

## EFFECT OF INTEGRATED FINANCIAL ACCOUNTING SYSTEMS ON THE FINANCIAL PERFORMANCE OF CHAI STORES IN KISII COUNTY, KENYA

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### ABSTRACT

*Integrated Financial accounting systems has been improving business operations in the current years. Integrated Financial accounting systems faces the challenges of unauthorized access, alterations and destruction of data thus compromising the confidentiality, integrity and availability of financial information. The research sought to evaluate the effect of integrated financial accounting systems on financial performance of chain stores in Kisii County, Kenya. The objectives of the study were; To determine the effect of computerized integrated accounting systems on the financial performance of chain stores in Kisii County, to examine the effect of payroll system the financial performance of chain stores and to establish the effect of asset management systems on the financial performance of chain stores. The study used descriptive survey design. The target population was 206 respondents from the chain stores in Kisii County. A census method comprised of all the 206 respondents (branch managers, supervisors, accountants and other employees. Closed ended questionnaire used to collect data from the chain stores. Descriptive methods included mean and standard deviation. The inferential statistics included regression analysis to test the model fit and correlation analysis. The data was analyzed with the aid of Statistical Package for Social Sciences (SPSS) version 22.0 and presented using tables & figures. The results from the respondents agreed that supply chain management, Revenue management and accounts receivable management was mainly for controlling cost of baking of cakes and breads. Customer relationship management with taxation systems was most controls procedures for cash management. Payroll management and debt management in budgeting and budgetary compliance was used. Asset management systems had a strong and positive significant relationship on financial performance as shown by correlation value of  $r=.711$   $p=.000$ . Payroll systems had a strong and positive significant relationship on financial performance as supported by  $r=.894$   $p=.001$ . The correlation analysis indicated that computerized accounting systems had a moderate and positive significant relationship on financial performance as shown by correlation  $r= .688$ ,  $p.006$ . Non-current asset management with Accounts payable management was for auditing procedures. General ledger management was also one of the integrated computerized systems. The study recommended for improvement of computerized accounting systems on performance of chain stores. The study recommended for another further study on computerized financial accounting systems on financial performance of chain stores.*

**Keywords:** *Computerized Integrated Accounting Systems, payroll system, asset management systems*

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## INTRODUCTION

Integrated financial accounting systems can be traced back to ancient times in Egypt, China, Greece and Mesopotamia. Ancient Egypt and Chinese civilization were handling treasury and other government records of tax matters. Egyptians bookkeepers kept records that were checked by an elaborate internal verification process. Records from Mesopotamia showed list of incomes and expenditures. Further development of accounting happened in medieval period with introduction of cashbook in the Roman Empire (Alexander, 2002; Alrawi & Thomas, 2007; Edwards, 2013).

During the Renaissance period, there was introduction of double entry by Luca Pacioli, the father of accounting, which has brought a great impact to modern accounting. The origin of using Latin word debit “he owes” and Credit “he trust” were introduced in the accounting. Pacioli recommended the use of memorandum, journal and ledger as the books of account in his treatise of accounting (Edwards, 2013; Rogers, 2014).

Large and complex companies developed during industrial revolution leading to introduction of cost accounting by developing systems of recording and tracking cost. Cost accounting was one of the oldest management tools to be used. It was during this time that Queen Victoria of Scotland gave a royal charter to recognize accounting as a profession (Edwards, 2013; Schneider, 2015; Tanis, 2013; Wiley, 2013).

In Germany, a study on integration of management accounting and financial accounting showed that a good management computerized accounting information was not only characterized by relevance, accuracy, timeliness, or technical reliability with respect to a given control problem, but also by consistency from a user-side perspective. It may be difficult to achieve consistency if relevant GAAPs are not applied even if legal and tax requirements have been fulfilled. Consistency was not about internal reporting though must adhere to provision of IFRS 8 - Operating Segment. There are two fundamental options to provide Accounting information for management control purpose; IAS where financial records are used as a database for management accounting and/or as third set of books that was different from Financial and tax accounting records (Weibenberger & Angelkort, 2010).

In Saudi Arabia, an investigation on the perceived threats of accounting information systems in developing countries (CAIS) revealed that almost 50% of Saudi organization suffered loss due to breach of CAIS. The most significant perceived threats of CAIS are accidental and intentional entry of wrong data, accidental destruction of data by employees, sharing of passwords, computer viruses, suppression and destruction of reported output, unauthorized documents visibility, direct print and distribution of information to people who are not entitled (Abu-Musa, 2006).

In Bangladesh, information generated by accounting information systems (AIS) increases operation processes, management reports, budgeting and controls. Effectiveness of AIS was analyzed on scope, timeliness and aggregation. Scope covers financial and non-financial, internal and external information useful for prediction of the future events. Aggregation was a means of collecting and summarizing information within a given period. The concept of AIS uses content, accuracy, format, ease of use and timelines (Fowzia & Nasrin, 2011).

In Ghana, a study to explore the conception, motivation, assessment, benefits and challenges surrounding CAIS in developing countries found out that external and internal factors, as well as potential benefits of CAIS contribute to its adoption. The factors include increased workload, budgetary constraints, size of the firm, competition, external agents, computer set of efficacy of decision makers, the level of IT expertise and technological innovation. The benefits of CAIS in state owned enterprises were speed, accuracy, improvement in work life of employee, effective supervision, and improved decision making, reduced human errors, and increased reliability of financial institution. CAIS improves the quality of financial statements and compliance with regulations and improves data processing. It was also found out that there was no integration of CAIS with other was to allow real time access of data. The main challenge of CAIS was found out to be the

organizations own employees. Reports generated by CAIS are used by internal management, staff and external stakeholders. These reports include analysis of receipts, payments, accounts payable, accounts receivable, cash management petty cash utilization and inventory balances (Appiah, Agyemang, Agyei, Nketiah, & Mensah, 2013).

In Tanzania, a study on the impact of computerization on internal control over cash in Iringa municipal council by Selfano, Peninah, & Sarah (2014) showed that computerization of accounting systems brought a considerable improvement on internal control of cash. The authorizations and approvals must be done on the systems which are secured through password and segregation of duties and responsibilities.

In Kampala city, Uganda, a study on the impact of accounting information systems on profitability level of small scale businesses revealed that most small scale businesses do not have AIS resulting to continue low performance. It showed a positive relationship between AIS and profit levels of small businesses in Kampala. This was because AIS increase speed of processing data and classifying it easily reduces time. Reliability and safety of data which can be retrieved late was guaranteed by the system back up (Muhindo, Mzuza, & Zhou, 2014).

In Kisumu, Kenya, a study of effects of Financial accounting systems FAS on audit risk management in public enterprises highlighted the impact of FAS as strengthening manual account, promoting effectiveness of organization by changing procedures, improving data processing and promoting rudimentary analysis. Risk management systems have failed in many cases due to lack of corporate governance and audit monitoring procedures due to lack of Financial Accounting System. Accounting functions falls in two major branches; Management accounting that gives reports to internal managers for decision making and financial accounting for external stakeholders. The ability of a company to protect financial information using software safeguards the company from legal and financial liabilities. FAS increases the internal control process that leads to a positive external auditor's report which was useful to leaders and other stakeholders (Otieno & Orina, 2013).

IFMIS was an ICAS adopted by Government of Kenya and has strengthened public finance management leading to growth & development of the country. An investigation on the effects of IFMIS on cash management practices in the public sector showed that a reliable system was accurate, timely, complete & consistent in collection of information, secure from destruction, corruption, unauthorized access & breach of confidentiality. FAS should guarantee confidentiality, integrity and availability of data and information. Reliability and flexibility of IFMIS affects cash management positively. Some of the highlighted weaknesses of IFMIS are lack of internal control over data entry, transaction processing and reporting; poor standard data classification for recording financial events; duplication of processes for similar transactions; and duplication of data entry (Selfano, et al., 2014). The factors that influence implementation of IFMIS in Kenya government ministries are implementation cost, capacity & technical skills, complexity of IFMIS, and motivation of workforce (Karanja & Nganga, 2014).

According to study on impact of information technology on accounting systems by Lim (2013), advancement in ICT has greatly affected accounting systems of business entities. The positive impact of ICT in accounting are; increased competitive advantage, economic efficiency, improved processing equipment, accounting software tools, security, internet for business transactions, cloud computing, efficiency leading to better results, speed of transactions, accuracy of entries, improved internal and external reporting, flexibility, and reduction of paper work.

### **Statement of Problem**

Performance of chain stores is undergoing declining trend, though chain stores have established various accounting systems but it is not clear which integrated financial accounting system can enhance their performance. Financial integrated accounting systems (IFAS) are speed, automatic document production, accuracy, up-to-date information, availability of information, management information, cost savings, VAT

return, legibility, efficiency, staff motivation, reduced frustration, and the ability to deal in multiple currencies easily (Hadler, 2014; Magloff, 2014).

Some of the perceived security threats of accounting information identified by Hayale & Abu (2008) are; accidental & intentional destruction of data, accidental & intentional entry of erroneous data by employee and/or other personnel.

On March 2016, Uchumi chain stores closed down its five branches in; Kisii, Nairobi-Taj Mall, Eldoret, Nakuru and Embu due to financial distress (Michira, 2016) that could be traced to three years of manipulation of books, weak internal controls, fraudulent procurement and mismanagement.

In 2017, Nakumatt chain stores closed down most of its branches including Kisii branch due to debt distress. Therefore, ICAS faces the challenges of unauthorized access, alterations and destruction of data thus compromising the confidentiality, integrity and availability of financial information.

Tuskys suppliers protested over delays to settle their dues for goods delivered. The suppliers had to seek government intervention to have them paid. The chain store finally collapsed due to financial distress.

Ukwala chain store applied to the court for permanent closure of its business, revealing that it was unable to pay its debts that had accumulated to nearly one billion shillings. The chain store owed Kenya Revenue Authority, in April 2018 KRA froze Ukwala chain stores bank accounts at Diamond Trust, claiming money for Pay as You Earn and VAT arrears from the company.

Choppies a Botswana based chain store entered to the Kenyan market was ushered in by the distressed Ukwala chain stores in 2016. The retailer had 6 branches including in Kisii, barely survived for four years in the competitive market due to debt distress.

There are many factors cited as having contributed to the death of Kenya's retail giant, these factors include gross mismanagement, poor financial decisions, tax compliance issues and massive losses.

Hayale & Abu Khadra (2009) evaluated the level of effectiveness of integrated financial accounting information systems (CAIS) that were implemented by the Jordanian banking sector to preserve confidentiality, integrity and availability of the bank's data. Hayale & Abu (2008) also investigated perceived security threats of accounting information on Jordanian banking sector.

### **Objective of the Study**

The main objective of the study was to determine the effect of integrated financial accounting systems on financial performance of chain stores in Kisii county Kenya.

The specific objectives were;

- To determine the effect of computerized integrated accounting systems on the financial performance of chain stores in Kisii County
- To determine the effect of payroll system on the financial performance of the chain stores in Kisii County
- To determine the effect of asset management systems on the financial performance of chain stores in Kisii County

## **LITERATURE REVIEW**

### **Agency Theory**

The theory was proposed by Jensen and Meckling expanded on in 1976. The agency theory outlines how the principal(s) and the agent interact (s). Shareholders and management, head office and branch, management and employees, holding company and subsidiaries, and so on can form an agency partnership. The agent is hired by the principal to do jobs for him. The principal's self-interests can conflict with the agencies, and vice versa. The theory is intended to settle disputes between principals and agents.

With the purpose of financial reporting and qualitative characteristics and constraints of decision-useful financial reporting information, the International Accounting Standards Board (IASB) published a conceptual framework for financial statement preparation and presentation in 2008. According to the stewardship and agency theory concepts, agency theory is primarily concerned with proactively solving issues that might arise in an agency partnership, such as when the principal's and agent's goals and/or priorities conflict, and it is difficult and/or expensive for the principal to verify what the agent is actually doing. The issue with risk sharing occurs when the principal and the agent have opposing views on risk and therefore favor opposing actions.

According to the agency theory, Nicușor (2015) investigated the possible benefits and disadvantages of the most common tools a shareholder can use to track and regulate a manager. Despite the wide variety of policies and instruments available to shareholders, he discovered that they all had flaws that limited their applicability. He also discovered that a strong board of directors, a strong ownership structure, management compensation plans, a strong capital structure, and a strong market for corporate control all helped to alleviate friction between shareholders and managers to some degree, but that their applicability and effectiveness were questioned, necessitating further study. The study concluded that there is no one-size-fits-all solution for any environment, but rather a dynamic mix tailored to each company's unique circumstances, and that policymakers should consider all of the firm's characteristics.

Namazi (2012) investigated the "Agency Theory's" impact on the implementation of effective management control mechanisms. Agency theory, according to the results, suggests a variety of organizational, economic, behavioral, and regulating roles that can be used in the implementation of management control systems. It was also discovered that the quantity and consistency of information (public or private) in the managerial accounting system dictated whether or not a control mechanism was implemented. Implementing a control structure necessitated the sharing of information and variables affecting the organization relationship. The study was guided by this theory as it explains integrated financial accounting system and its effects on performance where there must be two participants.

### **Systems theory**

The theory was proposed by the biologist Ludwig von Bertalanffy in the 1940's reacting against reductionism (breaking a whole part into small parts) and attempting to revive the unity of science (Ansari, 2004) and furthered by Ross Ashby (Ansari, 2004; Heylighen & Joslyn, 1992). Systems Theory states that "the trans disciplinary study of the abstract organization of phenomena, independent of their substance, type, or spatial or temporal scale of existence. It investigates both the principles common to all complex entities, and the models (usually mathematical) which can be used to describe them" (Heylighen & Joslyn, 1992). Bertalanffy stated that real systems are open to, and interact with, their environments, and that they can acquire, qualitatively, new properties through emergence thus resulting in continual evolution.

The main limitations are instead of reducing an entity (such as the human body) to the properties of its elements or parts (such as organs or cells) the theory focuses on the arrangement and relations of the parts which connect them into a whole i.e. holism. The organization determines a system that was independent of the concrete substance of the elements such as particles, cells, transistors, people, etc. The same concepts and principles of organization are popular in many different disciplines such as biology, sociology, physics, technology, etc., providing a basis for their unification. A systems concept has system-environment boundary, input, process, output, information state, hierarchy, and goal-directedness (Heylighen & Joslyn, 1992).

There are two thinking of systems theory; biological (open) system which originated from biology (the Darwin's work on the evolution of the species) proposed by Bertalanffy, and cybernetic (closed) system which originated from classical (Newtonian) physics proposed by Ross Ashby. An open system was appropriate in biological systems since they interact with the environment, grow and survive. It has more variables forming a complex set of interrelationship. It also has anticipatory control of errors before they occur through feed

forward mechanism. The aim of regulation was to fine-tune and shift the system along a dynamic path through continuous improvement in order to reach a dynamic equilibrium. A closed system, on the other hand, does not communicate with its surroundings and regulates itself using feedback. It has a few variables that can be managed inside the system, allowing for cost and quality management. It uses error regulated regulations that was control after the evidence. They are worried with machine reviews in order to maintain stability (Ansari, 2004).

This theory was linked to this study because accounting is viewed as interactive systems rather than isolated components, according to the systems approach. A system was described as “an ordered or complex whole; an assemblage or combination of items or parts forming a complex unitary whole”. A system is made up of a variety of sub-systems that communicate with one another and complement one another to form a unified whole (Accounting Theory, 2004). This was more appropriate in this study.

### Contingency theory

Contingency theory was proposed by Woodward in 1965 and developed by Van de Ven in 1974 and states that "The choice of a technique or system was inherently dependent on specific circumstances" (Alrawi & Thomas, 2007). There was no universal control system that was best but organizational context and circumstances determines the appropriate control systems (Fisher, 1995). There was a lot of work-related uncertainty hence the need for managers to have a lot of information. Supervision, coordination and control procedures are the mechanisms that provide requi Computerized accounting system can provide fast services on recording transaction or arrive on the best-selling mechanism (Kotler and keller 2009).requires selling of products and services at low price to many customers differently to change in technology. Computerized accounting system can provide fast services on recording transaction or arrive on the best-selling mechanism (Kotler and keller 2009).

This theory may face challenges in its application of computerized accounting systems, because customers of retail stores are very diverse. This may be insignificant to retail management and performance retail stores. Cheap product sold at low price may not be economical in retail stores because of uncertain returns gradual prices in market (Aniebiet E., 2017).

This is applicable in this study because it explains how retail stores can use computerized accounting systems to manage transactions. The retailing situations are very complicated and hence computerized accounting system can be properly explained by this theory. It is applied in this study to enable the researcher interpret the relationship between accounting systems and retail stores performance.

### Conceptual Framework

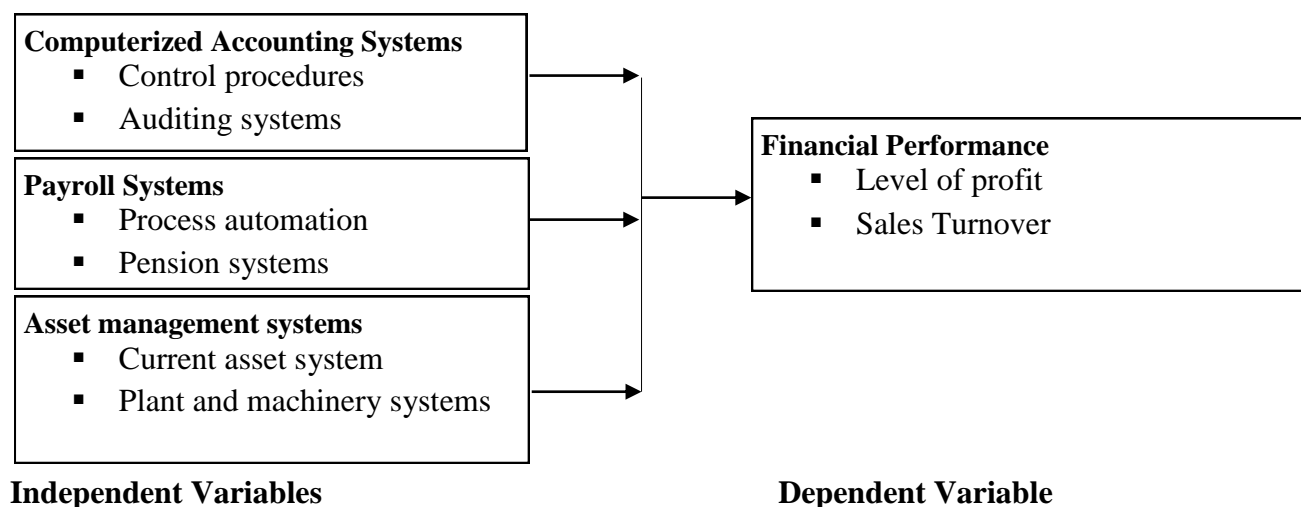


Figure 1: Conceptual Framework

## **Empirical Literature**

### **Computerized Integrated Accounting Systems**

According to Aisha (2018) only one set of books are maintained to meet the requirement of financial accounting and cost accounting on integrated accounting systems,. The benefits of maintaining integrated accounting system (IGAS) were; only one set of accounts were maintained resulting to a single profit figure hence eliminating need for reconciliations, avoids duplication of efforts and time reducing expenses, reduction of time of getting information for costing and financial accounting purposes, and it is more advantageous if operated in mechanized and computerized environment (Aisha, 2018).

A survey on the opinion of the users of off the shelf accounting software as an integration of financial accounting, management accounting and cash flow accounting in Paris France was conducted by Touron and Stolowy (2009). The study found that integrated accounting has dual impact in terms of information and changes in the accounting business processes. Unity of data source and availability of the source made information more reliable, timely and relevant (Touron & Stolowy, 2009).

Essent, an accounting software's development firm, outlined the four advantages of integrated accounting on their website as elimination of re-keying, provision of real-time information, automatic performing of job costing, and accuracy of calculations. Re-keying of data entry may lead to errors and omissions as well as it cost time and labor. Standalone accounting systems takes time to upload data from one system to the other while integrated accounting system means up-to-date financial information for decision making. Integrated accounting system automatically performs sophisticated accounting processes such as job costing without errors and omissions (Essent, 2017).

In integrated accounting, cost accounting and financial accountings were kept and integrated in the same set of books to ensure that all relevant expenditure were absorbed in cost accounts making it possible to ascertain marginal cost, variances and abnormal gains and losses. Points considered in preparation of financial reports were treatment of financial items not included in cost accounts, treatment of cost accounting transactions not included in financial accounting, treatment of abnormal gains and losses, and valuation of closing inventory (finished stock and work in progress) (Achary, 2016).

A survey on the users' opinion on the integration of financial accounting, management accounting and cash flow accounting showed that the benefits of Integrated Accounting was improved data reliability and relevance of the information, changing from accounting approach to management approach, and being an instrument of organization change. Integrated accountings brings together financial accounting, management accounting and cash flow management (Stolowy & Touron, 1998). The study focused on only two branches of accounting i.e. financial accounting and management accounting leaving out all the other branches of accounting such as tax accounting, fund accounting and cost accounting.

Integrated Accounting Systems are advantageous because they are simple to understand, no need for reconciliation, less costly, cross checking, user friendly, availability of both financial and cost data, time saving and use of machines such as computers. The accounts under IAS are stock control account, cost of sales account, debtors and creditors control account, prepaid expenses and outstanding expenses account, direct wages and overhead control account, separate cost center account and cash account (Pendse, 2015; Stolowy & Touron, 1998).

### **Payroll System**

Payroll systems are based on the International financial reporting standard 8 (IFRS 8)- Operating Segments - requires publicly traded entities to disclose information about their operating segments, geographical areas in which they operate, products and services and major customers based on internal management reports of identification of operating segments and measurements of disclosed segment information (International Accounting Standard Board, 2013c). Geographical area relates to accounting for various branches of an

organization while product segments relates to various categories of product such as clothing, furniture, electronics, food staff etc.

According to IFRS 8, operating segment was a component of an entity that; engages in business activity that earns revenue and incur expenses, operating results are regularly reviewed by entity chief decision makers, and discrete financial information was available (International Accounting Standard Board, 2013c)

An investigation on improving internal controls (IC) over segment reporting was instituted by Securities and Exchange Commission on 2016 to settle a cease and desist order against Power Secure International for allegedly failing to identify and report its segment as Financial Accounting Standards Board. The objective was to show the importance of appropriate design and operation of internal controls on identification of chief operating decision maker, on identification of operating segment, and on aggregation of operating segments. It was found out those material weaknesses in internal controls over segment reporting contributed to faulty segment reporting (Jiang & Lin, 2017)

An empirical test by Hope, Thomas, & Winter Botham (2012) on disclosure of geographical segment earnings and trading volume showed that decrease in disclosure of geographical earnings by multi-nationals in United States reduces public information hence being detrimental to trading volume in the stock exchange. Another empirical test by Hope, et al. (2010) on the impact of non-disclosure of geographic segment earnings on earnings predictability showed that non-disclosure of geographical segment does not affect the user's ability to forecast earning. However, the two tests do not show why there was reduction in trading volume yet the ability to forecast earnings was not affected. This research will seek to know if the inconsistency of the results was an effect of the segment information on the IC.

Equity bank Kenya Limited a subsidiary of Equity group holding limited in Kenya which has 177 branches grouped into 8 regions within the country. The bank has savings accounts, current accounts and fixed deposit accounts for various individuals, corporate, institutions, associations and government agencies. The customers are drawn from salaried persons, SMEs, large businesses, and government agencies. The customers may access their account through the banking hall, agency banking, mobile banking and/or internet banking. The CEO would want to measure the performance of the bank based on the regions, type of accounts, class of customers, market and/or mode of service delivery (Equity Group Holding Limited, 2017).

### **Asset management systems**

A case study of 34 users of integrated financial management information system (IFMIS) in the ministry of foreign affairs on the impact of IFMIS on financial probity in the public sector in Kenya showed that corruption cases has reduced since the implementation of IFMIS. They found out those employees ethical conduct had improved since the introduction of the IFMIS in the ministry of foreign affairs. Asset management was related to the provision of rules with clear instructions, procedures and processes was the most prevalent culture among the employees (Bosire, 2016).

A survey on enterprise resource planning systems (ERP) and internal audit examined internal auditors' ability to identify and manage operational, technological, financial, compliance and other risks as the organization migrates to an ERP environment found out that the internal auditors perceive a reduction in operational and financial risk and an increase in technical risks. The effects are somewhat mitigated by their ability to access and manage these risks (Saharia, Koch, & Tucker, 2008). However, their study did not evaluate the effectiveness of integrated operations on the IC.

Some of the cycles in accounting software are; revenue cycle, expenditure cycle, human resource and payroll cycle, production cycle, and general ledger cycle. Revenue cycle involves receiving sales order, shipping of goods, billing customers and cash collection respectively. Expenditure cycle involves making order for goods and services to suppliers, receiving goods, acknowledging supplier invoice, and cash payments respectively. Production cycle involves product design, planning & scheduling, production operation, and cost accounting



respectively. Payroll cycle involves updating employees' data, validating, preparation and payments. General ledger cycle involves update accounts, adjusting where necessary, prepare a trial balance and financial statement (Stolowy & Touron, 1998).

Ramadhan, Joshi, & Hameed (2011) investigated Bahraini accountants' perceptions of internal control problems associated with their use of computerized accounting systems and possible solutions to such problems. They found out that internal control problems relate to inputs, processing, storage and output. Input problems are; invisibility of input, entry of wrong data by unfamiliar user and unauthorized access. Processing problems are; centralization of data and centralization of duties, lack of human judgment, misuse of computer speed and potential of errors. Storage problems are; change of information without a trail, loss of information, and lack of audit trail. Output problems are creation of different reality and over reliance on computer results. Their study focused on the problem of the individual accounting modules where they but did not evaluate the integrated modules to see the effects they would have on the IC.

A quantitative methodology study on the usage of accounting information systems (AIS) for Effective Internal Controls in the Hotels examined if the usage of AIS has improved the internal control systems in the hotels showed that AIS has policies, organizational design, procedures and physical barriers that contribute to the internal control structure resulting to better internal controls enabling the hotels achieve their operational goals (Mndzebele, 2012). The study was on only one component of AIS i.e. controls leaving out other four components of AIS i.e. data, people, hardware and ICAS.

An Empirical study on the factors of affecting internal control benefits under ERP system in Taiwan showed that the quality variables of an information system, service quality, system and information quality, and internal control quality are critical factors influencing the internal control benefits of an enterprise while good communication can also improve the internal control benefits. Similarly, enhancing the internal control personnel's understanding of an ERP system by fully explaining the functions, service quality, and information qualities of an ERP system using a good communication interface can improve the internal control benefits of an ERP system (Hsiung & Wang, 2014). Among the factors studied integrated operations was not studied but was an important role of an ERP.

### **Consolidated Financial Reporting Transactions**

Fleischmann, Zanetti, & Beier (2009) reviewed the internal control systems ICS of numerous groups within the IT-based group financial reporting. The review showed that when software solutions are used for group accounting the IC was often insufficient or not effective enough and compliance with the basic principles of proper accounting was not always ensured to the extent required. The accounting rules built into the software that automatically generated entries for consolidated statements were also not sufficiently documented and cannot be interpreted by a competent reader within a reasonable amount of time. They also discovered that the rules were sometimes set incorrectly and/or incompletely in a number of applications assessed thus leading to erroneous or incomplete entries in the consolidated statements. They also found out that it takes a long time to replicate figures calculated by software in the consolidated reports resulting in partial compliance with the basic principles of proper accounting especially to the consolidated figures in the cash flow statement, translation reserves, and the statement of changes in equity. This research will seek to validate whether the Consolidated Financial Reporting Transactions in a computerized environment weaken the IC as alleged by their report ( Fleischmann, Zanetti, &Beier2009).

In Iran, a Study of effect of accounting information systems and software's on qualitative features of accounting information showed that using AIS and software packages significantly affect financial statements of companies accepted in Tehran Stock Exchange (Fowzia & Nasrin, 2011).

A study by Morris (2011) on the impact of enterprise resource planning (ERP) systems on the effectiveness of internal controls (ICS) over financial reporting showed that built-in controls and other features helped to

improve internal control over financial reporting. The study evaluated compliance data on Sarbanes-Oxley (SOX) legislation for a sample of the firms that implemented ERP systems. The findings showed that firms implementing ERP in financial reporting had less internal control weaknesses than firms that were not implementing ERP (Morris 2011).

Computerized accounting systems are able to produce instant reports on Aged debtors' summary, Trial balance, trading and profit and loss account, balance sheet, Stock valuation, Sales analysis, Budget analysis and variance analysis, VAT returns, Payroll analysis (Hadler, 2014). The advantages of Computerized accounting systems are Speed, Automatic document production, Accuracy, Up-to-date information, Availability of information, Management information, VAT return, Legibility, Efficiency, Staff motivation, Cost savings, Reduce frustration, The ability to deal in multiple currencies easily (Hadler, 2014; Magloff, 2014).

### **Empirical Studies on the Chain stores in Kisii County, Kenya**

A descriptive study was conducted on effect of internal control on profitability in Kenyan chain stores a case of chain stores in Kisii Town, Kenya. The objectives of the study were to determine the effect of book keeping procedure on profitability which concludes that proper book keeping positively significantly affects profitability, to assess the effect of approval of business transactions on profitability in chain stores in Kisii town which shown that there was existing relationship between approval of transaction and profitability, and to evaluate the influence of procurement procedures on profitability in chain stores in Kisii County which shown that there was self-governing progression checks (Gichama, Nyakundi, & Mogwambo, 2016).

Kuloba&Wesonga (2015) on a case study of 8 chain stores in Kisii Town studied on the factors that influence consumer ranking of retail outlets in Kenya. The study ranked the factors where availability of adequate number of cashiers to reduce queuing time as the most important factor while ownership of the chain stores was the least important factor. Cashiers in chain stores used integrated computerized accounting system to record sales transactions.

A survey on inventory management system and performance of chain stores in western Kenya by Kitheka (2012) found a moderate relationship between performance of chain stores in Kisumu, Kisii, Kakamega, and Bungoma and inventory management automation. The study then recommended the chain stores to automate inventory management system so as to improve their customer service delivery and operational costs. Customer service delivery is improved by improving on lead time and responsiveness to customer's needs. Improved customer satisfaction leads to customer royalty.

A study on effectiveness of vendor managed inventory systems in retail chain stores in Kenya by Irungu and Wanjau (2011) showed that vender managed inventory systems effectiveness is affected by the quality of ICT information sharing and inventory flow but not quality of relationship. The study concluded that vender managed inventory system were suitable for medium and large chain stores with well-established network system since they have capability to run the systems.

## **METHODOLOGY**

**Research Design:** The study used descriptive survey design. This is because it enabled the researcher to collect data from one chain store to the other and apply quantitative data. It was easier to describe the study situation the way it is shown.

**Study Area:** The study carried out on the chain stores in Kisii County, Kenya. Most of the chain stores are in Kisii County, because is growing town in Nyanza region, Kenya. Most of the major chain stores and other business organization have their branches and subsidiaries in kisii Kenya.

**Target Population:** Target population is the total number of units that data can be collected from and include but not limited to individuals, events, facts and/or organizations (Mugenda, 2003). The target population of 202 respondents comprises of branch managers, branch supervisors, branch accountants and other employees, because they will answer questions and they have a good understanding of the integrated accounting system used by the chain stores. There are 13 chain stores, 1 general shop wholesale Kisii discount and 1 superstore Ouru superstore Ltd in Kisii County with Intergrated Accounting Sytems namely; Kisii Mattress Ltd, Naivas Ltd (Naivas), Unique Ltd, Shivling Chain stores, quickmatt chain stores, Chamuda chain stores, Oswal chain stores, Gucha chain stores, Gudmart chain stores, Jogoo, Kisii Matt, Choppies chain stores, Tuskys chain stores. However, some Chain stores Ltd closed down on March 2015 due to financial performance (Michira, 2016) caused by manipulation of the books of account and weak accounting system (Okoth, 2016) forcing the researcher to focus on chain stores.

The study adopted a census approach. This enhanced validity of the data collected by including all chain stores under the study unlike in sampling where only a small group was selected to represent the entire target population (Bryman, 2012; Kothari, 2011; Smith, 2007).

**Table 1: Target Population**

	<b>Managers</b>	<b>Supervisors</b>	<b>Accountants</b>	<b>Other employees</b>	<b>Total</b>
Kisii discount	1	2	1	10	14
Quick matt	1	3	1	12	17
Naivas	1	1	1	10	13
Ourusuperstor	1	1	1	9	12
Shivling	2	2	1	8	13
Unique	1	0	1	7	9
Chamuda	1	1	1	11	14
Kisii matreses	1	1	1	10	13
Oswal	1	1	1	9	12
Gucha	1	1	1	5	8
Gudmart	1	1	1	12	15
Jogoo	1	1	1	10	13
Kisii Matt	3	3	3	8	17
Choppies	1	1	1	12	15
Tuskys	1	1	1	18	21
<b>Total</b>					<b>206</b>

Table 1 showed the distribution of target population among the branch managers, branch supervisors, branch accountants and other employees in all chain stores in Kisii County.

**Data Collection:** The researcher used closed questionnaires to gather primary data

**Validity & Reliability of Research Instrument:** Validity is how best a tool measures what it is supposed to measure. It the meaningfulness and accuracy of the study results (Mugenda, 2003). To test the validity of the questionnaire, the researcher presented it to the supervisor for scrutiny and suggestions on its relevance, clarity and suitability.

On the other hand, reliability is the degree to which a research instrument produces stable and consistent results (Mugenda, 2003). Reliability or fitness of the multivariate regression models was measured by; first, measuring the internal reliability of the questionnaire using Cronbach alpha value of 0.7 and above.

**Data analysis and presentation:** Data was analyzed using Likert scale, descriptive statistics, and inferential statistics. Descriptive statistics involved the use of absolute and relative frequencies, measures of central tendency (i.e. mean) and measure of dispersion (standard deviation).

**Analytical model:** The study used various inferential statistics as regression and correlation analysis. The variables was factored in the regression model. Variables was measured using rating / Likert scales and then converted to mean values to permit the application of regression model. The proposed regression equation as follows:

$$y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where;

**y** = Dependent variable (financial performance),

**X<sub>1</sub>** = computerized accounting systems.....independent variable 1,

**X<sub>2</sub>** = payroll systems.....independent variable 2,

**X<sub>3</sub>** = Asset management systems.....independent variable 3,

**α** = Constant,

**β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub>** = Slopes/beta values

**ε** = Margin of error/Disturbance term.

## FINDINGS AND DISCUSSION

The researcher distributed 206 questionnaires to the field. The employees were given the questionnaires of which only 194 were filled and returned. This resulted to the response rate of 94.2 percent. This was supported by Bryman (2012) who provides that a response from 66 to 96 was adequate for data analysis and interpretation.

### Descriptive statistics on Integrated Financial Accounting Systems

#### Computerized accounting systems

The research sought to determine the effect of computerized accounting systems on financial performance. The respondents used different statements from the result obtained. The results were ranked using mean and standard deviation to infer the effect of the findings. Thus, table 2 was presented to discuss the corresponding tested statements.

**Table 2: Descriptive Statistics of computerized accounting systems**

	Mean	Std. Deviation
Controls procedures for cash management	2.7691	.61017
Auditing procedures of Inventory management	1.7181	.65307
Supply chain management	4.2113	.66096
Accounts payable management	1.5309	.65307
Accounts receivable management	4.1546	.82500
Revenue management	4.1959	.73603
Customer relationship management	3.9639	.58808
Baking of cakes and breads	4.0309	.72632
Project management	1.1013	.73525
Non-current asset management	1.5309	.65307
Payroll management	2.5111	.65307
General ledger management	1.109	.66096
Debt management	2.530	.65307
Budgeting and budgetary compliance	2.1546	.82500
Taxation systems	3.1959	.73603
Valid N (listwise)		

The study as presented above, the results seemed to agree that Supply chain management with mean value of 4.2113 and standard deviation of .66096 which was very close to maximum value of 5. Revenue management with mean value of 4.1959 and standard deviation of .73603 Accounts receivable management with a mean value of 4.1546 and standard deviation of .82500 Baking of cakes and breads with a mean value of 4.0309 and

standard deviation of.72632, Customer relationship management with a mean value of 3.9639 Taxation systems with a mean value of 3.1959 and standard deviation of.73603 Controls procedures for cash management with a mean value of 2.7691 and standard deviation of.44108, Payroll management with a mean value of 2.5111 and standard deviation of.65307, Debt management with a mean value of 2.530 and standard deviation of.65307, Budgeting and budgetary compliance with a mean value of 2.1546 and standard deviation of.82500, Non-current asset management with a mean value of 1.5309 and standard deviation of.65307, Accounts payable management with a mean value of 1.5309 and standard deviation of.65307,Auditing procedures of with a mean value of 1.7181 and standard deviation of.65307, Project management with a mean value of 1.1013 and standard deviation of.73525, and General ledger management with a mean value of 1.109 and standard deviation of .66096.The highest mean was 4.2113 and the lowest mean was 1.1013. This shows extremes. The findings are not reflecting where the respondents are as they viewed the items from different angles

### Descriptive statistics on Payroll System

The study sought to set out the effect of payroll management system on financial performance of chain stores. The result was presented in table 3.

**Table 3: Descriptive Statistics on payroll system**

	Mean	Std. Deviation
Process automation in consolidation and reporting	2.7436	.43134
Pension segmentation (Categorization of payments & services)	1.4588	.49959
Employee income segmentation	2.6907	1.23725
Marketers rates segmentation	1.2938	.45669
Service delivery segmentation	4.1443	1.04797
Valid N (listwise)		

From the results in table 3, service delivery segmentation with a mean value of 4.1443 with standard deviation of 1.04797, process automation in consolidation and reporting with mean value of 2.7436 with standard deviation of .43134, employee income segmentation with a mean value of 2.6907 with standard deviation of 1.23725, pension segmentation (Categorization of payments & services ) with a mean value of 1.4588 with standard deviation of .49959 and marketers rates segmentation with a mean value of 1.2938 with standard deviation of .45669.

### Descriptive statistic of Asset Management System

The study sought to determine the effects of asset management systems and financial performance of chain stores. The study indicated that assets held jointly in partnership with other organization(s) with a mean value of 4.1495 standard deviation of .80370, Joint controlled assets with a mean value of 4.0928 standard deviation of .86477,Entities owed jointly in partnership with other organizations with a mean value of 4.0309 standard deviation of .79446.Joint controlled entities with a mean of 3.9588 standard deviation of .79446, Current asset systems are managed well in subsidiaries with a mean value of 1.6804 and standard deviation of .88799, Financial Investment assets with a mean value of 1.6804 standard deviation of .88799, Investment Property in plant and machinery and equipment with a mean value of 1.3351 standard deviation of.47323,Assets held for renting and leasing with a standard deviation of 1.1753 standard deviation of .38117,Association of current asset systems in where the company owns major resources with a mean value of 1.0804 standard deviation .88799.

**Table 4: Management System**

	Mean	Std. Deviation
Current asset systems are managed well in subsidiaries	1.6804	.88799
Association of current asset systems is where the company owns major resource	1.0804	.88799
Financial / Investment assets	1.6804	.88799
Investment Property in plant and machinery and equipment	1.3351	.47323
Assets held for renting and leasing, and/or for capital appreciation purpose Assets held by the company such as shares, debentures, fixed deposits and treasury bills and bonds.	1.1753	.38117
Joint controlled assets	4.0928	.86477
Assets held jointly in partnership with other organization(s)	4.1495	.80370
Joint controlled entities	3.9588	.61783
Entities owned jointly in partnership with other organization(s)	4.0309	.79446

The study sought to determine the extent to which chain stores measures financial performance as presented in table 5.

**Table 5: Descriptive Statistics of financial performance measures**

	Mean	Std. Deviation
We measure profit from sales	4.0997	.38589
We use return on asset to measure financial performance	4.3454	.50828
We determine incomes after deduction expenses	3.9175	.95136

Table 5 indicated that chain stores used return on asset to measure financial performance shown a mean value of 4.3454 with standard deviation of .50828, chain stores measure profit from sales with a mean value of 4.0997 with standard deviation of .38589 and determine incomes after deduction expenses with a mean value of 3.9175 with standard deviation of .95136.

The correlation analysis indicated that computerized accounting systems had a moderate and positive significant relationship on financial performance as shown by correlation  $r = .688$ ,  $p = .006$ . Integration of management accounting was related to financial accounting in Germany by (Weinberger & Angelkort 2010).

Asset management systems had a strong and positive significant relationship on financial performance as shown by correlation value of  $r = .711$   $p = .000$ . This was in agreement which indicated that asset management was related to the provision of rules with clear instructions, procedures and processes was the most prevalent culture among the employees (Bosire, 2016).

Payroll systems had a strong and positive significant relationship on financial performance as supported by  $r = .894$   $p = .001$ . The results of the correlation analysis in Table 6 show that under the Pearson correlation all the independent Variables, computerized accounting systems were significantly correlated to financial performance. Payroll systems and asset management systems were strongly and positively correlated to financial performance respectively at statistically significant at 5%. It was found out those material weaknesses in internal controls over segment reporting contributed to faulty segment reporting (Jiang & Lin, 2017).

The correlation was done using the Pearson's product moment correlation at 0.05 level of significance and results captured on Table 6.

**Table 6: Correlation analysis**

		computerized accounting	payroll systems	Asset management systems	Financial performance
computerized systems	Pearson Correlation		1		
	Sig. (2-tailed)				
	N	194			
payroll systems	Pearson Correlation	.628		1	
	Sig. (2-tailed)	.000			
	N	194	194		
Asset management systems	Pearson Correlation	.748	.091		1
	Sig. (2-tailed)	.001	.884		
	N	194	194	194	
Financial performance	Pearson Correlation	.688	.894	.711	1
	Sig. (2-tailed)	.006	.001	.000	
	N	194	194	194	194

Regression analysis was also conducted to test the effect of the relationship as presented in table 6. The study sought to determine regression analysis in order to test the effect of a relationship between variables. The results were presented in table 7.

**Table 7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842	.709	.696	9.461

- Predictors: (Constant), computerized accounting systems, Payroll system, Asset management
- Dependent: Financial performance

The model summary indicated the R square .709 in the regression analysis line. This implied that the computerized accounting systems, Payroll system, Asset management causes a variation in financial performance by 70.9% and the 29.1% remaining can be explained by other variables not included this study. This shows that the model has a good fit since the value is above 5%. This concurs that R-squared is always between 0 and 100%: 0% indicates that the model explains none of the variability of the response data around its mean and 100% indicates that the model explains the variability of the response data around its mean. In general, the higher the R-squared, the better the model fits the data.

**Table 8: Results of Regression of Financial Performance**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.294	.376		8.751	.
computerized accounting systems	.633	.055	.206	3.073	.000
Payroll system	.671	.044	.125	5.368	.000
Asset management	.519	.076	.109	4.761	.004

From the regression coefficients table, the following regression equation was established as shown;

$$Y = 3.294 + .633X_1 + .671X_2 + .519X_3$$

Computerized integrated accounting systems( $X_1$ ) had a coefficient of 0.633. The t static is 3.073 which has a p-value of .000 which is less than .05 implies that the coefficient of  $X_1$  is significant at 0.05 level of significance. This shows that computerized integrated accounting system has a significant positive influence on financial performance. This implies that a change in one unit of computerized accounting systems results to 63.3% change in financial performance.

The coefficient of payroll system( $X_2$ ) was 0.671. The t static is 5.368 with a p value of 0.000 which is less than 0.05. This implies that one-unit change Payroll system results into 67.1% change in financial performance.

Asset management system( $X_3$ ) had a coefficient of 0.519. This implies that the coefficient 0.000 is significant. This implies that asset management has a significant positive influence on financial performance. The t static is 4.761 which has a p value of 0.004 which is less than 0.05 implies that the coefficient of  $X_3$  is significant at 0.05 level of significance. This shows that asset management has a significant positive influence on financial performance. This implies that one unit change in asset management results into 51.9% changes in financial performance.

The table shows that independent variables, and financial performance had a positive coefficient, which implies that they were directly proportional to financial performance. This means that an increase of computerized financial accounting systems, Asset management and payroll system had a positive relationship with financial performance. The finding show that all the variables tested were statistically significant with p-values less than 0.05

## **CONCLUSION AND RECOMMENDATION**

The following conclusions can be made arising from the findings of this study;

Based on the findings on computerized accounting systems and performance the study concludes that Computerized Accounting systems do influence financial performance of chain stores. A positive increase in computerized accounting systems leads to an increase in financial performance. Computerized accounting systems had positive significant correlation on financial performance.

Based on the findings on payroll system and performance the study concludes that payroll system do influence the financial performance of chain stores. A positive increase i payroll system leads to an increase in financial performance. Payroll management system was positively correlated to financial performance.

Based on the findings on the Asset management and performance the study concludes that asset management do influence the financial performance of chain stores. A positive influence on Asset management leads to an increase in financial management. Asset management had a strong and positive significant relationship on financial performance.

From the findings and conclusion on computerized integrated accounting and performance the study recommends that the chain stores should use computerized integrated accounting to improve their performance. The study recommended that the chain stores should improve computerized system on financial performance.

In the chain stores, payroll systems indicated improvement on financial performance with strong correlation. However, chain stores should further improve their payroll system by ensuring that all employees are entitled to proper salary payment in relations to their pension in national social security fund. This should disclose financial information required by the contributor for further improvement.



The study recommends that focus should be made on the asset management system, since it entail organization inventory. Inventory being money should be held up in materials and items, there is need to ensure that the system is effective for the best interest of the shareholders.

### **Suggestion for further studies**

The study focused on the effect of financial accounting systems on financial performance of chain stores and chain stores in Kisii County. Other similar studies can be conducted in other counties for generalization of the study findings using secondary data.

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