (2007).Accruals quality and internal control over financial reporting, *The Accounting Review* 82(5).

Doyle, J., Ge W. and McVay S. (2007).Determinants of weaknesses in internal control over financial reporting, *Journal of Accounting and Economics* 44(1-2).

Eisenhardt, K. M. (1985). Control: Organizational and economic approaches, *Management Science* 31(2)

Eisenhardt, K. M. (1985). Control: Organizational and economic approaches. *Management Science*, 31 (2).

Evans, W. R. and Davis, W. D. (2005). High-Performance Work Systems and Organizational Performance: The Mediating Role of Internal Social Structure. *Journal of Management*, 31 (5).

Florian, M. (2011). Sales Management Control Strategies in Banking: Strategic Fit and Performance Impact, KunkelLopkaMedienentwicklung, Heidelberg-Germany.

Gamble, J. and Thompson, Jr A. A. (2010). Essentials of Strategic Management: The Quest for Competitive Advantage, 2nd edition. McGraw-Hill/Irwin.

Ge, W. and McVay S. (2005).The disclosure of material weaknesses in internal control after the Sarbanes-Oxley Act.*Accounting Horizons* 19(3).

Goetsch, D. L. and Davis, S. (2009). Quality Management for Organizational Excellence: Introduction to Total Quality, 6th edition. Prentice Hall.

Griffin, R. W. (2010). Management, 10th edition. South-Western College Pub.

Hammersley, J., Myers L. and Shakespeare C. (2008). Market reactions to the disclosure of internal control weaknesses and to the characteristics of those weaknesses under Section 302 of the Sarbanes Oxley Act of 2002. Review of Accounting Studies 13(1).

Hansen, D. R., Mowen M. M. and Guan L. (2009). Cost Management: Accounting and Control, 6th edition. South-Western Cengage Learning.

Hornsby, J. S. and Kuratko D. F. 2002. The Human Resource Function in Emerging Enterprises, South-Western Educational Publishing.

Jan, A. P. (2009). Managing Organizational Culture for Effective Internal Control, SPI Publisher Services, London

Jaworski, B. J., Stathakopoulos, V. and Krishnan, H. S. (1993). Control Combinations in Marketing: Conceptual Framework and Empirical Evidence. Journal of Marketing, 57 (January).

Kerzner, H. (2005). Project Management: A Systems Approach to Planning, Scheduling, and Controlling, Wiley.

Lane, H. W., Distefano, J. J. and Maznevski, M. L. (2000). International Management Behavior: Text, Readings, and Cases, Blackwell Publishing.

Ma, C. (1988). Unique implementation of incentive contracts with many agents. Review of Economic Studies 55(4).

Mabey, et al (1998). Human Resource Management: A Strategic Introduction (Management, Organizations, and Business Series). Blackwell Publishing.

Merchant, K. A. (1998). Modern Management Control Systems: Text and Cases. Prentice Hall.

Merchant, K. A. and Van der Stede W. (2007). Management Control Systems: Performance Measurement, Evaluation and Incentives, 2nd edition. Prentice Hall.

Northouse, P. G. (2003). Leadership: Theory and Practice, Sage Publications.

Ogneva, M., Subramanyam K. and Raghunandan K. (2007). Internal control weakness and cost of equity: evidence from SOX section 404 disclosures, The Accounting Review 82(5).

Otley, D., (1999). Performance management: a framework for management control systems research, Management Accounting Research 10.

- Ouchi, W. G. (1977). The Relationship Between Organizational Structure and Organizational Control. *Administrative Science Quarterly*, 22(1).
- Ouchi, W. G. (1978). The Transmission of Control Through Organizational Hierarchy. *Academy of Management Journal*, 2.
- Ouchi, W. G. (1979). A Conceptual Framework for the Design of Organizational Control Mechanisms. *Management Science*, 25(9).
- Ouchi, W. G. (1979). A conceptual framework for the design of organizational control mechanisms, *Management Science* (September).
- Ouchi, W.G. (1977). The relationship between organizational structure and organizational control. *Administrative Science Quarterly*, 22 (1).
- Ouchi, W.G. and M. A. Maguire. (1975). Organizational Control: Two Functions. *Administrative Science Quarterly*, 20 (December).
- Simons, R. (1999). Performance Measurement and Control Systems for Implementing Strategy Text and Cases. Prentice Hall.
- Simons, R., (1987). Accounting control systems and business strategy: An empirical analysis, *Accounting, Organisations and Society* 12.
- Simons, R., Davila A. and Kaplan, R. S. (1999). Performance Measurement & Control Systems for Implementing Strategy: Text and Cases. Prentice Hall College Division.
- Snell, A. S. (1992). Control theory in strategic human resource management: The mediating effect of administrative information. *Academy of Management Journal*, 35 (2).
- Snell, S. A. and Youndt, M. A. (1995). Human resource management and firm performance: Testing a contingency model of executive controls. *Journal of Management*, 21 (4).
- Towry, K. L. (2003). Control in a teamwork environment - The impact of social ties on the effectiveness of mutual monitoring contracts. *The Accounting Review* (October).
- Turner, K. L. and Makhija, M. V. (2006). The role of organizational controls in managing knowledge., *Academy of Management Review*, 31 (1).
- Velez, M.L., Sanchez, J. M., lvarez-Dardet, C., (2008). Management control systems as inter-organizational trust builders in evolving relationships: Evidence from a longitudinal case study, *Accounting, Organizations and Society* 33.
- Virginia Polytechnic Institute and State University (2008). Internal Controls: The Key to Good Business Practices, http://www.cafm.vt.edu/dbmg/internal_controls.php.

APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

INSTITUTE OF DISTANCE LEARNING

QUESTIONNAIRE

This questionnaire intends to collect information on the monitoring practices of private vendors in revenue collections in Electricity Company Ghana. Thank you for contributing to the success of this research.

HOW TO COMPLETE THE QUESTIONNAIRE

Please tick the box before the best response to each question.

SECTION A: Social Demographic Profile of Respondents

1. What is your sex?

Male

Female

2. In which age group do you belong

20 – 29

30 – 39

40 – 49

50 – 79

3. Which level of education are you?

- SHS/Secondary
- Vocational/Commercial/Technical
- Diploma
- Bachelors'
- Masters'
- Others (Specify).....

4. Which year of service are you in the bank?

- Less than 1 year
- 1 – 4 years
- 5 – 9 years
- 10 – 14 years
- 14 – 19 years
- 20 – 24 years
- 25 years and above

SECTION B: Internal Practices Adapted to Regulate Private Vendor

1. What internal control practices are used to control private vendors at ECG.

- Daily deposit of proceed at Bank
- Keeping of proper records on vendor activities
- Weekly monitoring of activities
- Monthly audit of accounts
- Submission of financial reports monthly

Unannounced inspection

2. Have the above control practices yielded results?

Yes

No

3. If yes, how has it helped in to achieve results?

Fraudulent activities are observed on time.

Vendors are afraid to engage in fraudulent activates

Vendors are always on the alert to do the right thing

It helps the vendors to achieve their target

4. If No, what is it that the control systems are not working?

Inadequate monitory team

Inefficient monitory

Collision between vendors and monitoring team

Unfaithfulness of vendor

SECTION C: Problems with Monitory Private Vendors

1. What problems does management have with monitoring the activities of private vendors?

Inadequate logistics

Inadequate auditors field inspection

Collision between vendors and monitoring team

Unreliable financial report of vendors

Non – compliance with laws and regulations

2. How can the problems of monitoring of private vendor be solved?

- Engaging the server of external auditors for vendor activities
- Provisions of logistics needed for field
- Ensure strict monitoring regularly

SECTION D: Problems Private Vendors Face in Collecting Revenue.

1. What problems do private vendors of ECG face in the provision of their services?

- Frequent power outages at vending stations
- Vending stations are remotes from central business districts
- Poor attitude of customers
- Inadequate staff to run 24 hourly services
- Poor security

2. How can the problems facing vendors be rectified?

- Provision of adequate security
- Provision of additional staff to run 24 hour services
- Education for customers
- Relocation of vending station to more strategic and accessible areas

KNUST

