

**MANAGEMENT COMPETENCE, FIRM-LEVEL INSTITUTIONS,  
HUMAN RESOURCE MANAGEMENT BUNDLES AND  
PERFORMANCE OF COMPANIES LISTED ON THE NAIROBI  
SECURITIES EXCHANGE**

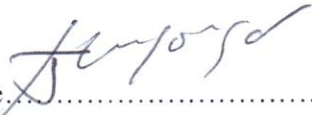
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**A Thesis Submitted In Partial Fulfillment of the Requirements for  
the Award of the Degree of Doctor of Philosophy in Business  
Administration, School of Business, University of Nairobi**

**2016**

## DECLARATION

This research thesis is my original work and has not, in its entirety or in part been previously presented to any other university for the award of a degree.

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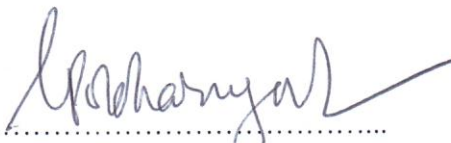
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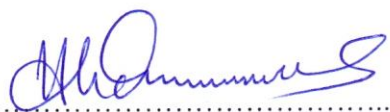
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## **DEDICATION**

To my late mother, Dorcas Kamene Kyongo, for investing all her life in me

To make me what I am.

---

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## ACRONYMS AND ABBREVIATIONS

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BSC	Balanced Scorecard
CAP	Chapter
HR	Human Resource
HRM	Human Resource Management
NSE	Nairobi Securities Exchange
RBV	Resource Based View
ROA	Return on Assets
ROE	Return on Equity
ROS	Return on Sales
UON	University of Nairobi

## ABSTRACT

Today's dynamic business environment requires publicly quoted companies to enhance their performance so as to remain competitive. This calls for careful consideration of the factors that influence their performance. The extant study sought to find out the effects of management competence, firm-level institutions, and human resource management (HRM) bundles on the performance of companies listed on the Nairobi Securities Exchange (NSE). The specific objectives of the study were to determine: the effect of management competence on the performance of companies listed on the Nairobi Securities Exchange, the effect of firm-level institutions on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange, the effect of HRM bundles on the relationship between management competence and performance of companies listed on the NSE and whether the combined effect of management competence, firm-level institutions and HRM bundles on company performance was different from the individual effect of management competence. Four hypotheses corresponding to the specific objectives of the study were formulated and tested. The study was informed by Knowledge Space Theory, Resource-Based View (RBV) and Ability-Motivation-Opportunity (AMO) Theory. The study targeted HR managers of each of the 64 companies listed on the Nairobi Securities Exchange as at December 2014 and 34 of them responded. The study adopted the Positivist research philosophy and a descriptive survey design. SPSS Version 21 was applied to analyze data using descriptive statistics and inferential statistics (Regression Analysis). Statistical tests of hypotheses conducted included normality and linearity tests, multicollinearity test and Levine test. Research findings from the tests of hypotheses established that management competence positively and significantly affected company performance, firm-level institutions and HRM bundles moderate the relationship between management competence and company performance, and the combined effect of management competence, firm-level institutions and HRM bundles on company performance was different from the individual effect of management competence. The study findings support the RBV Theory, Knowledge Space Theory and AMO Theory, which underscore the crucial role of management competence, firm-level institutions and HRM bundles in company performance. The study has contributed to the existing body of knowledge by establishing that firm-level institutions and HRM bundles moderate the relationship between management competence and company performance and that management competence, firm-level institutions and HRM bundles combined explain company performance. One of the limitations of the study was that it used cross-sectional data and targeted only those companies listed on the NSE, making it hard to generalize the study findings to other organizations. Finally, the study recommends further investigation of the study variables in Non-governmental organizations, small and medium enterprises and faith-based organizations, using longitudinal data and a different data analysis technique to test whether the outcome will be different.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

The current business environment is facing so many challenges. These challenges have compelled companies to find out factors that influence their performance for them to take appropriate steps to initiate them (Abu- Jarad, Yusof & Nikbin, 2010). Management competence, among other factors influences the performance of companies (Almajali, Alamro, & Al-Soub, 2012; Chien, 2004). For companies to attain satisfactory levels of performance, they must equip their managers with the required competencies and also utilize firm-level institutions and human resource management (HRM) bundles (Alanaiti, Alshawi, & Al-Karaghoul, 2011; Mensah, 2003).

Publicly quoted companies operate in a challenging business environment . Some of the challenges are: difficult economic conditions, enlightened and demanding customers, lack of competent experts in financial markets and cut throat competition (Massele, Jonathan, Darroux, & Fengju (2015). Publicly quoted companies on the Nairobi Securities Exchange (NSE) are not an exception. Therefore, for these companies to survive in a challenging environment, they have to meet stakeholders' expectations by maintaining high standards of performance in their business transactions. They are also supposed to adhere to strict guidelines from Capital Market Authority and the Government, in all their dealings as they compete in a dynamic business environment that influences their performance while meeting and exceeding their stakeholder's expectations. Therefore, these companies need to consider competency development for their managers to enhance their performance (Masoud, 2013). Competence development involves the general development of knowledge, understanding and cognition in an individual on a specific dimension (Hyland, 1994).

Empirical evidence suggests that management competence is a necessary condition for superior company performance. As confirmed by Tutar, Altinoz and Cakiroglun (2011), only competent individuals who find their jobs meaningful could contribute to organizational performance. Competence makes management jobs meaningful and

can be enhanced through firm-level institutions such as organizational culture, leadership style, organizational policies, organizational procedures and organizational structures, which have been found to positively influence company performance (Machuki, Leting', & Aosa, 2012; Lim, 1995; Kotter & Heskett, 1992; Lötter, 1996). Human resource management (HRM) bundles also have the potential to influence management competence, which in turn influences organizational performance (Youndt, Snell, & Lepak, 1996).

The extant study is informed by Knowledge Space Theory, Resource - Based View (RBV) Theory and Ability-Motivation-Opportunity (AMO) Theory (Bailey, 1993; Barney, 1991; Korossy, 1999; Penrose, 1959). These theories underpin the relationships among the variables of the study, namely management competence, firm-level institutions, human resource management bundles and company performance. Knowledge Space Theory and the Resource Based View explain how management competence and firm-level institutions affect company performance. The Ability-Motivation-Opportunity Theory informs the selection of HRM bundles, in particular, skill-enhancing bundle, motivation-enhancing bundle and empowerment-enhancing bundle. Several studies have found that human resource management bundles directly or indirectly affect firm performance (Huselid, 1995; Ichniowski, Shaw, & Prensushi, 1997). This study targeted 64 companies listed on the Nairobi Securities Exchange as at 31 December 2014 (NSE Handbook, 2014).

### **1.1.1 Management Competence**

There are several definitions of management competence. Boyatzi (1982) refers to competence as an individual's underlying characteristics such as a motive, trait, skill, or a domain of knowledge which he or she uses (Almajali, Alamro & Al-Soub, 2012). According to Woodruffe (1993, p.2), competencies are "behavioral repertoires that some people carry out better than others". The term competent is associated with individuals who manifest efficiency and effectiveness in their work or persons with the ability to perform to a given performance standard (Kagire & Munene, 2007). Competence has been referred to as the individual relative abilities of a person concerning a particular work task or set of related tasks (Jacobs, 1997). All these definitions relate competence to individual performance. Therefore, a competent manager is one who is effective and efficient, having the capacity to perform to a given performance standard.

Several researchers have come up with management competence classification. Management competence comprises functional competence, social or relational competence, cognitive or knowledge competence, personal competence, ethical competence and Meta- competence (Francoise & Winterton, 2005; Ismail & Abidin, 2010). Functional competencies refer to “the set of professional skills, abilities, and technical knowledge which specifically deal with the technical aspects of the job, essential to carry out specific functional or task- related activities” (Janjua, Naeem, & Kayani, 2002, p. 398). According to Janjua et al., (2012), functional competencies include vocational and technical skills which are necessary for the accomplishment of task-related objectives of the job. Functional management competence covers the “understanding of and proficiency in managing specific functional tasks” (Katz, 1974, p.91). Therefore, functional competencies encompass proficiency in technical tasks and areas appropriate to the specific job. Managers with functional competencies possess work planning skills and the ability to make decisions.

The way managers relate with others in their workplaces is determined by their level of social competence. Individuals possessing social competence are known to be experienced, knowledgeable and the able to cope with various social challenges (Frey & Ruppert, 2013). Social competencies enable managers to enhance their productivity and establish and maintain healthy business relationships with both internal and external stakeholders (Hogan & Warrenfeltz, 2003). Individuals who are socially competent have been proved to be good in communication, team playing, networking, lobbying , maintaining meaningful relationships with internal and external business stakeholders and understanding their expectations (Mumford, Zaccaro, Connelly, & Mars, 2000).

Management cognitive competence explains management level of knowledge. As postulated by Janjua et al. (2012), cognitive competence consists of cognitive ability to handle business issues and problems. Cognitive competence also involves managers’ thinking ability to identify and solve work-related problems and also consist of analytical thinking, systematic thinking, visionary thinking and creative thinking (Nordhaug, 1998).



Managers' cognitive thinking skills are developed when managers engage in a thinking process which, according to Skarzauskiene (2008) involves manipulating information, forming of concepts, and way of problem solving, searching for reasons. Therefore, managers who possess cognitive competencies are able to provide solutions to work-related problems. In order for managers to execute their managerial functions effectively and efficiently, they need to be knowledgeable in business issues to enable them to have understanding of the business and industry of the firm they serve and by applying the understanding of the integrated value chain and the way the firm creates value (Bosilie & Paauwe, 2005).

Efforts have been made to define personal competence, ethical competence and Meta competence. According to Cheetham and Chivers (1998), personal competence also called 'behavioral competence' refers to a relatively enduring characteristic of an individual associated with effective job performance. Individuals who are ethically competent are known to possess professional values and are able to make sound judgments based upon these values in work-related situations, whereas those with Meta-competence are able to cope with uncertainty, as well as with learning and reflection. The study focused on functional, social and cognitive competencies because they are more common and relevant to management related jobs (Viitala, 2005).

For an organization to enhance the competencies of their managers, they need to identify learning needs after which human resource practitioners should come up with the most appropriate teaching method (Stoner, Vadyba, Freeman, & Gilbert, 2000). Managers' learning encompasses a significant number of practical methods such as job rotation and lateral promotion, job enrichment, job instruction training, apprentice training, coaching, mentoring and committee assignments (Carrell, 1995). Since competencies could predict job performance, companies should ensure that managers acquire necessary competencies by the current concerns of the business to realise the goals and objectives of their organizations accordingly. This also calls for managers to attend various training programs sponsored by the employer and also take initiative and be self-motivated to look for opportunities to improve their competence (McClelland, 1973).

There are several ways of building competence. Some of the methods used in building competence include recruiting an employee with the desired competence, contracting an expert with the required competency for a specified period and coming up with training sessions periodically to enhance their competence. Competence can also be built through encouraging self-learning and creativity and giving knowledge incentives to motivate employees to acquire and apply knowledge (Kim & Lee, 2012; Nonaka & Toyama, 2003). According to Jacobs (1997), competence may not be linearly related to performance because the task performance of an expert may decrease about an experienced specialist, which is an indication that knowing too much may be a hindrance in task performance. That is, resolving simple solutions by over-analyzing and deriving overly complex fixes for problems. Indeed, having competencies begs the question of their use, who is the person using them and how does that core person develop (Burgoyne, 1989). According to this view, possession of knowledge is not a demonstration of competence. Demonstrated competence is competence in action, which is likely to produce results (Lane & Robinson, 1985).

### **1.1.2 Firm-Level Institutions**

There are several definitions of institutions. North (1994) describes institutions as humanly devised constraints that structure political, economic and social interactions. Institutions can refer to both the governance structure that defines the rule of the game and to the rules of the game themselves (Bhaumik & Divoma, 2011). Firm-level institutions constitute the internal organizational environment, which defines the context in which strategic decisions are executed. Examples of firm-level institutions are systems, leadership style, procedures, structure, internal controls, policies, culture and financial resources (Machuki et al., 2012). The current study adopted organizational culture, leadership style, organizational policies, organizational procedures and organizational structure as firm-level institutions.

The 8'S's model for strategy execution informed the choice of firm-level institutions (Higgins, 2005). The 8 'S's model is derived from McKinsey 7'S's Model (Peters & Waterman, 1982) of strategy execution. The model for executing strategies enables senior management to formulate, monitor, and assess the cross-functional implementation of strategies, new or revised. At a minimum, top management must match structure, systems and processes, leadership style, staff, resources, and shared

values - with each new strategy that arises for that strategy to succeed, for strategic performance to occur (Higgins, 2005). The selected firm-level institutions play a crucial role in company performance.

Organizational culture was chosen as a firm-level institution because a company's culture influences everything that a company does and is the central driver of superior business performance (Gallagher & Brown, 2007). Leadership is one of the crucial elements used in enhancing business performance and the leading building block of competitive advantage (Zhu, Chew, & Spangler, 2005). Organizational policies and procedures aid in the provision of the framework within which a firm operates, offering definition of what they do and how they do it (Dale, 2007).

Several scholars have defined organizational culture differently. Tichy (1982, p.13) defined culture as "the 'normative glue' that holds an organization together." Another definition of organizational culture is shared philosophies, ideologies, beliefs, feelings, assumptions, expectations, attitudes, norms, and values among organizational members (Schein, 2011). According to Forehand and von Gilmer (1964), culture is an arrangement of several attributes that identify an organization and differentiates it from another. Hofstede (2011, p.3) defines culture "as the collective programming of minds that distinguishes the members of one group or category of people." According to Schein (1990, p.109), culture "is a set of different values and behaviors commonly shared by members and that may be considered to make organizations successful." According to Kotter and Heskett (1992), culture is a fairly established set of shared beliefs, behaviors, and values among members of a community.

There are different operationalizations of culture. House, Hanges, Javidan, Dorfman, and Gupta (2004) operationalized culture in terms of uncertainty avoidance, power distance, collectivism I, collectivism II- family, gender egalitarianism, assertiveness, and future orientation. Hofstede's (1980) operationalization consist of power distance (the degree in which employees and management have distant relationship, formal and informal), individualism (the degree in which people may create difference between interest of organization and self-interest), uncertainty avoidance (the level in which people are willing to mitigate the uncertainty and tolerance of ambiguity) and

masculinity (the level in which success is defined as ambition, challenge, and insolence, rather than caring and promotion). Schwartz's (1994) dimensions of culture consist of affective and intellectual and self - enhancement versus self-transcendence. Trompenaars (1993) identified seven dimensions of culture which are "universalism versus particularism; diffuse versus specific, neutral versus emotional, individualism versus communication, ascription versus achievement, attitude to time and last one is the attitude to the environment. Other operationalization and measures of organizational culture include: performance, leadership, customer focus, organization structure, communication, conflict management, human resource management, participation, innovation, decision-making, professionalism, organizational goal integration and fun (Human Factor International, 2011).

Culture can either be counter culture, subculture, strong culture or weak culture. As suggested by Kerr and Slocum, Jr. (2005), counter culture is recognized as shared beliefs and values which are indirectly opposite to the values and beliefs of the broader organizational culture, and is mostly formed around a forceful manager or leader. According to Schein (1995), subculture is the segment of culture which shows different norms, values, beliefs and behavior of people due to the difference in geographical areas or departmental goal and job requirements (within the organization). There is a correlation between employees' perception about subculture and their commitment towards the organization (Lok, Westwood, & Crawford, 2005).

An organization can either have a strong or weak culture. Deal and Kennedy (1982) notes that in an organization with a strong culture, the majority of workers share and embrace the same type of beliefs and values of the organization, whereas a weak organizational culture is loosely knit or loosely joined and may sometimes push individual thought and contributions by strictly imposing rules on the employees that may create diversity between the person's personal objectives and organizational goals and this could sometimes be a valuable asset to a firm that needs to grow through innovation.

Organizational culture plays a crucial role in organizations. According to Saffold (1998), culture shapes the way things are done in organizations: may cause to influence employees' decisions and behavior, works as social glue to bond the employees together and get them feel a strong part of the corporate experience which is useful to attract new staff and retain the best performers, is very helpful to assist the sense-making process and aids the employees to understand the organizational events and objectives. Culture therefore enhances the efficiency and effectiveness of the employees.

A strong culture is instrumental in enhancing the way employees perform by instilling in them a sense of a self-confidence and commitment, reduces job stress, and enhances the ethical behavior of the workers (Saffold, 1998). Both robust and weak cultures have a great impact on the organizational behavior but in the strong culture, employees' goals are aligned with the purpose of management and helpful to increase the overall organizational performance (Deal & Kennedy, 1982). As observed by Barney (1991), organizational culture is a source of competitive advantage. Barney introduced three conditions: that culture must be viable, rare and have attributes and be imperfectly imitable. These can contribute to superior organizational performance that can be temporary or continue for the long-term. Long-term increase in organizational performance may cause to get the competitive advantage under long run.

Managers exercise different leadership styles. According to Newstrom and Davis (1993), leadership style involves provision of direction, implementation of plans, and motivating people. Miller, Walker, and Drummond (2002) viewed leadership style as the pattern of interactions between leaders and followers. McGuire (2005) explored basic leadership styles of different managers and came up with charismatic, persuasive, consultative, transactional, transformational and delegating managerial leadership styles. The extant study adopted transformational and transactional leadership styles.

There are several attempts made to define both transformational and transactional leadership. According to Burns (1978), transformational leadership is a process in which leaders and their followers help each other to boost their morale. Burns (1978) noted the difficulty in differentiating between management and leadership and

claimed that the differences are in characteristics and behaviors. He established two concepts: transforming leadership and transactional leadership. According to Burns (1985), the transforming approach brings about significant difference in the life of persons and firms. Transformational leadership is a leadership that achieves remarkable levels of performance from followers through engaging them by appealing to their upper-level needs and ideals that yield higher levels of follower satisfaction, performance and organizational commitment (Bass, 1985). Transformational leadership is the process of coordinating the workers and integrating all system components by driving the leaders toward the ideal perspective (Cacioppe, 2000).

Transformational leadership comprises idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (Bass, 1998). Idealized influence explains leaders' behavior and followers' reactions to the leader. Inspirational motivation occurs when leaders provide symbols and emotional appeals to improve awareness and understanding of mutually desired goals. Intellectual stimulation involves encouraging followers to question their old ways of doing things whereas individualized consideration means treating followers differently but equitably on a one-to-one basis (Bass, 1998).

More so, transformational leaders build strong leaders on teams that have self-motivation, focus and effectiveness in formulating and executing important goals, working within the context of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (Ballou, 2012). Managers can use transformational leadership to come up with a challenging and attractive vision together with the workers and align the vision to a strategy for its attainment, developing the vision, operationalizing it, expressing confidence, decisiveness and optimism about the vision and its implementation and realizing the vision through small planned steps and small successes in the path for its full implementation (Yukl, 1999).

Transactional leadership is defined with respect to the characteristics of a transactional leader. According to Burns (1978), transactional leadership evolved for the marketplace of fast, simple transactions among various leaders and followers, each moving from transaction to transaction in search of gratification. Transactional

leadership focuses on the exchanges that occur between leaders and followers (Bass, 1985; Burns, 1978). In this leadership, leaders lead primarily by using social exchanges for transactions and these exchanges allow leaders to accomplish their performance objectives, complete required tasks, maintain the current organizational situation, motivate followers through a contractual agreement, direct the right behavior of followers toward achievement of established goals, emphasize extrinsic rewards, avoid unnecessary risks, and focus on improved organizational efficiency (Robbins, Judge, & Sanghi, 2007). According to Robbins et al. (2007), a transactional leader pursues a cost-benefit economic exchange to meet subordinates' current material and psychological needs in return for 'contracted' services rendered by the subordinate.

Transactional leadership consists of two fundamental dimensions: contingent reward and management-by-exception (Bass, 1985). Contingent reward implies that the leader and follower have a mutuality of understanding of the rewards or sanctions for performance or non-performance. The emphasis is on completing tasks agreed upon based on previous expectations. In effect, the leader, most of the times utilizes contingent positive and negative reinforcement. In management-by-exception, the leader takes action only when major deviations from plans are evident (Bass, 1985). Transactional leadership allows followers to fulfill their self-interest, minimize workplace anxiety and concentrate on clear organizational objectives such as increased quality, customer service, reduced costs, and increased production (Sadeghi & Pihie, 2012). As argued by Burns (1978), transactional leadership practices lead followers to short-term relationships of exchange with the leader. These relationships tend toward shallow, temporary exchanges of gratification and often create resentments between the participants. Additionally, scholars criticize transactional leadership theory because it utilizes a one-size-fits-all universal approach to leadership theory construction that disregards situational and contextual factors related to organizational challenges (Yukl, 1999; 2011; Yukl & Mahsud, 2010).

Organizations have different policies, which give guidelines on how things are done. Singar and Ramsden (1972) defined policies as principles established for providing leadership in a company, a general course of action in which some practices are developed collectively, in a constructive way, with an aim of realizing some targets.

Some of the areas in which organizations have policies are HR., finance, safety, and ethics. Organizational policies prescribe the acceptable methods or behaviors and define the attitude, expectations, and values of the organization concerning how individuals are treated as well as serve as a point of reference for the development of organizational practices and decisions made by people, besides resulting in equal treatment among individuals (Armstrong, 2009). When a policy is identified, writing the procedures describe its operationalization. Procedures are a set of written instructions or guidelines that describe the recommended steps for a particular policy (Edwards, 2008). They explain how to implement rules and regulations and define the course of action arising from the policy decision.

Organizations cannot operate effectively without grouping people at hierarchical levels. Organizational structure is the way people are grouped and how their work is coordinated and controlled (Wang, 2005). It also refers to a formal configuration between individuals and groups regarding the allocation of tasks, responsibilities, and authority within the organization (Greenberg, 2011). According to Mintzberg (2009), organizational structure defines how people are organized or how their jobs are divided and coordinated. According to Damanpour (1991), organizational structure includes the nature of formalization, layers of hierarchy, and levels of horizontal integration, centralization of authority and patterns of communication. He further asserted that organization structure is the manner in which power and responsibilities are allocated, and work procedures are done among members of the organization.

The organizational structure affects organizations through two major ways. First, it provides a foundation for operating procedures; second, it determines how involved people at the different levels of the organization are to be in the decision - making process (Jacobides, 2007). As indicated by Ostroff and Smith (1992), in a traditional vertical structure, the organization is divided into different functions, departments, and tasks with a very clear chain of command. On the other hand, in a horizontal organization structure, individuals are involved in taking the decisions closest to them, though there is still a level of hierarchy, but the structure is much flatter.



### **1.1.3 Human Resource Management Bundles**

Human resource management practices are combined in a way that constitutes a bundle. A human resource management bundle represents combinations of interrelated and internally consistent human resource practices, complementary to each other (Tadick & Pivac, 2014). Strategic human resource management has shifted the theoretical focus from a single human resource practice to an integrated framework of different human resource practices in the form of a system of human resource management bundles (Mayson & Barret, 2006). The notion of a bundle indicates that practices within bundles are interrelated and internally consistent and that more is better than one on the impact on performance. The human resource system, having internally consistent human resource practices becomes coherent, complementary and is synergistic in a sense that each human resource practice supports the effectiveness of other practices (Chadwick, 2010).

As argued by McDuffie (1995), the appropriate unit of analysis for studying the strategic link between different human resources practices and performance should not involve individual activities as much as interrelated and internally consistent practices, complementary to one another. He explains that a bundle creates the multiple, reinforcing conditions that support employee motivation. He further pointed out that human resource management bundles can be approached from both configurational and universalistic perspectives. Configurational theories propose that the relationship between human resource management and performance involves complex interactions between bundles of human resource activities and outcomes (McDuffie, 1995). Universalistic perspective assumes that there is an identifiable set of best practices for managing employees that have universal additive positive effects on corporate performance (Pfeffer, 1994). The extant study adopts universalistic bundles, which comprise only practices combined in an additive manner. Essentially, with an additive relationship, several practices might generate greater effects on an outcome than either one used alone (Alcazar, Fernandez & Gardey, 2005).

The human resource management bundles under investigation are skill, motivation, and empowerment-enhancing bundles. The justification for the choice of the human resource management bundles is that most human resource practices can have performance - enhancing effects if they are combined into skill-enhancing bundles

that augment the knowledge and skill levels of the workforce, motivation-enhancing bundles that provide employees with adequate levels of direction and inducements and empowerment-enhancing bundles that boost employee autonomy and responsibility levels (Subramony, 2009).

Several scholars have attempted to define the three HRM bundles. According to Ostroff and Bowen (2002, p.750), skill enhancing bundles are “combinations of HRM practices primarily related to staffing and training that focus on increasing the collective knowledge, ability and skill levels of the workforce.” According to Kinnie, Hutchison, Purcell, and Swart (2006), motivation-enhancing bundles help direct employees’ efforts toward the attainment of work objectives and provide them with the inducements necessary to engage in high levels of performance.

Motivation-enhancing bundles include the use of such practices as performance appraisals that evaluate individual and group performance and the use of internal promotion systems that focus on employee merit (Huselid, 1995). The human resource practices in the three bundles reflect the main objectives of most conceptualizations of a strategic HRM programme such as identification and recruitment of strong performers and providing them with the abilities and confidence to work effectively, monitoring the progress of performers towards the required performance targets and rewarding them well for meeting or exceeding them (Batt, 2002). Empowerment-enhancing bundles delegate decision-making authority through autonomous work groups and facilitation of employee participation and voice using upward feedback mechanisms (Wood & Wall, 2007).

The practices constituting the chosen bundles derive from the list of practices contained in a meta-analytic investigation of the relationship between human resource management bundles and organizational performance carried out by Subramony (2009) as shown in Appendix 1. In generating a human resource index for analysis, researchers adopt an additive approach and take the average score of a set of HR practice scales or count the number of human resource practices that are present in a system (Huselid, 1995; Youndt et al., 1996). The current study used the additive approach to combining practices because statistically, the additive combination of practices has the desirable property that the sum of normally distributed variable

scores is still normally distributed thus the absence of a particular practice will not eradicate the effect of all other practices, but weaken the net result of the bundle as opposed to the multiplicative approach which implies that if any single organizational practice is not present, the "bundle" score should be zero (McDuffie, 1995).

#### **1.1.4 Company Performance**

Scholars have defined and measured organizational performance in different ways. Daft (2000) posits that organizational performance is the organization's ability to realize its goals by using resources in an efficient and effective manner. According to Lebas and Euske (2006), organizational performance is a set of financial and non-financial measures which provide information on the degree to which corporate objectives have been achieved.

Some measures of firm performance include return on investment (ROI), market share and market share growth, sales, export proportions, growth rates in domestic and export sales growth, profit, sales volume, cash flow, return on assets (ROA), return on equity (ROE), profit before tax, sales growth, profitability, gross profit, revenue growth, stock price, liquidity and operational efficiency and the Balanced Scorecard (Akimova, 2000; Anwar et al., 2012; Droge & Vickery; 1994; Kaplan & Norton, 1992; Li, 2000; Nguyen, 2008; Sharma & Fisher, 1997; Snow & Hrebiniak, 1980)

The Balanced Scorecard (BSC) adopted by the current study examined company performance from the perspectives of the customer, learning and growth, internal business processes, environment and finances (Anwar et al., 2012; Kaplan & Norton, 1992). The term balanced refers to the balance between financial and non-financial performance measures, between lagging and leading indicators and between internal and external perspectives of performance measurement (Abu-Jarad, Yusof, & Nikbin, 2010).

The selected tool is appropriate for this study because it is a multidimensional approach, which does not leave any key functional area in the organization unturned (Anwar, Djakfar, & Abdulhafidha, 2012). BSC was also used as a measurement tool by Magutu (2013).

### **1.1.5 Companies Listed on the Nairobi Securities Exchange**

The London Stock Exchange as an overseas stock exchange formally recognized the Nairobi Securities Exchange, formerly known as Nairobi Stock Exchange until July 2011, in 1954. Since then, it has grown to become a major financial institution and is now the fourth largest trading volume across the African continent and plays a key role in the Kenya's economic growth (Olweny & Kimani, 2012). There were 64 companies listed on NSE as at 31 December 2014 (NSE Handbook, 2014). Since this represent key sectors of the economy, which include Agriculture, Commercial, and Services sector, Financial, and Investment sector and Development industry and Allied sector, Nairobi Securities Exchange was the target for the study.

The choice of listed companies for the study is further justified by the requirements for listing which include among others, that for a company to be listed, it must be a company limited by shares and registered under the Companies Act (Cap. 486) as a public limited company and to publish audited financial statements regularly in compliance with international financial reporting standards at the end of each accounting period (The Companies Act, 2015). For the purpose of compliance, the listed companies have published their audited financial statements, which this study used to measure their financial performance (2012-2014). The group of companies listed on the Nairobi Securities Exchange was considered appropriate for the study because various stakeholders expect them to perform, and for them to perform satisfactorily, they would need resources and in particular human resources. The quality of the human resources, especially the managers is crucial in enhancing the performance of the companies.

The Government of Kenya aims to achieve and sustain an annual growth rate of 10% for it to realize the Kenya Vision 2030 (GOK, 2007) and therefore expects the NSE to play its role as a robust securities market. The NSE on its part expects the listed companies to perform and meet the expectations of the stakeholders by enhancing their efficiency and competitiveness. Since shareholders hold these companies accountable and expect them to facilitate generation of fair profits, there is need for these companies to meet their expectations by developing competencies for their managers, aligning their firm-level institutions and appropriately bundling HR. practices.

## **1.2 Research Problem**

There is substantial literature on management competence, firm-level institutions and HRM bundles and the way they affect company performance. However, these variables have been operationalized differently in different contexts (Armstrong, 2009, Machuki et al., 2012; Subramony, 2009) and no attempt has been made to explain the relationships among them and the extent to which they affect the performance of publicly quoted companies.

The current study focused on the companies listed on the Nairobi Securities Exchange because they represent key sectors of the economy and the shareholders, the Government and the Nairobi Securities Exchange expect them to perform. However, these companies face challenges which need to be addressed for them to meet the expectations of various stakeholders, some of which are lack of competent managers and cut throat competition (Mensah, 2003). These challenges would perhaps be addressed by formulating and executing competence development strategies, aligning the firm-level institutions to the strategies and appropriately bundling HR. practices.

Since satisfactory company performance is contingent on management competence (Tutar et al., 2011), managers should possess competencies required for effective performance of their duties. Almajali et al. (2012) study on ‘factors affecting the financial performance of Jordanian Insurance companies listed at Amman Stock Exchange’, established that management competence had a significant positive effect on the financial performance of Insurance companies. The study adopted stratified random sampling, was restricted to financial performance (ROA) only, and management competence index was measured by the ratio of profit to the number of professionals, using secondary data. The non-financial measures of performance were not included in the study. Similarly, the study did not specify the dimensions of management competence it addressed.

In a study by Tiraieyari, Altinoz and Cakiroglun (2009) on the relationship between technical competency and extensionists’ job performance, it was established that job performance of extension workers was positively related to technical aspects of their job. This study was outside Africa and targeted only one dimension of competence, and the respondents were not managers but extension workers. The cited empirical studies on the effect of management competence on company performance are

inconclusive in that they focused on one dimension of management competence, one dimension of firm performance, relied on secondary data and used a sampling technique which was biased and susceptible to estimation errors. The current study focused on three management-related dimensions of competence, using a multidimensional approach in measuring performance and adopted a descriptive survey design which is less susceptible to estimation errors.

Studies linking firm-level institutions to firm performance produced different outcomes. When treated together, firm-level institutions were found not to have positive and statistical significance on firm performance (Machuki et al., 2012). However, studies addressing each firm-level institution individually produced positive results. Culture was found to have a significant positive relationship with firm performance (Ezirim, Nwibere, & Emecheta, 2010). A study on the effects of leadership style on organizational performance of selected small scale enterprises in Lagos, Nigeria found that leadership style had positive but insignificant effect on organizational performance. These studies were conducted in different contexts and operationalized differently and their outcomes were not the same. In a study by Subramony (2009) on meta-analysis of 239 effect sizes derived from 65 studies, it was revealed that HRM bundles had significantly larger magnitudes of effects than their constituent individual practices and were positively related to firm performance.

Chadwik (2010) established that the whole HR. system had quality impact in enhancing the overall organizational performance as compared to the sum of its practices individually. These studies on the effects on HRM bundles on organizational performance were operationalized differently and conducted outside Kenya. The cited studies have examined management competence, firm-level institutions, and HRM bundles Vis-a-Vis company performance in isolation.

Since firm-level institutions and HRM bundles have been found to have individual influence on firm performance (Bosilie, Dietz & Boon, 2005; Gordon & DiTomaso, 1992; Ferris, Hall, Royce, & Martocchio, 2004; Mackenzie, Podsakoff, & Rich, 2001), the current study focused on the moderating effects of firm-level institutions and HRM bundles on the relationship between management competence and company performance.

The study therefore attempted to answer the broad question, what is the effect of firm-level institutions and HRM bundles on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange?

### **1.3 Research Objectives**

The general objective of the study was to investigate the effect of firm-level institutions and human resource management bundles on the relationship between management competence and company performance. The specific objectives of the study were to:

- i. Determine the effect of management competence on the performance of companies listed on the Nairobi Securities Exchange.
- ii. Establish the effect of firm-level institutions on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange.
- iii. Establish the effect of human resource management bundles on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange.
- iv. Determine whether the combined effect of management competence, firm-level institutions and human resource management bundles on the performance of companies listed on the Nairobi Securities Exchange was different from the individual effect of management competence.

### **1.4 Value of the Study**

The study could add value to theory, policy, and management practice. It could contribute to an understanding of the link between competence and performance, while also clarifying the moderating effect of firm-level institutions (organizational culture, leadership style, organizational policies, organizational procedures and organizational structures) and human resource management bundles on the relationship between management competence and company performance. Thus, the study extends the existing body of knowledge. The study also tested the theories underpinning the study for applicability on the companies listed on the Nairobi Securities Exchange.

The findings of the study would be of help to managers of the targeted companies as they come up with or review HR. policies and procedures geared toward competency development and motivation. These policies cover areas like recruitment and selection, training and development, working conditions, reward and compensation, performance management and sexual harassment. These policies on competency development are critical to an organization because competent and motivated individuals can enhance organizations performance.

The study would contribute to management practice in the companies listed on the Nairobi Securities Exchange by coming up with procedures or reinforcing the existing ones to follow in implementing the set policies. Examples of procedures are recruitment procedures, grievance procedures, financial procedures, and dismissal and redundancy procedures. The findings of the study provide managers of the targeted companies with guidelines in making appropriate decisions concerning competency development to improve firm performance.

The results of the study would provide companies with a clear understanding of the need to develop management competency thus, the necessity to put structures in place to impart knowledge, skills and abilities needed by managers to perform their tasks satisfactorily. They would, through able leadership, create and sustain a culture of competence to enhance the performance of their companies. The study forms a basis for future research as academics identify knowledge and/or methodological gaps to fill.

### **1.5 Organization of the Study**

The thesis contains five chapters as follows. Chapter one gives an introduction that places the study into its proper perspective by elucidating the conceptual, theoretical, contextual and empirical issues of relevance. It presents the research problem, which contains the issues warranting an investigation and knowledge gaps too. It also contains the objectives of the study and the expected value addition.

Chapter two presents a brief overview of the three theories which underpin the study that is, Knowledge Space Theory, Resource Based View Theory and Ability-Motivation-Opportunity Theory. It also presents a review of the academic and empirical literature on the study variables. The chapter also contains a conceptual



framework that models the relationships among the variables of the study- independent variables, moderating variables and the dependent variable. Further, chapter contains research hypotheses, corresponding to the objectives of the study. The chapter concludes by presenting a summary of knowledge gaps.

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Chapter three presents the research methodology informing the study which include: research philosophy, research design, population, data collection, validity and reliability of the data collection instrument, operationalization of study variables, data analysis and summary of research objectives, hypotheses and analytical methods used. Chapter four contains results of tests for reliability, normality, multicollinearity and homoscedasticity. The chapter also contains descriptive statistics for each of the four study variables, findings and discussions on the four hypotheses, tested using simple linear regression analysis, stepwise regression analysis and multiple regression analysis.

Chapter five concludes the study by giving a summary of study findings, and implications, recommendations, limitations that the study encountered, contributions made by the study and areas that need to be researched further following the gaps that the study identified.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter gives an in-depth insight into the theoretical underpinnings of the study and empirical literature review with a view of creating a clear understanding of the relationship between management competence, firm-level institutions, human resource management bundles and company performance. The chapter also contains the conceptual model, the research hypotheses and summary of knowledge gaps.

#### **2.2 Theoretical Foundation of the Study**

The theories informing this study are Knowledge Space Theory, Resource-Based View, and Ability-Motivation-Opportunity Theory. These theories explain the relationships among the variables of the study namely, management competence, firm-level institutions, human resource management bundles and company performance.

##### **2.2.1 Knowledge Space Theory**

The theory of knowledge spaces originated with Doignon and Falmagne (1985). This theory models the response behavior for knowledge tests on a behavioral level, that is, on the basis of prerequisite relationships between the items in a test. A person's knowledge state is the subset of test items this person can solve. To enrich knowledge space theory, Korossy (1999) focused on competence-performance approach by modeling not only the observable behaviors but also the underlying latent skills or competencies.

The benefit of using the competence-performance approach is that competencies help to predict performance outcomes and provide an explanation for discrepancies in performance (Korossy, 1999). The Knowledge Space theory suggests that, in addition to the set of problems, one should look at the set of knowledge, skills and abilities needed to solve the problems. Similar to the set of problems, competencies are also structured in a competence space, which results from a surmise relation on the set of competencies, and this subset of competence states contains all those competence states in each of which the problem is solvable.

The basic idea of knowledge space theory is that an individual's knowledge in a particular domain is the set of problems this individual is able to solve. Thus, determining a set of problems and identifying a set of corresponding competencies can significantly help companies to improve their performance. Therefore, this theory addresses the effect of management competence on company performance.

### **2.2.2 Resource - Based View**

The origin of the Resource-Based View (RBV) Theory can be traced back to the work of Penrose (1959) perceiving the firm as an administrative organization and a collection of productive physical and human resources. The RBV of the firm focuses particularly on the firm's internal environment, its resources and capabilities, to explain the creation of profit and value by the organization (Barney, 1991; Grant, 1991; Makhija, 2003; Penrose, 1980). The resources and capabilities can be used to generate economic benefits to the firm (Amit & Schoemaker, 1993).

The Resource-Based View (RBV) analyzes and identifies an organization's strategic advantages based on examining its unique set of resources and capabilities as a firm (Pearce & Robinson, 2009). The RBV of the firm arose from a diversion since the early 1980's towards considering internal resources and competencies as the major source of competitive advantage (Barney, 1991). A company's capabilities or competencies and management's ability to marshal the resources and their deployment patterns to produce superior performance is a source of competitive advantage (Grant, 1991). The RBV focuses on firm's internal environment, organizational morale, technical knowledge and the firm's capabilities that are, the skills-the management's ability and ways of combining resources that a company uses to transform inputs into outputs (Pearce & Robinson, 2009). A firm's internal environment can refer to firm-level institutions whereas technical knowledge, skills and experience refer to management competence. Utilizing HRM bundles, leadership style, organizational policies, organizational structures and a culture of competence can lead to the achievement of employee skills, abilities, expertise and morale. The RBV Theory has given rise to the Knowledge Based View (KBV), which advances the critical role of internal resources and competencies by focusing on differentiated knowledge to create competitive advantage (Hoskisson, Madsen, & Walker, 1999). As evidenced by Grant (1991), a firm's knowledge about routines and processes that

define the unique way of doing things inside the organization and the knowledge of customer needs and suppliers' strengths are critical to superior performance. Knowledge resources are of particular importance to make sure that the organization sustains competitive advantages, as these resources are in-imitable and form the foundation for sustainable differentiation (Wiklund & Shepherd, 2003). The RBV of the firm literature justifies variations in performance between firms because of knowledge asymmetries (Hoopes, Madsen, & Walker, 2003). According to the Resource-Based View, management competence is a resource relevant for competitive advantage since it supports competitive advantage as it mainly fulfills the requirements of being valuable, rare, imperfectly imitable, and substitutable (Barney, 1991).

### **2.2.3 Ability-Motivation-Opportunity Theory**

The Ability-Motivation-Opportunity (AMO) theory originated from Bailey (1993) and later developed by Appelbaum, Berg, and Kalleberg (2000). This theory is developed from basic concepts of Psychology: an ability that is, skills and capabilities requisite to the performance of behavior; motivation - the impetus toward a behavior and opportunity - contextual and situational factors relevant to the fulfilment of the behavior (Hughes, 2007).

The AMO theory explains the relationship between HRM bundles and job performance. This theory implies that HR. practices and policies can be used to influence the individual's ability, motivation and opportunity to perform, which leads to an improvement of an individuals' job performance outcome. It also focuses on firm-level institutions which constitute the contextual and situational factors which facilitate employee performance. The AMO Theory focuses on making employees and managers able to perform by ensuring that they acquire necessary skills, abilities, and knowledge. Organizations can apply the AMO Theory by making use of skill-motivation - empowerment HR. bundles to influence company performance. The three theories underpin the study by underscoring the important role played by management competence (knowledge, skills and abilities), firm-level institutions and HRM bundles in enhancing company performance.

### **2.3 Management Competence and Company Performance**

Management competence influences managers' performance, which in turn contributes to company performance. Competencies are factors that contribute to superior individual and organizational performance (Armstrong, 2009). A study by Monari (2013) which focused on 'employee attributes, organizational factors, time management tendencies and employee performance in Chartered Universities in Kenya', established a relationship among employee attributes of satisfaction, empowerment, motivation, commitment, competence and employee performance as exhibited by effectiveness and efficiency.

Social competence influences performance in academic institutions. In the Nooraie and Arsi (2012) study on emotional intelligence and faculties' academic performance, it was found that social competence and individual competence had a positive effect on academic performance of faculty members. Financial performance is a function of management competence as per the study findings by Almajali et al. (2012). The cited studies did not show which competencies managers require in enhancing the performance of their organizations. Using cognitive, functional, and social dimensions of employee competence, Ismail and Abidin (2010) investigated the 'impact of workers competence on their performance in the Malaysian Private Sector', and the outcome of the study showed that employees' competence had a positive influence on their performance. Further research by Kim, Yune, Choi, and Gong (2008) found a positive correlation between social competence and organizational performance.

Interpersonal skills are the best single predictor of job performance ratings (Wayne, Liden, Graf, & Ferris, 1997). Similarly, Ferris, Witt, and Hochwarter (2001) reported social skills as the single strongest predictor of performance rating dimensions of task performance, job dedication, and interpersonal facilitation, as well as for an overall rating of return. Results of an investigation conducted by Payne (2005) indicated that high performing employees were more skilled at communicating empathy, adapting their communication and managing interactions with others than lower performing employees. Similar findings of another research showed that possession of social competence led to a good prediction of job performance (Riggo & Tylor, 2000).

Further results of research indicated that among all individual factors, social skill had the strongest contribution in explaining the extension workers performance (Thach, Ismail, Jegak, & Idris, 2008). These empirical studies, conducted in the education, health and ICT sub- sectors, took place in Iran, Taiwan, and Malaysia

Sharing of knowledge among employees influences organizational performance. Hsu's (2008) study on the relationship between the organizations human capitals and performance concluded that organizational performance could be improved through sharing of knowledge. In Carter and Gray's (2007) study on the relationship between internal market orientations, relational competence and employee performance, it emerged that relational competence facilitated relational behavior, intra-firm performance and inter-organizational performance. In this way, enhancement of both employee and organizational performance through improving organizations human resource management and internal market orientation becomes possible. Whereas Carter and Gray's study was limited to social competence only, this study addressed the effect of social, cognitive and functional competence on company performance in different industries in Kenya.

Functional competence affects performance in organizations. Boyd (2003) established that successful extension workers should have strong technical knowledge and skill, meaning that employees are successful due to their competence in their work. In a study done by Tiraieyari et al. (2009) to establish the relationship between technical competence and job performance, the results showed that job performance of extension workers was positively related to the technical aspects of their job ( $R\text{-Squared} = 0.356$ ,  $p = 0.001$ ). Similarly, the result of regression analysis in the study of analysis of the job performance of the agricultural extension experts of Iran conducted by Rezaie, Alambeigi, and Rezvanfar (2008) revealed that competence contributed 48.6% of the variance in job performance of extension workers. The cited studies showed a positive and significant effect of competence on performance.

Evidence from empirical studies shows that having competence and not utilizing it does not contribute to performance. A study done in Ghana by Sanda, Sackey, and Fältholm (2011) established that SME's executives possessed the requisite competencies and discretionary behaviors to enhance the performances of their firms

but they were unable to make such competencies reflect in the performance of their businesses. Perhaps, this could have been due to their inability to acquire efficiency and effectiveness in the management of their places of work. According to Sanda, et al. (2011), for the senior managers to portray efficiency, they should have the capability to use their managerial skills to carry out research to achieve organizational goals. In addition, for them to show how effective they were, they should have the capability to apply their competencies in research efforts to complement their other managerial competencies toward achieving the organization's set performance targets. The finding was in agreement with Aionon's (2003) assertion that there are individuals who have high levels of competence but exhibit low performance because of not making use of their competence. Therefore, for competence to influence firm performance, managers should portray efficiency and effectiveness. This also calls for organizations to create an enabling environment for executives to apply their competencies in their work.

## **2.4 Management Competence, Firm-level Institutions and Company**

### **Performance**

Firm-level institutions in particular organizational culture, leadership style, organizational policies, organizational procedures and organizational structures have potential to influence management competence, which in turn affects firm performance. According to Barney (1991), firm-level institutions play a crucial role in sustaining firm performance. Companies should therefore, make proper use of their firm-level institutions to enhance their performance.

The culture of an organization has the potential to enhance organizational performance. According to Saffold (1998), culture can contribute to superior performance in an organization. Organizational culture shapes the organizational processes and also provides an aggressive sustainable advantage (Barney, 1991). Barney (1991) introduced three conditions; that culture must be viable, rare and have attributes, and imperfectly imitable. This can lead to short-term or long-term superior organizational performance leading to competitive advantage for the firm. According to a study conducted by Gordon and DiTomaso (1992), there is a positive relationship between culture and organizational performance. Between 1990 and 2007, more than 60 research studies covering 7619 companies and small business units in 26 countries

established that market culture and business performance were strongly related as evidenced by more than 35 performance measures, including return on investment, revenue growth, customer retention, market share, new product sales and employee performance (Abu-Jarad et al., 2010). Culture was found to be significantly and positively related to profitability, sales volume and market share (Ezirim, Nwibere , & Emecheta, 2010). Profitability, sales volume, and market share are measures of organizational performance. The extant study addressed the link between culture and performance by using organizational culture, together with other firm-level institutions as a moderating variable and by measuring organizational performance using additional perspectives such as learning and growth, internal business processes and environment.

Organizational culture has a relationship with management competence and company performance. Zwell (2000) argued that an entire organization must create a culture of competence for succeeding generations of workers, who contribute to a company's future. He further said that creating a culture of competence offers a blueprint for selective recruitment and development of a superior workforce to enhance organizational performance. Alanaiti et al. (2011) mentioned internal organizational environment as a contributor to individual employee competence, which in turn influences organizational performance. The internal organizational environment comprises resources and capabilities, which a firm can use to enhance their performance and create competitive advantage.

A study on the moderating effect of organizational culture on the relationship between knowledge management and organizational effectiveness in the service sector established that an enabling organizational culture positively moderated the relationship (Butt, Danish & Munir, 2012) and that knowledge management was closely correlated with cognitive (knowledge) dimension of management competence whereas effectiveness is a measure of company performance. The findings of this study impress upon management to promote knowledge management practices to improve company effectiveness. A result-oriented culture has a positive effect on the relationship between successful workplace learning and performance (Daryoush, Silong, Omar, & Othman, 2013).



The current study assessed organizational culture by using human resource managers, an approach similar to the one employed by Gordon and DiTomaso (1992) whose respondents were only managers or executives. Since there is no known study on the relationship between organizational culture, management competence and company performance in publicly quoted companies in Kenya, the current study is timely to address the gap.

There is a link between transformational leadership and firm performance. MacKenzie, Podsakoff and Rich (2001) found a relationship between transformational leadership and organizational performance. A study by Obiwuru, Okwu, Akpa, and Nwankwere (2011) on the effects of leadership style on organizational performance, using selected small scale enterprises in Ikosi-Ketu Council Development Area of Lagos State, found that transformational leadership style positively but insignificantly affects performance. Perhaps, this was due to the study context - small-scale enterprises. By studying the effects of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration on the performance of companies in the main industries in Kenya, perhaps the results would be positive and significant.

There is empirical support that transformational leadership influences management competence and company performance. By exhibiting individualized consideration, a transformational leader first diagnoses the individual needs and abilities of followers then in addressing them, he/she may play the roles of mentor, counselor or coach (Bryman, 1992). Transformational leaders foster a climate of trust, nurture employee confidence and encourage their development (Jin, 2010). A manager who adopts this leadership style leads to the development of employees by giving them tasks that develop their skills and strengthen their confidence to perform.

There exists a link between transactional leadership, management competence, and company performance. Transactional leadership behaviors facilitate improvement and extension of current knowledge, associated with exploitative innovation (Jansen, Vera, & Crossan, 2009). The research results meant that a transactional leader plays the role of enhancing manager's knowledge to develop their cognitive competence to enhance organizational performance.

There is a need to find out whether transactional leadership also influences management functional and social competencies and company performance. Leadership style, in particular, charismatic and transactional leadership were found to have a moderating effect on the relationship between hierarchical conflicts and employee satisfaction (Buisman, 2009). The current study determined the moderating effect of firm-level institutions inclusive of leadership style, on the relationship between management competence and company performance.

Organizational policies have some influence on management competence and company performance. Kim and Lee (2012) found that human resource management policies and practices enhanced strategic capabilities and organizational performance in management consultant firms in South Korea. HRM policies are also known to have a positive effect on organizational performance through employee attitudes such as satisfaction, commitment and motivation and employee behaviors which include absences, turnover and disputes (Katou, 2012).

Organizational structure affects organizational performance. North (1990) suggests that organizational structures are institutionalized over time, and have an effect on performance. A study carried out on the Nairobi Securities Exchange in Kenya established that structures had no statistically significant individual effect on profit before tax, new product introduction, and market share and product/service quality (Machuki et al., 2012). As established by Quangyen and Yezhuang (2013), organization structure reduces employee ambiguity and assists in offering explanations and prediction of behavior.

Csazer (2008) subscribed to the view that organization structure shapes performance in an organization. Walton (1986) asserted that organizational structure was related to effectiveness. A study conducted on the moderating effect of organizational structure on the relationship between knowledge management capability and job performance established a positive and significant moderating effect of organizational structure on the relationship (Lai, 2013). The current study examined the moderating effect of structure, among other firm-level institutions.

Studies linking organizational procedures to organizational performance have not shown encouraging results. According to Machuki et al. (2012), organizational procedures have a statistically significant effect on organizational performance. In the same study, organizational procedures was positively related to market share but negatively related to operational efficiency, product/service quality, and profit before tax. Organizational structures had a positive relationship with operational efficiency, new product introduction, and sales volume and negatively related to product/service quality, ROI, market share and earnings per share. The current study determined the moderating effect of firm-level institutions (organizational structure included) on the relationship between management competence and performance among companies listed on the Nairobi Securities Exchange, using five perspectives of the Balanced Scorecard as performance measures.

## **2.5 Management Competence, Human Resource Management Bundles and Company Performance**

Empirical evidence indicates that HRM bundles have effects on organizational performance, larger than the individual practices, which constitute the bundle. The whole HRM system has quality impact in enhancing the overall organizational performance as compared to the sum of its practices individually. Therefore, overall, all practices in the HRM system support and strengthen each other to increase the overall organizational performance (Chadwick, 2010). By use of universalistic approaches in which several HR. practices were combined, Guthrie (2001) measured companies' use of high involvement work practices and found that making use of them can enhance firm performance. This confirmed that when HR. practices are combined to form bundles, their effects on organizational performance are higher than when the practices are used individually.

Researchers have attempted to investigate the relationship between human resource management bundles and firm performance. Guest, Michie, Conway, and Sheehan (2003) in their study of HRM in UK companies, identified 48 single HRM practices which were grouped into nine main areas of HRM including training and development and appraisal. In creating a measure of the overall human resource system, a measure was derived by combining mean scores across the nine practices. Huselid's (1995) approach also involved the combination of HR. practices, which he found to be significantly related to organizational productivity and financial performance.

In addition to the effects of HRM bundles on financial performance, this study hoped to assess the effect of the HRM bundles on company performance using other four perspectives: customer, internal business processes, learning and growth and the environment. When HRM practices are combined in different forms, they affect organizational performance in a greater way than when practices are explored individually (Ichniowski, Shaw, & Prennushi, 1997). Delaney and Huselid (1996) tested the complementarities among HRM practices by analyzing the interaction effects of all possible combinations of HRM practices on perceived firm performance. They failed, however, to find any benefits derived from a specific combination of practices. The current studies hoped to get positive results by examining the moderating effects of selected HRM bundles on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange.

There are indications that HRM bundles moderate the relationship between management competence and company performance. In a seminal paper, Alanaiti et al. (2011) discussed factors that affect individual competence such as training and education, the organizational environment and personal characteristics. According to this view, training - a human resource practice in the skill- enhancing HR bundle, may enhance individual competence, which in turn affects company performance. According to Singh (2003), Indian organizations normally direct their HRM efforts towards the development of competencies, culture, and effectiveness among employees individually or in groups. HRM efforts refer to human resource management practices, which can be combined to form bundles and assist in competency development and eventually contribute to company performance.

According to Risher (2000), employees are rewarded with salary increases when they add new knowledge or skills or when they demonstrate higher-level competence at existing capabilities. Therefore, compensation, an HR. practice in the motivation-enhancing HR. bundle has the potential to moderate the relationship between management competence and company performance. The current study investigated the effects of specific combinations of HRM practices on performance of companies in different industries as listed on the Nairobi Securities Exchange, Kenya.

## 2.6 Summary of Literature and Knowledge Gaps

Table 2:1 is a summary of previous studies on the relationship between competence and company performance. The summary gives the focus of these studies, their major findings, research gaps and the focus of the current study.

**Table 2.1 Summary of Knowledge Gaps**

Researcher(s)	Focus of Study	Research Methodology	Research Findings	Research Gaps	Focus of Current Study
Monari, F (2013)	Employee attributes, organizational factors, time management tendencies and employee performance in Chartered Universities in Kenya.	A cross-sectional survey of all staff in all chartered universities in Kenya 1365 employees were issued with questionnaires	There is a positive relationship among employee attributes of empowerment, commitment and competence on employee performance.	The study did not detail the dimensions of employee competence and how they contribute to performance	The study investigated the effect of various employee competence dimensions on performance
Nooraie, M & Arsi, I.S.(2012)	Emotional intelligence and Faculties' academic performance.	Field survey of Universities in North West of Iran	Social competence and individual competence have a positive effect on academic performance of faculty members.	The study did not establish the effects of functional and knowledge competencies on performance	This study, also investigated the effects of functional and knowledge competencies on performance
Machuki <i>et al.</i> (2012)	Firm-Level institutions and performance of publicly quoted companies in Kenya.	Questionnaires were used to carry out a survey of 23 companies listed on NSE	Overall results for the effect of firm-level institutions on corporate performance were statistically not significant.	The study did not focus on the moderating effect of firm-level institutions and used four perspectives of the BSC	The extant study concentrated on the moderating effect of firm-level institutions on management competence, using five perspectives of the BSC
Almajali, A.Y., Alamro, S.S., & Al-Soub, Y.Z. (2012)	Factors affecting the financial performance of Jordanian Insurance companies listed on Amman Stock Exchange.	Secondary data was used by 25 insurance companies	Leverage, liquidity, size and management competence index showed a positive statistical effect on financial performance.	The study related management competence to financial performance only.	The extant study addressed the effects of employee competence on four other perspectives of the BSC.

**Table 2.1 Summary of Knowledge Gaps Continued**

Researcher(s)	Focus of Study	Research Methodology	Research Findings	Research Gaps	Focus of Current Study
Danish, R.Q, Munir, Y & Butt,S.S. (2012)	Moderating role of organizational culture between knowledge Management and organizational effectiveness in the service sector.	Questionnaires were administered to 325 employees and managers of 26 leading service organizations in Gujranwala, Pakistan.	Knowledge management practices have a strong positive association with organizational effectiveness, while conducive organization culture positively moderates this relationship.	The study investigated the association of cognitive dimension of management competence with organizational performance(eff ectiveness) using organizational culture as a moderating variable	The current study investigated the moderating effect of five firm-level institutions, using managers only as respondents. The study also used both primary and secondary data.
Obiwuru <i>et al.</i> (2011)	Effects of leadership style on organizational performance.	Questionnaires were administered to 15 respondents in three small-scale enterprises.	Transactional leadership style is more appropriate in inducing performance in small scale enterprises than transformational leadership style.	The study was conducted in small scale enterprises with only 15 respondents.	This study targeted 64 medium and large firms in different industries.
Alainati, S., AlShawi, S. A., & Al-Karaghoul, W. (2011)	The effect of knowledge management and organizational learning on individual competencies.	Qualitative interviews were administered to 41 individuals from public and private organizations in Kuwait.	Individual competencies have a reciprocal relationship with knowledge management; the determining factors of individual competencies training, education, personal characteristics and culture affect knowledge management success and are themselves affected by KM strategies.	The study showed the effect knowledge management on competence and the effect of training and culture in individual competency development.	The current study determined the moderating effect of HR bundles and firm-level institutions on the relationship between management competence and performance of companies listed on the NSE, using HR managers as respondents.
Ismail, R. & Abidin, S.Z. (2010)	Impact of workers competence on their performance in the Malaysian private service sector.	Questionnaires were administered to 1136 executives, managers and employees of health, education and ICT sub-sectors in Malaysia	Workers' competence has significant influence towards work performance.	The study was carried out in the education, health and ICT sub- sectors in Iran, Taiwan, and Malaysia	This study established the effect of functional, social and cognitive competence on companies in different industries in Kenya.

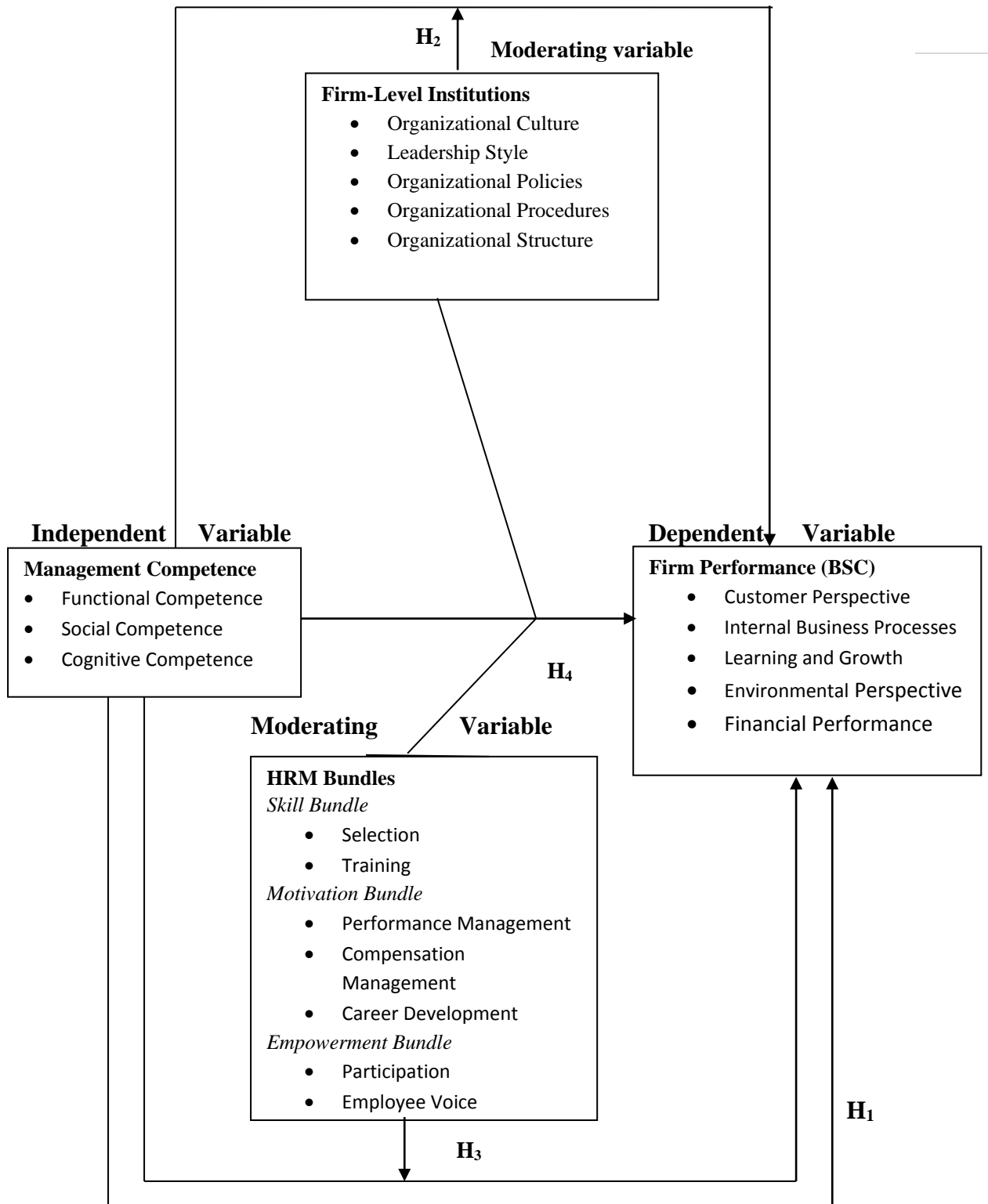
Researcher(s)	Focus of Study	Research Methodology	Research Findings	Research Gaps	Focus of Current Study
I-Chieh Hsu (2008)	Knowledge sharing practices as a facilitating factor for improving organizational performance through human capital.	A survey of 256 companies in Taiwan	Organizational performance could be enhanced through sharing of knowledge.	The study was restricted itself to cognitive competence only and was conducted outside Kenya.	This study establishes the effect of functional, cognitive and social competencies in enhancing company performance in Kenya.
Kim <i>et al.</i> (2008)	Employees' Perceptions of Interpersonal Competence: The Case of South Korea.	Concept mapping	Hierarchical clustering on the multidimensional scaling coordinates produced six clusters: caring & considerate, sociable & out-going, kind & gentle, reliable & leadership skills, and confident & responsible.	The study was limited to social competence only	The current study addressed other competence dimensions
Delery & Doty (1996)	Modes of theorizing in strategic human resource management: Tests of universalistic, contingency and configurational performance predictions.	Questionnaires were administered to loan officers in 1, 050 banks	There is a stronger relationship between HR practices and measures of financial performance.	The study was limited to the banking sector only and restricted to a single job-loan officer.	The current study focused on companies in different industries using HRM managers as respondents.
Huselid, M.A. (1995)	The impact of human resource management practices on productivity and corporate financial performance.	Questionnaires were distributed to 968 firms in the US.	HRM practices have an economically and statistically significant impact on productivity and corporate financial performance.	The study did not consider other on-financial measures of firm performance such as learning and growth, internal business processes and environment.	The current research used a multidimensional approach to measuring company performance.

## **2.7 Conceptual Model**

The conceptual model in Figure 2.1 depicts the relationships among the variables of the study. Arrow H<sub>1</sub> shows a direct link between management competence and company performance. Arrow H<sub>2</sub> and H<sub>3</sub> denote the relationship between management competence and company performance moderated by firm-level institutions and human resource management bundles. Arrow H<sub>4</sub> shows the combined effect of management competence, firm-level institutions and HRM bundles on company performance. Below is the conceptual model.



**Figure 2.1: Conceptual Model**



Source: Author (2016)

## **2.8 Research Hypotheses**

The study sought to test the following hypotheses given the specific objectives;

**H<sub>1</sub>:** Management competence has a significant effect on performance of companies listed on the Nairobi Securities Exchange.

**H<sub>2</sub>:** Firm- level institutions moderate the relationship between management competence and performance of companies listed in the Nairobi Securities Exchange.

**H<sub>3</sub>:** HRM bundles moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange.

**H<sub>4</sub>:** The combined effect of management competence, firm- level institutions and HRM bundles on performance of companies listed on the Nairobi Securities Exchange is different from the individual effect of management competence.

## **2.9 Chapter Summary**

Chapter two gave a description of the theoretical underpinnings of the study. It also reviewed the literature on the moderating effect of firm – level institutions and human resource management bundles on the relationship between management competence and company performance. The chapter presented the conceptual model and four hypotheses derived from it in line with the study objectives.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter contains the research methodology adopted for the survey. In particular, it addresses the research philosophy, the research design, population of the study, data collection, reliability and validity of data collection instrument, the operationalization of study variables, data analysis and a summary of research objectives, study hypotheses and analytical methods used in the study.

#### **3.2 Research Philosophy**

Research philosophy is the foundation of knowledge. The said knowledge has significant assumptions about the way in which researchers view the world (Saunders, Lewis, & Thornhill, 2009). Three main research philosophies underpin research in social sciences. These are positivism, phenomenology and pragmatism/mixed methods approach (Johnson, Onwuegbuzie, & Turner, 2007).

A phenomenology research paradigm is a philosophical approach to studying human experiences based on the idea that human experience itself is inherently subjective and is contingent on the context in which people live (Zikmund, 2003). Phenomenology builds on the assumption that knowledge comes from an individual's experience and is subjective. It focuses on immediate experience, personal knowledge and individual interpretations (Saunders et al., 2008). Phenomenology orientation relates to qualitative research that emphasizes words rather than quantification in the collection and analysis of data (Bryman & Bell, 2007).

Positivism is a philosophy of science that seeks facts of social phenomena with little regard for the subjective state of individuals. Positivism is based upon values of reason, truth and validity and focuses purely on facts, gathered through direct observation and experience and measured empirically using quantitative methods (surveys and experiments) and statistical analysis (Blaikie, 1993; Saunders et al., 2007). Positivism takes the quantitative approach. It is based on real facts, objectivity, neutrality, measurement, and validity of results and maintains that knowledge should be based on facts and not abstractions.

Hence, knowledge is predicated on observations and experiments based on existing theory (Cooper & Schindler, 2003). As pointed by Hussey and Hussey (1997), quantitative research employs an inductive approach in which theory is developed from the observation of empirical reality. Thus, general inferences are drawn from particular instances. The current study was guided by the positivist paradigm, which is characterized by operationalization of variables and testing of hypotheses developed from existing theories. The rationale for the chosen research paradigm is based on the fact that it is used for theory testing. Being guided by this philosophy therefore, the theories underpinning the current study were tested.

### **3.3 Research Design**

Research design constitutes the blueprint for data collection, measurement, and analysis. Research design aids the researcher in the allocation of limited resources by posing critical choices in methodology (Phillips, 1971). According to Kerlinger (1986), research design consists of the plan and structure of investigation so conceived to obtain answers to research questions. He further says that the survey design expresses both the structure of the research problem - the framework, organization or configuration of the relationships among variables of the study and the plan of inquiry used to obtain empirical evidence on those relationships.

Various perspectives classify research designs. The common perspectives on which research designs are categorized are; the purpose of the study, method of data collection and the time horizon of the survey. The purpose of the survey may be descriptive or causal. The method of data collection may be cross-sectional or longitudinal (Sekaran, 2003; Zikmund, 2003). The objectives of the study, the available data sources, and the urgency of the decision and the cost of obtaining the data determine the research design chosen (Zikmund, 2003). Descriptive studies are those studies concerned with description of the characteristics of a particular individual, or of a group (Kothari, 2010). A survey is an attempt to collect data from members of a population to determine the current status of that population on one or more variables (Gary, 1983; as cited in Mugenda & Mugenda, 2003). According to Zikmund (2003), surveys provide quick and accurate means of assessing information if properly carried out.

A descriptive survey was appropriate for this study because it afforded the researcher the opportunity to capture a population's characteristics and test hypotheses quantitatively. A descriptive survey design entails collecting data across many research units at one point in time predominantly by use of questionnaires (Bryman & Bell, 2007). Further, it was preferred because of the need to collect data from a cross-section of firms listed on the Nairobi Securities Exchange at one point in time and the results generalized to represent the entire population of the study. In consequence, the researcher had no control of variables in the sense of being able to manipulate them. The researcher only reported what had happened as descriptive survey is bias-free. Sifa (2009) used similar research design on an empirical study similar to this one.

### **3.4 Population of the Study**

The target population for the study was 64 companies listed on the Nairobi Securities Exchange as at 31 December 2014 (NSE Handbook, 2014). The unit of analysis was each of the 64 quoted companies. The respondents were 64 human resource managers or those designated to handle the human resource function from each of the companies. The rationale for the choice of these companies was that they represent the key sectors of the Kenyan economy, which include the Agricultural, Commercial, and Services, Finance and Investment, and Industrial and Allied sectors.

There is the availability of objective and reliable data on firms' financial performance over a period as they appear in the published audited accounts because of their conformity to the stock market and other legal requirements. Demands for high performance placed on these firms by the shareholders and the Nairobi Securities Exchange throws a challenge to these companies to perform. These companies have the expectation from their business stakeholders to maintain high standards of accounting, resource management and transparency in the administration of the business as they operate in a dynamic business environment that affects their performance while meeting and exceeding the expectations of their stakeholders.

### **3.5 Data Collection**

Data for research is obtained from primary or secondary sources. The extant study made use of both primary and secondary data. Primary data collection employed a structured questionnaire. The advantage of using questionnaires is that they obtain data more efficiently in terms of time, energy and cost; hence it is commonly used as an instrument for collecting data from the respondents (Sekaran, 2003).

The designed questionnaire for current study aimed at measuring the perceptions of the interviewees of the existence and magnitude of the research variables: management competence, firm-level institutions, human resource management bundles and firm performance. The study used closed-ended questions on a Likert-type scale ranging from (1) not at all to (5) very large extent (Likert, 1932). Closed-ended questions were preferred because they assisted the respondents in making quick decisions to choose among the set of available alternatives and also made it easier to code the information for subsequent analysis (Sekaran, 2003).

Some of the questionnaire items used to develop the questionnaire were adapted from previous studies: management competence (Joanneum, Rene, Gesellschaft, Frech , & Beinhauer 2011); organizational culture (HFI, 2011), transformational leadership style (Bass, 1998); transactional leadership style (Schermerhorn, Hunt , & Osborn, 1991; HRM bundles (Delery & Doty, 1996) and firm performance (Giannopoulos, Holt, Khansalar, & Cleanhous, 2013; Magutu,2013). The administration of the questionnaires targeted the human resource managers or similar person from each of the 64 listed companies because it was believed that they had the needed information for the study. A trained research assistant administered some of the questionnaires. To ensure that ethical considerations applied in the data collection exercise, the research assistant was educated on the need, to be honest. To make sure that the research assistant actually administered the questionnaire, the respondents were requested to give their e-mail addresses and /or cell phone numbers and stamp the questionnaires.

Secondary data on return on assets for three years (2012-2014) was obtained from published audited accounts. The financial perspective in the BSC was operationalized by profitability whose indicator was return on assets (ROA). Return on assets is a measure of the rate of return on total assets after interest expense and taxes (Eugene & Joel, 2005). Return on Assets, as a financial ratio is a tool used to measure the degree to which the assets generate profits. The greater the return on assets, the better is the company's performance. This is because of the great rate of return on investment (Bambang, 2001). Investors would like the company with high return on assets (ROA). This is because a company with a high ROA is capable of producing high levels of corporate profits than the one with low ROA (Ang, 2001). According to Ang, ROA's over 5% are generally considered safe.

### **3.6 Validity of Data Collection Instruments**

A real data collection instrument should be valid. In validity, one looks at the operationalization and sees whether on its face it seems like a good translation of the construct (Trochim, 2006). As defined by Kothari (2010), validity is the extent to which differences found with a measuring instrument reflects true differences among those being tested. Content validity addresses how well the items developed to operationalize a construct provide an adequate and representative sample of all the elements that might measure the construct of interest whereas criterion-related validity relates to one's ability to predict some outcome or estimate the existence of some current condition (Kothari, 2004).

Construct validity refers to the degree to which an instrument measures the trait or theoretical construct that it is intended to measure (Kimberlin & Winterstein, 2008). Professionals in human resource management censured content validity because the focus of the study was in the area of HRM. Face validity confirmed the coverage of all the areas of investigation by checking the questionnaire and by adopting already tested instruments used by similar studies. This was used to complement the validity tests done by previous studies from which the research instruments were adapted. Face validity is defined as the subjective judgment of an individual on the operationalization of a construct (Kimberlin & Winterstein, 2008) and was ensured through researcher's own judgment. Construct validity was ensured through the operationalization of variables.

### **3.7 Reliability of Data Collection Instruments**

A reliability test was performed to test the reliability of the data collection instrument. Reliability indicates the accuracy or precision of the measuring instrument (Norland, 1990). A pre- test is the final step toward enhancing survey results and it entails the evaluation of questions prior the study (Cooper & Schindler, 2003). It seeks to ensure that the questionnaire consistently measures whatever it is intended to measure. The pre-testing of the questionnaire was done on seven human resource managers from seven different companies, which are similar to those listed on the Nairobi Securities Exchange. It was then adjusted by the findings of the test and the final draft prepared for the purpose of collecting data from the 64 targeted companies.

This study used Cronbach's Alpha (Cronbach, 1951), the most common measure of internal consistency, which indicates the extent to which a set of items can be treated as measuring a single latent variable (Cronbach & Shavelson, 2004). Cronbach Alpha measured the reliability of the questionnaire prior to data analysis. Cronbach Alpha reliability coefficients normally range between zero and one. High Alpha coefficients values are more reliable. The reliability coefficient of 0.70 or greater is considered acceptable reliability (Nunnally & Bernstein, 1994). According to Mugenda (2008), more than 0.80 indicates a high degree of reliability.

### **3.8 Tests of Regression Assumptions**

To ensure that that the assumptions of regression analysis were fulfilled, several diagnostic tests were carried out. Tests that were performed include test for normality, linearity test, test for homogeneity of variance, multicollinearity check and correlation analysis. To test for normality, the Shapiro-Wilk test, and normal probability P-P plots were used. The results of the Shapiro-Wilk test determined whether the distribution of the sample was either normal or not.

As stipulated by Hair, Black, Babin, Anderson, and Tatham (2011), if the test is not significant ( $p > 0.05$ ), it means that the distribution of the sample is probably normal. The normal distribution forms a straight diagonal line and the plotted data values are compared with the diagonal. If the distribution is normal, the line representing the



actual data distribution closely follows the diagonal. Test for Linearity used a scatterplot of standardized residuals (ZRESID) against standardized predicted values (ZPRED). The graph of these values should resemble a random array of dots evenly dispersed around zero. If there is any curve on this chart, then the chances are that the data have broken the assumption of linearity. If the graph funnels out, then the chances are that there is homoscedasticity. Tolerance and variance inflation factor (VIF) checked for multicollinearity. A tolerance value of below 0.1 or a VIF of greater than 10 indicates a serious problem of multicollinearity (Field, 2009).

### **3.9 Operationalization of Study Variables**

The operationalization of the independent, moderating and dependent variables appear in Table 3: 1.

**Table 3.1: Operationalization of Variables**

Variable		Indicator	Source	Measurement	Questionnaire Item
<b>Management Competence</b>	<i>Functional Competence</i>	Ability to make decisions, problem-solving ability, work planning ability, ability to organize and to control work activities.	Ismail,R & Abidin ,S.Z.(2009)	5- point Likert type	5
	<i>Social competence</i>	Understanding people’s expectations and reactions, managing conflicts, leadership skills, teamwork, networking and building relationships and social judgment skills.	Vitala ,R.(2005) ; Mumford M.D.(2000)	5- point Likert type	6
	<i>Cognitive Competence</i>	Flexibility, analytical thinking, systematic thinking, visionary thinking and creative thinking to solve work- related problems.	Francoise & Winterson (2005)	5- point Likert type	7
<b>Firm-level institutions</b>	<i>Organizational Culture</i>	Individual performance, leadership, customer focus, organization structure, communication, conflict management, human resource management, participation, innovation, decision making, professionalism, organizational goal integration and fun	HFI (2011)	5- point Likert-type	8
	<i>Leadership style</i>	Transformational Leadership Style Idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.	Bass, B.M. (1998)	5- point Likert-type	9
		Transactional Leadership Style - Contingent reward and management-by-exception.	Schermerhorn, J.R., Jr, Hunt ,J.G. & Osborn,R.N. (1991),	5- point Likert type	10
	<i>Organizational Policies</i>	Recruitment and selection policies, training, development and educational policy, policy on work conditions, appraisal, compensation and rewards policies, confidentiality policy, ethics policy, equal employment opportunity policy, safety, sexual harassment.	Demo, G.,Neiva,E.R., Nunel,I., & Rozzett ,K.(2012).	5- point Likert type	11
	<i>Organizational Procedures</i>	Recruitment procedures, grievance procedures, financial procedures, disciplinary procedures and redundancy procedures.			12
	<i>Organizational Structure</i>	Centralization and decentralization of decisions and control, Channels of communication, Functions and tasks, rules and procedures, hierarchical structure, the chain of command.	Linde,A.& Wallgren,E.(2012).	5- point Likert-type	13
<b>HRM Bundles</b>	<i>Skill HR Bundle</i>	Selection and training.	Subramony (2009), Delery & Doty(1996)	5- point Likert-type	14
	<i>Motivation HR Bundle</i>	Performance management, compensation management and career development.			15
	<i>Empowerment HR Bundle</i>	Self-managed or autonomous work groups, employee participation in decision making, systems to encourage feedback from employees.			16
<b>Company Performance</b>	<i>Customer perspective</i>	New customers attracted customer satisfaction, resolution of customer complaints, customer retention and the share of the market.	Kaplan, R. S., & Norton, D. P. (1992); Anwar, M.R., Djakfar, L.D., & Abdulhafidha, A.K.(2012). Giannopoulos, G., Holt, A., Khansalar, E.,& Cleanthous, S. (2013). Magutu (2013)	Direct Measure 5- point Likert-type	17
	<i>Internal business processes</i>	Internal business processes -quality, after sales service, operational efficiency, safety measures and the introduction of new products.			18
	<i>Learning and growth</i>	Development of new products, entering new markets,research, and development, enhancement of employee knowledge, skills and abilities, employee satisfaction and retention.			19
	<i>Environmental perspective</i>	Pollution prevention, product stewardship and sustainable development.			20
	<i>Financial Perspective</i>	Profitability-ROA			21

### **3.10 Data Analysis**

With the help of SPSS, data was analyzed using descriptive statistics and inferential (regression analysis) statistics. Forms of regression analysis used were simple linear regression analysis, stepwise regression and multiple regression analysis. Several tests were done as a precursor to regression analysis. These tests were; a test of linearity and test of normality, Levine's test for homogeneity of variance, multicollinearity, and correlation analysis. After running regressions, hypotheses were tested at a significance level of 0.05.

The coefficient of determination ( $R^2$ ) and p-values facilitated the interpretation of the regression output. Tables presented results for regression analysis. From the tables, the researcher deduced findings on the predictive power of the model by evaluating  $R^2$ . From the ANOVA table, the study ascertained the significance of the model overall. From the coefficient table, the regression beta coefficients provided results on the nature of the relationship between each predictor factor and the outcome (dependent factor); the beta values provided information on the significance of each of the predictors in explaining variations in the dependent variable. A positive beta sign meant a positive relationship between the independent variable and the dependent variable whereas a negative beta sign meant a negative correlation between the predictor factor and the outcome.

To perform regression analysis, the responses from the Likert-scale for each predictor variable were summed up to form a composite index. For the dependent variable, the responses from the financial measures (scale) were standardized and summed up together with the non-financial scale to form a composite index for the aggregate company performance. Composite indices for management competence, firm-level institutions, human resource management bundles and company performance were applied in performing regression analysis.

The testing of hypothesis **H<sub>1</sub>** that predicted that management competence has a significant effect on the performance of companies listed on the Nairobi Securities Exchange was performed using simple regression analysis where company performance was regressed on management competence. The following simple linear regression model was used:

$$Y = \alpha_0 + \beta_1 X + \epsilon_1 \dots\dots\dots (3.1)$$

Where,

**Y** is Company Performance,

**α** is alpha

**β** is the beta coefficient

**X<sub>1</sub>** is Management competence

**ε** is error term.

The testing of hypothesis **H<sub>2</sub>**, which stated that firm-level institutions moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange, was performed using a stepwise regression analysis technique. Composite scores for organizational culture, leadership style, organizational policies, organizational procedures, organizational structure and company performance, were employed in the analysis. Three regression models (3.1, 3.2 & 3.3) as shown below were used to test the hypothesis:

$$Y = \alpha_0 + \beta_1 X + \epsilon \dots\dots\dots 3.2$$

$$Y = \alpha_0 + \beta_1 X + \beta_2 Z + \epsilon \dots\dots\dots 3.3$$

$$Y = \alpha_0 + \beta_1 X + \beta_2 Z + \beta_3 XZ + \epsilon \dots\dots\dots 3.4$$

Where,

**Y** is company performance

**α** is alpha

**β<sub>1</sub>- β<sub>3</sub>** are regression coefficients

**X** is Independent variable (Management competence)

**Z** is Moderating variable (Firm-level institutions)

**XZ** is cross product of the independent variable and moderator (interaction term)

**ε** is regression error term

To test the third hypothesis (**H<sub>3</sub>**) which predicted that human resource management bundles moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange, stepwise regression analysis was used with three models as shown below:

$$Y = \alpha_0 + \beta_1 X + \epsilon \dots \dots \dots 3.5$$

$$Y = \alpha_0 + \beta_1 X + \beta_2 Z_1 + \epsilon \dots \dots \dots 3.6$$

$$Y = \alpha_0 + \beta_1 X + \beta_2 Z_1 + \beta_3 XZ_1 + \epsilon \dots \dots \dots 3.7$$

Where,

Y is company performance

$\alpha$  is alpha

$\beta_1$ -  $\beta_3$  are regression coefficients

X is Independent variable (Management Competence)

Z<sub>1</sub> is Moderating variable (HRM bundles)

XZ<sub>1</sub> is cross-product of the independent variable and moderator (interaction term)

$\epsilon$  = regression error term.

In testing hypothesis **H<sub>4</sub>**, which predicted that the combined effect of management competence, firm-level institutions and human resource management bundles on the performance of companies listed on the Nairobi Securities Exchange is different from the effect of management competence, simple linear and multiple regression were used. Composite scores of management competence, firm-level institutions, HRM bundles and company performance, were used to test the hypothesis. Two regression models were used:

$$Y = Y = \alpha_0 + \beta_1 X_1 + \epsilon \dots \dots \dots 3.8$$

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + + \beta_3 X_3 + \epsilon \dots \dots \dots 3.9$$

Where,

Y is Company Performance

$\alpha$  is alpha

$\beta_1$ -  $\beta_3$  are beta coefficients

X<sub>1</sub> is independent variable (management competence)

X<sub>2</sub> is moderating variable (firm -level institutions)

X<sub>3</sub> is moderating variable (HRM bundles)

$\epsilon$  = regression error term

The overall fit (R-Squared) of the two models were compared. If R<sup>2</sup> for the combined effect model was greater than R<sup>2</sup> for individual effect model, then the combined effect of management competence, firm-level institutions, human resource management bundles on the performance of companies listed on the Nairobi Securities Exchange was different from the individual effect of management competence on company performance.

### **3.11 Summary of Research Objectives, Hypotheses, and Analytical Methods**

A summary of research objectives, hypotheses and analytical methods is shown in Table 3.2.

**Table 3:2: Summaries of Research Objectives, Hypotheses and Analytical Methods**

Research Objective	Research Hypothesis	Data Analysis Technique	Interpretation
i. Determine the effect of management competence on the performance of companies listed on the Nairobi Securities Exchange.	<b>H<sub>1</sub>:</b> Management competence has a significant effect on the performance of companies listed on the Nairobi Securities Exchange.	Simple Linear Regression $Y = \alpha_0 + \beta_1 X + \epsilon$ Where, Y = Company Performance $\alpha$ = alpha $\beta$ = beta X = management competence $\epsilon$ = error term.	Change in R <sup>2</sup> value; if $\beta$ Value for management competence is positive, and F, $\beta$ and $t$ are all significant ( $p < 0.05$ ), then management competence has a positive and significant effect on firm performance.
ii. Establish the effect of firm- level institutions on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange	<b>H<sub>2</sub>:</b> Firm- level institutions moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange.	Step-Wise regression equations $Y = \alpha_0 + \beta_1 X + \epsilon$ $Y = \alpha_0 + \beta_1 X + \beta_2 Z + \epsilon$ $Y = \alpha_0 + \beta_1 X + \beta_2 Z + \beta_3 XZ + \epsilon$ Where, Y = Company Performance, $\alpha$ = alpha, $\beta$ = beta X = management competence Z = firm level institutions XZ = cross-product of management competence and firm -level institutions $\epsilon$ = error term.	If change in R <sup>2</sup> after addition of interaction term (moderator) is significant (R <sup>2</sup> change, F change, $\beta$ & $t$ are all significant ( $p < 0.05$ ), then firm- level institutions moderate the relationship.
iii. Assess the effect of HRM bundles on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange	<b>H<sub>3</sub>:</b> HRM Bundles moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange	Step-Wise regression equations $Y = \alpha_0 + \beta_1 X + \epsilon$ $Y = \alpha_0 + \beta_1 X + \beta_2 Z_1 + \epsilon$ $Y = \alpha_0 + \beta_1 X + \beta_2 Z_1 + \beta_3 XZ_1 + \epsilon$ Where, Y = Company Performance $\alpha$ = alpha $\beta$ = beta X = management competence Z = HRM bundles XZ = Cross product of management competence and HRM bundles $\epsilon$ = error term.	If change in R <sup>2</sup> after addition of interaction term (moderator) is significant (R <sup>2</sup> change, F change, $\beta$ & $t$ are all significant ( $p < 0.05$ ), then HRM bundles moderate the relationship.
iv. Determine whether the combined effect of management competence, firm-level institutions and HRM bundles on the performance of companies listed on the Nairobi Securities Exchange is different from the individual effect of management competence.	<b>H<sub>4</sub>:</b> The combined effect of management competence, firm-level institutions and HRM bundles on the performance of companies listed on the Nairobi Securities Exchange is different from the individual effect of management competence.	Multiple regression equation $Y = \alpha_0 + \beta_1 X_1 + \epsilon$ $Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$ Where, Y = Company Performance $\alpha$ = alpha $\beta$ = beta X <sub>1</sub> = Management competence X <sub>2</sub> = Firm-level institutions X <sub>3</sub> = HRM bundles, $\epsilon$ = error term.	If change in R <sup>2</sup> for combined effect model is greater than change in R <sup>2</sup> for individual effect model at $p < 0.05$ , if the calculated $t$ value is greater than the tabulated value, then the combined effect of management competence, firm-level institutions and HRM bundles on performance of companies listed on the Nairobi Securities Exchange is different from the individual effect of management competence.

## **CHAPTER FOUR**

### **DATA ANALYSIS, FINDINGS, AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents the study findings and contains the following: Firstly, the chapter presents response rate and demographic characteristics of the unit of study. Secondly, the chapter presents tests for the assumption of regression analysis. Third, the chapter contains results of descriptive statistics of the variables used in the study. Finally, the results of tests of hypotheses corresponding to the objectives of the study are presented, followed by a discussion of the findings.

#### **4.2 Editing and Coding**

Editing of data is a process of examining the collected raw data to detect errors and omissions for the purpose of making corrections and involves scrutiny of the completed questionnaires to ensure that the data are accurate, consistent with other facts gathered and uniformly entered (Kothari, 2004). Data entry process, which manipulates data to make meaning out of it, precedes editing. Coding is the process of assigning numerals or other symbols to answers so that responses can be categorized into a limited number of mutually exclusive categories or classes which should be appropriate to the research problem under study (Kothari, 2004; Saunders et al., 2009). Editing and coding of the data for this study was through scrutinizing the completed questionnaires and assigning numerals to answers to categorize responses.

#### **4.3 Study Response Rate**

The target population of the study was 64 companies listed on the Nairobi Securities Exchange as at 31 December, 2014. These companies formed the unit of analysis for the study as every company had a unique set of management competencies, firm-level institutions and human resource management bundles. Out of the 64 questionnaires issued to Human Resource Managers or equivalent officers, 34 were filled and returned in a form usable for analysis. This constituted a response rate of 53.1 %. Table 4.1 displays a summary of the response rate.



**Table 4.1: Response Rate**

Items	Frequency	Percentage
Filled and returned	34	53.1
Not returned	30	46.9
Total	64	100

As indicated in Table 4.1, the response rate was 53.1 %. The study response rate of 53.1 % was considered adequate for the purpose of data analysis compared to previous studies done in the same area both locally and abroad. Locally, Sagwa (2014) had 60%. Abroad, Youndt et al. (1996) had 26%. According to Mugenda and Mugenda (2003) and Bryman and Bell (2007), a response rate of 50 % or more is considered adequate.

#### 4.4 Profile of Organizations

The 34 companies that were surveyed represent the major sectors of Kenya's economy. Frequencies and percentages were used to examine the distribution of companies listed on the Nairobi Securities Exchange. Table 4.2 shows how the companies that responded to the study questionnaire were distributed per sector.

**Table 4.2: Distribution per Sector**

Sector	Frequency	Percentage
Agriculture	2	5.9
Commercial & Services	4	11.8
Automobiles & Accessories	2	5.9
Banking	11	32.3
Insurance	2	5.9
Manufacturing & Allied	6	17.6
Construction & Allied	3	8.8
Energy & Petroleum	2	5.9
Growth Enterprise Market Segment	1	2.9
Investment	1	2.9
Total	34	100

The findings in Table 4.2 indicated that out of the 34 companies that participated in the study, 32.3 % were in the banking sector, 17.7 % were in the manufacturing and allied, 8.8 % were in the construction and allied, 11.8 % were in commercial and services, 5.9 % were in Agriculture, insurance and energy and petroleum, and 2.9 % were in growth enterprise market segment and investment. The majority of the companies that responded to the questionnaire were in the banking sector (32.3%) and manufacturing and allied (17.7 %). Thus, most of the NSE listed companies (61.8%) which responded were in the banking industry, manufacturing and allied and commercial and services sectors. These companies play a major role in the economic development of Kenya. Table 4.3 shows the distribution of companies by ownership, years of establishment and number of employees.

**Table 4.3: Distribution of Companies by Ownership, Years of Establishment and Level of Employment**

<b>Ownership</b>	<b>Frequency</b>	<b>Percentage</b>
Locally Owned	23	67.65
Foreign Owned	11	32.35
<b>Total</b>	34	100
<b>Number of Employees</b>		
Less than 100	6	17.65
100 to 300	3	8.82
301 to 500	5	14.71
501 to 700	4	11.76
Over 700	16	47.06
<b>TOTAL</b>	34	100
<b>Year of Establishment</b>		
1-30	3	9.82
31-60	18	51.94
61-90	6	17.65
Over 90	7	20.59
<b>TOTAL</b>	34	100

Both locals and foreigners own the companies listed on the Nairobi Securities Exchange and their years of establishment and number of employees differ. The information on company ownership in Table 4.3 shows that companies listed on the NSE may be classified depending on who owns a majority of shares between local and foreign investors. Those with over 50 per cent local ownership are referred to as majorly locally - owned and those with over 50 per cent foreign shareholding are called majorly foreign owned. Out of the 34, those responded, local investors majorly owned 23(67.65%) whereas foreign investors majorly owned 11(33.35%). The results imply that the Nairobi Securities Exchange predominantly consisted of locally owned companies.

In their study, Barbosa and Louri (2005) found that there was no significant difference in performance between domestically owned and MNCs operating in Portugal and Greece. In another study, Omran, Bolboi, and Fatheldin (2008) with a sample of 304 companies from Egypt, Jordan, Oman, and Tunisia (2000-2002) found no significant impact of foreign investors on firm performance. According to Aydin, Sayim, and Yalama (2007), foreign ownership had a positive impact on firm performance. The cited studies suggest that whether foreign or locally owned, NSE listed companies are expected to perform and play a critical role in the growth of Kenya's economy and realization of Vision 2030 (Olweny & Kimani, 2011).

Concerning the level of employment, Table 4.3 shows that 47.06 % of the companies listed on the Nairobi Securities Exchange had over 700 employees. The table further shows that 73.53% of the companies had more than 300 employees. The fact that 75.53 per-cent of the companies had more than 300 employees implies that a majority of the companies listed on the NSE were large and mature. Previous studies have shown that company size can be a predictor of company performance (Simerly & Li, 2000). Hvide and These (2007) in their study concluded that larger firms perform better than smaller ones . Therefore, since most of the companies listed on the Nairobi Securities Exchange are large, they are expected to achieve reasonable levels of performance.

In a study by Malik (2011), it was found that there was a significant positive relationship between company size and profitability. Flamini, McDonald, and Schumacher (2009) also established that bigger firms were more competitive than smaller ones in harnessing economies of scale in transactions and enjoyed a higher level of profits. Further, Almajali et al. (2012) found that the financial performance of a company could be affected by its size. However, for companies that become exceptionally large, the effect of size could be negative due to bureaucratic or/and other reasons (Yuqi, 2007).

From the analysis, it is evident that companies that have been in existence for 1-30 years accounted for 9.82 %, 31-60 ( 51.94%), 61-90 (17.65 %) and over 90 years (20.59 %) . The analysis showed that most of the companies were between 31-60 years regarding age. Examining the relationship between company age and performance would seem to be relevant for both theory and practice: if performance declines as companies grow older, it could explain why most of them are eventually taken over (Loderer, Neusser , & Waelchli, 2009). Sorensen and Stuart (2000) established that company age has some influence on performance. They further found that organizational inertia within old firms may make them rigid and not able to embrace changes in the environment.

Liargovas and Skandalis (2008) reported that older firms possess more skills. This is as a result of enjoying the benefits of learning and not vulnerable to the liabilities of newness. Hence , they have satisfactory performance. However, due to old age, knowledge, abilities, and skills (competence) may become obsolete and induce organizational decay (Agarwal & Gort, 2002). The fact that 90.18 % of NSE listed companies have been in existence for over 30 years implies that they are mature and established and must have developed appropriate management competencies to enhance their performance. It also implies that these companies must have aligned their firm-level institutions to their competence development strategies to realize reasonable performance. Perhaps, the accumulated experience over time might have exposed these companies to the practice of bundling their human resource management practices for improved performance.

#### 4.5 Reliability Test

Cronbach Alpha tested for reliability. The reason for the test was to determine the internal consistency of the scale items. The results of the analysis are presented in Table 4.4.

**Table 4.4: Overall Reliability Statistics**

<b>Cronbach's Alpha</b>	<b>Cronbach's Alpha Based on Standardized Items</b>	<b>No. of Variables</b>	<b>Comment</b>
0.895	0.949	4	Reliable

**Cronbach's Alpha Coefficients for the Measurement Scales for the Constructs**

<b>Variable</b>	<b>Alpha</b>	<b>No. of Items</b>	<b>Comment</b>
Company performance	0.734	14	Reliable
Management Competence	0.876	42	Reliable
Firm-level institutions	0.932	58	Reliable
HRM Bundles	0.920	40	Reliable

As shown in Table 4.4, the overall Alpha coefficient for unstandardized scale items was 0.895 and 0.949 for the standardized. The Cronbach alpha coefficients for the variables of the study were as follows: performance had 0.734, management competence had 0.876, firm-level institutions had 0.932 and HRM bundles had 0.920. All the constructs were reliable since their Cronbach alpha was above 0.70, which was used as a cut-off point for reliability (Nunnally & Bernstein, 1994).

#### 4.6 Regression Assumptions

Several tests preceded regression analysis. The tests included test for normality, linearity test, multicollinearity check, and test for homogeneity of variance (Levine test) and correlation analysis.

#### 4.6.1 Test for Normality

Considering that regression analysis was the principal data analysis method, the normality in the distribution of data was assumed. Normality tests can be carried out using Kolmogorov-Smirnov tests, Shapiro-Wilk test, Kurtosis and Skewness, P-P plots and histograms (Field, 2005; Saunders et al., 2009). Shapiro-Wilk test was developed with an objective of using the null hypothesis principle to check whether a sample came from a normally distributed population (Shapiro & Wilk, 1965). To test whether the variables were normally distributed, Shapiro - Wilk test for normality was used.

The Shapiro-Wilk test compares the scores in the sample to a normally distributed set of scores with the same mean and standard deviation. If the test is non-significant ( $p>0.05$ ), it means that the distribution of the sample is not significantly different from a normal distribution. Hence, it is probably normal. Conversely, if the test is significant ( $p<0.05$ ), then the distribution in question is considered not normal (Shapiro & Wilk, 1965). The test becomes applicable when the sample size is between 3 and 2,000 (Field, 2009). The results of the normality test are shown in Table 4.5.

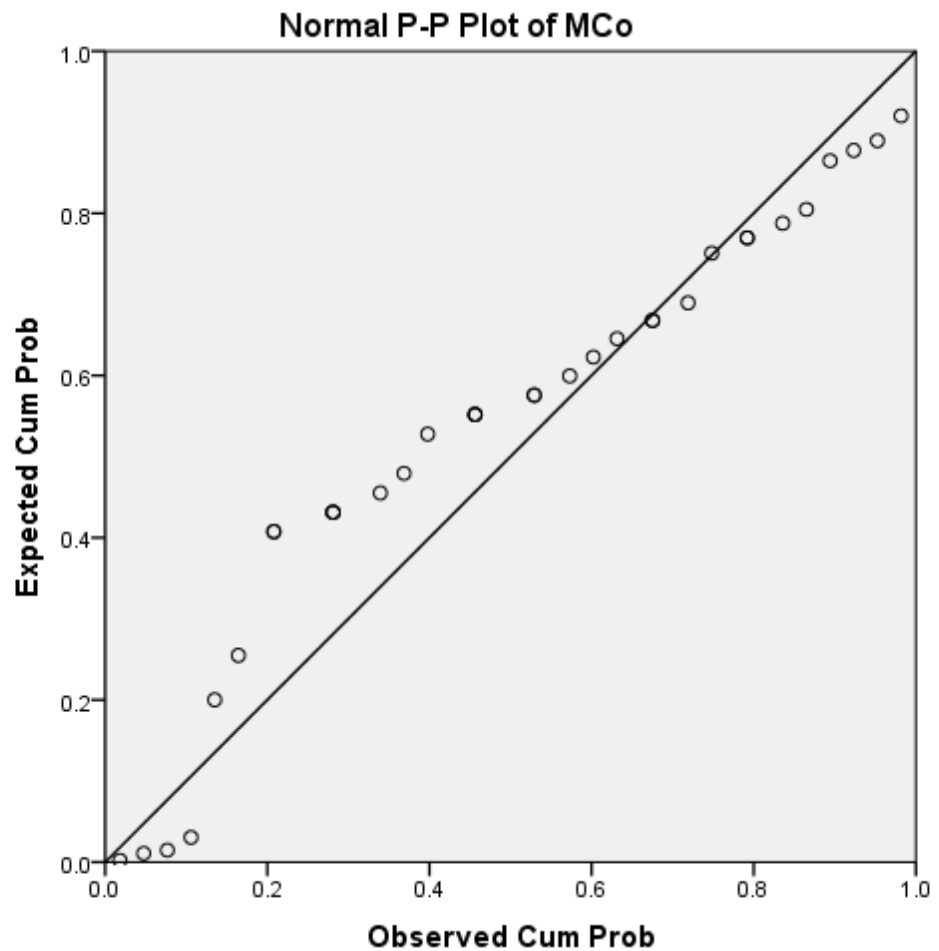
**Table 4.5: Test for Normality**

Variable	Shapiro-Wilk		
	Statistic	df	Sig.
Management Competence	0.891	34	.003
Firm- Level Institutions	0.940	34	.063
HRM Bundles	0.908	34	.008
Company Performance	0.616	34	.001

The results of the test in Table 4.5 imply that the distribution may not be normal since three of the four variables have a p-value of less than 0.05. However, it should be noted Shapiro-Wilk test is biased by large samples. Considering the limitations of the Shapiro-Wilk test, there should be other tests carried out in addition to this test. The verification of the results of Shapiro-Wilk test was done through normal probability plots in which the plotted data values compare with the diagonal. Hence, Figure 4.1 to

Figure 4.3 presents the visual expression of the expected and observed values with respect to the four variables of the study. Figure 4.1 presents a visual expression of the intended outcome on the indicators of management competence versus the actual/observed outcome on the same.

**Figure 4.1: Normal Probability P-P Plots for Management Competence**



The visual presentation in Figure 4.1 indicates that the observed values deviated reasonably from the expected values apart from a few items. Hence, the results were relatively suggestive of normality. Figure 4.2 presents a visual expression of the intended outcome on the indicators of firm-level institutions versus the actual/observed outcome on the same.

**Figure 4.2: Normal P-P Plots for Firm-Level Institutions**

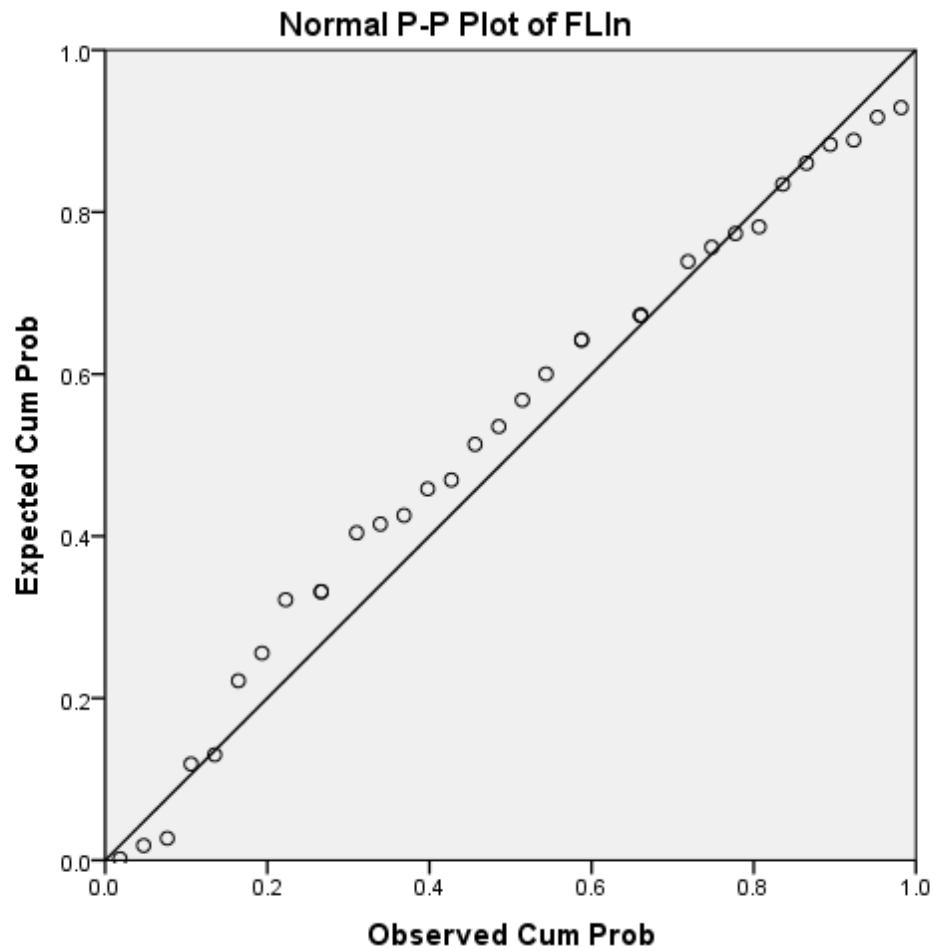
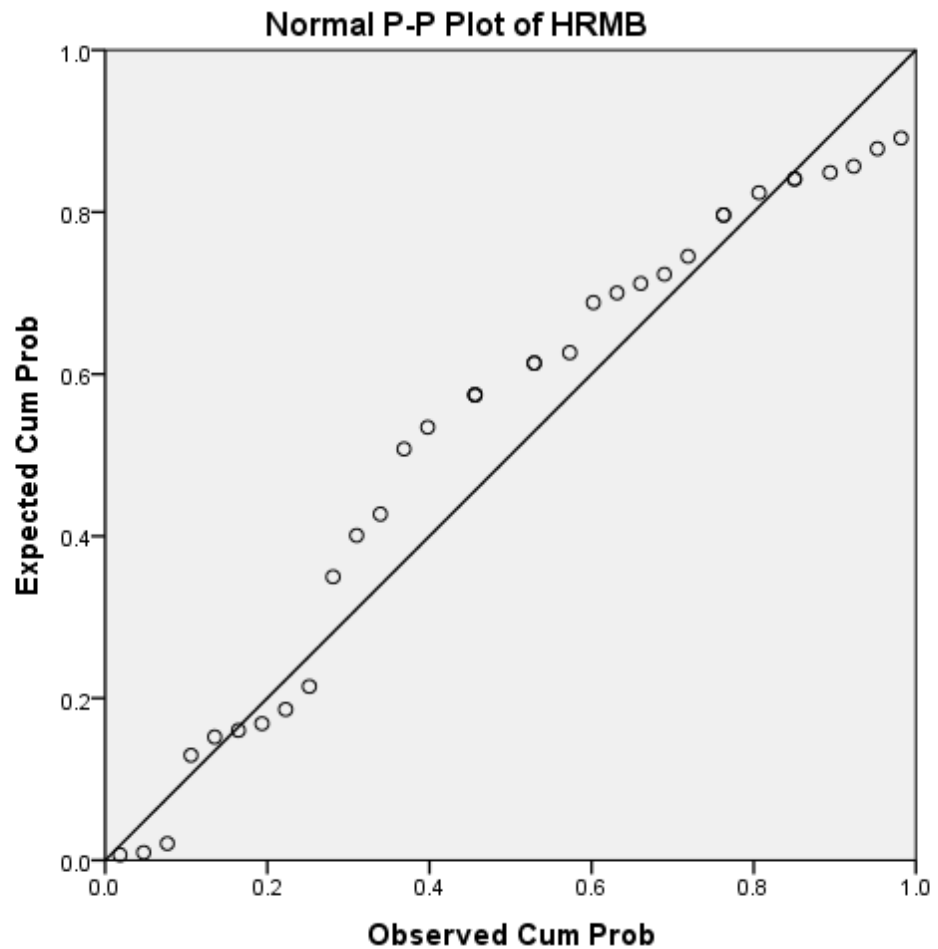


Figure 4.2 shows a strong link between the expected firm-level institutions values and the observed characteristics on the same. Hence, it indicates that the observed values do not deviate much from the expected values apart from a few items. This finding indicates that the data could be normal. Results in Figure 4.3 present a visual expression of the intended outcome on the three HRM bundles versus the actual/observed outcome on the same.



**Figure 4.3: Normal P-P Plots for HRM Bundles**



The results in Figure 4.3 show the association between the HRM bundles' values and the observed/actual outcome on the same. This confirms that some of the observed values deviated from the expected values apart from a few implying that the distribution could be non-normal distribution.

#### **4.6.2 Test for Linearity Using a Scatter Plot**

Linearity was examined through residual plots generated by the analysis software (SPSS). A scatter plot of standardized residuals (ZRESID) against standardized predicted (ZPRED) values was used. A Scatter plot shows  $n$  pair of observations  $(x_1, y_1)$ ,  $(x_2, y_2)$ ,  $(x_n, y_n)$  as dots (or some other symbol) on an X-Y graph. A scatter plot is a starting point for bivariate data analysis and was created to investigate the relationship between two variables to ascertain if there was an association between them and if so, what kind of association exists (Doane & Seward, 2011). Figure 4.4 shows the results of the test.

**Figure 4:4: Scatter Plot of ZRESID against ZPRED**

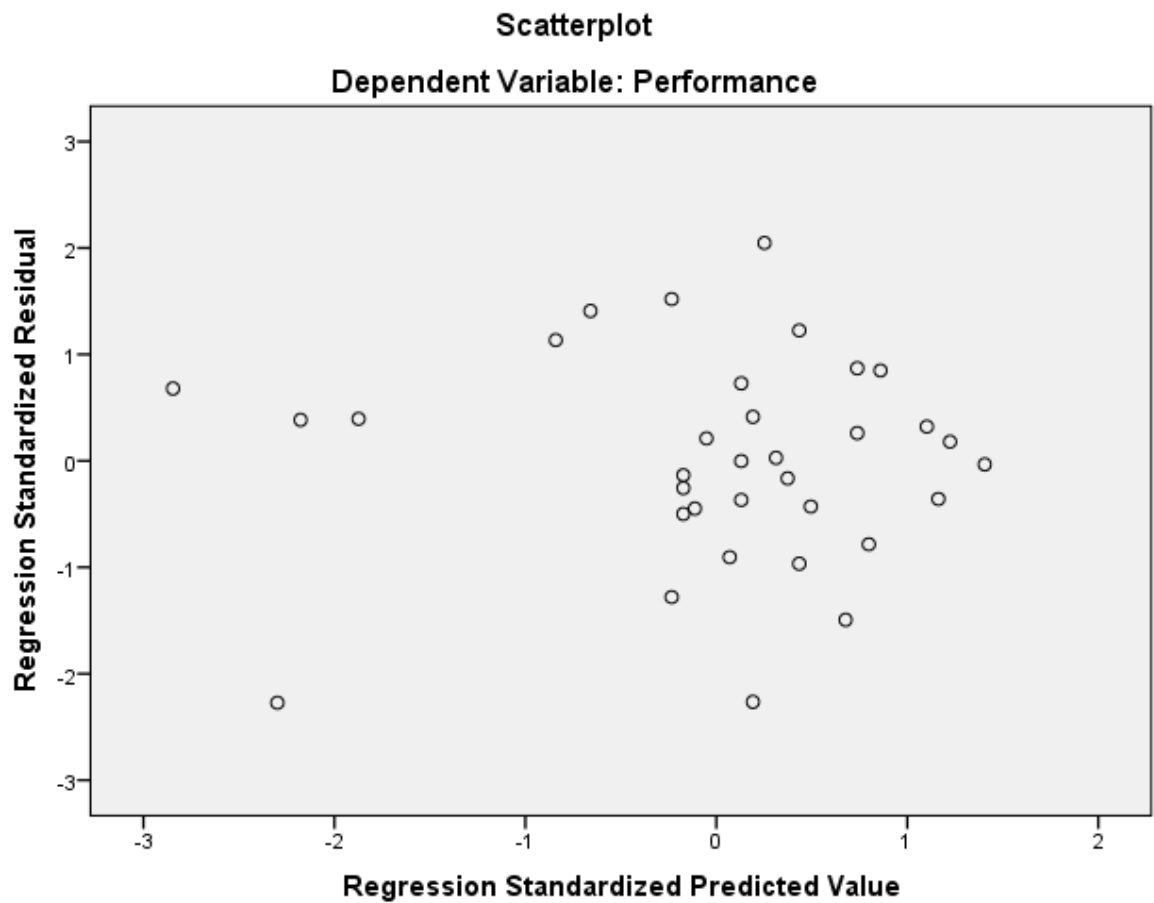


Figure 4.4 shows that data points are randomly and almost evenly dispersed around zero, the graph does not funnel out, and there is no curve. This pattern indicates that the assumption of linearity was met.

#### **4.6.3 Test for Multicollinearity Using Tolerance and Variance Inflation (VIF)**

##### **Factor**

Multicollinearity is a high degree of correlation among several independent variables (Aczel, 2009). According to Doane and Seward (2011), when the independent variables  $X_1, X_2, \dots, X_n$  are inter-correlated instead of being independent, there is multicollinearity. Tolerance and VIF values determine the level of multicollinearity. Tolerance is a measure of collinearity. Tolerance of a variable is defined as one minus the squared multiple correlation of this variable with all other independent variables in the regression equation (Doane & Seward, 2011).

Therefore, the smaller the tolerance of a variable, the more redundant is its contribution to the regression. According to Doane and Seward (2011), a little tolerance value indicates that the variable under consideration is almost a perfect linear combination of the independent variables already in the equation and that it should not be added to the regression equation. All variables involved in the linear relationship will have a small tolerance. If a low tolerance value is accompanied by large standard errors and non-significance, multicollinearity may be an issue.

Tolerance below 0.10 is a cause of concern because it means that at least 90% of the variance of the independent variable is shared with some other independent variables and that the multiple correlations of other independent variables with this independent variable is at least 0.90. According to Denis (2011), a large tolerance value indicates a minor problem with collinearity. Tolerance values approaching zero indicates that the variable is highly collinear with the other predictor variables.

Variance inflation factor measures the impact of collinearity among the variables in a regression model (Researchconsultation.com, 2007). Researchconsultation.com further asserts that VIF and its calculation is done by dividing 1 by tolerance and is always greater than or equal to one. Field (2009) indicates that the rule of thumb for VIF is above 4 and below 10. A VIF of greater than 10 indicates a serious problem of multicollinearity; because when VIF is high, there is high multicollinearity and instability of the B and beta coefficients.

A VIF of 10 indicates (all other things being equal) that the variance of the  $i^{th}$  regression coefficient is 10 times greater than it would have been if the  $i^{th}$  independent variable had been linearly independent of the other independent variable in the analysis. Table 4.5 shows tolerance and VIF values for the predictor variables.

**Table 4.6: Tolerance and VIF Values**

Variable	Collinearity Statistics	
	Tolerance	Variance Inflation Factor
Management Competence	0.226	4.433
Firm-Level Institutions	0.132	7.567
HRM Bundles	0.237	4.212

As shown in Table 4.6, the tolerance values for the predictor variables are as follows; management competence had 0.226, firm-level institutions had 0.132 and HRM bundles had 0.237. All the tolerance values are above 0.1 indicating that the variables are not highly collinear with one another. The VIF value for management competence was 4.433 whereas for firm-level institutions, it was 7.567. HRM bundles had a VIF value of 4.212. The VIF values for all the study predictor variables were above 4 and below 10. If the VIF goes above 10, it is assumed that the regression coefficients are poorly estimated due to multicollinearity. However, some researchers suggest that VIF does not cause major problems and is best ignored except in extreme cases (Doane & Seward, 2011). Therefore, the VIF values for the study do not indicate a high degree of multicollinearity.

#### **4.6.4 Levine Test for Homoscedasticity**

Homoscedasticity is the assumption of equal standard deviations of Y values about the population regression line, regardless of the value of X. Homoscedasticity is the extent to which the data values for the dependent and independent variables have equal variances (Weirs, 2008). However, if the variances happen to be unequal, then heteroscedasticity exists. Even if heteroscedasticity exists, one can still carry out regression analysis since this does not bias the ordinary least square regression coefficients (Saunders et al., 2009). Hence, regression analysis using heteroscedastic data will still provide unbiased results for the relationship between the predictor and the dependent variable.

The Levine's test is an inferential statistic used to assess the equality of variances for a variable calculated for two or more groups (Levine, 1960). It tests if k samples do have equal variances (homogeneity of variance or homoscedasticity). The Levine's test tests the null hypothesis that the population variances are equal. The study uses the 0.05 significance level to determine statistical significance so, if Levine's test shows a significance value of less than 0.05, then it is concluded that the variances are significantly different meaning the study's statistical test (*t*-test or *F*-test) is invalid and therefore conclusive inferences cannot be made from it. Likewise, if Levine's test shows a significance value of greater than 0.05, then the conclusion is that the variances are not significantly different. This confirms the validity of *t*-test or *F*-test results (Bryk & Raudenbush, 1988). Table 4.7 presents results for the Levine's test.

**Table 4.7 :Test of Homogeneity of Variances**

Predictor Variable	Levine Statistic	df1	df2	Sig.
Management Competence	0.454	3	29	0.717
Firm-Level Institutions	0.624	3	29	0.605
HRM Bundles	1.157	3	29	0.343

As shown in Table 4.7, the Levine’s test was not significant. The Levine statistics for all the three predictor variables were not significant at 0.05 (Management competence: .454,  $p > 0.05$  (0.717); Firm-Level institutions: 0.624,  $p > 0.05$  (0.605); HRM bundles: 1.157,  $p > 0.05$  (0.343). Thus, the assumption of homogeneity of variance is not violated. According to Bryk and Raudenbush (1988), if Levine’s test was not significant, there will be the validity of t-test or F-test results. Therefore, the study variables qualify for use in ANOVA.

#### **4.7 Descriptive Statistics**

The study computed the means, standard deviations and coefficients of variation for all the study variables. The mean is the sum of the data values divided by a number of data items whereas standard deviation is a single number that helps researchers to understand how individual values in a data set vary from the mean. The coefficient of variation is the standard deviation expressed as a percent of the mean (Doane & Seward, 2011). The descriptive statistics are presented in Table 4.8 to 4.11.

##### **4.7.1 Descriptive Statistics for Management Competence**

Management competence was measured using three dimensions namely; functional competence, social competence and cognitive competence. Respondents were asked to indicate the extent to which they agreed that the items of management competence dimensions applied to their organizations. Each dimension had a 5-point Likert-type scale, ranging from “not at all” (1) to “a large extent” (5). The responses were analyzed using mean scores, standard deviations and coefficients of variation. High mean values indicated a strong agreement on the item and lower values mean implied strong disagreement on the item. The descriptive statistics for each dimension are shown in Table 4.8.

**Table 4.8: Means, Standard Deviations and Coefficients of Variation for Measures of Management Competence**

Domain	Dimension	N	Mean(M)	Standard Deviation (SD)	Coefficient of Variation (CV) %
<b>Management Competence</b>	Functional Competence	34	4.07	0.581	14.28
	Social Competence	34	4.18	0.644	15.41
	Cognitive Competence	34	4.17	0.623	14.94
	Total	34			
	<b>Overall Scores</b>	34	4.14	0.616	14.88

As indicated in Table 4.8, the overall mean for measures of management competence was 4.14. Social competence had an average of 4.18. This means that the respondents agreed largely that functional competence was embraced in their organizations. The standard deviation (SD) was 0.581, a measure of how concentrated or dispersed the data were around the mean, reflects the amount of variation. Cognitive competence had a mean score of 4.17 and a standard deviation of 0.623. This means that managers in the companies under study applied management cognitive competence largely. The average score for functional competence was 4.07. This implied that the respondents agreed to a large extent that functional competence applied to their organizations.

Concerning the extent to which each dimension of competence applied to the companies under investigation, social competence had the highest score of 4.18 followed by cognitive competence with 4.17. Functional competence had 4.07. The mean scores for the three dimensions were over 4 on a scale of 5. This means that companies listed on the Nairobi Securities Exchange largely made use of management competence dimensions. The overall mean for management competence was 4.14 implying 82.8 % of the respondents agreed that management competence applied to their organizations.

The coefficients of variation were as follows; functional competence had 14.28 %, social competence had 15.41 % and cognitive competence had 14.94 %. The lower the coefficient of variation, the smaller is the variation between the actual outcomes and expected values that is, the smaller the residuals relative to the predicted value. The higher the coefficient of variation, the greater is the dispersion in the variable. The coefficients of variation for all the dimension of management competence were low, meaning that the model was fit in terms of the relative sizes of squared residuals and outcome values.

#### 4.7.2 Descriptive Statistics for Firm- Level Institutions

Firm-level institutions were measured using organizational culture, leadership style, organizational policies, organizational procedures and organizational structure. The descriptive statistics for each dimension and the aggregate score are shown in Table 4.9.

**Table 4.9: Means, Standard Deviations and Coefficients of Variation for Measures of Firm-Level Institutions**

Domain	Dimension	N	Mean	SD	CV (%)
<b>Firm-level institutions</b>	Organizational Culture	34	3.99	0.755	18.92
	Leadership Style	34	3.91	0.638	16.32
	Organizational Policies	34	4.41	0.618	14.01
	Organizational Procedures	34	4.49	0.668	14.88
	Organizational Structure	34	4.24	0.785	18.51
	Total	34			
	Overall Mean		4.20	0.693	16.5

Table 4.9 shows the mean scores for the dimensions of firm-level institutions. From the table, it can be observed that organizational procedures had the highest mean score (M=4.49 and SD=0.688) followed by organizational policies with M=4.41 and SD=0.618. Organizational structure had a mean score of 4.24 and a standard deviation of 0.785. Organizational culture had a mean of of 3.99 and a standard deviation of 0.755

whereas leadership style had a mean of 3.91 and standard deviation of 0.638. Leadership style had the lowest mean score of 3.91. The aggregate score for firm - level institutions domain was 4.20 (84 %). The average score of 4.20 approximates 4 on the 5 - point Likert- scale adopted for the study. The score implied that the respondents agreed largely that each of the statements listed under firm- level institutions applied to their firms. Organizational culture had the highest variability (18.92%) followed by organizational structure (18.51%). Leadership style had 16.32 %, organizational procedures had 14.88 % and organizational policies had 14.01%. All the coefficients of variation for firm-level institutions were lower than 20 %. This implies goodness of fit of the model.

#### 4.7.3 Descriptive Statistics for Human Resource Management Bundles

This domain comprised skill bundle, motivation bundle and empowerment bundle. The descriptive statistics for HRM bundles showing means, standard deviations and coefficients of variation are presented in Table 4.10.

**Table 4.10: Means, Standard Deviations, and Coefficients of Variation for Measures of HRM Bundles**

Domain	Dimension	N	Mean(M)	Standard Deviation (SD)	Coefficient of Variation (CV) %
<b>Human Resource Management Bundles</b>	Skills Bundle	34	4.19	0.783	18.69
	Motivation Bundle	34	3.93	0.903	22.98
	Empowerment Bundle	34	4.04	0.750	18.56
	Total	34			
	<b>Overall Mean</b>		<b>4.05</b>	0.812	20.05

As shown in Table 4.10, the mean scores for HRM bundles' dimensions were as follows; Skills bundle: M= 4.19, SD=0.783; Motivation bundle: M= 3.93, SD=0.903, and empowerment bundle: M= 4.04,SD=0.750. This meant that the skill bundle was top in the list in terms of application followed by empowerment bundle then motivation bundle. The overall mean was 4.05 implying that the respondents agreed



largely that human resource management bundles, that is, skill bundle, motivation bundle and empowerment bundles applied in their organizations. Motivation bundle had the highest variability (CV=22.98 %) followed by skill bundle with a CV of 18.69 % then empowerment bundle (18.56%). The coefficients of variation for all the HRM bundles were low, suggesting a good model fit.

#### 4.7.4 Descriptive Statistics for Company Performance

This domain comprises non- financial and financial performance. For non- financial performance, respondents were required to rate the extent to which their companies used some key performance indicators for the last three years (2012-2014). For financial performance, ratios for ROA were calculated for the three years (2012-2014). They were then fitted in a 5- point Likert scale and their mean generated. Table 4.11 presents the results of the analysis.

**Table 4.11: Means, Standard Deviations and Coefficients of Variation for Measures of Company Performance**

Domain	Dimension	N	Mean(M)	Standard Deviation(SD)	Coefficient of Variation (CV) %
Company Performance	Non-Financial Performance	34	4.19	.509	12.15
	Financial Performance	34	1.88	1.122	59.68
	Valid N (list-wise)	34			
	Total				
	Overall Mean		3.035	0.816	26.89

As shown in Table 4.11, the mean score of 4.19 for non- financial performance approximates to a score of 4 on the 5- point Likert scale adopted by the study. This implies that the respondents agreed largely to each of the statements listed in the dimensions under performance in the structured questionnaire. A mean of 4.19 for non- financial performance implies that 83.8 % of the respondents agreed largely that the dimensions of non-financial performance applied in their companies. The variability for non- financial performance was as low as 12.15 %. This finding means

that the variation between the actual outcome and expected values was small. That is, the residuals were smaller relative to the predicted value. The average score for the financial performance was 1.88 in a scale of 1-5. Since ROA's above 5% are safe, on average, the financial performance of companies listed on the Nairobi Securities Exchange was good (37.6 %). The coefficient of variation for the financial performance was 59.68 % showing moderate dispersion in financial performance.

#### 4.8 Correlation Analysis

A correlation matrix was produced in order to ascertain the nature and strength of the relationship between values of the study variables. In addition, the correlation matrix communicates how the independent factors of the study influence one another and their effect on the dependent variable and further whether the associations meet the minimum threshold for multiple regression. Correlation analysis was done using Pearson-Product Moment Correlation. Multicollinearity becomes a problem if the correlations are in excess of 0.9 (Field, 2005). Table 4.12 shows the correlation coefficients for management competence, firm-level institutions, human resource management bundles and company performance.

**Table 4.12: Correlation Matrix for all Variables**

Correlations					
Variables		Management Competence	Firm - Level Institutions	HRM Bundles	Company Performance
<b>Management Competence</b>	Pearson Correlation	1			
	Sig. (2-tailed)				
<b>Firm Level Institutions</b>	Pearson Correlation	.880 <sup>**</sup>	1		
	Sig. (2-tailed)	.000			
<b>HRM Bundles</b>	Pearson Correlation	.771 <sup>**</sup>	.873 <sup>**</sup>	1	
	Sig. (2-tailed)	.000	.000		
<b>Company Performance</b>	Pearson Correlation	.765 <sup>**</sup>	.807 <sup>**</sup>	.840 <sup>**</sup>	1
	Sig. (2-tailed)	.000	.000	.000	
**. Correlation is significant at the 0.01 level (2-tailed)					

The correlation results in Table 4.12 showed positive and significant relationship between management competence and company performance ( $r = 0.765, p < 0.01$ ), firm-level institutions and company performance ( $r = 0.807, p < 0.01$ ), HRM bundles and company performance ( $r = 0.840, p < 0.01$ ), firm-level institutions and management competence ( $r = 0.880, p < 0.01$ ), HRM bundles and management competence ( $r = 0.771, p < 0.01$ ) and HRM bundles and firm-level institutions ( $r = 0.873, p < 0.01$ ). As evidenced in Table 4.12, correlation coefficients were between 0.765 and 0.880. Correlation values (off-diagonal elements) of at least 0.9 are sometimes interpreted as indicating a multicollinearity problem (Hair et al., 1998). From the results, the correlations are below 0.9. Therefore, the study variables were not highly correlated as to cause multicollinearity. These correlation results showed that the use of regression analysis for the test of hypotheses was justified.

#### **4.9 Tests of Hypotheses**

There were four hypotheses for this study, corresponding to the four objectives. A composite index was computed for each variable to facilitate hypotheses testing. For the dependent variable, the responses from the non-financial measures were also summed together with the financial responses to form a composite score for the aggregate company performance. Four hypotheses drawn from the conceptual model (Figure 2.1) were tested.

##### **4.9.1 Hypothesis H1: Management Competence has a significant effect on the Performance of companies listed on the Nairobi Securities Exchange**

The study sought to determine the effect of management competence on the performance of companies listed on the Nairobi Securities Exchange. This was achieved by performing simple linear regression analysis to test hypothesis **H<sub>1</sub>**. The study tested the individual effect of each dimension of management competence and the composite of the three dimensions, on the performance of companies listed on the Nairobi Securities Exchange. Tables 4.13-4.16 present the findings of the analysis.

**Table 4.13: Simple Linear Regression Results for the Effect of Social Competence on Company Performance**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.768	.589	.576	8.17767

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3068.141	1	3068.141	45.879	.000 <sup>b</sup>
	Residual	2139.977	32	66.874		
	Total	5208.118	33			

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	39.325	9.470		4.152	.000
	Social Competence	15.256	2.252	.768	6.773	.000

Dependent Variable: Company Performance  
 Predictor: Social Competence

The results in Table 4.13 show that  $r = 0.768$ , implying a strong correlation between the independent variable (social competence) and the dependent variable (Company performance). The R-squared was 0.589; meaning that 58.9 % of the variation in company performance was explained by variation in social competence. Other factors explained 41.1 %. The ANOVA results indicated that the model was statistically significant ( $F = 45.879$ ,  $p < 0.05$ ). The standardized coefficients showed that the effect of social competence on company performance was positive and significant ( $\beta = 0.768$ ,  $t = 6.773$ ,  $p < 0.05$ ). The beta value implied that for one unit increase in social competence, performance increased by 0.768. The findings, therefore, confirm that social competence was significantly related to the performance of companies listed on the Nairobi Securities Exchange. To test the effects of cognitive competence on the performance of companies listed on the Nairobi securities Exchange, simple linear regression was performed.

Cognitive competence was regressed on company performance. Table 4.14 presents the results of the analysis.

**Table 4.14: Simple Linear Regression Results for the Effect of Cognitive Competence on Company Performance**

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.618	.382	.363	10.03016		

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1988.786	1	1988.786	19.768	.000 <sup>b</sup>
	Residual	3219.332	32	100.604		
	Total	5208.118	33			

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	49.732	12.051		4.127	.000
	Management Competence	12.749	2.867	.618	4.446	.000

Dependent Variable: Company Performance  
 Predictor: Cognitive Competence

As indicated in Table 4.14,  $r = 0.618$ , meaning that there was a strong correlation between the independent variable and the dependent variable. The R-squared was 0.382, indicating that 38.2 % of the variation in company performance was explained by variation in cognitive competence. Other factors explained 61.8 %. The ANOVA results indicated that the model was statistically significant ( $F = 19.768$ ,  $p < 0.05$ ). The standardized coefficients showed that the effect of cognitive competence on company performance was positive and significant ( $\beta = 0.618$ ,  $t = 4.446$ ,  $p < 0.05$ ). The beta value implied that for one unit increase in cognitive competence, performance increased by 0.618. The findings, therefore, confirmed that cognitive competence had a significant effect on the performance of companies listed on the Nairobi Securities Exchange. To test the effect of management competence on the performance of companies listed on the Nairobi Securities Exchange, a composite index for management competence was regressed on company performance. Table 4.15 presents the results of the analysis.

**Table 4.15: Simple Linear Regression Results for the Effect of Management Competence on the Performance of Companies listed on the Nairobi Securities Exchange**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.765 <sup>a</sup>	.585	.572	8.21530

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3048.399	1	3048.399	45.167	0.00
	Residual	2159.718	32	67.491		
	Total	5208.118	33			

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.725	11.107		2.586	0.014
	Management Competence	.584	.087	.765	6.721	0.00

Dependent Variable: Company Performance  
 Predictor: Management Competence

From the results in Table 4.15,  $r = 0.765$ , meaning that there was a strong correlation between the independent variable and the dependent variable. The R-squared was 0.585, indicating that 58.5 % of the variation in company performance was explained by variation in the independent variable. Other factors that are not part of the study explained 41.95 %. The ANOVA results indicated that the model was statistically significant ( $F = 45.167$ ,  $p < 0.05$ ).

The standardized coefficients showed that the effect of management competence on company performance was positive and significant ( $\beta = 0.765$ ,  $t = 6.721$ ,  $p < 0.05$ ). The beta value implied that for one unit increase in management competence, performance increased by 0.765. The findings, therefore, confirm the hypothesis that management competence had a significant effect on the performance of companies listed on the Nairobi Securities Exchange. Overall, the results of the analysis suggest that companies listed on the Nairobi Securities Exchange should consider developing management competence to enhance their performance.

#### **4.9.2 Hypothesis H<sub>2</sub>: Firm- Level Institutions Moderate the Relationship between Management Competence and Performance of Companies listed on the Nairobi Securities Exchange**

Hypothesis H<sub>2</sub> predicted that firm-level institutions would moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. Stepwise regression analysis was used to test the hypothesis. The analysis involved entering variables in steps to the regression model. The first step involved regressing company performance on management competence. In the second step, firm-level institutions (potential moderating variable) were entered to the model. In the third step, the interaction term (a cross product of management competence and firm-level institutions) was added to the model. The regression results were checked to see if there was a significant change in R-squared, which could be attributed to the interaction between management competence and firm-level institutions. The ANOVA statistics were also checked to find out whether the regression model was significant. The beta value, the t- statistic and the significance level were checked as determinants of the moderating effect of firm-level institutions. The F- statistic was also checked to see if there was goodness of fit in the model. The results of the analysis are presented in Table 4.16a.

**Table 4.16a: Stepwise Regression Results for the Effect of Firm-Level Institutions on the Relationship between Management competence and Performance of Companies Listed on the Nairobi Securities Exchange**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.765	.585	.572	8.21530	.585	45.167	1	32	.000
2	.815	.665	.643	7.50236	.080	7.371	1	31	.011
3	.825	.680	.648	7.45254	.015	1.416	1	30	.243

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3048.399	1	3048.399	45.167	.000
	Residual	2159.718	32	67.491		
	Total	5208.118	33			
2	Regression	3463.272	2	1731.636	30.765	.000
	Residual	1744.846	31	56.285		
	Total	5208.118	33			
3	Regression	3541.907	3	1180.636	21.257	.000
	Residual	1666.211	30	55.540		
	Total	5208.118	33			

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.725	11.107		2.586	.014
	Management Competence	.584	.087	.765	6.721	.000
2	(Constant)	27.470	10.153		2.706	.001
	Management Competence	.185	.167	.242	1.106	.053
	Firm-Level Institutions	.206	.076	.594	2.715	.000
3	(Constant)	-28.895	48.432		-.597	.672
	Management Competence	.643	.420	.843	1.533	.926
	Firm-Level Institutions	.472	.236	1.363	1.999	.601
	MC*FLI	-.002	.002	-1.335	-1.190	.688

Dependent Variable: Company Performance

a. Predictor: Management Competence

b. Predictors: Management Competence, Firm –Level Institutions

c. Predictors: Management Competence, Firm-Level Institutions, Management competence\*Firm-Level institutions

**NOTE**

MC= Management Competence

FLI=Firm-level Institutions



Table 4.16a showed that R-Squared for Model 1, in which company performance was regressed on management competence, was 0.585. This indicated that 58.5 % of the variation in company performance was explained by management competence. The ANOVA results indicated that the model was significant ( $F = 45.167$ ,  $p < 0.05$ ). The standardized beta showed that the effect of management competence on company performance was positive and significant ( $\beta=0.765$ ,  $t=6.721$ ,  $p < 0.05$ ), implying that for every unit increase in management competence, company performance increased by 0.765. Model 2 showed that when firm-level institutions were added to the model, R-squared increased from 0.585 to 0.665 ( $R^2=0.665$ ,  $F=30.765$ ,  $p < 0.05$ ). This indicated that 66.5 % of the variation in company performance was explained by variation in management competence and firm-level institutions. The model showed that firm-level institutions explained additional 8 % of the variation in company performance (R Squared change=0.08). The R-Squared change (0.080) in Model 2 showed that the addition of firm-level institutions to the model made a significant contribution to performance ( $p<0.05$ ). The ANOVA results indicated that the model which includes management competence and firm-level institutions was significant ( $F=30.765$ ;  $p<0.05$ ). The F- change in Model 2 was  $F=7.371$  and was significant at  $p<0.05$ . The standardized beta indicated that the effect of firm-level institutions on company performance was positive and significant ( $\beta=0.594$ ,  $t=2.715$ ,  $p<0.05$ ). The decrease of P-value in the ANOVA statistic from 45.167 to 30.765 indicated a reduction in the predictive power of the regression model when firm-level institutions were added.

In Model 3,  $R^2$  was 0.680 and R- Squared change is 0.015 and was not significant ( $p>0.05$ ). The F-change was 1.416 and was not significant at  $p < 0.05$ . The model had goodness of fit ( $F=21.257$ ,  $p < 0.05$ ). The F-change from  $F=30.765$  to 21.257 indicated the reducing predictive power of the model when the interaction term was introduced to the regression model. The model showed that the coefficient for management competence and firm-level institutions were positive but insignificant (Management competence:  $\beta=0.643$ , Firm-level institutions: 1.363,  $p > 0.05$ ). Beta values more than one indicated that one of the variables had a variance greater than one. The standardized coefficients for the interaction between management competence and firm-level institutions were negative and insignificant ( $\beta = -1.135$ ,  $t = -1.190$ ,  $p > 0.05$ ). This meant that a unit of positive change in firm-level institutions contributed to -1.135 decline in the performance of companies listed on the NSE.

The change, however, was not significant, implying that firm-level institutions do not moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. The tolerance value (0.13) and the VIF (7.6) for firm-level institutions seem to have interfered with the measurement of the variable as a moderator. A further analysis was done after transforming the potential moderator.

#### **4.9.2.1 Testing For the Moderating effect of Firm-Level Institutions on the Relationship Between Management Competence and Performance of Companies Listed on the Nairobi Securities Exchange by Using Transformed Data**

Data is transformed to remedy model problems such as measurement errors in the predictor variables in the regression model. To conduct this analysis, the independent variable was regressed on the dependent variable. The potential moderator was then transformed through recoding and entered into the model. The interaction term was added to the third model to determine whether the moderation was statistically significant. R square change was used to determine the effect of the addition of the interaction term to the model; that is, whether there was moderation. The P-value was used to determine whether the moderation was statistically significant. Table 4.16b presents the results of the analysis.

**Table 4.16b : Stepwise Regression Results for the Effect of Firm-Level Institutions on the Relationship between Management competence and Performance of Companies Listed on the Nairobi Securities Exchange**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.765	.585	.572	8.21530	.585	45.167	1	32	.000
2	.781	.609	.584	8.10295	.024	1.894	1	31	.179
3	.827	.684	.652	7.40794	.075	7.090	1	30	.012

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3048.399	1	3048.399	45.167	.000 <sup>b</sup>
	Residual	2159.718	32	67.491		
	Total	5208.118	33			
2	Regression	3172.725	2	1586.362	24.161	.000 <sup>c</sup>
	Residual	2035.393	31	65.658		
	Total	5208.118	33			
3	Regression	3561.789	3	1187.263	21.635	.000 <sup>d</sup>
	Residual	1646.329	30	54.878		
	Total	5208.118	33			

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.725	11.107		2.586	.014
	Management Competence	.584	.087	.765	6.721	.000
2	(Constant)	42.288	14.736		2.870	.007
	Management Competence	.430	.141	.564	3.054	.005
	Firm-Level Institutions	.379	.275	.254	1.376	.179
3	(Constant)	96.177	24.313		3.956	.000
	Management Competence	-1.032	.564	-1.353	-1.830	.077
	Firm-Level Institutions	-1.789	.852	-1.200	-2.100	.044
	MC*FLI	.005	.002	3.207	2.663	.012

Dependent Variable: Company Performance

a. Predictor: Management Competence

b. Predictors: Management Competence, Firm –Level Institutions

c. Predictors: Management Competence, Firm-Level Institutions, Management competence\*Firm-Level institutions

**NOTE**

MC= Management Competence

FLI=Firm-level Institutions

Table 4.16b indicates a change of 0.075 in R square. This meant 7.5 % increase in the variation in performance explained by the addition of the interaction term (Cross product of management competence and firm-level institutions). This increase was statistically significant at  $p < 0.05$ . The beta in Model 3 was positive and significant ( $\beta$  3.207,  $t=2.663$ ,  $p < 0.05$ ). The findings confirm that firm-level institutions are a moderator in the relationship between management competence and company performance. Hypothesis H<sub>2</sub> was therefore confirmed.

#### **4.9.3 Hypothesis H<sub>3</sub>: Human Resource Management Bundles Moderate the Relationship between Management Competence and Performance of Companies Listed on the Nairobi Securities Exchange**

This hypothesis was a response to the need to determine the moderating effect of human resource management bundles on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. Four stepwise regression analyses were run to determine the effect of each HRM bundle and the three bundles combined on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. A stepwise regression analysis was performed to determine the effect of skill bundle, motivation bundle, empowerment bundle, respectively on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. A further analysis was done for the combined effect of the three bundles of human resource management bundles on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. The results of the analysis are presented in Table 4.17- 4.20.

**Table 4.17: Stepwise Regression Results for the Effect of Skill Bundle on the Relationship between Management Competence and Performance of Companies listed on the Nairobi Securities Exchange**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.765	.585	.572	8.21530	.585	45.167	1	32	.000
2	.877	.770	.755	6.22276	.185	24.774	1	31	.000
3	.878	.771	.748	6.30218	.001	.224	1	30	.640

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3048.399	1	3048.399	45.167	.000 <sup>b</sup>
	Residual	2159.718	32	67.491		
	Total	5208.118	33			
2	Regression	4007.711	2	2003.856	51.749	.000 <sup>c</sup>
	Residual	1200.407	31	38.723		
	Total	5208.118	33			
3	Regression	4016.592	3	1338.864	33.710	.000 <sup>d</sup>
	Residual	1191.525	30	39.718		
	Total	5208.118	33			

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.725	11.107		2.586	.014
	Management Competence	.584	.087	.765	6.721	.000
2	(Constant)	32.803	8.453		3.881	.001
	Management Competence	.186	.103	.244	1.803	.081
	Skill Bundle	10.989	2.208	.675	4.977	.000
3	(Constant)	17.117	34.260		.500	.621
	Management Competence	.321	.302	.420	1.060	.298
	Skill Bundle	15.483	9.762	.951	1.586	.123
	MC*SB	-.037	.079	-.429	-.473	.640

Dependent Variable: Company Performance

a. Predictors: Management Competence, Skill Bundle

b. Predictors: Management Competence, Skill Bundle, Management Competence \*Skill bundle

MC=Management Competence

SB=Skill Bundle

As shown in Table 4.17,  $r$  for Model 1 = 0.765. The value for  $r$  meant that management competence was strongly correlated with company performance. The R-squared for Model 1 in which company performance was regressed on management competence was significant ( $R^2=0.585$ ,  $F=45.167$ ,  $p < 0.05$ ). This indicated that 58.5 % of the variation in company performance was explained by management competence. The ANOVA results indicated that the model was significant ( $F=45.167$ ,  $p < 0.05$ ). The standardized beta coefficient showed that the effect of management competence on company performance was positive and significant ( $\beta=0.765$ ,  $t=6.721$ ,  $p < 0.05$ ).

Model 2 showed that when skill bundle was added to the model,  $r$  increased to 0.877 meaning that management competence and skill bundle together were very strongly correlated with company performance. When skill bundle was added to the model, R-Squared rose from 0.585 to 0.770, indicating 77 % of the variation in company performance was explained by variation in management competence and skill bundle. The model shows that skill bundle explains an additional 18.5 % of the variation in company performance (Change in R-Squared = 0.185). The F-change ( $F=24.774$ ) is significant ( $p < 0.05$ ). The ANOVA results indicate that the regression model which includes management competence and skill bundle was significant ( $F=51.749$ ;  $p < 0.05$ ). The F-value for model 2 is 51.749, an improvement from 45.167. This showed an increasing effect on the predictive ability of the regression model when skill bundle was added.

As shown in Model 3,  $r = 0.878$  meaning that when the interaction term was added to the model, there was a slight change of 0.001 in the correlation coefficient. This indicated that management competence, skill bundle and the interaction between them were very strongly correlated with company performance. There was equally a slight change in R-Squared (R-Square change = 0.001). This implied that the introduction of the interaction term to the regression model had very little effect on the variation of the predictors of the outcome. The F-change was 0.224 and insignificant ( $p > 0.05$ ). The ANOVA statistics indicated goodness of fit of the model ( $F=33.710$ ,  $p < 0.05$ ). However, it should be noted that the F-value decreased from 51.749 to 33.710 showing a reduction in the predictive power of the regression model when the interaction term was introduced.

As shown in Model 1, the standardized beta coefficient for management competence was positive and significant ( $\beta=0.765$ ,  $t=6.721$ ,  $p<0.05$ ). When skill bundle was added to the model (Model 2) containing management competence, the beta coefficient for management competence was positive but insignificant ( $\beta=.244$ ,  $t=1.803$ ,  $p >0.05$ ). The standardized coefficient for skill bundle is positive and significant ( $\beta=0.675$ ,  $t=4.977$ ,  $p<0.05$ ). This means that a unit increase in skill bundle increases company performance by 0.675. The standardized coefficient for management competence in Model 3 was positive but insignificant ( $\beta=0.429$ ,  $t=1.060$ ,  $p>0.05$ ). Similarly, the coefficients for skill bundle were positive but insignificant ( $\beta=0.951$ ,  $t=1.586$ ),  $p>0.05$ ).

The standardized coefficient for the interaction between management competence and skill bundle in Model 3 was negative and insignificant ( $\beta=- 0.429$ ,  $t= -0.473$ ,  $p >0.05$ ). This meant that a unit of positive change in skill bundle contributed to -0.429 decline in performance of companies listed on the Nairobi Securities Exchange. The change, however, was not significant, implying that skill bundle did not moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. To determine the effect of motivation bundle on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange, a stepwise regression analysis was carried out. Table 4.18 presents the results of the analysis.

**Table 4.18: Stepwise Regression Results for the Effect of Motivation Bundle on the Relationship between Management Competence and performance of Companies Listed on the Nairobi Securities Exchange**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.765	.585	.572	8.21530	.585	45.167	1	32	.000
2	.862	.743	.726	6.57087	.154	19.021	1	31	.000
3	.863	.744	.719	6.66524	.001	.128	1	30	.723

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3048.399	1	3048.399	45.167	.000 <sup>b</sup>
	Residual	2159.718	32	67.491		
	Total	5208.118	33			
2	Regression	3869.651	2	1934.826	44.812	.000 <sup>c</sup>
	Residual	1338.466	31	43.176		
	Total	5208.118	33			
3	Regression	3875.353	3	1291.784	29.078	.000 <sup>d</sup>
	Residual	1332.765	30	44.425		
	Total	5208.118	33			

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.725	11.107		2.586	.014
	Management Competence	.584	.087	.765	6.721	.000
2	(Constant)	34.853	8.994		3.875	.001
	Management Competence	.291	.097	.381	3.006	.005
	Motivation Bundle	7.863	1.803	.553	4.361	.000
3	(Constant)	24.610	30.012		.820	.419
	Management Competence	.377	.261	.495	1.444	.159
	Motivation Bundle	11.093	9.200	.780	1.206	.237
	MC*MB	-.026	.074	-.319	-.358	.723

Dependent Variable: Company Performance

Predictor: Management Competence

Predictors: Management Competence, Motivation Bundle

Predictors: Management Competence, Motivation Bundle, Management Competence\*Motivation Bundle

**NOTE**

MC=Management Competence

MB=Motivation Bundle



Table 4.18 showed that  $r$  for Model 1 was 0.765. The  $r$  value meant that management competence was strongly correlated with company performance. The R-squared for Model 1 in which company performance was regressed on management competence was significant ( $R^2=0.585$ ,  $F=45.167$ ,  $p < 0.05$ ). This indicated that 58.5 % of the variation in company performance was explained by management competence. The ANOVA results showed that the model was significant ( $F=45.167$ ,  $p < 0.05$ ). The standardized coefficients showed that the effect of management competence on company performance was positive and significant ( $\beta=0.765$ ,  $t=6.721$ ,  $p < 0.05$ ).

Model 2 showed that when motivation bundle was added to the regression model,  $r$  increased to 0.862, meaning that management competence and skill bundle together were very strongly correlated with company performance. R-Squared rose from 0.585 to 0.726, indicating that 72.6 % of the variation in company performance was explained by variation in management competence and motivation bundle alone. The model showed that motivation bundle alone explained an additional 15.4 % of the variation in company performance (Change in R- Squared =0.154). The F- change ( $F=19.021$ ) was significant ( $p < 0.05$ ). The ANOVA results indicated that the model which includes management competence and motivation bundle was significant ( $F=44.812$ ,  $p < 0.05$ ). The F-value for Model 2 declined from 45.167 to 44.812. This showed a reducing effect on the predictive ability of the model when motivation bundle was added to the regression model.

Model 3 indicated that  $r = 0.863$ . The  $r$  value meant that when the interaction term was added to the regression model, there was a slight change of 0.001 in  $r$ . This indicated that management competence, motivation bundle and the interaction between management competence and motivation bundle were very strongly correlated with company performance. There was equally a slight change in R-squared (R-square change=0.001). This implied that the introduction of the interaction term to the model had petite effect on the variation of the predictors on the dependent variable. The F- change was 0.128 but insignificant ( $p > 0.05$ ). The ANOVA statistics indicated the goodness of fit of the model ( $F=29.078$ ,  $p < 0.05$ ). The F-value decreased from 44.812 in Model 2 to 29.078 in Model 3, showing a reduction in the predictive power of the model when the interaction term was introduced.

As shown in Model 1, the standardized coefficients for management competence were positive and significant ( $\beta=0.765$ ,  $t=6.721$ ,  $p<0.05$ ). When motivation bundle was added to the model (Model 2) containing management competence, the coefficients for management competence were positive but insignificant ( $\beta=.381$ ,  $t= 1.803$ ,  $p >0.05$ ). The standardized coefficients for motivation bundle were positive and significant ( $\beta=0.553$ ,  $t=4.361$ ,  $p<0.05$ ). This meant that a one-unit increase in the use of motivation bundle increased variation in company performance by 0.553 or 55.3 %. The standardized coefficients for management competence in Model 3 were positive but insignificant ( $\beta=0.495$ ,  $t=1.44$ ,  $p>0.05$ ). Similarly, the coefficients of the motivation bundle were positive but insignificant ( $\beta=0.780$ ,  $t=1.206$ ),  $p>0.05$ ).

The standardized coefficients for the interaction between management competence and motivation bundle in Model 3 were negative and insignificant ( $\beta=- 0.319$ ,  $t= - 0.358$ ,  $p > 0.05$ ). This meant that a unit of positive change in motivation bundle contributed to - 0.319 decline in performance of companies listed on the Nairobi Securities Exchange. The change, however, was not significant, implying that motivation bundle did not moderate the relationship between management competence and performance of companies listed in Nairobi Securities Exchange. In determining the effect of empowerment bundle on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange, a stepwise regression analysis was carried out. The results of the regression are presented in Table 4.19.

**Table 4.19: Stepwise Regression Results for the Effect of Empowerment Bundle on the Relationship between Management Competence and Performance of Companies listed on the Nairobi Securities Exchange**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.765	.585	.590	8.21530	.585	45.167	1	31	.000
2	.856	.732	.715	6.81476	.125	14.534	1	30	.001
3	.856	.733	.705	6.92763	.001	.030	1	29	.863

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3138.360	1	3138.360	45.167	.000 <sup>b</sup>
	Residual	2068.185	31	66.716		
	Total	5206.545	32			
2	Regression	3813.318	2	1906.659	41.056	.000 <sup>c</sup>
	Residual	1393.228	30	46.441		
	Total	5206.545	32			
3	Regression	3814.777	3	1271.592	26.496	.000 <sup>d</sup>
	Residual	1391.769	29	47.992		
	Total	5206.545	32			

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	26.507	11.204		2.366	.024
	Management Competence	.599	.087	.776	6.859	.000
2	(Constant)	31.527	9.440		3.340	.002
	Management Competence	.233	.120	.302	1.934	.063
	Empowerment Bundle	10.280	2.697	.595	3.812	.001
3	(Constant)	24.774	39.902		.621	.540
	Management Competence	.287	.335	.373	.858	.398
	Empowerment Bundle	12.442	12.701	.721	.980	.335
	MC*EB	-.017	.097	-.187	-.174	.863

Dependent Variable: Company Performance

a. Predictor: Management Competence

b. Predictors: Management Competence, Empowerment Bundle

c. Predictors: Management Competence, Empowerment Bundle, Management Competence\*Empowerment Bundle

MC=Management Competence

EB=Empowerment Bundle

As shown in Table 4.19,  $r$  for Model 1 was 0.765 meaning that management competence was strongly correlated with company performance. The R-Squared for Model 1 in which company performance was regressed on management competence was significant ( $R^2=0.585$ ,  $F=45.167$ ,  $p < 0.05$ ). This indicated that 58.5 % of the variation in company performance was explained by management competence. The ANOVA results showed that the model was significant ( $F=45.167$ ,  $p < 0.05$ ). The standardized coefficients showed that the effect of management competence on company performance was positive and significant ( $\beta=0.765$ ,  $t=6.721$ ,  $p < 0.05$ ).

Model 2 showed that when empowerment bundle was added to the model,  $r$  increased to 0.856 indicating that management competence and empowerment bundle together were very strongly correlated with company performance. R-Squared rose from 0.585 to 0.732, implying that 73.2 % of the variation in company performance was explained by variation in management competence and empowerment bundle. The model showed that empowerment bundle explained an additional 14.7 % of the variation in company performance (Change in R-Squared = 0.147). The F-change ( $F=14.534$ ) was significant ( $p < 0.05$ ). The ANOVA results indicated that the model which includes management competence and empowerment bundle was significant ( $F=41.056$ ,  $p < 0.05$ ). The F-value for Model 2 declined from 45.167 to 41.056. This showed a reducing effect on the predictive ability of the model when empowerment bundle was added to the regression model.

In Model 3,  $r = 0.856$  meaning that when the interaction term was added to the regression model, there was no change in  $r$ . This indicated that management competence, empowerment bundle and the interaction between management competence and empowerment bundle were very strongly correlated with company performance. There was a slight change of 0.001 in R-Squared (R-Square change=0.001). This implied that the introduction of the interaction term to the model had a very little positive contribution to the variation caused by the two predictors on the dependent variable. The F-change was 0.30 but insignificant ( $p > 0.05$ ). The ANOVA statistics indicated the goodness of fit of the model ( $F=26.496$ ,  $p < 0.05$ ). The F-value decreased from 41.056 in Model 2 to 26.496 (Model 3), showing a reduction in the predictive power of the model in the presence of the interaction term.

As shown in Model 1, the standardized coefficients for management competence were positive and significant ( $\beta=0.765$ ,  $t=6.721$ ,  $p<0.05$ ). When empowerment bundle was added to the model (Model 2) containing management competence, the beta coefficient for management competence was positive but insignificant ( $\beta=.302$ ,  $t=1.934$ ,  $p >0.05$ ). The standardized beta coefficient for empowerment bundle was positive and significant ( $\beta=0.595$ ,  $t=3.812$ ,  $p<0.05$ ). The finding implied that a unit increase in empowerment bundle increased variation in company performance by 0.595. The standardized beta coefficient for management competence in model 3 was positive but insignificant ( $\beta=0.373$ ,  $t=0.858$ ,  $p>0.05$ ). Similarly, the standardized beta coefficient for empowerment bundle was positive but insignificant ( $\beta=0.721$ ,  $t=0.980$ ),  $p>0.05$ ).

The standardized coefficient for the interaction between management competence and empowerment bundle in Model 3 was negative and insignificant ( $\beta=- 0.187$ ,  $t= - 0.174$ ,  $p > 0.05$ ). This meant that a unit of positive change in empowerment bundle contributed to -0.187 decline in performance of companies listed on the Nairobi Securities Exchange. The change, however, was not significant, implying that empowerment bundle did not moderate the relationship between management competence and performance of companies listed on Nairobi Securities Exchange. After establishing that skill, motivation and empowerment HRM bundles did not moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. A further stepwise regression was performed to determine the effect of combined HRM bundles on the said relationship. The results of the analysis are presented in Table 4.20a.

**Table 4.20a: Stepwise Regression Results for the Effect of Combined HRM Bundles on the Relationship between Management Competence and Performance of Companies Listed on the Nairobi Securities Exchange**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.765	.585	.572	8.21530	.585	45.167	1	32	.000
2	.860	.740	.723	6.61371	.155	18.375	1	31	.000
3	.860	.740	.714	6.72278	.000	.002	1	30	.962

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3048.399	1	3048.399	45.167	.000 <sup>b</sup>
	Residual	2159.718	32	67.491		
	Total	5208.118	33			
2	Regression	3852.140	2	1926.070	44.033	.000 <sup>c</sup>
	Residual	1355.978	31	43.741		
	Total	5208.118	33			
3	Regression	3852.243	3	1284.081	28.411	.000 <sup>d</sup>
	Residual	1355.875	30	45.196		
	Total	5208.118	33			

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.725	11.107		2.586	.014
	Management Competence	.584	.087	.765	6.721	.000
2	(Constant)	33.332	9.006		3.701	.001
	Management Competence	.221	.110	.289	2.009	.053
	HRM Bundles	.262	.061	.617	4.287	.000
3	(Constant)	36.565	68.344		.535	.597
	Management Competence	.084	2.864	.110	.029	.977
	HRM Bundles	.239	.475	.564	.503	.619
	MC*HRMB	.063	1.326	.223	.048	.962

Dependent Variable: Company Performance  
a. Predictor: Management Competence  
b. Predictors: Management Competence, Combined HR Bundles,  
Management Competence \*Combined Human Resource Management Bundles

MC: Management Competence  
HRMB: Human Resource Management Bundles

As shown in Table 4.20a,  $r$  for Model 1 = 0.765. The value for  $r$  meant that management competence was strongly correlated with company performance. The R-squared for Model 1 in which company performance was regressed on management competence was 0.585. This indicated that 58.5 % of the variation in company performance was explained by management competence. The ANOVA results indicated that the model was significant ( $F=45.167$ ,  $p<0.05$ ). The standardized coefficients showed that the effect of management competence on company performance was positive and significant ( $\beta=0.765$ ,  $p<0.05$ ).

Model 2 showed that when HRM bundles were added to the model,  $r$  increased to 0.860 meaning that management competence and human resource management bundles together had a strong correlation with company performance. Similarly, R-squared rose to 0.740. This showed that 74 % of the variation in company performance was explained by variation in management competence and HRM bundles. The model indicated that HRM bundles explained additional 15.5 % of the variation in company performance (R-Squared change=0.155). The F-change ( $F=18.375$ ) was significant ( $p<0.05$ ). The ANOVA results indicated that the model which included management competence and HRM bundles was significant ( $F=44.033$ ;  $p<0.05$ ). The F-value for model 2 was 44.033, a decrease from 45.167. This showed a reducing effect on the predictive ability of the model when HRM bundles were added to the regression model.

Model 3 indicated that  $r = 0.860$  suggesting that the inclusion of the interaction term to the model had no effect on  $r$ . This indicated that management competence, HRM bundles, and the interaction term remained strongly correlated with company performance. There was no change in R-Squared, suggesting that the introduction of the interaction term to the model did not affect the contribution of the predictors to change company performance. This implied that the introduction of the interaction term to the model did not influence the variation of the predictors of the outcome. The F- change was 0.002 and insignificant ( $p>0.05$ ). The ANOVA statistics indicate the goodness of fit of the model ( $F=28.411$ ,  $p<0.05$ ). However, it should be noted that the F-value decreased from 44.033 to 28.411, showing a reduction in the predictive power of the model when the interaction term was introduced.

As shown in Model 1, the standardized coefficients for management competence were positive and significant ( $\beta=0.765$ ,  $t=6.721$ ,  $p<0.05$ ). When HRM bundles were added to the regression model containing management competence, the coefficient for management competence was positive but insignificant ( $\beta=0.289$ ,  $t= 2.009$ ,  $p >0.05$ ). The standardized coefficient for HRM bundles was positive and significant ( $\beta=0.617$ ,  $t=4.287$ ,  $p<0.05$ ). This meant that a unit increase in HRM bundles increased company performance by 0.328 ( $0.617-0.289$ ). The standardized coefficients for the moderator (interaction term) in Model 3 were positive but insignificant ( $\beta=0.223$ ,  $t= 0.048$ ,  $p >0.05$ ). This showed that the HRM combined bundles did not moderate the relationship between management competence and company performance. Overall, the results of the statistical tests of hypothesis H<sub>3</sub> indicated that human resource management bundles had no moderating effect on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. To verify the results, another test for moderation was performed using transformed data on the independent variable and the potential moderator.

#### **4.9.3.1 Testing for the Moderating Effect of HRM Bundles on the Relationship Between Management Competence and the Performance of Companies Listed on the Nairobi Securities Exchange by Using Transformed Data**

To conduct this analysis, the independent variable (Management competence) and the potential moderator (Human resource management bundles) were transformed and entered to the regression model in steps. Step one involved regressing management competence on the dependent variable. In step two, the potential moderator was introduced to the model. The interaction term was then entered to the model to determine whether the moderation was statistically significant. R- square change was used to determine the effect of the addition of the interaction term to the model that is, whether there was moderation. The P-value was used to determine whether the moderation was statistically significant. Table 4.20b presents the results of the analysis.



**Table 4.20 b: Stepwise Regression Results for the Effect of Combined HRM Bundles on the Relationship between Management Competence and Performance of Companies Listed on the Nairobi Securities Exchange by Using Transformed Data**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.683	.466	.449	9.32265	.466	27.924	1	32	.000
2	.804	.647	.624	7.70309	.181	15.871	1	31	.000
3	.856	.733	.706	6.80727	.086	9.696	1	30	.004

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2781.181	32	86.912		
	Residual	5208.118	33			
	Total	3368.654	2	1684.327	28.386	.000 <sup>c</sup>
2	Regression	1839.463	31	59.338		
	Residual	5208.118	33			
	Total	3817.950	3	1272.650	27.464	.000 <sup>d</sup>
3	Regression	1390.168	30	46.339		
	Residual	5208.118	33			
	Total					

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	86.642	3.445		25.153	.000
	Management Competence	1.224	.232	.683	5.284	.000
2	(Constant)	82.091	3.067		26.766	.000
	Management Competence	.500	.264	.279	1.895	.067
	HRM Bundles	.905	.227	.586	3.984	.000
3	(Constant)	39.499	13.944		2.833	.008
	Management Competence	-.456	.386	-.255	-1.183	.246
	HRM Bundles	.565	.229	.366	2.471	.019
	MC*HRMB	.217	.070	.762	3.114	.004

Dependent Variable: Company Performance  
a. Predictor: Management Competence  
b. Predictors: Management Competence, Combined HRM Bundles,  
c. Management Competence \*Combined Human Resource Management Bundles, MC\*HRMB  
MC: Management Competence  
HRMB: Human Resource Management Bundles

Table 4.20b indicated a change of 0.086 in R square. This meant 8.6 % increase in the variation explained by the addition of the interaction term. This increase was statistically significant at 0.05. The beta in Model 3 was positive and significant ( $\beta=0.762$ ,  $t=3.114$ ,  $p< 0.05$ ). The findings established that human resource management bundles moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. Hypothesis H<sub>3</sub> was therefore supported.

#### **4.9.4 Hypothesis H<sub>4</sub>: The Combined Effect of Management Competence, Firm Level Institutions and HRM Bundles on Company Performance is different from the Individual Effect of Management Competence on Performance of Companies Listed on the Nairobi Securities Exchange**

To test hypothesis H<sub>4</sub>, two regressions were run. The first model focused on the effect of management competence on company performance. The second model tested the combined effect of management competence, firm-level institutions and human resource management bundles on the performance of companies listed on the Nairobi Securities Exchange. The results of the two regression models were compared. Table 4.21 has the results of the analysis.

**Table 4.21: Multiple Regression Results for the Combined Effect of Management Competence, Firm-level Institutions and HRM Bundles on the Performance of Companies listed on the Nairobi Securities Exchange**

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.765	.585	.572	8.21530	.585	45.167	1	32	.000	1.884
2	.861	.741	.715	6.70395	.156	9.027	2	30	.001	

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3048.399	1	3048.399	45.167	.000 <sup>b</sup>
	Residual	2159.718	32	67.491		
	Total	5208.118	33			
2	Regression	3859.831	3	1286.610	28.628	.000 <sup>c</sup>
	Residual	1348.287	30	44.943		
	Total	5208.118	33			

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.725	11.107		2.586	.014
	Management Competence		.087	.765	6.721	.000
2	(Constant)	32.730	9.244		3.541	.001
	Management Competence	.180	.149	.235	1.203	.238
	Firm-Level Institutions	.037	.089	.106	.414	.682
	HRM Bundles	.240	.081	.566	2.970	.006

Dependent Variable: Company Performance

Predictors: Management Competence, Firm-Level Institutions, HRM Bundles

As shown in Table 4.21, correlation coefficient (r) for Model 1 and 2 were 0.765 and 0.861 respectively. This meant that the predictors for the two regression models were very strongly correlated with company performance. R-Squared for Model 1 was 0.585. This indicates that management competence explained 58.5 % of the variation in company performance. The standardized beta coefficients for management competence were positive and significant ( $\beta=0.765$ ,  $t=6.721$ ,  $p < 0.05$ ). The F- change (9.027) was significant ( $p < 0.05$ ). Model 2 showed that when company performance was regressed on the three predictor variables, R-Squared increased from 0.585 to 0.741 indicating an increase of 15.6 %. The ANOVA results showed that the model was significant ( $F=28.628$ ,  $p < 0.05$ ).

The change in F-value from  $F= 45.167$  to  $28.628$ , indicated a reduction in the predictive power of the model when management competence, firm-level institutions and HRM bundles were added to the regression model.

Regarding the relative effect of the three predictor variables in explaining variation in company performance, the beta coefficients for management competence and firm-level institutions were positive though insignificant (Management Competence:  $\beta=0.235$ ,  $t=1.203$ ,  $p >0.05$ ; Firm-level institutions:  $\beta=0.106$ ,  $t=0.414$ ,  $p>0.05$ ). The standardized coefficients for HRM bundles were positive and significant ( $\beta =0 .566$ ,  $t= 2.970$ ,  $p <0.05$ ). This meant that when the three predictor variables were entered simultaneously to the regression model, variance in company performance increased significantly from  $R^2 = 0.572$  to  $R^2 =0.715$ , a difference of  $0.156$  or  $15.6 \%$ , which was significant at  $p<0.001$ . This increase in company performance was largely due to human resource management bundles ( $\beta=0.566$ ,  $t=2.970$ ,  $p<0.05$ ). These results implied that a unit change in human resource management bundles was associated with a corresponding  $0.566$  increase in company performance.

The beta coefficients for management competence and firm-level institutions were low and insignificant at  $p < 0.05$  (Management competence:  $\beta = 0.235$ ,  $t = 21.203$ ,  $p > 0.05$ ; Firm-level institutions:  $\beta=0.106$ ,  $t=0.414$ ,  $p> 0.05$ ). Overall, Model 2 shows that the additional variation in company performance ( $74.1 \%$ ) explained by variation in management competence, firm-level institutions and HRM bundles combined, was different from the variation in company performance ( $58.5 \%$ ) explained by management competence alone. The results of the analysis indicated that the combined effect of management competence, firm-level institutions and HRM bundles on the performance of companies listed on the Nairobi Securities Exchange was different from the individual effect of management competence on firm performance. Therefore, Hypothesis  $H_4$  was supported.

**Table 4:22: Summary of Results of Tests of Hypotheses**

Objectives	Hypothesis	Result	Remarks
i. Determine the effect of management competence on the performance of companies listed on the Nairobi Securities Exchange.	<b>H<sub>1</sub></b> : Management competence has a significant effect on performance of companies listed on the Nairobi Securities Exchange.	R <sup>2</sup> =.585 F=45.167, p<.05 β=.765 t= 6.721, p<.05	Supported
ii. Establish the effect of firm- level institutions on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange.	H <sub>2</sub> : Firm- level institutions moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange.	R <sup>2</sup> change 0.075<0.05  β= 3.207 t= 2.663 p < 0.05	Supported
iii. Assess the effect of HRM bundles on the relationship between management competence on performance of companies listed on the Nairobi Securities Exchange.	H <sub>3</sub> : HRM Bundles moderate the relationship between management competence on performance of companies listed on the Nairobi Securities Exchange.	R <sup>2</sup> Change 0.086 <0.05 β=.766 t= 3.114 p < 0.05	Supported
iv. Determine whether the combined effect of management competence, firm-level institutions and HRM bundles on the performance of companies listed on the Nairobi Securities Exchange is different from the individual effect of management competence.	H <sub>4</sub> : The combined effect of management competence, firm- level institutions and HRM bundles on performance of companies listed on the Nairobi Securities Exchange is different from the individual effect of management competence.	Model 1: R <sup>2</sup> =0.585 Model 2: R <sup>2</sup> =0.741 R <sup>2</sup> ( Model 2) >R <sup>2</sup> (Model 1) Beta Coefficients Model 1=0.765 Model 2=0.907,all positive	Supported

## **4.10 Discussion and Implications**

In this section, the study carried out an interrogation of the research findings under each of the research objectives and corresponding hypotheses. There was a further attempt to compare the results with those of similar studies done in the past.

### **4.10.1 Effect of Management Competence on the Performance of Companies**

#### **Listed on the Nairobi Securities Exchange**

The first objective of the study was to determine the effect of management competence on company performance. The hypothesis arising from this objective was that management competence has a significant effect on company performance. The hypothesis testing was by use of simple linear regression analysis. The regression results showed that management competence had a positive and significant effect on company performance ( $R^2 = 0.585$ ,  $F = 45.167$ ,  $\beta = 0.765$ ,  $t = 6.721$ ,  $p < 0.05$ ). Thus, the regression results supported hypothesis **H<sub>1</sub>** that management competence had a significant effect on the performance of companies listed on the Nairobi Securities Exchange.

The findings showed a reasonable variation in company performance ( $R^2 = 58.5\%$ ) caused by management competence. The study findings agree with the result of a study by Rezaie et al. (2008) who established that employee competence contributed 48.6 % of the variance in job performance of extension workers. Though the respondents were extension workers, the study compares favorably with the current study where management competence contributed 58.5 % of the variation in company performance. The study results are also in agreement with the findings of a survey carried out by Ismail and Abidin, (2010) on the impact of workers competence on their performance in the Malaysian private service sector, which established that employee competence, had a significant influence on performance. In the study, workers competence caused 0.323 or 32.3% of the variation in performance. From these studies, there is a consensus that management competence has a positive and significant effect on company performance.

However, there is empirical evidence that management competence may not necessarily have a positive and significant effect on company performance unless supportive conditions exist as shown in the study carried out by Sanda, Sackey, and Fältholm (2011) who established that senior managers in Ghana possessed competence, yet this was not reflected in their performance. The implication for the study results is that for companies to perform, they should ensure that their managers not only acquire the necessary competencies but also concurrently acquire efficiency and effectiveness in the management of their places of work. The findings support Knowledge Space Theory, which essentially deals with the relationship between competence and performance by articulating that competencies predict performance outcomes and provide an explanation for discrepancies in performance (Korossy, 2009).

#### **4.10.2 Moderating Effect of Firm-Level Institutions on the Relationship between Management Competence and Performance of Companies Listed on the Nairobi Securities Exchange**

The second objective of the study sought to establish the effect of firm-level institutions on the relationship between management competence and company performance. The hypothesis that firm-level institutions moderate the relationship between management competence and company performance was tested using stepwise regression. Based on the regression results, it was established that firm-level institutions moderated the relationship between management competence and company performance. These findings are in agreement with Barney (1991) that firm-level institutions play a significant role in sustaining corporate performance. Consistent with the findings also, MacKenzie, Podsakoff, and Rich (2001) established a positive and significant effect of transformational leadership style on organizational performance. However, Obiwuru (2011) found a positive but insignificant effect of leadership style on organizational performance. Further, the findings are in agreement with those of Katou (2012) and Gordon and DiTomaso (1992) who established a positive effect of organizational policies and culture on organizational performance. However, the study findings differ from those of Machuki et al. (2012) who found that the effect of firm-level institutions on organizational performance was not statistically significant.

The finding of this study that firm-level institutions moderate the relationship between management competence and company performance is consistent with studies carried out on the individual moderating effect of organizational culture, leadership style, organizational structure, and organizational policies. A study on the moderating effect of organizational culture on the relationship between knowledge management and organizational effectiveness in the service sector, established that a supportive organizational culture positively moderates the relationship (Butt, Danish, & Munir, 2012). Another study found a result-oriented culture to have a positive effect on the relationship between successful workplace learning and performance (Daryoush, Silong, Omar, & Othman, 2013). Still consistent with the finding of this study was the finding by Buisman (2009) that leadership style moderates the relationship between hierarchical conflicts and employee satisfaction.

Generally, the cited studies indicate that firm-level institutions either directly or indirectly affect company performance. Therefore, since firm-level institutions are those firm-specific attributes in the firm's internal environment, which define the context in which decisions are made and implemented, companies listed on the Nairobi Securities Exchange can benefit from better management of their firm-level institutions.

#### **4.10.3 Moderating Effect of HRM Bundles on the Relationship between Management Competence and Performance of Companies Listed on the Nairobi Securities Exchange**

The moderating effect of HRM bundles on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange was performed using step wise regression analysis. As shown in Model 3, there was an increase of 8.6 % which was significant at 0.05. The beta indicate that the moderating effect was statistically significant ( $\beta=0.762$ ,  $t=3.114$ ,  $p < 0.05$ )

The finding that HRM bundles indirectly firm performance is supported by Subramony (2009), who found a direct relationship. In his study, HRM bundles were found to have significant larger magnitudes of effects than their individual constituent practices and were positively related to business outcomes. Further, he found that the synergistic combination of selective staffing procedures and training practices result in the creation of a highly skilled work force by attracting and selecting employees



with high levels of organization-relevant knowledge, skills and abilities and by ensuring the acquisition of task-related skills and procedural knowledge necessary for high levels of performance . Further support was given by Dietz and Boon (2005), Ferris, Hall, Royce , and Martocchio (2004) and McDuffie (1995) who established that HRM bundles favorably affect the performance of business firms. Consistent with the findings also, Kinnie et al. (2006) established that motivation-enhancing bundles direct employees' efforts towards the accomplishment of work objectives and provide them with the inducements necessary to engage in high levels of performance.

Empowerment-enhancing bundles were also found to positively influence organizational performance in such areas as productivity (Kirkman & Rosen, 1999; Patterson, West, & Wall, 2004), customer satisfaction (Mathieu, Gilson & Ruddy, 2006), and sales performance (Ahearne, Mathieu, & Rapp, 2005), and ultimately firm-level financial performance (Banker, Potter, & Srinivasan, 2000; Helgesen, 2006). The fact that HRM bundles have a positive and significant effect on company performance means that for organizations to enhance their performance, they need to appropriately combine HR. practices.

Previous studies are to some extent in agreement with the findings that HRM bundles moderate the relationship between management competence and company performance. In his work, Alanaiti et al. (2011) established factors that affect individual competence such as training and education, the organizational environment and personal characteristics. This implies that training - a HR. practice in a HR. bundle, has the potential to affect competence, which in turn affects firm performance. Further, Singh (2003) established that firms direct their HRM efforts towards the development of competencies, culture, and effectiveness among employees individually or in groups. The HRM efforts (HR. practices) can be combined to form bundles and assist in competency development and eventually contribute to company performance. Also, consistent with the findings, Risher (2000) noted that workers were rewarded with salary increments after adding new knowledge or skills or when they demonstrated higher-level competence at existing capabilities. This implies that compensation, an HR. practice in the motivation HRM bundle has the potential to moderate the relationship between management competence and

company performance. Based on the cited studies, the moderating effect of HRM bundles on the relationship between management competence and company performance seem to be implied.

The Ability-Motivation-Opportunity theory supports the view that human resource management bundles have a direct effect on performance by documenting that human resource management practices can be used to influence the employee's ability, motivation and opportunity to perform, which enhances individual job performance (Boxall & Purcell, 2008).

#### **4. 10.4 Combined Effect of Management Competence, Firm-Level Institutions and Human Resource Management Bundles on the Performance of Companies Listed on the Nairobi Securities Exchange**

The fourth objective of the study was to determine whether the combined effect of management competence, firm-level institutions and HRM bundles on performance of companies listed on the Nairobi Securities Exchange was greater than the effect of management competence on the performance of the said companies. Hypothesis H<sub>4</sub> was tested by regressing management competence on company performance and also by regressing management competence, firm-level institutions and HRM bundles on company performance. The results were compared for conclusions to be made. The results indicated that the combined effect of management competence, firm-level institutions and HRM bundles on company performance was different from and indeed greater than the effect of management competence alone on company performance ( $R^2$  for model 2 (0.741) >  $R^2$  for model 1 (0.585)).

The hypothesis that the combined effect of management competence, firm-level institutions and HRM bundles on the performance of companies listed on the Nairobi Securities Exchange was different from the effect of management competence on the performance of the said companies is supported. These findings support the RBV Theory which focuses on the organization's internal environment, organizational morale, technical knowledge and the organization's capabilities that an organization uses to transform inputs into outputs (Pearce & Robinson, 2009). It also supports the AMO theory which explains the role played by abilities (competence), opportunity to perform, and HRM bundles in company performance.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the overview of the research findings, conclusions, implications and recommendations of the study. The chapter discusses a summary of findings on research objectives, hypotheses and conclusions of the study. Finally, the chapter discusses implications of the study to theory and practice, limitations of the study and suggestion for further research.

#### **5.2 Summary of Findings**

The study examined the effects of firm-level institutions and HRM bundles on the relationship between management competence and performance of companies listed on Nairobi Securities Exchange. The study collected data from 34 companies listed on the Nairobi Securities Exchange. The study revealed that the companies largely utilized functional, social and cognitive competencies. Based on the descriptive statistics for management competence, the overall mean score was 4.14 (82.8 %), showing that companies listed on the Nairobi Securities Exchange practised functional competence and social competence largely.

Regarding firm-level institutions, the companies have embraced a culture of individual performance, leadership, customer focus, communication, conflict management, decision-making, professionalism and organizational goal integration. A leadership style in most of the organizations was both transformational and transactional. The companies were found to have policies on recruitment, confidentiality, sexual harassment, ethics, safety, compensation, and reward. These companies were also found to have put procedures in place in areas such as recruitment, grievances, finance, discipline and redundancy. The companies also had structures, which guided their work regarding chain of command, lines of communication, distribution of power and delegation of decision-making. The overall mean for firm-level institutions was 4.20, meaning that firm-level institutions addressed in this study were applied largely (84%) in the companies listed on the Nairobi Securities Exchange.

Largely, the companies embraced human resource management practices in the form of bundles such as skill- enhancing HR bundle practices (selection, training), motivation-enhancing bundle (performance management, compensation management, and career development) and empowerment-enhancing bundle (participation, employee voice, and team empowerment). The mean for human resource management bundles was 4.05. This translated to 81 % of the responses. Overall, all the predictor variables had mean scores of more than 4, implying that they were applicable to the companies under study. Over 80 % of the responses for all the predictor variables were in agreement concerning the presence of these variables in their companies. The mean for aggregate company performance was 3.05, implying that the respondents to a moderate extent (61%) were in agreement concerning the application of the main performance indicators in their companies.

The first study objective sought to determine the effect of management competence on the performance of companies listed on the Nairobi Securities Exchange as at 31 December 2014. Simple linear regression was used to test the hypothesis that management competence had a positive and significant effect on company performance. The results revealed a positive effect of management competence on performance ( $\beta=0.765$ ,  $t=6.721$ ,  $p<0.05$ ). Hypothesis one ( $H_1$ ) was thus supported.

The second objective was to establish the effect of firm-level institutions on the relationship between management competence and company performance. Data on management competence, firm-level institutions and company performance were subjected to stepwise regression analysis. The regression results indicated an increase in  $R^2$  when the interaction term was introduced to the model. Further, the coefficients of the interaction between management competence and firm-level institutions were positive and significant ( $\beta=3.207$ ,  $t=2.663$ ,  $p>0.05$ ). Hence, hypothesis  $H_2$ , which stated that firm-level institutions moderate the relationship between management competence and company performance, was supported.

The third objective was to establish the effect of HRM bundles on the relationship between management competence and company performance. A stepwise regression analysis was carried on management competence, HRM bundles and company performance. The regression results indicate that there was an increase in R square

which was significant at 0.05 and the beta of the interaction term was positive and significant ( $R^2$  change = 0.086,  $\beta=0.762$ ,  $t=3.114$ ,  $p>0.05$ ). Hence, hypothesis H<sub>3</sub>, which stated that HRM bundles moderate the relationship between management competence and company performance, was supported.

The fourth objective of the study was to determine whether the combined effect of management competence, firm-level institutions and HRM bundles on performance was different from the effect of management competence on the performance of companies listed on the Nairobi Securities Exchange. The corresponding hypothesis was tested using simple and multiple regression analysis. The regression results showed that the combination of the predictor variables explained greater variance in company performance than the variance explained by management competence alone. The beta for management competence (in Model 1) and human resource management bundles (Model 2) were positive and significant (Management competence:  $\beta=0.765$ ,  $t=6.721$ ,  $p<0.05$ ; human resource management bundles:  $\beta=0.566$ ,  $t=2.970$ ,  $p<0.05$ ). The beta for firm-level institutions was positive but insignificant ( $\beta=0.106$ ,  $t=0.414$ ,  $p>0.05$ ). H<sub>4</sub> was therefore supported on the basis that there was a quantum change in R squared from 0.572 to 0.715.

### **5.3 Conclusions and Implications**

The broad objective of the study was to determine the effect of firm-level institutions and HRM bundles on the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. The specific objectives of the study were to determine the effect of management competence on company performance, establish the effect of firm-level institutions on the relationship between management competence and company performance, determine the effect of human resource management bundles on the relationship between management competence and company performance and to determine whether the combined effect of management competence, firm-level institutions and human resource management bundles on performance was different from the individual effect of management competence on performance. The findings of the study lead to several conclusions.

There is a relationship between management competence and performance of companies listed on the Nairobi Securities Exchange, and management competence has a positive and significant effect on the performance of the companies. The study finding confirms that management competence is crucial in enhancing company performance. Hence, possession of functional, social and cognitive competence by management would result in higher levels of company performance.

The study findings revealed that firm-level institutions and HRM bundles moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. These findings imply that proper alignment of firm-level institutions to organizational competence development strategy would lead to enhanced organizational performance. Further, organizations that appropriately bundle human resource practices are more likely to improve their performance than those which do not.

Finally, the findings of the study showed that the combined effect of management competence, firm-level institutions and human resource management bundles on the performance of companies listed on the Nairobi Securities Exchange is different from the effect of management competence alone. This calls for an integrated approach when using the three predictor variables so as to enhance company performance.

#### **5.4 Recommendations**

Given the findings of the study and its subsequent conclusions, the study makes the following recommendations to policy and practice. Since management competence was found to influence the performance of companies listed on the Nairobi Securities Exchange, those companies which have not yet made efforts to formulate policies geared towards enhancing functional competence, social competence and cognitive competence of their managers, should do so. These companies should also ensure that the formulated policies are implemented, and further encourage their managers to improve continuously on their competencies to enhance their performance and that of their companies.

The fact that firm-level institutions moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange calls upon the said companies to match their culture, leadership style, policies, procedures and structure with any strategy that they formulate to build competence among their managers. This will contribute to effective strategy execution and ultimately enhance the performance of their organizations.

Based on the finding that HRM bundles moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange, it is highly recommended that the said companies should bundle HR. practices into skill-enhancing bundle, motivation enhancing bundle and empowerment enhancing bundle. Appropriate bundling of HR. practices is hoped to supplement managers' skill and knowledge levels, provide them with direction and inducement and boost their autonomy and responsibility levels.

The combined effect of management competence, firm-level institutions and human resource management bundles on the performance of companies listed on the Nairobi Securities Exchange was found to be greater than the effect of management competence alone. This shows that integrating management competence, firm-level institutions and human resource management bundles achieves greater effect on company performance than that of management competence alone. Companies listed on the Nairobi Securities Exchange should, therefore, adopt an integrated approach in their use of management competence, firm-level institutions and human resource management bundles for improved performance.

### **5.5 Contribution Made by the Study**

The extant study makes contributions to human resource theory and practice in several ways as explained below. First, the findings of the three hypotheses of the study confirm the Resource Based View, and the Ability-Motivation-Opportunity theory.

Hypothesis H<sub>1</sub> that management competence has significant effect on the performance of companies listed on the Nairobi Securities Exchange confirms the RBV theory whose emphasis is on among other things, resources that are rare, valuable, imperfectly imitable and substitutable. Management competence is a resource that is valuable and to some extent not easy to find, copy or even substitute. Management competence, as a resource qualified by the RBV theory was confirmed by Makhija (2003), who established that it creates profit and value for firms. The concept of profit and value for firms implies firm performance. Therefore, the study findings confirm RBV theory.

The findings for hypothesis H<sub>1</sub> also confirm Knowledge Space Theory, which explains how competencies help predict and explain discrepancies in performance (Korossy, 1999). The theory advocates the identification of problems prevailing in an organization and determining the corresponding competencies to solve the problems. The findings therefore confirm the theory by showing the relationship between management competence and company performance. The hypothesis also supports the AMO theory (ability to perform). The ability to perform is present when employees can do the job because they have the necessary knowledge and skills (Boxall & Purcell, 2008).

The test of hypothesis H<sub>2</sub> supports the RBV Theory. The RBV theory is concerned with the internal environment. It is this environment which defines the context in which strategic decisions are made and implemented (firm-level institutions). Firm-level institutions are found in the internal environment. The findings also support the AMO theory (opportunity to perform). The opportunity to perform is present when the work structure and environment facilitate the necessary support and possibilities to perform (Boxall & Purcell, 2008). This implies that managers have the opportunity to perform when the environment is conducive, where organizational culture, leadership style, organizational policies, organizational procedures and structure are aligned to one another and to management competence.



The finding that HRM bundles moderate the relationship between management competence and performance of companies listed on the companies listed on the Nairobi Securities Exchange confirms the AMO theory. It is this theory that guided the selection of the three HRM bundles. Indeed, the three HRM bundles (skill, motivation and empowerment) give managers the ability, motivation and opportunity to perform. The results of the fourth hypothesis which indicate that management competence, firm-level institutions and HRM bundles explain performance supports RBV, Knowledge Space theory and AMO theory.

Secondly, the extant study contributes to knowledge by establishing that firm-level institutions and HRM bundles moderate the relationship between management competence and performance of companies listed on the Nairobi Securities Exchange. Finally, this study contributes to the existing body of knowledge by establishing that management competence; firm-level institutions and HRM bundles are combined to explain performance of companies listed on the Nairobi Securities Exchange. Finally, companies listed on the Nairobi Securities Exchange will gain from the knowledge of the study by applying it to develop management competence, manage their firm-level institutions and appropriately bundle human resource practices for enhanced performance.

### **5.6 Limitations of the Study**

The study encountered some limitations, which are documented hereunder. First, some methodological challenges are noteworthy. The study only targeted companies listed on the Nairobi Securities Exchange. This implies that the findings cannot be generalized and may not apply to categories of other organizations like academic institutions, non- governmental organizations (NGOs), small and medium enterprises(SMEs), academic institutions and faith-based organizations. This is because firms in different industries have unique challenges and problems requiring a unique set of management competencies, different approaches to management of firm-level institutions and different ways of combining their human resource management practices to form bundles.

The study used a descriptive survey design in which averages for company financial performance data for a three-year period (2012-2014) were used. Data on financial performance, management competence, firm-level institutions and HRM bundles were collected at one point. This means that the findings were limited to cross-sectional data without the likelihood of establishing the effect of the period between which changes might have taken place in the companies under investigation. The outcome of the study could have been more significant if efforts had been made to establish the effect of the period between which changes might have taken place in the companies listed on the Nairobi Securities Exchange.

The response rate was not very good due to unwillingness by most companies to allow access to the human resource managers. Where access was allowed, some of the human resource managers were not willing to accept and fill the questionnaires. Some companies even indicated that they do not accept questionnaires for academic research. Others promised to fill the questionnaire and even after constant follow-up, did not keep their promise. However, the response rate was adequate to make generalizations and recommendations based on the findings of the study and conclusions.

### **5.7 Suggestions for Further Research**

The research gaps identified in this study provide some basis for further empirical investigations. There is need for a similar study that includes other management competencies (such as personal competence, ethical competence and Meta - competence) and more firm-level institutions, using longitudinal data and a larger sample to test whether their effect on company performance will be different.

A similar study should also be conducted among other categories of organizations such as academic institutions, NGOs, SMEs, and faith- based organizations. This is because the findings for the companies listed on the Nairobi Securities Exchange may not apply to these organizations whose motives are different and that have unique characteristics that may require a unique set of management competencies, firm-level institutions and HRM bundles.

## REFERENCES

- Abu- Jarad, I .Y. Yusof, N., & Nikbin, D. (2010). A review paper on organizational culture and organizational performance. *International Journal of Business and Social Sciences*, 1(3), 26-46.
- Aczel, A., & Sounderpandian, J. (2009). *Complete business statistics* (10<sup>th</sup> ed.). Boston: McGrawHill,
- Agarwal, R., & Gort, M. (2002). Firm product lifecycles and firm survival. *American Economic Review*, 92, 184-190.
- Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance. *Journal of Applied Psychology*, 90, 945–955.
- Ainon, M. (2003). *Psikologi Kejayaan*. PTS Publications and Distribution, Sdn. Bhd, Pahang.
- Akimova, I. (2000). Development of market orientation and competitiveness of Ukrainian firms. *European Journal of Marketing*, 34(9/10), 1128-1148.
- Al-Amro,S. (2012). Factors affecting stock market prices in Amman Stock Exchange. *European Journal of Business and Management*, 4(8).
- Alainati, S., AlShawi, S. A., & Al-Karaghoul, W. (2011). The effect of knowledge management and organizational learning on individual competencies. *European, Mediterranean and Middle Eastern Conference on Information Systems*, Athens, Greece, 672-687.
- Alcazar, F. M., Fernandez, & Gardey, G. S. (2005). Researching on SHRM: An analysis of the debate over the role played by human resources in firm success. *Management Review*, 16(2), 213-241.
- Almajali, A. Y., Alamro, S. A., & Al-Soub,Y. Z. (2012). Factors affecting the financial performance of Jordanian Insurance Companies listed in Amman Stock Exchange. *Journal of Management Research*, 4(2).
- Amit, R., & Schoemaker, P. (1993). Strategic assets and organizational rent. *Strategic Management Journal*, 14, 33-46.
- Ang, R. (2001). *Buku Pintar Pasar Modal Indonesia*. Media Soft, Indonesia.
- Anwar, M.R., Djakfar,L.D., & Abdulhafidha , A.K.(2012). Human resources performance and competency of management by using a method of Balanced Scorecard: *International Journal of Civil & Environmental Engineering*, 12 (4).
- Appelbaum, E., Berg, P., & Kalleberg, A. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Ithaca, New York: Cornell University Press.

- Armstrong, M. (2009). *A handbook of human resource management practices* (11<sup>th</sup> ed.), London: Kogan Page.
- Aydin, N., Sayim, M., & Yalama, A. (2007). Foreign ownership and firm performance: evidence from Turkey. *International Research Journal of Finance and Economics*, 11, 103-110.
- Ballou, H. (2012). *The Transformational leadership traits: Create leader*. Available online at <http://transformationalstrategist.com/transformational-leadership-traits-2/>.
- Bambang, R. (2001). *Dasar-dasar Pembelanjaan Perusahaan*, Edisi Keempat, Yogyakarta: BPF. *Denda Wijaya*.
- Banker, R., Potter, G., & Srinivasan, D. (2000). An empirical investigation of an incentive plan that includes non-financial performance measures, *Accounting Review*, 7, 65.
- Barbosa, N., & Louri, H. (2005). Corporate performance: Does ownership matter? Comparison of foreign and domestic owned firms in Greece and Portugal. *Review of Industrial Organization*, 27, 73-102.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B.M. (1998). Transformational leadership: *Industry, Military and Educational Impact*, 72-80. Lawrence Erlbaum Associates, London.
- Batt, R. (2002). Managing customer services: human resource practices, quit rates, and sales growth. *Academy of Management Journal*, 45(3), 587-597.
- Bhaumik, S. K., & Dimova, R. (2014). Good and bad institutions: Is the debate over? Cross-country firm-level evidence from the textile industry. *Cambridge Journal of Economics*, 38(1), 109-126.
- Blaikie, N. (1993). *Approaches to social enquiry polity*. Cambridge: Polity Press,
- Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal*, 15(3), 67-94.
- Boselie, P., & Paauwe, J. (2005). Human resource functional competencies in European companies, *Personnel Review*, 34, 5
- Bowen, E. D., & Ostroff, C. (2004). Understanding HRM-firm performance linkages: The role of the "strength" of the system. *Academy of Management Review*, 29, 203-221.

- Boxall, P., & Purcell, J. (2008). *Strategy and human resource management*. Basingstoke: Palgrave Macmillan.
- Boyatzis, R. E. (1982). *The competent manager: A model for effective performance*. New York: John Wiley & Sons.
- Boyd, B. L. (2003). Competencies for leaders of volunteers during the next decade: a national Delphi study. *Journal of Agricultural Education*, 44(4), 47-51.
- Bryk, A., & Raudenbush, S. (1988). Heterogeneity of variance in experimental studies: A challenge to conventional interpretations. *Psychological Bulletin*, 104(3), 396-404.
- Bryman, A. (1992). *Charisma and leadership in organizations*. London: Sage.
- Bryman, A., & Bell, E. (2007). *Business research methods*: Oxford, New York.
- Buisman, S. K. (2009). The understanding of the moderating effect of leadership styles on the relationship between hierarchical conflicts and employee satisfaction, *Work and organizational Psychology* (Unpublished master's thesis, University of Twente, the Netherlands).
- Burgoyne, J. (1989). Creating the managerial portfolio: Building on competency approaches to management development. *Management Education and Development*, 30(1), 56-61.
- Burns, J. M. (1978). *Leadership*. New York: Harper and Row.
- Butt, S. S., Danish, R. Q., & Munir, Y. (2012). Moderating role of organizational culture between knowledge management and organizational effectiveness in the service sector. *World Applied Science Journal*, 20(1), 45-53.
- Cacioppe, R. (2000). Creating spirit at work: Revisioning organization development and leadership-part II. *Leadership and Organization Development Journal*, 21(2), 110-119.
- Carrell, M. R. (1995). *Human resource management: Global strategies for managing a diverse work force* in Carrell, M.R., Elbert, N. F., Hatfield, R. D., Prentice Hall, Englewood Cliffs, 810, New York.
- Carter, L., & Gray, D. (2007). Relational competence, internal market orientation and employee performance. *The Marketing Review*, 7 (4), 385-400.
- Chadwick, C. (2010). Theoretical insights on the nature of performance synergies in human resource system: Toward greater precision. *Human Resource Management*, 20, 85-101.
- Cheetham, G., & Chivers, G. (1996). Towards a holistic model of professional competence. *Journal of European Industrial Training*, 20(5), 20-30.

- Cheetham, G., & Chivers, G. (1998). The reflective (and competent) practitioner: a model of professional competence which seeks to harmonize the reflective practitioner and competence- based approaches. *Journal of European Industrial Training*, 22(7), 267-276.
- Chien, M.H. (2004). Study to improve organizational performance. A view from SHRM. *Journal of American Academy of Business*, 4 (1/2), 89.
- Cooper, D. R., & Schindler, P. S. (2003). *Business research methods*. Boston: McGraw-Hill.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16 (3), 297–334
- Cronbach, L., & Shavelson, R. (2004). My Current Thoughts on Coefficient Alpha and successor procedures. *Educational Psychological Measurement*, 64 (3), 391-418.
- Csazer, A. F. (2008). Organization structure as determinant of performance. Evidence from mutual funds, Pennsylvania.
- Daft, R. L. (2000). *Organization theory and design*. (7<sup>th</sup> ed.). U.S.A: South-Western College Publishing, Thomson Learning.
- Daft, L.R. (2005). *Leadership experience* (4th ed.). South Western:Cengage learning .
- Dale, A. (2007). Redcar & Cleveland Voluntary Development Agency. The Green, Dormanstown, TS10 5NA.
- Darlington, R. B. (1978). Reduced-Variance Regression. *Psychological Bulletin*, 85, 1328-1355.
- Daryoush, Y., Silong, A . D., Omar, Z., & Othman, J. (2013). Successful workplace learning: moderating effect of organizational culture. *International Journal of Human Resource Studies*, 3(4), 1-19.
- Deal, T. E., & Kennedy, A. A. (1982). *Corporate cultures: The Rites and rituals of corporate life*. Reading, MA.
- Delaney, J. T. & Huselid, M.A. (1996). The impact of human resource management on perceptions of organizational performance. *The Academy of Management Journal*, 39,949-969.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *The Academy of Management Journal*, 39 (4), 802-834.
- Damanpour, F. (1991). Organizational Innovation: a meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34(3), 555-590.

- Denis, D. (2011). Multiple linear regression using SPSS Part II. University of Montana.
- Doane, D. P., & Seward, L. E. (2005). Applied statistics in business and economics. USA: Irwin.
- Droge, C., Vickey, S., & Markland, R.E. (1994). Sources and outcomes of competitive advantage: an exploratory study in the furniture industry. *Decision Sciences*, 25 (5), 669-689.
- Edwards, D. (2008). Developing policies and procedures for volunteer organizations. Ministry of Agriculture, Food and Rural Affairs, Ontario.
- Eugene, B. F., & Joel, H. F. (2005), Manajemen Keuangan, Edisi kesepuluh, Buku Satu, (Terjemahan Ali Akbar Yulianto). Erlangga: Jakarta.
- Ezirim, C.B., Nwibere, B. M., & Emecheta, B. C, (2010). Organizational culture and performance: The Nigerian experience. *International Journal of Business and Public Administration*, 7(1), 40-56.
- Ferris, G. R., Hall, A. T., Royle, M. T., & Martocchio, J. J. (2004). Theoretical development in the field of human resource management: Issues and challenges. *Organizational Analysis*, 12, 231–254.
- Ferris, G. R., Witt, L. A., & Hochwarter, W. A. (2001). Interaction of social skill and general mental ability on work outcomes, *Journal of Applied Psychology*, 86, 1075-1082.
- Field, A. (2005). *Factor Analysis using SPSS. Research Methods II*. C8057.
- Field, A. (2009). *Discovering Statistics using SPSS (3<sup>rd</sup> ed.)* LA: SAGE.
- Flamini, V., McDonald, C., & Schumacher, L. (2009). Determinants of commercial bank profitability in Sub-Saharan Africa. *IMF Working Paper*, 1-30.
- Forehand, G. A., & Von, G. (1964). Environmental Variations in Studies of Organizational Behavior. *Psychological Bulletin*, 62, 361-382.
- Francoise, D., & Winterton, J. (2005) in Ismail. R. & Abidin, S.Z. (2010). Impact of workers' competence on their performance in the Malaysian private service sector. *Peer-reviewed and Open Access Journal*, 2 (2), 25-36.
- Frey, A., & Ruppert, J. J. (2013), Structuring and detecting competence, in K. Beck and Zlatkin-Troitschanskaia (Eds). From diagnostics to learning success (pp.185-198) Rotterdam: Sense.
- Gallagher, S., & Brown, B. (2007). *A strong market culture drives organizational performance*. Wiley Interscience.
- Giannopoulos, G., Holt, A., Khansalar, E., & Cleanthous, S. (2013). The use of the balanced scorecard in small companies. *International Journal of Business and Management*, 8(14), 1-22.

- Gordon, G. G., & DiTomaso, N. (1992). Predicting corporate performance from organizational culture. *Journal of Management Studies*, 29, 783-98.
- Guest, D. E., Michie, J., Conway, N., & Sheehan, M. (2003). Human resource management and corporate performance in the UK. *British Journal of Industrial Relations*, 41(2), 291-314.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33, 114-135.
- Greenberg, J. (2011). *Behavior in organizations* (10<sup>th</sup> ed.). Prentice Hall, Upper Saddle River, New Jersey.
- Hair, J. F., Black, W.C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2011). *IEEE Transactions on Engineering Management*, 53(1), 3-16.
- Hatch, M. J. and Cunliffe, A. L. (2006), *Organization Theory* (2nd ed). Oxford University Press, Oxford.
- Helgesen, Ø. (2006). Are loyal customers profitable? Customer satisfaction, customer (action) loyalty and customer profitability at the individual level. *Journal of Marketing Management*, 22 (3-4), 245-266.
- Higgins, J. M. (2005). The Eight 'S's of Successful Strategy Execution. *Journal of Change Management*, 5(1-3), 3-13.
- Hofstede, G. (1980). *Culture's consequences*, London: Sage.
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1).
- Hofstede, G., & Bond, M. H. (1998). *The Confucius Connection: from Cultural Roots to Economic Growth. Organizational Dynamics*, 5-21.
- Hogan, R., & Warrenfeltz, R. (2003). Educating the modern managers. *Academy of Management Learning and Education*, 2 (1), 74-84.
- Hoopes, D., Madsen, T., & Walker, G. (2003). Guest editor's introduction to the Special Issue: Why is there a Resource-based view? Towards a theory of competitive heterogeneity. *Strategic Management Journal*, 24, 889-902.
- Hoskisson, R.E., Madsen, T.L., & Walker, G. (1999). Theory and research in strategic management: Swings of a pendulum. *Journal of Management*, 25 (3), 417-456.
- HFI (2011). *An introduction to the organization culture questionnaire*. Wellington house, Starley way, Birmingham International Park, Solihull, B37, 7HB, United Kingdom.
- Hughes, J. (2007). Proceedings of the 40<sup>th</sup> Hawaii international conference on system sciences.



- Hussey, H., & Hussey, R. (1997). *Business research. A practical guide for undergraduate and postgraduate students*. New York: Palgrave.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Sage publications.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity and corporate financial performance. *The Academy of Management Journal*, 3, 635-720.
- Hvide, H. K., & Møen, J. (2007). *Liquidity constraints and entrepreneurial performance*.
- Hyland, T. (1994). *Competence, education and NVQs: Dissenting perspectives*. London: Cassell.
- Ichniowski, C., Shaw, K., & Prennushi, G., (1997). The effects of human resource management practices on productivity. *American Economic Review*, 87, 291-313.
- Hsu, I. C. (2008). Knowledge sharing practices as a facilitating factor for improving organizational performance through human capital: A preliminary test. *Expert Systems with applications*, 35(3), 1316-1326.
- Ismail, R., & Abidin, S.Z. (2010). Impact of workers' competence on their performance in the Malaysian private service sector. *Peer-reviewed and Open Access Journal*, 2 (2), 25-36.
- Jacobs, R. L. (1997). *A taxonomy of employee development: Toward an organizational culture of expertise*. In *Proceedings of the 1997 Annual Conference of the Academy of Human Resource Development, Baton Rouge, LA: Academy of Human Resource Development* (pp. 278-283).
- Jacobides, M. G. (2007). The inherent limits of organizational structure and the unfulfilled role of hierarchy: Lessons from a Near-War. *Organization Science*, 18(3), 455-477.
- Janjua, S. Y., Naeem, M, A., & Kayani, E.N. (2012). The competence classification framework: A classification model for employee development. *Interdisciplinary Journal of Contemporary research in business*, 4 (1), 396-404.
- Jansen, J., Vera, D., & Crossan, M. (2009). Strategic leadership for exploration and exploitation: The moderating role of environmental dynamism. *The Leadership Quarterly*, 20, 5-18.
- Jin (2010). Emotional leadership as a key dimension of public relations. National survey of public relations leaders. *Journal of Public Relations Research*, 22(2), 153-181.
- Joanneum, F.H., Gesellschaft, M.B., Rene, W., Frech, B., & Beinhauer, R. (2011). Competence. Competence survey report.

- Johnson, R. B., Onwuegbuzie, A. J. & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133.
- June, S., & Mahmood, R. (2011). The Relationship between Role Ambiguity, Competency and Person-Job Fit With the Job Performance of Employees in the Service Sector SMEs in Malaysia. *Business Management Dynamics*, 1(2), 79-98.
- Kagire, J. R. K., & Munene, J.C. (2007). Engineering lecturers' competencies and organizational citizenship behavior at Kyambogo University. *Journal of European Industrial Training*, 31(9), 706-726.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: Measures that drive performance. *Harvard Business Review*, 70(1), 71-79.
- Katz, R. L. (1974). Skills of the effective administrator. Kazanjian, *Harvard Business Review*, 9/10, 90-102.
- Katou, A. A. (2012). Investigating reverse causality between human resource management policies and organizational performance in small firms. *Management Research Review*, 35(2), 134-156.
- Kerlinger, F. N. (1986). *Foundations of behavioral research* (3<sup>rd</sup> ed.), New York: Holt, Rinehart & Winson.
- Kerr, J., & Slocum, J. W. (2005). Managing corporate culture through reward systems. *The Academy of Management Executive*, 19 (4), 130-138.
- Kimberlin, C. L., & Winterstein, A. G. (2008). Research fundamentals. Validity and reliability of measurement instruments used in research. *American Journal of Health-System Pharmacy*, 65(23), 2276- 84.
- Kim, A., & Lee, C. (2012). How does HRM enhance strategic capabilities? Evidence from the Korean management consulting industry. *The International Journal of Human Resource Management*, 23(1), 126-146.
- Kim, C., Min., K., Yune, K. S., Choi, H., & Gong, E. H. (2008). Employees' perceptions of interpersonal competence. The case of South Korea. *Asia Pacific Education Review*, 9 (2), 221-232.
- Kinnie, N., Hutchison, S., Purcell, J., & Swart, J. (2006). *Human resource management and organizational performance*. In T. Edman & A. Wilkinson (Eds.). *Contemporary human resource management: Texts and cases* (2<sup>nd</sup> ed., pp.26-64). London: Prentice Hall.
- Kirkman, B., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *The Academy of Management Journal*, 42, 58–74.

- Korossy, K. (1999). Modeling knowledge as competence and performance; In D. Albert & Luka (Eds.): *Knowledge spaces: Theories, empirical research, and applications*. Mahwah New Jersey: Lawrence Erlbaum Associates, 103-132.
- Kothari, C. R. (2004). *Research methodology, methods and techniques*. Revised edition, New, New Delhi, India: Age International (P) Ltd Publishers.
- Kothari, C. R. (2010). *Research Methodology: Methods and Techniques* (2<sup>nd</sup> ed.). Delhi: Dharmesh Art Process,
- Kotter, J. P., & Heskett, J.L. (1992). *Corporate culture and performance*. New York : Free Press.
- Lai, Y. (2013). The moderating effect of organizational structure in knowledge management for international ports in Taiwan. *International Journal of Computer and Information Technology*, 2(2), 240-246.
- Lane, G., & Robinson, A. (1995). The development of standards of competence for senior management. *Executive Development*, 8(6), 4-8.
- Lebans, M., & Euske, K. (2006). *A conceptual and operational delineation of performance. Business performance measurement*, Cambridge University Press.
- Lee, S., Kim, B., & Kim, H. (2012). An integrated view of knowledge management for performance. *Journal of Knowledge management*, 16(2), 183-203.
- Levine, H. (1960). *In contributions to Probability and Statistics: Essays in Honor of Harold Hotelling*, I. Olkin et al, eds. Stanford University Press, 278 -292.
- Li, L. X. (2000). An analysis of sources of competitiveness and performance of Chinese manufacturers. *International Journal of Operations and Production Management*, 20(13), 299-315.
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 140, 1-55.
- Lim, B. (1995). Examining the links between organizational culture and organizational performance. *Leadership and Organizational Development Journal*, 16(5), 16-21.
- Linde, A., & Wallgren, E. (2012). *The effects of organizational structure and rules on banks' risk management: A comparative study of three major banks in Sweden*: UMEA University.
- Liargovas, P., & Skandalis, K. (2008). *Factor affecting firms' financial performance: The case of Greece*. Athens: University of Peloponnese Press.
- Loderer, C., Neusser, K., & Waelchli, U. (2009). *Firm age and survival*. Working paper, University of Bern, Switzerland.

- Lok, P., Westwood, R., & Crawford, J. (2005). Perceptions of organizational subculture and their significance for organizational commitment. *Applied Psychology, 54*(4), 490-514.
- Machuki, V.N., Letting', N.C., & Aosa, E.O. (2012). Firm-level institutions and performance of publicly quoted companies in Kenya. *International Journal of Humanities and Social Sciences, 2* (21), 298-312.
- McDuffie, J. P. (1995). Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. *Industrial and Labor Relations, 48*, 197-221.
- MacKenzie, S. B., Podsakoff, P., & Rich, G. A. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science, 29*, 115-134.
- Magutu, O. P. (2013). Supply chain strategies, technology and performance of large scale manufacturing firms in Kenya (Unpublished doctoral dissertation), University of Nairobi, Kenya.
- Mahmood, K. (2002). Competencies needed for future academic librarians in Pakistan. *Education information, 20*(1), 27-43.
- Makhija, M. (2003). Comparing the Resource-based and the Market-based views of the firm: Empirical evidence from the Czech privatization. *Strategic Management Journal, 24*, 433-451.
- Malik, H. (2011). Determinants of insurance companies' profitability: An analysis of insurance sector of Pakistan. *Academic Research International, 1*(3), 2223-2253.
- Massele, J., Darroux, G., Jonathan, H., & Fengju, XU. (2015). Challenges faced by Dar es Salaam Stock Exchange market in Tanzania. *Research Journal of Finance and Accounting, 4*(15), 36-42.
- Masoud, E. Y. (2013). The impact of functional competencies on firm performance of Pharmaceutical industry in Jordan. *International Journal of Marketing Studies, 5*(3), 56.
- Mayson, S., & Barrett, R. (2006). The science and practice of HRM in small firms. *Human Resource Management Review, 16*(4), 447-455.
- Mathieu, J., Gilson, L., & Ruddy, T. (2006). Empowerment and team effectiveness: An empirical test of an integrated model. *Journal of Applied Psychology, 91*, 97-108.
- Mcguire, R. (2005). Which management style to use? *Pharmaceutical Journal, 275*, 317-320.
- McClelland, D. C. (1973). Testing for competence rather than for intelligence. *American Psychologist, 28*, 1-14.

- Meijerink, J. G., Bondarouk, T., & Lepak, D. P. (2015). Employees as active consumers of HRM: Linking employees' HRM Competences with their perceptions of HRM service value. *Human Resource Management*.
- Mensah, S. (2003). *The essentials of an efficient market and implications for investors, firms and regulators. UNECA Workshop on African Capital Markets Development*, Johannesburg, South Africa.
- Miller, J. E. Walker, J. R., & Drummond, K. E. (2002). *Supervision in the hospitality industry* (4<sup>th</sup> ed.). New Jersey: John Wiley & Sons, Inc.
- Mintzberg, H. (2009). *Tracking strategies: Toward a general strategy formation*. New York: OUP.
- Monari, F. (2013). *Employee attributes, organizational factors, time management tendencies and employee performance in Chartered universities in Kenya (Unpublished doctoral dissertation)*, University of Nairobi, Nairobi, Kenya.
- Mugenda, A. G. (2008). *Social science research: Theory and practices*. Nairobi: Applied Research and Training Services.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches*. Nairobi: African Center for technology studies.
- Mumford, M. D., Zaccaro, S. J., Connelly, M. S., & Mars, M. A. (2000). Leadership skills, conclusions and future directions. *Leadership Quarterly*, 11(1), 155-170.
- Nairobi Securities Exchange Handbook. (2014)
- Newstrom, J. W., & Davis, K. (1993). *Organizational behavior: Human behavior at work*. New York: McGraw- Hill.
- Nguyen, T. M. A. (2008). *Functional competencies and their effects on performance of manufacturing companies in Vietnam (Doctoral dissertation)*.
- Nonaka, I., & Toyama, R. (2003). The knowledge-creating theory revisited: Knowledge creation as a synthesizing process. *Knowledge Management Research Practice*, 1, 2–10.
- Nooraie, M., & Arsi, I. S. (2012). Emotional intelligence and faculties' academic performance. *African Journal of Business Management*, 6 (9), 3333-3341.
- Nordhaug, O. (1998). Competence specificities in organizations: A classificatory framework. *International Studies of Management and Organization*, 28(1), 8-29.
- Norland, E. V. T. (1990). Controlling error in evaluation instruments. *Journal of extension*, 28(2), 1-35.
- North, D. C. (1994). Economic performance through time. *American Economic Review*, 84(3), 359-367.

- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (2<sup>nd</sup> ed.). New York: McGraw-Hill.
- Obiwuru, T. C., Okwu, A. T., Akpa, V. O., & Nwankwere, I. A. (2011). Effects of leadership style on organizational performance: a survey of selected small scale enterprises in Ikosi-Ketu Council Development area of Lagos State, Nigeria. *Australian Journal of Business and Management Research*, 1(7), 100-111.
- Olweny, T. O., & Kimani, D. (2011). Stock market performance and economic growth. Empirical Evidence from Kenya using causality test approach. *Advances in Management & Applied Economics*, 1(3), 153-196.
- Omran, M. A., Bolbol, A., & Fatheldin (2008). Corporate governance and firm performance in Arab equity Markets: Does ownership concentration matter?" *International Review of Law and Economics*, 28, 32-45.
- Ostroff, F., & Smith, D. (1992). The horizontal organization. *The McKinsey Quarterly*, 1, 148-168.
- Patterson, M. G., West, M. A., & Wall, T. D. (2004). Integrated manufacturing, empowerment and company performance. *Journal of Organizational Behavior*, 25, 641-665.
- Payne, H. J. (2005). Reconceptualizing social skills in organizations: Exploring the relationship between communication competence, job performance and supervisory roles. *Journal of Leadership Organization Studies*, 11, 63-77.
- Pearce, J. A., & Robinson, R. B. Jr. (2009). *Strategic management: Formulation, implementation and control* (11<sup>th</sup> ed.), McGraw- Hill International edition.
- Peters, T. J., & Waterman, R. H., Jr. (1982). *In search of excellence*. New York: Harper & Row.
- Penrose, E. (1959). *The theory of the growth of the firm*. Oxford: Basil Blackwell Publisher.
- Penrose, E. (1980). *The theory of the growth of the firm* (2<sup>nd</sup> ed.). Oxford: Basil Blackwell Publisher.
- Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of the workforce*. Boston: Harvard Business School Press.
- Phillips, B. S. (1971). *Social research, strategies and tactics* (2<sup>nd</sup> ed.). New York: Mac Millan Company
- Quangyen, T., & Yezhuang, T. (2013). Organizational structure: Influencing factors and impact on a firm. *American Journal of Industrial and Business Management*, 3, 229-236.

- Rezaie, A., Alambeigi, A., & Rezvanfar, A. (2008). Analysis of the job performance of the agricultural extension experts of Yazd province, Iran. *Research Journal of Agriculture and Biological Sciences*, 4, 78-85.
- Riggo, R. E., & Taylor, S. J. (2000). Personality and communication skills as predictors of hospice nurse performance. *Journal of Business Psychology*, 15, 351-359.
- Risher, H. (2000). Paying for employee competence. *School Administrator*, 57(9), 21-24.
- Robbins, S. P., Judge, T. A., & Sanghi, S. (2007). *Organizational Behavior* (12<sup>th</sup> ed.). India: Pearson: Prentice Hall.
- Sadeghi, A., & Pihie, Z. A. L. (2012). Transformational leadership and its predictive effects on leadership effectiveness. *International Journal of Business and Social Science*, 3(7).
- Saffold, G. S. (1998). Culture traits, strength, and organizational performance: Moving beyond strong culture. *The Academy of Management Review*, 13, 546-558.
- Sagwa, E.V. (2014). *Human resource management practices and performance of firms listed on the Nairobi Securities Exchange* (Unpublished doctoral dissertation), University of Nairobi, Nairobi, Kenya.
- Sanda, A., Sackey, J., & Fältholm, Y. (2011). Managerial competence and non-performance of small firms in a developing economy. *Academy of Knowledge Process*, 2(3).
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (4<sup>th</sup> ed.). Harlow: Pearson Education,
- Schein, S. H. (1985). *Organizational culture and leadership*. San Francisco: Jossey- Bass.
- Schein, E. H. (1990). *Organizational culture*. American Psychological Association, 45(2), 109.
- Schein, E. H. (2011). *Leadership and organizational culture*. New York: Wiley.
- Schermerhorn, J. R., Hunt, J. G., & Osborn, R. N. (1991). *Managing organizational behavior*. (4<sup>th</sup> ed.), 484-485.
- Sekaran, U. (2003). *Research methods for business: A skill building approach*. Kundli: John Wiley & Sons.
- Simerly, R., & Li, M. (2000). Environmental dynamism, financial leverage and performance: A theoretical integration and an empirical test. *Strategic Management Journal*, 21(1), 31-49.
- Shapiro, W. W., & Wilk, M. B. (1965). An analysis test of variance test for normality (Complete samples). *Biometrika Trust*, 52(3/4), 591-611.
- Sharma, B., & Fisher, T. (1997). Functional strategies and competitiveness: An empirical analysis using data from Australian manufacturing. *Benchmarking for Quality Management and Technology*, 4 (42), 86-94.

- Sifa, C. B. (2009). *Influence of core competences on the relationship between co- alignment variables and performance of profit - oriented Parastatals in Kenya* (Unpublished doctoral dissertation), University of Nairobi, Nairobi, Kenya.
- Singar, E. J., & Ramdsen, J. (1972). *Human resources: Obtaining results from people at work*. United Kingdom: McGraw-Hill.
- Singh, H. A. (2003). *Developing competence of management teachers/trainers*. City University College of Aman; UBS, Punjab University.
- Skarzauskiene, A. (2008). Theoretical insights to leadership based on system thinking principles. *Organizacija Vodyba Sisteminiai Tyrimai*, 48(1), 105-120.
- Snow, C. C., & Hrebiniak, L. G. (1980). Strategic, distinctive competence and organizational performance. *Administrative Science Quarterly*, 25, 317-337.
- Sorensen, B., & Stuart, E. (2000). Age, obsolescence, and organizational innovation. *The Academy of Management Journal*, 25(6), 121 - 132.
- Stoner, J., Vadyba, J., Stoner, E.R., Freeman. & Gilbert, D.R. (2000). Vilnius: Poligrafija ir informatika, 386.
- Subramony, M. (2009). A meta-analytic investigation of the relationship between firm bundles and firm performance. *Human Resource Management*, 48(5), 745- 768.
- Tadic, I., & Pivac, S. (2014). Defining human resources' "bundles" and its correlation with companies' financial performance. *International Journal of Social Management*, 1(4), 1023-1027.
- Thach, L. N., Ismail, M., Jegak, U., & Idris, K. (2008). Individual factors as predictors of extension agents' performance in Mekong delta, Vietnam. *Journal of Human Resources, Adult Learning*, 3, 93-102.
- Tichy, N. M. (1982). Managing change strategically: The technical, political, and cultural keys. *Organizational Dynamics*, 11(2), 59-80.
- Tiraieyari, N., Idris, K. H., Hamzah, A., & Uli, K. (2009). Relationship between technical competency and extensionists' job performance. *Research Journal of Agriculture and Biological Sciences*, 5, 533-540.
- Trochim, W. M. K. (2006). *Research Methods Knowledge base*. New York: Web centre for social research methods, Cengage Publishing.
- Trompenaars, F. (1993). *Riding the waves of culture*. London: Economics Books.
- Tutar, H., Altinoz, M. & Cakiroglun, D. (2011). The effects of employee empowerment on achievement motivation and the contextual performance of employees. *African Journal of Business Management*, 5(15), 6318-6329.



- Viitala, R. (2005). Perceived developmental needs of managers compared to an integrated management competency model. *Journal of Workplace Learning*, 17(7), 436-451.
- Walton, C. R. (1986). A vision-led approach to management restructuring. *Organizational Dynamics*, 14(4), 5-17.
- Wang, Z. (2005). Organizational effectiveness through technology innovation and HRM strategies. *International Journal of Management*, 26 (6) 481- 487.
- Wayne, S.J., Liden, R.C., Graf, I. K., & Ferris, G. R. (1997). The role of upward influence tactics in human resource decisions. *Journal of Personnel Psychology*, 50, 979-1006.
- Weirs, A. (2008). *Introduction to business statistics* (6<sup>th</sup> ed.). Australia: South-Western Cengage Learning.
- Wiklund, J., & Shepherd, D. A. (2003). Knowledge-based resources, entrepreneurial orientation and the performance of small and medium sized businesses. *Strategic Management Journal*, 24(5), 1304-1314.
- Wood, S. J., & Wall, T. D. (2007). Work enrichment and employee voice in human resource management performance studies. *International Journal of Human Resource Management*, 18 (7), 1335-1372.
- Woodruffe, C. (1992). What is meant by competency? In R.Boam, and P. Sparrow (Eds), *Designing and Achieving Competence*. London: McGraw-Hill.
- Youndt, M. A., Snell, S. A. Jr., & Lepak, D. P. (1996). Human resource management, manufacturing strategy and firm performance. *The Academy of Management Journal*, 39(4), 836-866.
- Yukl, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The Leadership Quarterly*, 10(2), 285-305.
- Yuqi, L. (2007). Determinants of banks' profitability and its implication on risk management practices: panel evidence from the UK, The University of Nottingham.
- Zhu, W., Chew, I., & Spangler, W., (2005). CEO transformational leadership and organizational outcomes: The mediating role of human capital-enhancing human resource management. *The Leadership Quarterly*, 16, 39-52.
- Zikmund, W. (2003). *Business research methods* (7<sup>th</sup> ed.). United Kingdom: Thompson, South Western,
- Zwell, M. (2000). *Creating a culture of competence*. New York, NY: Wiley.

## APPENDICES

### APPENDIX 1: LIST OF PRACTICES INCLUDED IN THE THREE HUMAN RESOURCE MANAGEMENT BUNDLES

<b>Study</b>	<b>Skill Bundle</b>	<b>Motivation Bundle</b>	<b>Empowerment Bundle</b>
Appleyard & Brown(2001);Batt(2002)			Team participation, team autonomy, work design(discretion over work methods, teams)
Batt, Colvin& Keefe(2002)			Voice(problem-solving groups, self-directed teams)
Chandler & McEvoy(2000)		Profit sharing, gainsharing	
Collins& Clark(2003)		Incentive pay(performance based pay, stock options, bonus)	
Collins, Smith& Stevens(2001)	Acquisition practices(recruitment sources, selection)		
Colvin, Batt & Keefe(2005)		Variable pay, internal promotions	Voice(grievance procedures, self-directed groups, problem-solving teams)
Delaney & Huselid(1996)	Selective staffing, training	Incentive compensation, internal labor market	Decentralized decision making, flat organizational structure
Delery & Doty (1996)		Profit sharing, performance appraisal	
Delery, Gupta, Shaw, Jenkins & Ganster(2000)		Pay, benefits(paid off, health and disability insurance)	Voice( grievance procedures, participation in decision making)
Faems, Sels, DeWinne & Maes (2005)	Selection, training	Compensation(performance pay, bonus, benefits), performance management (reward reviews, evaluation system, performance review)	Participation(direct , indirect and financial participation
Fey & Bjorkman(2001)			Employee feedback ( information sharing programs, complaint resolution, surveys)
Gardner, Moynihan, Park & Wright (2001)	Selection, training	Pay for performance, bonus, performance evaluation, promotions	Complaint process, teams, communication
Gibson, Porath, Benson & Lawler(2007)			Information sharing, team enabling

<b>APPENDIX 1 : LIST OF PRACTICES INCLUDED IN THE THREE HRM BUNDLES CONTINUED</b>			
Guerrero & Barraud-Didier(2004)		Compensation(performance- based compensation, stock, stock ownership, fringe benefits)	Empowerment(work content, work time, team work)
		Pay practices(merit/incentive pay, skill-based pay)	
Harel, Tzafrir & Baruch ( 2003)	Selection , training		
Hartog & Verburg (2004)		Rewards (pay for performance, profit sharing), performance evaluation.	Autonomy, information sharing.
Khatri(2000)	Selection, training	Performance- based compensation, flexible benefits	Employee relations/participation(grievance systems, participation in decision-making)
Kirman & Rosen ( 1999)			Team-based HR policies(treatment as an autonomous group e.g. autonomy in member choice, work allocation)
Liao & Chuang ( 2004)			Employee involvement(influence on work process and outcomes, participation in decision- making )
Mathiew et al. (2006)			Team empowerment (authority, responsibility)
Patterson et al.(2004)			Job enrichment( Skill flexibility, job variety and job responsibility)
Rajagopalan(1996)		Annual bonus plan, long-term performance plan	
Rogg , Shull, Schmitt(2001)	Selection, training	Performance review(standardized performance reviews, pay and promotions linked to performance)	
Shaw, Delery, Jenkins & Gupta (1998)	Selection, training	Pay, benefits	
Shaw et al. (2002)	Pay, benefits		
Subramony <i>et al.</i> (2008)		Competitive pay, benefits package	
Youndt & Snell (2004)			Egalitarian HR(empowerment, flat organizational structure)
Zhu, Chew & Spangler(2005)	Selection, training		

**Source:** Subramony (2009)

## APPENDIX II: LETTER OF INTRODUCTION FROM THE UNIVERSITY



**UNIVERSITY OF NAIROBI**  
**COLLEGE OF HUMANITIES AND SOCIAL SCIENCES**  
**SCHOOL OF BUSINESS**  
**DOCTORAL STUDIES PROGRAMME**

Telephone: 4184160/1-5 Ext. 225  
Email: dsp@uonbi.ac.ke

P.O. Box 30197  
Nairobi, Kenya

14<sup>th</sup> August, 2015

TO WHOM IT MAY CONCERN

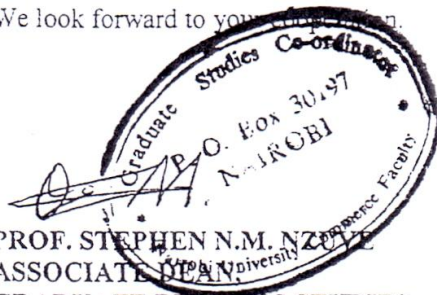
RE: KYONGO JOANES KALELI: D80/80082/2009

This is to certify that, KYONGO JOANES KALELI: D80/80082/2009 is a Ph.D candidate in the School of Business, University of Nairobi. The title of his study is: **“Management Competence, Firm-Level Institutions, Human Resource Management Bundles and Performance of Companies listed at the Nairobi Securities Exchange”**.

The purpose of this letter therefore, is to kindly request you to assist and facilitate in carrying out the research/study in your organization. A questionnaire is herewith attached for your kind consideration and necessary action.

Data and information obtained through this exercise will be used for academic purposes only. Hence, the respondents are requested not to indicate their names anywhere on the questionnaire.

We look forward to your response.



**PROF. STEPHEN N.M. NZOYE**  
**ASSOCIATE DEAN**  
**GRADUATE BUSINESS STUDIES**  
**SCHOOL OF BUSINESS**

SNM/nmk

### **APPENDIX III: LETTER INTRODUCING THE RESEARCH ASSISTANT**

20 August, 2015

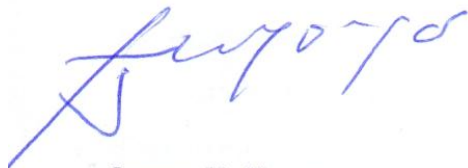
Dear Respondent,

**RE: RESEARCH ASSISTANT: KELVIN K. NGIKI**

This is to introduce my research assistant, Kelvin Ngiki to you. He will approach you with an introduction letter from the School of Business, University of Nairobi and a study questionnaire. In case of any difficulties in understanding some sections of the questionnaire, please do not hesitate to ask him for clarification. In case you still need more details, you can as well get in touch with me through my number 0716195421 or email address, [jkyongo@daystar.ac.ke](mailto:jkyongo@daystar.ac.ke). I therefore request you to fill the questionnaire for me. I assure you the data that you will provide will be for academic purposes only. For authenticity, I request you to sign and stamp the questionnaire. I also wish to appreciate you later so you may also give us your cell phone number and/or your email address.

Thanking you.

Yours Faithfully,



Joanes K. Kyongo

## APPENDIX IV: STUDY QUESTIONNAIRE

Dear Respondent,

My name is **JOANES KYONGO KALELI**, a PhD (HR) candidate at the University of Nairobi. I am undertaking a research on **Management Competence, Firm-level institutions, Human Resource Management Bundles and Performance of Companies listed on the Nairobi Securities Exchange, Kenya**. By virtue of being a Human Resource Manager in your company, you form part of the respondents for this research. Kindly accept my invitation to participate in this research by sparing some time to fill the questionnaire. The questionnaire is being administered for research purposes and the information provided will be used purely for academic purposes and will be treated with confidentiality. Attached to this questionnaire are letters of introduction, one from the University and the other one introducing my research assistant.

### PART I: ORGANIZATIONAL DEMOGRAPHICS

Please provide the following information regarding your organization.

1. Company name \_\_\_\_\_
2. Year of establishment \_\_\_\_\_
3. Ownership (Tick one)
  - Majority of the shares are locally owned
  - Foreigners own majority of the shares
4. Total number of employees (Tick one)
  - Less than 100
  - 100 to 300
  - 301 to 500
  - 501 to 700
  - Over 700

## PART 11: MANAGEMENT COMPETENCE

Kindly rate the extent to which each of the statements listed in the matrix presented below applies to your organization by ticking on the appropriate box.

		1	2	3	4	5
	<b>COMPETENCE DIMENSION</b>	Not at all	Small extent	Moderate extent	Large extent	Very Large extent
5.	<b>Functional Competence</b> (Level of skill)					
a)	Ability to plan work activities					
b)	Ability to make correct decisions					
c)	Ability to systematically follow best practice to explore knowledge within our organization.					
d)	Ability to develop our employees' knowledge.					
e)	Ability to facilitate sharing of knowledge within our organization.					
f)	Ability to initiate and implement internal control in the form of overseeing managerial incentives and rewards.					
g)	Ability to enforce external control in the form of debt holder and stakeholder monitoring.					
h)	Ability to bring improvement in product and service operations by distributing and coordinating activities around the process.					
i)	Project administration expertise					
j)	Expertise to monitor and execute projects successfully.					
k)	Project scheduling techniques					
l)	Ability to involve everyone from inside/outside the organization with the same purpose and sense of quality consciousness and to serve customer needs better than competitors through quality products and services.					

m)	Ability to understand and cope with competition in the industry.					
n)	Ability to understand industry structure for effective strategy positioning.					
o)	Ability to develop strategy accordingly to defend competition and shape them in our company's favor.					
p)	Ability to influence potential forces and respond to them in an exploitative manner by choosing strategy which is optimum for new competitive landscape.					
q)	Ability to manage change through initiating development of coalitions.					
r)	Ability to convince and prepare employees to change.					
s)	Ability to institutionalize change through development of appropriate culture.					
t)	Knowledge and understanding of computer systems and software.					
u)	Ability to operate electronic and communication devices for business purposes.					
6.	<b>Social Competence</b> ( Behavior and attitude of individual workers)					
a)	Ability to utilize appropriate interpersonal skills to build relationships with colleagues and team members and external stakeholders.					
b)	Ability to effectively mobilize teams.					
c)	Understanding and appreciating the concerns and perspectives of our employees.					
d)	Taking active interest to address employees' concerns and assist them.					
e)	Ability to initiate and facilitate the process of mediation by encouraging communication between the conflicting parties with the aim of finding an appropriate solution acceptable to the parties involved.					



f)	Ability to prepare and deliver effective presentations to different audiences.					
g)	Ability to communicate organizational goals to our employees clearly and concisely.					
h)	Ability to use communication skills to positively influence individual behavior, using a range of verbal and written methods.					
i)	Ability to negotiate for win-win outcomes.					
j)	Ability to build and maintain long term and formal business relationships with different business stakeholders.					
k)	Ability to understand, analyze, tolerate, accept and evaluate the values, beliefs and behaviors of others.					
l)	Ability to manipulate our influence in corporate favor by using diplomatic and networking skills.					
m)	Ability to lobby for support by applying political skills.					
n)	Ability to manage interpersonal conflicts in our organization.					
7.	<b>Cognitive Competence</b> (Level of knowledge required to solve work-related problems)					
a)	Analytical thinking (ability to analyze problems and situations in a critical and logical manner)					
b)	Creative thinking (ability to think creatively and solve a problem in a new way)					
c)	Visionary thinking (ability to think strategically- foreseeing probable future scenarios and providing long term vision, mission and objectives to the organization and employees for organizational and personal development)					
d)	Flexibility (ability to adapt to a situation)					
e)	Entrepreneur thinking ( ability to think more intuitively and progressively to recognize and tap potential opportunities)					
f)	Innovativeness (Ability to generate new ideas in face of work-related problems in a given situation)					

g)	Reflexive thinking (ability to think progressively and in a transformational way, challenging some basic accepted ideologies and presuppositions about work beliefs and practices)					
h)	Systematic thinking (ability to see the bigger picture i.e. ability to see how things are interconnected )					

#### **PART 1V: FIRM- LEVEL INSTITUTIONS**

Kindly rate the extent to which each of the statements listed in the matrix presented below applies to your organization by ticking on the appropriate box.

		1	2	3	4	5
8.	<b>Organizational Culture</b>	Not at all	Small extent	Moderate Extent	Large extent	Very large extent
a)	In our organization, managers are respected for their expertise and their decisions are implemented.					
b)	In our organization, we have annual award ceremonies to reward good performers.					
c)	In our organization, customers' views are sought and listened to and feedback is used to make improvements.					
d)	In our organization, we clearly communicate expected standards of behavior.					
e)	In our organization, we make decisions promptly and on the basis of facts, not personal prejudice or self-interest.					
f)	In our organization, we ensure that the overall organization's goal is clearly understood by all employees.					
g)	In our company, we organize social and other events for enjoyment by the members.					
h)	In our organization, we clearly define responsibilities and individuals understand their role and the extent of their authority.					
i)	In our organization, we encourage employees to volunteer their views and disagreement is seen as a positive attempt to improve things.					

j)	In our organization, we ensure that the right people are recruited in the first place and make effort to help them develop their skills.					
k)	In our organization, we ensure that employees are well qualified for the jobs that they do.					
l)	In our organization, employees' technical knowledge is valued.					
m)	In our organization, we welcome ideas from any level.					
n)	In our organization, everyone's views are taken into account before important decisions are made.					
o)	In our organization, we commit time and money to exploring new ideas.					
9.	<b>Transformational Leadership Style</b>					
a)	We induce our employees to go beyond self-interest for the good of the group.					
b)	We provide reassurance to our employees that obstacles in their work areas will be overcome.					
c)	We consider the moral and ethical consequences of the decisions we make.					
d)	We talk optimistically about the future.					
e)	We encourage our employees to envision attractive future for the organization and themselves.					
f)	We provide meaning and challenge to the employees' work.					
g)	We display enthusiasm and optimism.					
h)	We provide our employees with challenging new ideas.					
i)	We encourage followers to break away from the old ways of thinking.					

j)	We suggest new ways of examining how to complete assignments and encourage re-thinking of ideas that have not been questioned in the past.					
k)	We encourage our employees to be innovative and creative by questioning assumptions, reframing problems and approaching old situations in new ways.					
l)	We seek differing perspectives when solving problems.					
m)	We help our employees to develop their strengths.					
n)	We treat our employees equitably.					
o)	We listen attentively to our employees' concerns.					
p)	We develop our followers by coaching and mentoring.					
q)	We treat employees individually in order to enhance effective ways of addressing their goals and challenges.					
<b>10.</b>	<b>Transactional Leadership Style</b>					
a)	As leader, I have a primary mission of maintaining stability.					
b)	As a leader, I facilitate events.					
c)	As a leader, I ensure that employees are rewarded equitably for their work.					
d)	As a leader, my preference is to think short range: what is realistic.					
e)	As a leader, I spend considerable energy in managing separate but related goals.					
f)	As a leader, the power I have to influence others comes primarily from my status position.					
g)	As a leader, I believe that a significant part of my leadership is that of a facilitator.					
h)	As a leader, I enjoy rewarding employees for extra- ordinary performance.					

i)	As a leader, I dedicate a good part of my time to correct errors and complaints.					
11.	<b>Organizational Policies</b>					
a)	Our organization has elaborate policy on recruitment.					
b)	Our organization requires employees not to disclose confidential information to unauthorized persons.					
c)	Our organization is committed to providing a work environment for all employees that is free from sexual harassment.					
d)	Our organization is committed to providing equal employment opportunities to all employees and job applicants.					
e)	Our organization is committed to evaluating employee's performance and competence.					
f)	Our organization is committed to supporting decisions about promotions, career planning and development.					
g)	Our organization is committed to rewarding employees' performance and competence via remuneration and incentives.					
h)	Our organization has ethical standards which are implemented to the letter.					
i)	Our organization is committed to a strong safety program that protects its staff, its property and public from harm/destruction.					
12.	<b>Organizational Procedures</b>					
a)	Our organization has a recruitment procedure that spells out the process to be followed when hiring.					
b)	Our organization has a grievance procedure which spells out the procedure on handling grievances and the approach to dealing with them.					

c)	Our organization has financial procedures which spell out the steps to be followed in managing finances.					
d)	Our organization has a disciplinary procedure which sets out the stages through which disciplinary action should proceed.					
e)	Our organization has a redundancy procedure spelling out the steps to be followed in dealing with employees who are surplus to requirements.					
13.	<b>Organizational Structure</b>					
a)	In our organization, the chain of command is clear.					
b)	In our organization, the content of work is specified.					
c)	In our organization, we use written rules to govern working relationships.					
d)	In our organization, there is a hierarchical structure with a combination of functions/tasks.					
e)	In our organization, there is a clear line of communication.					
f)	In our organization, there is distribution of power down the chain of command.					
g)	In our organization, decision-making power is delegated to different units within the organization.					

**PART V: HUMAN RESOURCE MANAGEMENT BUNDLES**

Kindly rate the extent to which each of the statements listed in the matrix presented below applies to your company by ticking on the appropriate box.

14.	<b>Skill-Enhancing HR bundle</b>	1	2	3	4	5
		Not at all	Small extent	Moderate Extent	Large extent	Very large extent
a)	<b><i>Selection</i></b>					
i)	Our organization hires employees based on job-related skills.					

ii)	Our organization recruits employees based on proven knowledge and abilities.					
iii)	Our organization makes use of line managers and HR managers in selection.					
iv)	Our organization uses valid and standardized tests when required in the recruitment process.					
v)	Our organization follows recruitment systems that are highly scientific and rigorous.					
b)	<b><i>Training</i></b>					
i)	We carry out training needs assessment to identify potential candidates for training.					
i)	We provide continuous training programs to update existing employee skills and knowledge.					
ii)	We have formal training programs to teach new hires the skills they need to perform their jobs.					
iii)	We offer formal training programs to employees in order to increase their promotability in this organization.					
iv)	We offer off and on-the-job training.					
v)	We use quality trainers to offer quality training to our employees.					
15.	<b>Motivation-Enhancing HR Bundle</b>					
a)	<b><i>Performance Management</i></b>					
i)	In our organization, employees participate in the identification of gaps in their knowledge and skills.					
ii)	In our organization, we lead the employees to effective and efficient cooperation and communication.					
iii)	In our organization, we lead the employees to voluntary and mutual sharing and use of their knowledge and skills in the organization.					
iv)	In our organization, we consistently conduct performance appraisal and give the necessary feedback to the employees.					

v)	In our organization, we set targets together with employees to achieve our goals.					
b)	<b><i>Compensation Management</i></b>					
i)	In our organization, compensation is decided on the basis of competence or ability of the employee.					
ii)	In our organization, job performance is an important factor in determining the incentive compensation of employees.					
iii)	In our organization, the compensation for all employees is directly linked to their performance.					
iv)	In our organization, profit sharing is used as a mechanism to reward higher performance.					
v)	In our organization, salary and other benefits are comparable to the market.					
c)	<b><i>Career Development</i></b>					
i)	In our organization, employees have clear career paths.					
ii)	In our organization, employees' career aspirations are known by their immediate supervisors.					
iii)	In our organization, we offer a variety of career paths.					
iv)	In our organization, we provide mentoring and coaching programs.					
v)	In our organization, we provide academic learning assistance programs.					
16.	<b>Empowerment-Enhancing Bundle</b>					
a)	<b><i>Participation</i></b>					
i)	Employees are allowed to make decisions.					
ii)	Employees are provided the opportunity to suggest improvements in the way things are done.					
iii)	Superiors keep open communication with employees.					
iv)	Employees are asked by their supervisors to participate in decisions.					
b)	<b><i>Employee Voice</i></b>					



i)	We have a grievance procedure that affords employees an opportunity to be heard.					
ii)	We get solutions from problem-solving teams whenever we have problems					
iii)	We allow our employees to work in self-directed teams.					
iv)	We listen to employees' complaints.					
v)	We have a mechanism for getting feedback from our employees.					
c)	<b>Team Empowerment</b>					
i)	In our organization, we encourage team work.					
ii)	Employees have a say in a team to belong to provided that is where their skills can best be utilized.					
iii)	We give teams autonomy in work allocation.					
iv)	Teams take responsibility for their work results.					
v)	Our employees make decisions as teams.					

#### PART VI: COMPANY PERFORMANCE

Kindly rate the extent to which your company has used each of the following key Performance indicators for the last three years (2012-2014) by ticking on the appropriate box.

	Criteria Domain	Not at all	Small extent	Moderate extent	Large extent	Very large extent
17.	<b>Customer Perspective</b> (Contains measures that identify the customer and market segment in which the business unit competes and the measures of the business unit's performance in these targeted segments)					
a)	For the last three years, our company has been able to attract many customers.					
b)	Our company has been satisfying our customers.					
c)	We have retained our customers for the last three years.					
d)	We have been resolving our customer complaints.					
e)	Our market share has expanded for the last three years.					

18.	<b>Internal Business Processes</b> (Measures the critical internal processes in which the organization must excel)				
a)	We offer products /services of high quality.				
b)	Our organization has high operational efficiency.				
c)	We offer after sales service to our customers.				
d)	We have introduced new products.				
e)	We have put safety measures in place to protect employees, property and the public from any harm.				
19.	<b>Learning and Growth Perspective</b> (Measures the infrastructure that the organization must build to create long term growth and improvement)				
a)	For the last three years, our company has been able to develop new products.				
b)	For the last three years, we have managed to enter new markets.				
c)	Our company has been able to develop employee competency.				
d)	Our company has been able to achieve employee satisfaction.				
e)	For the last three years, we have managed to retain our employees.				
20.	<b>Environmental Perspective</b> ( Minimizing environmental impact at firm level)				
a)	Our company has redesigned existing product systems to reduce liability for the last three years.				
b)	Our company committed to minimizing environmental burden of our growth and development for the last three years.				
c)	Our company has avoided environmentally hazardous business for the last three years.				
21.	<b>Financial Perspective (Measures firm's profitability)</b>				
	<b>Indicator</b>	<b>Unit of Measure</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
	Return on Assets				

**THANK YOU FOR YOUR CO-OPERATION AND TIME IN FILLING THE QUESTIONNAIRE**

## **APPENDIX V: COMPANIES LISTED IN THE NAIROBI SECURITIES**

### **EXCHANGE AS AT 31 DECEMBER 2014**

#### **AGRICULTURAL COMPANIES**

1. Eaagads Ltd
2. Kapchorua Tea Co. Ltd
3. Kakuzi
4. Limuru Tea Co. Ltd
5. Rea Vipingo Plantations Ltd
6. Sasini Ltd
7. Williamson Tea Kenya Ltd

#### **COMMERCIAL AND SERVICES COMPANIES**

8. Express Ltd
9. Kenya Airways Ltd
10. Nation Media Group
11. Standard Group Ltd
12. TPS Eastern Africa (Serena) Ltd
13. Scangroup Ltd
14. Uchumi Supermarket Ltd
15. Hutchings Biemer Ltd
16. Longhorn Kenya limited

#### **TELECOMMUNICATION AND TECHNOLOGY COMPANIES**

17. Safaricom Ltd

#### **AUTOMOBILES AND ACCESSORIES COMPANIES**

18. Car and General (Kenya) Ltd
19. Sameer Africa Ltd
20. Marshalls (E.A.) Ltd

#### **BANKING**

21. Barclays Bank Ltd
22. CFC Stanbic Holdings Ltd
23. I&M Holdings Ltd
24. Diamond Trust Bank Kenya Ltd
25. Kenya Commercial Bank Group

26. National Bank of Kenya Ltd
27. Standard Chartered Bank Ltd
28. Equity Bank Ltd
29. The Co-operative Bank of Kenya Ltd
30. Housing Finance Company of Kenya
31. National Industrial Credit Bank

#### **INSURANCE**

32. Jubilee Holdings Ltd
33. Pan Africa Insurance Holdings Ltd
34. Kenya Re-Insurance Corporation Ltd
35. Liberty Kenya Holdings Ltd
36. British-American Investments Company (Kenya) Ltd
37. CIC Insurance Group Ltd

#### **INVESTMENT**

38. Olympia Capital Holdings Ltd
39. Centum Investment Co. Ltd
40. Trans-Century Ltd

#### **INVESTMENT SERVICES**

41. Nairobi Securities Exchange Ltd

#### **MANUFACTURING AND ALLIED COMPANIES**

42. B.O.C Kenya Ltd
43. British American Tobacco Kenya Ltd
44. Carbacid Investments Ltd
45. East African Breweries Ltd
46. Mumias Sugar Co. Ltd
47. Unga Group Ltd
48. Eveready East Africa Ltd
49. Kenya Orchards Ltd
50. A.Baumann Co. Ltd

#### **CONSTRUCTION AND ALLIED COMPANIES**

51. Athi River Mining
52. Bamburi Cement Ltd
53. Crown Berger Ltd

54. E.A.Cables Ltd

55. E.A.Portland Cement Ltd

**ENERGY AND PETROLEUM COMPANIES**

56. KenolKobil Ltd

57. Total Kenya Ltd

58. KenGen Ltd

59. Kenya Power & Lighting Co.

60. Umeme

**GROWTH ENTERPRISE MARKET SEGMENT COMPANIES**

61. Home Afrika Ltd

62. Atlas Development and Support Services

63. Flame Tree Group Holdings Ltd

64. Kurwitu Ventures

**Source:** NSE Handbook (2014)