IMPLEMENTATION OF AN AUTOMATED PAYMENT SYSTEM AT THE MOMBASA TEA AUCTION CENTRE IN KENYA

BY

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OCTOBER, 2013
DECLARATION

This project is my original work and has not been submitted for a degree in any other university.

Signed………………………………….. Date……………………………………

WAHEIRE, ESTHER WANJIRU

D61/P/8383/2006

This project has been submitted with my approval as the University Supervisor.

Signed………………………………….. Date……………………………………

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DEDICATION

‘To my family for the constant encouragement and support throughout my studies’
ACKNOWLEDGEMENT

Foremost, I thank God for giving me the wisdom and courage and for guiding me throughout my life for without Him I would not have come this far.

Secondly, I am forever indebted to family for their constant support, encouragement and prayers.

Special thanks go to my supervisor, Prof. Martin Ogutu assisted by Dr. Jackson Maalu, for providing unlimited, invaluable and active guidance throughout the study. Their immense command and knowledge of the subject matter was vital in this achievement.

Finally, I owe my gratitude to a number of people who in one way or another contributed towards completion of this project. These are friends, fellow colleagues and the Mombasa Tea Auction participants including the Producers, Brokers, Buyers, Warehouses and the EATTA.
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ABSTRACT

This study aimed at establishing the challenges of implementing an Automated Payment System at the Mombasa Tea Auction in Kenya. The researcher used descriptive survey research design since the information gathered involved administering questionnaires.

The study population for this research were all participants of the Mombasa Tea Auction Centre as at 1st July 2013. The targeted sample size was 50 respondents. The researcher employed proportionate stratified sampling to select the respondents of the study from the study’s population. The data collected was quantitative in nature and was collected using a structured questionnaire containing closed questions. Collected data was edited, coded and classified so as to present the results of the data analysis in a systematic and clear way. The researcher collected data in large quantity which was organized in such a way that further analysis and interpretation of data was made easy. The descriptive statistics were used to analyze quantitative data using three major descriptive statistics for each single variable namely: distribution; central tendency; and dispersion.

Findings on the importance of certain factors in posing challenges in the implementation of Automated Payment System at the Mombasa Tea Auction indicated that legal restrictions promulgated by the EATTA or contractual obligations that bind many parties posed the highest challenge in the implementation of Automated Payment System at the Mombasa Tea Auction. Findings further indicated that constantly engaging with the EATTA and other stakeholders as new issues arise with a view to get a resolution or system upgrade was the most undertaken activity in order to cope with the challenges of the Automated Payment System at the Mombasa Tea Auction. The researcher made several recommendations including but not limited to; EATTA should reduce the legal restrictions promulgated or contractual obligations that bind many parties as this posed the highest challenge in the implementation of Automated Payment System at the Mombasa Tea Auction. This could be done by redrafting the existing contractual laws and processes with an aim of making it easier and simpler for members to get into legal and binding agreements.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ASCA</td>
<td>Accumulating Savings and Credit Associations</td>
</tr>
<tr>
<td>CAK</td>
<td>Co-operative Alliance of Kenya Limited</td>
</tr>
<tr>
<td>CBK</td>
<td>Central Bank of Kenya</td>
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<tr>
<td>CIC</td>
<td>Co-operative Insurance Company Ltd</td>
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<td>DT</td>
<td>Deposit Taking</td>
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<td>EATTA</td>
<td>East African Tea Trade Association</td>
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<td>FSD</td>
<td>Financial Sector Deepening</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GoK</td>
<td>Government of Kenya</td>
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<td>ICT</td>
<td>Information Communication and Technology</td>
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<td>KUSCCO</td>
<td>Kenya Union of Savings and Credit Co-operatives Ltd</td>
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<td>KES</td>
<td>Kenya Shillings</td>
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<td>MFI</td>
<td>Micro Finance Institution</td>
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<td>MoCDM</td>
<td>Ministry of Co-operative Development and Marketing</td>
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<td>MPT</td>
<td>Modern Portfolio Theory</td>
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<td>NACOs</td>
<td>National Co-operative Organizations</td>
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<td>NDT</td>
<td>Non Deposit Taking</td>
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<td>SACCO</td>
<td>Savings and Credit Co-operatives</td>
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<td>SASRA</td>
<td>SACCO Societies Regulatory Authority</td>
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<td>WOCCU</td>
<td>World Council of Credit Unions</td>
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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The question regarding payment strategy is no longer an issue of simply having a strategic plan and/or strategic management in place, but the implementation process on all aspects of an organization from sales and marketing to procurement and financial efficiency. According to Smith (2008), the development of a payment strategy is progressed by considering four core building blocks: revenue sources; payment methods; controls; and hygiene factors. Issues such as multiple channels, ancillary revenue, dynamic packaging, local and global payment methods, charge cards, agents, revenue reporting, reconciliation, internet wallets and purses, compliance, low cost and reliability all need to be taken into account. More so, it is important to consider the impact of modern technology, especially e-commerce, on payment strategies.

E-commerce together with the online payment strategy is an emerging industry entirely established on the internet platform. Compared to the traditional business model and offline financial services, the emerging industry and new technology bring new concept of business operation with the characteristics of swiftness and convenience. The digital world has spawned an environment where the successful implementation of any payment strategy requires new strategic thinking. The strategic vocabulary now includes words like richness, reach, disintermediation, deconstruction, and value proposition. Being able to acquire the key capabilities needed to address your digital opportunities, being able to focus on your growth/return requirements, and delineating all of the specific projects needed to make the strategy successful must be an essential feature of the organizations payment strategy implementation (Yan et al., 2011).

Effective payment strategy implementation, then, may best be achieved by a process approach first asking the key questions about the scope of products, services, alliances, and infrastructure requirements and then systematically detailing the activities to be carried out (Smith, 2008). Consequently, rather than focusing on the technical aspects of automated payment systems, this study aims at establishing the challenges of implementing an Automated Payment System at the East African Tea Trade Association.
1.1.1 Strategy Implementation

Strategy implementation as a systematic approach to position and relate the firm to its environment in a way that will assure its continued success and make it secure from environmental surprises (Ansoff and McDonnell, 1990). Pearce and Robinson (2000), point out that there is need to adopt new strategies that match the challenges from the environment. Reengineering, downsizing, self-management and outsourcing are some of the dominant strategies that have been used for restructuring in the 1990’s. Ansoff and McDonnell (1990) asserts that the management system used by a firm is a determining component of the firm’s responsiveness to environment changes because it determines the way that management perceives the environment, diagnosis their impact on the firm, decides what to do and implements the decisions.

Based on a critical review of previous frameworks, ten key strategy implementation variables were identified. These are strategy formulation, environmental uncertainty, organizational structure, culture, operational planning, communication, resource allocation, people, control and outcome (Okumus, 2001). Previous researchers have grouped implementation variables into a number of categories such as content, context, process and outcome. Critical analysis reveals that the previous researchers have adopted these groupings mainly from Pettigrew’s works on managing strategic change (Pettigrew, 1985; Pettigrew et al., 1992). Whereas it is argued that strategies are initiated and implemented in a strategic context and the variables in this grouping support and influence the implementation process; however, they are less controllable than the process variables (Bryson and Bromiley, 1993; Schmelzer, 1992). The operational process variables are seen as those which are primarily used and directly involved in the implementation process. It is assumed that companies have substantial control over these variables, at least in the short-term. The main difference between the context and process variables is that the latter are primarily used and employed in implementing decisions, while context variables are not primarily used but they are taken account of due to obstacles and problems in the implementation process. Finally, the outcome variables are seen as the expected results of the initiated strategy.

It can then be argued that based on the complexity and inter-dependency of strategy implementation variables, organizations are likely to face numerous challenges when it comes to strategy implementation, especially payment strategies which are highly dependent on technology. Hence, the way an organization deals with the challenges faced during
payment strategy implementation becomes critical in determining the success or failure of such strategy. Sterling et al. (2003) identify several reasons for strategy failure which include: unanticipated market changes – strategies can fail because the market conditions change before the strategy can take hold; too little investment – if insufficient resources are applied, the strategy will fail; lack of focus – resources are wastefully dissipated if priorities are unclear; failure of buy-in – insufficient buy-in to or understanding of the strategy among those who need to implement it will cause failure; and, poorly conceived business models – sometimes strategies are simply bad. They further point out that good strategic management is a function of people actively considering the strategy as they make day-to-day decisions in an ever-changing world. In establishing the challenges of implementing the Automated Payment System at the Mombasa Tea Auction, this study will therefore consider the strategy implementation variables as grouped by previous researchers such as content, context, process and outcome (Okumus, 2001).

1.1.2 Automated Payment System

According to the Canadian Payments Association (2010) the next ten years promise to deliver a rapidly changing payments landscape as increasing standardization and competition is expected to advance the commoditization of payments. Payment service providers will continue to grow and further develop niche markets within the payments value chain; offering new and innovative payments services and solutions. International credit card companies will enter non-credit retail payment markets creating payment competition across the full spectrum of retail payments. Emerging payments, such as mobile payments are set to grow and could replace payment cards as the next dominant consumer payment. Many countries around the world are addressing the emerging trends with a variety of oversight responses including government regulation and law modernization, standardization of rules to apply to payment service providers and new market entrants, and greater consideration given to payment stakeholders and users.

The need to implement a centralized automated tea payment system at the Mombasa Tea Auction Centre was to eliminate the manual payment process which was fraught with the risk of default of payment by the members. It was also borne by the need to ease trading by enhancing or improving the processes around reconciliation, release of tea from warehouses to buyers for shipment and query management (Okello, 2010).
In the previous manual auction system tea brokers would receive all payments from buyers and then pay producers 10 days after the auction. The system allowed brokers to have a stronghold on the auction proceeds with the producers at their mercy. The manual system exposed producers to potential loss, especially if a broker failed to remit payment. The previous system was tedious as buyers would bid for various lots held by different tea brokers, reconcile the records manually, make the payment to the broker account and then obtain the delivery orders from brokers. This delivery orders would then allow the warehouses to release the tea to the buyer upon presentation. Only then would the buyer get his tea and make arrangements to ship it. This process was costly and time consuming (Okello, 2010).

According to Okello (2010), East African Tea Trade Association (EATTA) new Automated Payment System (trading system) has reduced the cost and duration of settlement between the various parties involved in the tea auction system, eliminated the need to provide guarantees to counter parties and reduced the risk exposure to producers. Tea producers can now track their sales at the trading auction and determine their earnings at the touch of a button, thanks to a new electronic system at the public sales. The electronic billboard which tracks the payments of tea sold at the auction has revolutionalized the industry, eliminating inefficiency associated with the previous physical tea payment process.

In Kenya, other several payment strategies have been implemented in the recent past. One of them is the KEPSS. This is Kenya’s Real Time Gross Settlement (RTGS) System that went live on July 29th 2005. It is wholly owned and managed by the Central Bank of Kenya (CBK). It is a gross settlement system in which both processing and final settlement of funds transfer instructions take place continuously (i.e. in real time) from one bank to another. The transactions are settled individually, continuously and in real time in the accounts of the participants in central bank provided that the sending participant has sufficient covering balance or credit (settlement limit). Considering that money transfer takes place in the books of the Central Bank of Kenya, the payment is taken as final and irrevocable. The RTGS system mitigates systemic settlement risk inherent in large value net settlements (Waiyaki, 2004).

Another widely implemented payment and settlement system strategy is the Central Depository System (CDS) and Regional Integration strategy implemented by the Central
Depository & Settlement Corporation Limited. The Government of Kenya through its agency KENTRADE is also working on to implementing an Electronic Single Window System as a possible solution to lengthy, corrupt, manual and uncoordinated trade processes and procedures that have led to negative impact on the economy due to high cost of trade transactions. The system will provide an electronic platform for exchange of trade related documentation electronically by stakeholders involved in international trade transaction documentation (Wiayaki, 2004).

According to Waiyaki (2004) the major challenges in implementing payment strategies include sourcing adequate funding, having in place an appropriate legal and regulatory framework, putting in place correct corporate and market structure, adopting correct technology and having the correct strategy, correct and appropriate level of support as well as good corporate governance.

1.1.3 Tea Auction Centre in Mombasa, Kenya

The weekly Mombasa auction is at the centre of the tea trade in Kenya, and is an important reference point for the global tea industry. It is the only centre where teas from different countries are sold alongside each other, and therefore helps to establish price levels and differentials for teas all over the world. Every major tea producing and consuming country focuses on the weekly activities in this centre to gauge the market trends and create benchmarks for their international prices of tea. Due to the success story of the Mombasa auctions, courtesy of the East Africa Tea Trade Association (EATTA), more producing countries continue to join the Association. The variety of quality and progressively increased quantities offered have made Mombasa the second largest black tea auction centre in the world after Colombo in Sri-Lanka (Okello, 2010).

The East African Tea Trade Association is a voluntary organization bringing together Tea Producers, Buyers (Exporters), Brokers, Tea Packers and Warehouses, all working to promote the best interests of the Tea Trade in Africa. Currently, membership comprises over three hundred companies extending across the East and Central African borders. EATTA mandated to promote and facilitate the interests of all the stakeholders in the tea trade in Africa by creating an enabling business environment geared towards maintaining global standards and delivering tea products to the customers in the most profitable way. The primary functions of the Association are: To facilitate the Mombasa Tea Auction operations;
maintain discipline in the trade by ensuring compliance with the constitution; to promote the best interests of the Tea Trade in Africa; to compile and circulate statistical information to assist members in their operations; to help solve trade problems affecting members collectively; and, to organize social and educational programmes for members (Okello, 2010).

At the auction, the tea factories or producers do not sell their own teas, but each is represented by a selling broker, who is responsible for cataloguing the teas for sale. Buyers are provided with samples in advance of the auction so that they can be measured and tasted. The broker gives each lot of tea a valuation, based on factors such as the previous week’s price for similar tea, and any changes in quality. The auction is held in public and is an ‘open cry’ system. The buyers compete for lots of tea by bidding against each other in an auction room. Each lot is sold (“knocked”) to the highest bidder, as long as the price has reached a minimum level set by the broker (Okello, 2010).

The automated system revolves around a centralized payment process where payment is made to a single collection account at the bank, then other processes such as allocation of tea lots and release of tea from warehouses is authorized through an electronic billboard. The system allows producers at the factory level to access the billboard electronically where they can easily track the status of their tea. The tea producers are now in a position to monitor the progress of the sale of the tea. The system confirms the sale transaction both in terms of volume and value. Similarly, it will provides real time information on payment thereby enhancing transparency and assuring the producers of the receipt and safety of their collection of revenue for their tea (Okello, 2010).

The automated payment system has not only eliminated the risk exposure, but has centralized transactional services with the bank being responsible for distribution of funds to the various parties. Given that it is a centralized system, all parties have access to the system and they can access information and carry out an audit log (Okello, 2010).

1.2 Research Problem

According to Sterling et al. (2003) effective implementation of an average strategy, beats mediocre implementation of a great strategy every time, yet companies nonetheless often fail to operationalize their strategies in ways that improve the likelihood that they will be
implemented effectively. Therefore, understanding the various critical success factors of automated payment system is important. There are various factors, which should be considered by a firm before introducing and implementing automated payment system.

It was established that success of automated payment strategies, including both the largest of corporations and small retailers rely on electronic payment system (Sumanjeet, 2009). From the business perspective, new automated payment products are notoriously difficult to introduce as the barriers to entry (Lee, 1989; Yin, 1994), acceptance, and ubiquity are high (Abrazhevich, 2002). According to Okello (2010) the EATTA’s payment strategy implementation and key results areas include increase demand for teas and differentiated tea products both locally and internationally; expanded membership base, inclusivity, equity and full representative coverage of Africa region; leadership position and visibility profile as an intermediary enhanced and competitive advantage as a key industry representative meeting membership expectations; promotion of policies that are supportive to tea and business environment; re-engineering and transformation of the board and secretariat.

Though there have been various studies on the implementation of automated payment systems in various sectors in the country, there has been none carried out to specially study the factors that led to the implementation an automated payment system by the East African Tea Trade Association for the Mombasa Tea Auction. The automated tea auction payment system being an industry solution and the very first in the tea trade, it will be interesting to establish the various challenges, including but not limited to sourcing adequate funding, having in place an appropriate legal and regulatory framework, putting in place correct corporate and market structure, adopting correct technology that the EATTA and its members experienced. For instance, there was an analysis done by Osoro (2009) of the factors influencing vendor payment in government ministries in Kenya by undertaking a case study at the Ministry of Water and found that such systems faced certain implementation challenges mainly in relation to technology failure, inadequate end user skills and insufficient budgetary allocation.

1.3 Research Objective

This study aimed at establishing the challenges of implementing an automated payment system at the East African Tea Trade Association for the Mombasa Tea Auction. Consequently, the study’s objectives included:
i. To establish the challenges faced by the EATTA members in implementing the automated payment strategy.

ii. To establish how the EATTA members are coping with the challenges.

1.4 Value of the study

This study is significant to scholars who will use the findings in the study for further research in the same area/or related field in universities and other institutions of learning to build on the Strategy Implementation theory. Strategy implementation is subject to the organizational business environment which is dynamic and unique to each industry, therefore, there is a need for continuous research in this field.

In addition, government and professional bodies involved in policy making for the various industries also benefit from the study’s findings as it will provide information on the challenges faced in the implementation of automated payment strategies in the tea industry in Kenya. This will go a long way in assisting the policy makers in formulating effective policies that not only address key sector and industry areas, but that also matches international best practices and standards.

The study is also of value to the management teams of auction markets in Kenya as a reference point for challenges faced in the implementation of automated payment strategies ensuring that management adopts and implements effective strategic options. This enhances the organization’s strategy implementation success and assist management in gaining long term value from operationally successful automated payment systems.
CHAPTER TWO: LITERATURE REVIEW

2.1 Literature Review Introduction

Literature review provides the reader with an explanation of the theoretical rationale of the problem being studied as well as empirical review relating to the problem at hand. This chapter reviews literature on human capital theory, resource based theory and undertakes theoretical review as well as empirical review on strategy implementation challenges and develops a conceptual framework on challenges of implementing an automated payment system at the Mombasa Tea Auction Centre.

2.2 Theoretical Foundations

This section undertakes theoretical review on relevant theories including transactions cost theory and resource based theory. These theories provide a foundation for the strategy implementation by organizations.

2.2.2 Institutional Theory

Institutional theory attends to the deeper and more resilient aspects of social structure. It considers the processes by which structures, including schemas, rules, norms, and routines, become established as authoritative guidelines for social behavior. It inquires into how these elements are created, diffused, adopted, and adapted over space and time; and how they fall into decline and disuse. Although the ostensible subject is stability and order in social life, students of institutions must perforce attend not just to consensus and conformity but to conflict and change in social structures (Scott 2004).

The roots of institutional theory run richly through the formative years of the social sciences, enlisting and incorporating the creative insights of scholars ranging from Marx and Weber, Cooley and Mead, to Veblen and Commons. Much of this work, carried out at the end of the nineteenth and beginning of the twentieth centuries, was submerged under the onslaught of neoclassical theory in economics, behavioralism in political science, and positivism in sociology, but has experienced a remarkable renaissance in our own time (Scott 2001).

Most institutional theories see local actors, whether individuals, organizations, or national states, as affected by institutions built up in much wider environments. Individuals and organizations are affected by societal institutions, and national-states by a world society. But
it can be noted that some other lines of thought treat modern actors as affected by the institutionalization built into their own histories. Older ideas about habit, custom, and culture are resurrected as theories of what is now called ‘path dependence.’ So that individuals or organizations, faced with a new problem, use their accustomed older solutions whether or not these ever worked or can reasonably be expected to work (Meyer, 2007).

Institutional arguments rely not on aggregations of individual action, or on patterned interaction games between individuals, but on institutions that structure action. Institutions are emergent, higher-order factors above the individual level, constraining or constituting the interests and political participation of actors without requiring repeated collective mobilization or authoritative intervention to achieve these regularities. All three forms of institutionalists define institutions broadly. Political and historical institutionalists see institutions as formal or informal procedures, routines, norms, and conventions in the organizational structure of the polity or the political economy, whereas sociological institutionalists add cognitive scripts, moral templates and symbol systems that may reside at suprastate or supraorganizational levels (Meyer, 2007).

2.2.2 Transactions Cost Theory
Goods and services are obtained by transforming a set of inputs. The latter can enter the manufacturing process in different combinations and proportions, depending on the technologies which have been adopted. A different perspective focuses on how firms ensure the supply of inputs on the one hand and reach the final consumer on the other hand: rather than production functions, firms are regarded here as governance structures (Williamson, 1985).

Transaction cost theory concentrates on the relative efficiency of different exchange processes. If for the firm-as-a-production-function view the internalization of one or more stages of production might generate technological economies (that is savings on the costs of physical inputs), for the firm-as-organisation view it could lead also to transactional economies (that is savings on the costs of exchange inputs, when reduced amounts of resources are required to get the intermediate inputs). An intermediate step between pure market exchange and vertical integration is the use of short term and long term contracts. The decision to enter durable contractual relationships by signing long term contracts and the alternative vertical integration strategy share the same motivation: the choice among these
options is then a matter of degree. Unfortunately, this implies that it is difficult to distinguish between them empirically (Tirole, 1988).

Following the transaction cost theory (Coase, 1937) firms evaluate the relative costs of alternative governance structures (spot market transactions, short term contracts, long-term contracts, vertical integration) for managing transactions. Transaction costs could be defined as the costs of acquiring and handling the information about the quality of inputs, the relevant prices, the supplier’s reputation, and so on. Contractual agreements are costly: costs have to be borne in order to negotiate and write the terms of the arrangements, to monitor the performance of the contracting party, to enforce the contracts. Firms emerge as a way of economizing on transaction costs in a world of uncertainty, where contractual arrangements are too expensive.

The basic framework was enriched by Williamson (1971) with the introduction of two concepts: bounded rationality (Simon, 1961) and opportunism. The former underlines that human beings have limited cognitive competencies; if it is not possible to foresee each future contingency, all contracts turn out to be in some way incomplete. The latter is defined as self interest with guile and is particularly important in small number bargaining situations. Where it is possible to choose among many firms, opportunism is not an important problem. If, on the other side, one contracting party has undertaken some specific investments in view of the future trade with a downstream or upstream firm, it is locked into that particular relationship: the ex-ante competitive situation shifts towards an ex-post bilateral monopoly. The firm which is not owning the specific asset may extract the so called quasi-rents (Klein, Crawford and Alchian, 1978).

2.3 Challenges of Strategy Implementation

This section outlines sources of strategy implementation challenges faced by organizations which mainly arise from incompetent human resource skills, insufficient finance and inappropriate technology.

First and foremost, competent employees and their capabilities is essential ingredient for successful strategy implementation. They are important for the organization to develop human resource competencies (Schmidt & Keil, 2013). The organization needs to attract employees with necessary experience, technical skills and other soft skills (Badri, Bashiri, &
Hejazi, 2013). The skills need to vary depending on the type of strategy the firm is planning to implement. In the implementation of strategy hiring and retaining competent employees helps to develop core competencies. However the organization’s core competency emerges incrementally as the firm goes about business. It is prudent to be proactive about what implementation of strategy entails and build competencies and capabilities that are scalable. Building core competencies is an inter-departmental effort. Each department performs complementary activities across the organization’s value chain. In the implementation of strategy the management team’s role is to concentrate enough resources and management attention on activities that strengthen employees’ core competencies (Johnson & Scholes, 1999).

The effectiveness of strategy implementation is, at least in part, affected by the quality of people involved in the process (Badri, Bashiri, & Hejazi, 2013). Peng & Litteljohn (2001) defined quality as capabilities, skills, attitudes, experiences and other distinctiveness of people that a specific task or position requires. Prahalad and Hamel (1990) and Barney (1991) core capabilities as complex bundles of skills and collective learning, knowledge and technological know-how exercised through organizational processes that ensure co-ordination of functional activities and give a special advantage which in turn enhance the implementation of strategy and firms performance, creates synergy and competitive advantage.

The second important factor in strategy implementation is finance and the way that it is managed is the key determinant of strategic success. For the public sector this primarily concerns to deliver the best value within financial limits (Kenya Producers Coalition, 2010). Johnson et al. (2006) define three issues that organizations face in terms of the relation between strategy and finance: Managing for value, whether this is concerned with creating value for shareholders or ensuring the best use of public money (budgets); Funding strategic developments and financial expectations of stakeholders will vary, both between different stakeholders and in relation to different strategies (Jabareen, 2013).

Strategy implementation cost includes: determining what resources (people, equipment, materials) and what quantities of each should be used to perform organization activities; developing an approximation (estimate) of the costs of the resources needed to complete the strategy activities; allocating the overall cost estimate to individual work items; and
controlling and management changes to the implementation budget (Hrebiniak, 2006). In developing the initial budget, the finance manager must be able to provide the supporting detail for the cost justifications and the timing for project fund expenditures. When the finance manager finds that the cost schedule is not being followed, he/she must be able to take the necessary action to maintain the agreed-upon cost schedule and document all cost changes that occur during the project (Nyoro, Wanjala, Awour, 2001).

In addition, several competencies are related to keeping the strategy implementation within budget, including the ability to perform resource planning, cost estimation, and cost control (Savio, & Nikolopoulos, 2013). Cost to implement strategy depends on several variables including (chiefly): resource costs, labor rates, material rates, risk management, plant (buildings, machines, etc.), equipment, cost escalation, indirect costs.

Finance is necessary for procurement of services, equipment and facilities necessary for the implementation of the business strategy (Mascarenhas, 2013). The procurement processes include: determining what to procure and when; documenting product requirements and identifying potential sources; obtaining quotations, bids, offers, or proposals as appropriate; choosing from among potential sellers; managing the relationship with the seller; and completing and settling the contract, including resolution of any open items (Brenes, Mena & Molina, 2007). Strategy implementation cost includes the process required to ensure that the implementation is completed within the approved budget by considering resource planning which is determining what resources (people, equipment, materials) and what quantities of each should be used to implement business strategy. Thus, financial resource issues frequently arise not because implementation is inherently expensive or time consuming but because existing issues within the organisation impede it (Govindarajan & Fisher, 1990).

The big costs tend to be in systems change to support change. This is an issue he has addressed in part by moving from in-house systems with more flexibility (Zheng, 2013). Underlying many of these constraints is attitude. Roll-out expenses typically revolve around retraining people, changing processes, and any necessary new tools or technology. It uses up resources, he acknowledges (Almandoz, 2012). If a policy change falls short in implementation, a host of problems can arise beyond cost, such as increased reputational and regulatory risk, and even reduced employee morale. Obtaining sufficient financial resources, then, flows from a proper understanding of what is at stake (Gramm & Schnell, 2013).
Lastly, technology is products, processes, knowledge, instruments, procedures and systems which facilitate the production of goods and services (Arvanitis & Loukis, 2009). Technology gives organizations valuable assistance in implementing new policies, procedures and initiatives. Byrd, Lewis & Bryan (2006) suggest that technology enhances and maintains communication and accountability for the managers involved in implementation process throughout the strategy implementation process, and facilitate keeping track of implementation and performance goals and their achievement. However, organizations may be required to add new systems and infrastructure and ensure that all systems function reliably. Kenworthy (2012) state that training all relevant staff to use new systems and programs is relevant for successful implementation of strategies.

Technology is at the center of systems considered for finding customers needs and satisfaction. Successful implementation of strategies entails the integration and coordination of technologic innovations, production processes, marketing, financing and personnel. Through this, defined goals are achieved (Avison, Jones, Powell, Wilson, 2004). Information is the blood which flow into the organization's vessels and brings it to life therefore, during the implementing process information technology ensures there is internal circulation of information (Heide, Grønhaug & Johannessen, 2002). In most public sector organizations some managers are still attempting to implement their strategies predominantly using the MS office suite (ASCU, 2010). Unfortunately this is totally inadequate for medium to large organizations and even with the most creative use of Excel organizations quickly hit limitations. Likewise an information management system is not a strategy implementation system; it may provide information essential for planning purposes however it is unlikely to assist in the development and reporting on the numerous activities that need to take place as part of strategy implementation (Economist Intelligence Unit, 2010).

2.4 Empirical Review of Strategy Development and Implementation

According to Oshikoya & Hussain (2007) did a study on information technology and the challenge of economic development in Africa, stated that rapid changes in technology should be responded by the technical training institutes to find alternative ways to sustain their competitive advantage by deploying new process and new growth methods. Technology may play an important role in this respect. In this context, technology has a close relationship with improvement of production process.
According to Kyalo, (2011), in his study of strategy process development and implementation in TVET institutions he observed that technological change innovations had significant relationship with market growth. Technological posture, automation, and process innovation were significantly linked to satisfaction on return on investment (ROI) (Simiyu, 2007).

Gicharu (2009) did a study on challenges influencing strategic planning in technical training institutes in Kenya. The study findings indicated that the institutes embarked on strategy formulation and implementation, however the education Act was the most fundamental document used in strategic planning and training was conducted by consultants but funding was a key shortfall therefore hindering effective training and sensitization of staff, harmonization of educational documents to achieve desirable policies. This therefore led to failure of effective implementation of the competitive strategies.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction
In this chapter the research methodology used in the study is described. The geographical area where the study was conducted, the study design and the population are described. In addition, the instrument used to collect the data, data analysis and presentation are also described.

3.2 Research Design
The researcher used descriptive survey research design since the information gathered involved administering questionnaires. The major purpose of this design is to describe systematically a situation or area of interest factually and accurately. It is useful for addressing questions related to what, why, whom and how much can be used to measure the incidence of a phenomena (Kerlinger, 1969).

According to Chandran (2004) descriptive design is appropriate to describe and portray characteristics of an event, situation, and a group of people, community or a population. Specifically, the researcher will undertake a survey which involves collection of information from selected respondents through a survey instrument like questionnaires or interview guides.

3.3 Study Population
The study population for this research was all participants of the Mombasa Tea Auction Centre as at 1st July 2013. According to the membership list maintained by the East African Tea Trade Association, there were 165 members participating at the Mombasa Tea Auction as at 31st December 2012. Including the EATTA, the total number of the study population was 166.

3.4 Sampling Design
The targeted sample size was 50 respondents. The researcher employed proportionate stratified sampling to select the respondents of the study from the study’s population. This main advantage in this method was that it captures key population characteristics in the sample. It produced characteristics in the sample that are proportional to the overall
population. The members that were selected to represent all the participants at the Mombasa Tea Auction were Producers, Brokers, Buyers, Warehouses and the EATTA.

**Table 1: Sample Stratification**

<table>
<thead>
<tr>
<th>Department</th>
<th>Population</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producers</td>
<td>69</td>
<td>17</td>
</tr>
<tr>
<td>Brokers</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Buyers</td>
<td>71</td>
<td>18</td>
</tr>
<tr>
<td>Warehouses</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>EATTA</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>166</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

From the strata, the researcher employed the simple random sampling to select the individual firms from which to collect the research data.

**3.5 Data Collection**

The data collected was quantitative in nature and was collected using a structured questionnaire containing closed questions. A questionnaire, as the data collection instrument of choice was easy to formulate and administer and also provides a relatively simple and straightforward approach to the study of attitudes, values, beliefs and motives (Robson, 2002). The questionnaire was divided into two sections, A and B. Section A focused on the profile of the respondent while section B contained questions on the research objectives. The questionnaires were distributed by the researcher through ‘drop and pick’ method and in some cases by email to the members of East African Tea Trade Association. There was follow-up to ensure that questionnaires were collected on time as well as to assist respondents who had difficulty in completing the questionnaires.

Secondary data was collected from individual organizational strategic plans, human resource management information systems operational plans and reports. The strategic plans provided data on the key resource areas, persons responsible and timelines relating to the development
and implementation of an automated payment system at the Mombasa Tea Auction Centre, while the operational plans and reports provided specific data relating to the challenges of implementing an automated payment system for the Mombasa Tea Auction Centre at given specific points in time.

3.6 Data Analysis

Collected data was edited, coded and classified so as to present the results of the data analysis in a systematic and clear way. The researcher collected data in large quantity which was organized in such a way that further analysis and interpretation of data was made easy. The descriptive statistics were used to analyze quantitative data using three major descriptive statistics for each single variable namely: distribution; central tendency; and dispersion. Frequency distribution tables were used to present distribution; Mean was used to estimate central tendency; while standard deviation was used as a more accurate and detailed estimate of dispersion.

The Statistical Package for Social Sciences (SPSS) was utilized to analyze primary data. Adjusted R Square value and Analysis of Variance (ANOVA) were used to test the significance of the model, while Pearson correlation analysis was undertaken to test statistical relationships between the study’s variables or observed data values. The researcher then presented the findings using appropriate pie-charts, graphs and tables.
CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter outlines the analysis, findings and discussions of collected data relating to the challenges of implementing Automated Payment System at the Mombasa Tea Auction in Kenya.

4.2 Demographic Information

This section outlines the demographic information of the study’s findings. Figure 4.1 illustrates the nature of the respondents’ membership at the East African Tea Trade Association (EATTA). According to the figure, 44% were buyers, 20% were brokers, another 20% were warehouses and 16% were producers. This finding indicates that majority of the membership of EATTA comprises of buyers.

![Figure 4.1: Nature of membership at EATTA](image)

Figure 4.1 illustrates the number of years that the respondent had been a member of EATTA. According to the figure, 71% had been members of EATTA for 10 years and above, 25% had been members for between 6 and 10 years and 4% had been members of EATTA for between 0 and 5 years. This finding indicates that majority of the respondents had been members of EATTA for more than 10 years and thus they had sufficient information on the implementing an automated payment system at the East African Tea Trade Association for the Mombasa Tea Auction.

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Figure 4.2: Length of membership at EATTA

Figure 4.3 illustrates the country that the respondents’ operated from. According to the figure, 96% of the respondents operated from Kenya and 4% operated from Rwanda. This finding indicates that majority of the membership of EATTA operates from Kenya which could be attributed to the fact that the tea action is in Mombasa County in Kenya.

Figure 4.3: Respondents’ country of operation

Figure 4.4 illustrates long ago the Automated Payment System was adopted at the Mombasa Tea Auction by the respondents. According to the figure, 56% indicated that it was adopted between 4 to five years ago, 40% indicated 2 to 3 years ago and 4% indicated 0 to 1 year ago.
This finding indicates that majority of the membership of EATTA adopted the Automated Payment System between 4 to 5 years ago.

Figure 4.4: How long ago the Automated Payment System was adopted

Figure 4.5 illustrates the sector that the respondents’ utilised the Automated Payment System. According to the figure, 48% utilised the system in finance and accounting, 24% in operations, another 24% in marketing and 4% utilized the Automated Payment System in human resource. This finding indicates that majority of the respondents utilized the Automated Payment System in finance and accounting as this is primarily the area where payments are processed and settled.

Figure 4.5: Sector that the respondents’ utilised the Automated Payment System
Figure 4.6 illustrates whether relevant staff in the respondents’ company had internet and computer access before the Automated Payment System. According to the figure, 84% of the respondents’ relevant staff had internet and computer access before the Automated Payment System was implemented while 16% did not. This finding indicates that majority of the respondents’ relevant staff had internet and computer access before the Automated Payment System was implemented.

Figure 4.6: Internet and computer access before the Automated Payment System

4.3. Implementation the Automated Payment System at the Mombasa Tea Auction

Figure 4.7 illustrates the length of time it took to implement the Automated Payment System at the Mombasa Tea Auction. According to the figure, 58% of the respondents indicated that it took between 0 and 1 year, while 42 % indicated that it took between 2 to 3 years. This finding indicates that majority of the respondents were of the opinion that the implementation of the Automated Payment System at the Mombasa Tea Auction took less than a year.
Figure 4.7: Length of time it took to implement the Automated Payment System

Figure 4.8 illustrates the major source of challenges in the implementation of Automated Payment System at the Mombasa Tea Auction. According to the figure, 44% of the respondents indicated incompatibility of the technology with existing practices and operations, 24% indicated low technology literacy of members, 20% indicated high costs in acquiring systems to access the automated payment system, 8% indicated unclear expectation communication from top management to members and 4% indicated inadequate top management commitment. This finding indicates that majority of the respondents were of the opinion that the major source of challenges in the implementation of Automated Payment System at the Mombasa Tea Auction was incompatibility of the technology with existing practices and operations within their organizations.
Table 4.1 illustrates the respondents’ considerations regarding the truth of statements relating to the implementation of the Automated Payment System at the Mombasa Tea Auction. The researcher coded the respondents considerations where *Strongly Agree* was given the value five (1.0), *Agree* was given the value four (2.0), *Indifferent* was given the value three (3.0), *Disagree* was given the value two (4.0) and *Strongly Disagree* was given the value one (5.0). According to the table, the respondents agreed that there was involvement of adequate, competent and skilled personnel in the implementation of automated payment systems as its mean drew closer to two (2.0) at 2.36. The respondents were indifferent as to whether there was effective time management in the implementation of the automated payment system was realised; whether there was sufficient member collaboration in the implementation of the automated payment system; and that business processes and were extensively changed to align them with the processes of the Automated Payment System as their means drew closer to three (3.0) at 2.64, 2.56 and 2.48 respectively. This finding indicates that there was involvement of adequate, competent and skilled personnel in the implementation of automated payment systems at the Mombasa Tea Auction.

**Table 4.1: Implementation of the Automated Payment System**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>There was involvement of adequate, competent and skilled personnel in the implementation of automated payment</td>
<td>2.3600</td>
<td>1.1136</td>
</tr>
</tbody>
</table>
There was effective time management in the implementation of the automated payment system was realized 2.6400 0.9522

There was sufficient member collaboration in the implementation of the automated payment system 2.5600 1.0440

Business processes and were extensively changed to align them with the processes of the Automated Payment System 2.4800 1.2623

Table 4.2 illustrates the respondent’s opinion as to the importance of certain factors in posing challenges in the implementation of Automated Payment System at the Mombasa Tea Auction. The researcher coded the respondents considerations where Very Important was given the value five (1.0), Important was given the value four (2.0), Indifferent was given the value three (3.0), Unimportant was given the value two (4.0) and Very Unimportant was given the value one (5.0). According to the table, the respondents considered legal restrictions promulgated by the EATTA or contractual obligations that bind many parties; integration and specific module of information system (IS) not working as expected during the implementation of the automated payment system; and lack of adequate user skills and awareness of the automated payment system important in posing challenges in the implementation of Automated Payment System at the Mombasa Tea Auction as their means drew closer to two (2.0) at 1.96, 2.16 and 2.28 respectively. The respondents were indifferent as to whether inadequate staffing during the implementation of the automated payment system; lack of prior experience in the implementation of the automated payment system; inadequate finance for procurement of services, equipment and facilities necessary for the implementation of the automated payment system posed challenges in the implementation of Automated Payment System at the Mombasa Tea Auction as their means drew closer to three (3.0) at 2.56, 2.76 and 2.48 respectively. This finding indicates that legal restrictions promulgated by the EATTA or contractual obligations that bind many parties posed the highest challenge in the implementation of Automated Payment System at the Mombasa Tea Auction.

Table 4.2: Challenges in the implementation of Automated Payment System

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of adequate user skills and awareness of the automated payment system</td>
<td>2.2800</td>
<td>1.0214</td>
</tr>
<tr>
<td>Inadequate staffing during the implementation of the automated payment system</td>
<td>2.5600</td>
<td>1.0033</td>
</tr>
</tbody>
</table>
Lack of prior experience in the implementation of the automated payment system  |  2.7600  |  0.9695  
Integration and specific module of information system (IS) not working as expected during the implementation of the automated payment system |  2.1600  |  1.1060  
Inadequate finance for procurement of services, equipment and facilities necessary for the implementation of the automated payment system |  2.4800  |  1.4754  
Legal restrictions promulgated by the EATTA or contractual obligations that bind many parties |  1.9600  |  1.1719  

Table 4.3 illustrates automation advantages that had been realized using the Automated Payment System at the Mombasa Tea Auction. The researcher coded the respondents considerations where Strongly Agree was given the value five (1.0), Agree was given the value four (2.0), Indifferent was given the value three (3.0), Disagree was given the value two (4.0) and Strongly Disagree was given the value one (5.0). According to the table, the respondents agreed that the following automation advantages had been realized using the Automated Payment System: faster payment reconciliation for all stakeholders; shortened the process of tea payment and collection; enabled authentication of tea release instructions to warehouses; increased transparency due to known channels for query resolution; enhanced security of stakeholder sales proceeds (funds); and production of a greater number and variety of payment related reports, as their means drew closer to two (2.0) at 2.08, 2.16, 2.16, 2.08, 1.84 and 2.0 respectively. This finding indicates that enhanced security of stakeholder sales proceeds (funds) was the most realized automation advantage using the Automated Payment System at the Mombasa Tea Auction.

Table 4.3: Automation advantages realized using the Automated Payment System

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faster payment reconciliation for all stakeholders</td>
<td>2.0800</td>
<td>1.4411</td>
</tr>
<tr>
<td>Shortened the process of tea payment and collection</td>
<td>2.1600</td>
<td>1.2138</td>
</tr>
<tr>
<td>Enabled authentication of tea release instructions to warehouses</td>
<td>2.1600</td>
<td>1.4048</td>
</tr>
<tr>
<td>Increased transparency due to known channels for query resolution</td>
<td>2.0800</td>
<td>1.1874</td>
</tr>
<tr>
<td>Enhanced security of stakeholder sales proceeds (funds)</td>
<td>1.8400</td>
<td>1.1431</td>
</tr>
<tr>
<td>Production of a greater number and variety of payment related reports</td>
<td>2.0000</td>
<td>1.4434</td>
</tr>
</tbody>
</table>
4.4 Coping with Challenges of Implementing the Automated Payment System at the Mombasa Tea Auction

Table 4.4 illustrates how the respondents coped with the challenges of the Automated Payment System at the Mombasa Tea Auction. The researcher coded the respondents’ considerations where Strongly Agree was given the value five (1.0), Agree was given the value four (2.0), Indifferent was given the value three (3.0), Disagree was given the value two (4.0) and Strongly Disagree was given the value one (5.0). According to the table, the respondents agreed that the following was done to cope with challenges of the Automated Payment System: constantly training the existing and new staff using the automated payment system; improving availability of computers and internet access in order to access the Automated Payment System; customised some of our operations to merge with the Automated Payment System Process; and constantly engaging with the EATTA and other stakeholders as new issues arise with a view to get a resolution or system upgrade, as their means drew closer to two (2.0) at 2.32, 2.28, 2.28 and 1.84 respectively. This finding indicates that constantly engaging with the EATTA and other stakeholders as new issues arise with a view to get a resolution or system upgrade was the most undertaken activity in order to cope with the challenges of the Automated Payment System at the Mombasa Tea Auction.

Table 4.4: Coping with the challenges of the Automated Payment System

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constantly training the existing and new staff using the automated payment system</td>
<td>2.320</td>
<td>1.2490</td>
</tr>
<tr>
<td>Improving availability of computers and internet access in order to access the Automated Payment System</td>
<td>2.280</td>
<td>1.1000</td>
</tr>
<tr>
<td>Customized some of our operations to merge with the Automated Payment System Process</td>
<td>2.280</td>
<td>1.0214</td>
</tr>
<tr>
<td>Constantly engaging with the EATTA and other stakeholders as new issues arise with a view to get a resolution or system upgrade</td>
<td>1.840</td>
<td>1.0677</td>
</tr>
</tbody>
</table>

4.5 Discussion of Findings

The study research findings indicate that the majority of the membership of EATTA comprises of members operating from Kenya with a huge representation of buyer members. The member office department that utilizes the Automated Payment System are finance and accounting as this is primarily the area where payments are processed and settled.
Additionally, majority of the respondents were of the opinion that the implementation of the Automated Payment System at the Mombasa Tea Auction took less than a year and that relevant staff had internet and computer access before the system was implemented.

There was involvement of adequate, competent and skilled personnel in the implementation of automated payment systems at the Mombasa Tea Auction. This resulted to enhanced security of stakeholder sales proceeds (funds) as the most realized automation advantage using the Automated Payment System. The major challenges in the implementation of the Automated Payment System at the Mombasa Tea Auction was the legal restrictions promulgated by the EATTA or contractual obligations that bind many parties and the incompatibility of the technology with existing practices and operations within the various member organizations.

Constantly engaging with the EATTA and other stakeholders as new issues arise with a view to get a resolution or system upgrade was the most undertaken activity in order to cope with the challenges of the Automated Payment System at the Mombasa Tea Auction.
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter presents the summary of research findings, conclusions made from the findings, limitation of the study, recommendations for policy and practice, and suggestions for further research.

5.2 Summary of Findings
The study’s research findings on the demographic structure of the EATTA membership indicated that 44% were buyers, 20% were brokers, another 20% were warehouses and 16% were producers. This finding indicates that majority of the membership of EATTA comprises of buyers. Out of the respondents, 71% had been members of EATTA for 10 years and above, 25% had been members for between 6 and 10 years and 4% had been members of EATTA for between 0 and 5 years. The study sought to determine country of origin of the respondents and found out that 96% of the respondents operated from Kenya and 4% operated from Rwanda. 56% of the respondents indicated that that the Automated Payment System was adopted between 4 to five years ago, 40% indicated 2 to 3 years ago and 4% indicated 0 to 1 year ago. 48% utilised the system in finance and accounting, 24% in operations, another 24% in marketing and 4% utilized the Automated Payment System in human resource. 84% of the respondents’ relevant staff had internet and computer access before the Automated Payment System was implemented while 16% did not. 58% of the respondents indicated that it took between 0 and 1 year, while 42 % indicated that it took between 2 to 3 years. 44% of the respondents indicated incompatibility of the technology with existing practices and operations, 24% indicated low technology literacy of members, 20% indicated high costs in acquiring systems to access the automated payment system, 8% indicated unclear expectation communication from top management to members and 4% indicated inadequate top management commitment.

Research findings relating to the implementation of the Automated Payment System at the Mombasa Tea Auction indicated that that there was involvement of adequate, competent and skilled personnel in the implementation of automated payment systems at the Mombasa Tea Auction. Findings on the importance of certain factors in posing challenges in the
implementation of Automated Payment System at the Mombasa Tea Auction indicated that legal restrictions promulgated by the EATTA or contractual obligations that bind many parties posed the highest challenge in the implementation of Automated Payment System at the Mombasa Tea Auction.

Findings relating to automation advantages that had been realized using the Automated Payment System at the Mombasa Tea Auction indicated that enhanced security of stakeholder sales proceeds (funds) was the most realized automation advantage using the Automated Payment System at the Mombasa Tea Auction. Findings further indicated that constantly engaging with the EATTA and other stakeholders as new issues arise with a view to get a resolution or system upgrade was the most undertaken activity in order to cope with the challenges of the Automated Payment System at the Mombasa Tea Auction.

5.3 Conclusion of the Study

Noting that the Automated Payment System at the Mombasa Tea Auction was a new concept for the tea industry in Kenya, the study sought to establish if they were any challenges that the EATTA members experienced during its implementation and how they have coped with the challenges.

The study concludes that the major source of difficulty in the implementation of Automated Payment System at the Mombasa Tea Auction was incompatibility of the technology with existing practices and operations within the EATTA member organizations. The most critical challenge that the members were faced with during the implementation of the system is the legal restrictions promulgated by the EATTA or contractual obligations that bind many parties.

The study concludes that it is essential for the members to constantly engaging with the EATTA and other stakeholders as new issues arise with a view to get a resolution, amendment of association rules and regulations or upgrade of the Automated Payment System in order to successfully cope with the challenges afore mentioned.

5.4 Recommendations of the Study

In line with the findings and conclusions, the study recommends that the EATTA should reduce the legal restrictions promulgated or contractual obligations that bind many parties as this posed the highest challenge in the implementation of Automated Payment System at the
Mombasa Tea Auction. This could be done by redrafting the existing contractual laws and processes with an aim of making it easier and simpler for members to get into legal and binding agreements.

It has also recommended that the stakeholders should ensure that there exists minimal incompatibility of the Automated Payment System technology with existing practices and operations of member organizations by undertaking sufficient piloting before rolling out versions of the Automated Payment System.

Further, the study recommends that the government and other stakeholders should ensure that there is favourable external business environment for the advancement in the implementation of the Automated Payment System at the Mombasa Tea Auction by developing favourable policy in Kenya.

5.5 Limitations of the Study

The major limitations of this study related to time constraints, limited financial resources and geographic distance between the responding organizations. Time and geographical constraints were overcome by selecting a relatively small sample size as compared to the entire population size that did not compromise the validity and reliability of the research findings, while the limited financial resources available were spent on research activities that could not be undertaken solely by the researcher.

5.6 Suggestions for Further Research

The researcher recommends further studies be undertaken in order to investigate the factors affecting the development and implementation of Automated Payment Systems in Kenya. Findings from such a study will provide more insight on other factors that affect the implementation of IT systems and the relationship between the said factors, which could be useful in informing strategic management practice and policy in Kenya.
REFERENCES


APPENDICES

Appendix I: Questionnaire

Instructions: Please fill in the response to each question by ticking (√) your comments appropriately

Section A: Demographic Data

1. What is the nature of your membership at the East African Tea Trade Association?
   Producer ( )   Broker ( )   Buyer ( )
   Warehouse ( )   EATTA ( )

2. How long have you been a member of the East African Tea Trade Association?
   0 – 5 years ( )   6 – 10 years ( )   10 years + ( )

3. Which country does your company operate from?
   Kenya ( )   Uganda ( )   Tanzania ( )
   Burundi ( )   Rwanda ( )

4. How long ago was Automated Payment System adopted at the Mombasa Tea Auction?
   0 – 1 year ( )   2 – 3 years ( )   4 – 5 years ( )
   6 – 7 years ( )   8 – 9 years ( )   10 years + ( )

5. Which sector of your company utilises the Automated Payment System? (Tick as many as are appropriate)
   Finance and Accounting ( )   Human Resource ( )
   Operations ( )   Marketing ( )

6. Did the relevant staff in your company have internet and computer access before the Automated Payment System?
   Yes ( )   No ( )
Section B: Challenges of implementing an Automated Payment System at the Mombasa Tea Auction

1. How long did the implementation of the Automated Payment System at the Mombasa Tea Auction take?

<table>
<thead>
<tr>
<th>Duration</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 1 year</td>
<td>(         )</td>
</tr>
<tr>
<td>2 – 3 years</td>
<td>(         )</td>
</tr>
<tr>
<td>4 – 5 years</td>
<td>(         )</td>
</tr>
<tr>
<td>6 – 7 years</td>
<td>(         )</td>
</tr>
<tr>
<td>8 – 9 years</td>
<td>(         )</td>
</tr>
<tr>
<td>10 years +</td>
<td>(         )</td>
</tr>
</tbody>
</table>

2. What is the major source of challenges in the implementation of Automated Payment System at the Mombasa Tea Auction? *(Tick as many as are appropriate)*

- Incompatibility of the technology with existing practices and operations (  )
- Unclear expectation communication from top management to members (  )
- Low technology literacy of members (  )
- High costs in acquiring systems to access the automated payment system (  )
- Inadequate top management commitment (  )

3. In a scale of 1 to 5, are the following statements true in the implementation of the Automated Payment System at the Mombasa Tea Auction?

*(Rating Scale: 1- Strongly agree; 2 – Agree; 3 – Neither agree nor disagree; 4 – Disagree; 5 – Strongly disagree)*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>There was involvement of adequate, competent and skilled personnel in the implementation of automated payment systems</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>There was effective time management in the implementation of the automated payment system was realised</td>
<td>1 2 3 4 5</td>
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<tr>
<td>There was sufficient member collaboration in the implementation of the automated payment system</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Business processes and were extensively changed to align them with the processes of the Automated Payment System</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
4. Please rate the importance of the following factors in posing challenges in the implementation of Automated Payment System at the Mombasa Tea Auction:

(Rating Scale: 1- Very important; 2 – Important; 3 – Neither important nor unimportant; 4 – Unimportant; 5 – Very unimportant)

| Lack of adequate user skills and awareness of the automated payment system | 1 | 2 | 3 | 4 | 5 |
| Inadequate staffing during the implementation of the automated payment system | 1 | 2 | 3 | 4 | 5 |
| Lack of prior experience in the implementation of the automated payment system | 1 | 2 | 3 | 4 | 5 |
| Integration and specific module of information system (IS) not working as expected during the implementation of the automated payment system | 1 | 2 | 3 | 4 | 5 |
| Inadequate finance for procurement of services, equipment and facilities necessary for the implementation of the automated payment system | 1 | 2 | 3 | 4 | 5 |
| Legal restrictions promulgated by the EATTA or contractual obligations that bind many parties | 1 | 2 | 3 | 4 | 5 |

5. Please rate extent to which the following automation advantages have been realized using the Automated Payment System at the Mombasa Tea Auction:

(Rating Scale: 1- Strongly agree; 2 – Agree; 3 – Neither agree nor disagree; 4 – Disagree; 5 – Strongly disagree)

| Faster payment reconciliation for all stakeholders | 1 | 2 | 3 | 4 | 5 |
| Shortened the process of tea payment and collection | 1 | 2 | 3 | 4 | 5 |
| Enabled authentication of tea release instructions to warehouses | 1 | 2 | 3 | 4 | 5 |
| Increased transparency due to known channels for query resolution | 1 | 2 | 3 | 4 | 5 |
| Enhanced security of stakeholder sales proceeds (funds) | 1 | 2 | 3 | 4 | 5 |
| Production of a greater number and variety of payment related reports | 1 | 2 | 3 | 4 | 5 |
6. With regards to the implementation of the Automated Payment System at the Mombasa Tea Auction, please rate following statements indicating how you have coped with the challenges experienced.

*(Rating Scale: 1- Strongly agree; 2 – Agree; 3 – Neither agree nor disagree; 4 – Disagree; 5 – Strongly disagree)*

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
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<tbody>
<tr>
<td>Constantly training the existing and new staff using the automated payment system</td>
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<td>Improving availability of computers and internet access in order to access the Automated Payment System</td>
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<td>Customised some of our operations to merge with the Automated Payment System Process</td>
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<td>Constantly engaging with the EATTA and other stakeholders as new issues arise with a view to get a resolution or system upgrade</td>
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</table>
Appendix II: Letter of Introduction

UNIVERSITY OF NAIROBI
MOMBASA CAMPUS

DATE: 25TH SEPTEMBER 2013

TO WHOM IT MAY CONCERN

The bearer of this letter, Esther Wanjiru Waheire of Registration Number D61/P/8383/2006 is a Master of Business Administration (MBA) student of the University of Nairobi, Mombasa Campus.

She is required to submit as part of her coursework assessment a research project report. We would like the student to do her project on Implementation of an Automated Payment System at the Mombasa Tea Auction Centre in Kenya. We would, therefore, appreciate if you assist her by allowing her to collect data within your organization for the research.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organization on request.

Thank you.

Zephaniah Ogero Nyagwika
Administrative Assistant, School of Business-Mombasa Campus