

**An Inquiry into the Perceived Skills Gaps of Professional Accountants in Kenya: The
Case for Innovative Training and Examination Methodologies**

Erasto Mukuria Ng'ang'a



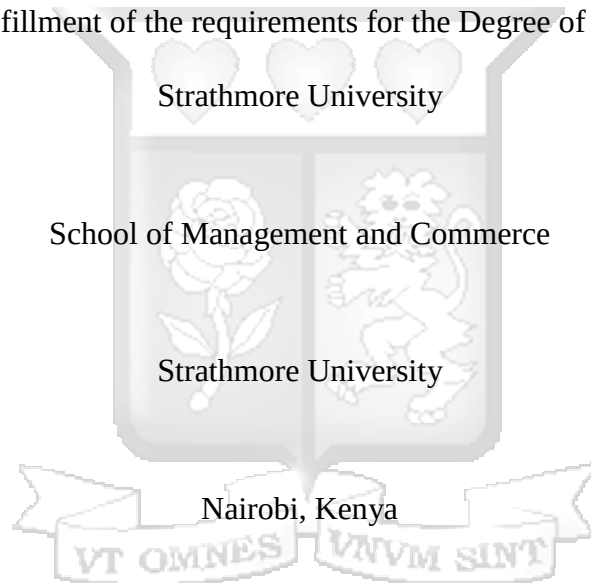
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An Inquiry into the Perceived Skills Gaps of Professional Accountants in Kenya: The Case for
Innovative Training and Examination Methodologies

By

Erasto Mukuria Ng'ang'a

Submitted in partial fulfillment of the requirements for the Degree of Master of Commerce at



June, 2014

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I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

.....

Erasto Mukuria Ng'ang'a

31 July 2015

Approval

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ABSTRACT

This research was aimed at identifying the skills gaps of accountants working in various sectors of the Kenyan economy. These skills are both technical and non-technical (vocational, additional or complementary). In addition, the research was aimed at identifying the most appropriate method of training accountants, the length of time that is most appropriate for training accountants, the length of time that student accountants should spend in practical training, the most appropriate methodology or methodologies for teaching accountants and finally, the most effective methods of assessing the competence of accountants. The research was done through self-administered questionnaires among selected organizations.

In relation to technical skills, skill gaps were identified in the areas of forensic auditing, the East African tax management protocol and the Customs and Excise Act. In additional (vocational or complementary) skills, gaps were identified in the use of social media, public speaking, persuasiveness, presentation skills and finally negotiation skills.

With regard to the method of training preferred for accountants, respondents settled for a combination of academic and professional courses. A period of between 3 and 5 years was indicated as the most appropriate for training accountants. The research findings also indicate that student accountants should be trained practically for a period of between 1 and 2 years.

The teaching methods recommended for accountants, in their order of preference were tutorials, distance learning, lecture method and finally case methodology. With regard to the assessment methods most suitable for accountants, the research findings indicate that paper-based examinations and real-life business cases would be most ideal.

The research findings indicate that practical attachment is not a favoured method of training. The research findings are also in general agreement with the view that technical knowledge is best assessed through paper-based examinations.



ACKNOWLEDGEMENT

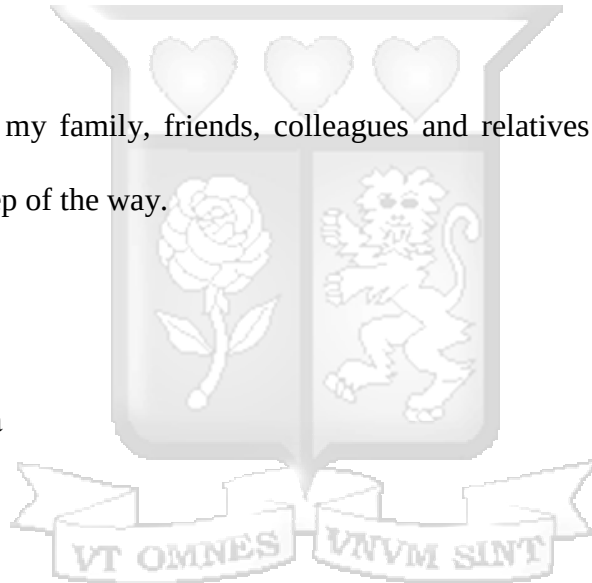
I would like, in a special way, to acknowledge and sincerely thank The Almighty God for giving me life, health, strength and wisdom which have enabled me to constructively put these ideas together.

I wish to acknowledge my supervisor, Dr. James Boyd McFie, for giving generously of his time and knowledge to guide me through the various aspects of this thesis.

Finally, I wish to thank my family, friends, colleagues and relatives for believing in me and encouraging me every step of the way.

Erasto Mukuria Ng'ang'a

May, 2014



DEDICATION

I dedicate this work to my dear mother Mrs Brigadier (Rtd) Mirriam W. Ng'ang'a of the Salvation Army. Thank you for bringing me up in the fear of the Lord Jesus Christ and for teaching me to practise the virtue of patience.

Erasto Mukuria Ng'ang'a

May, 2014



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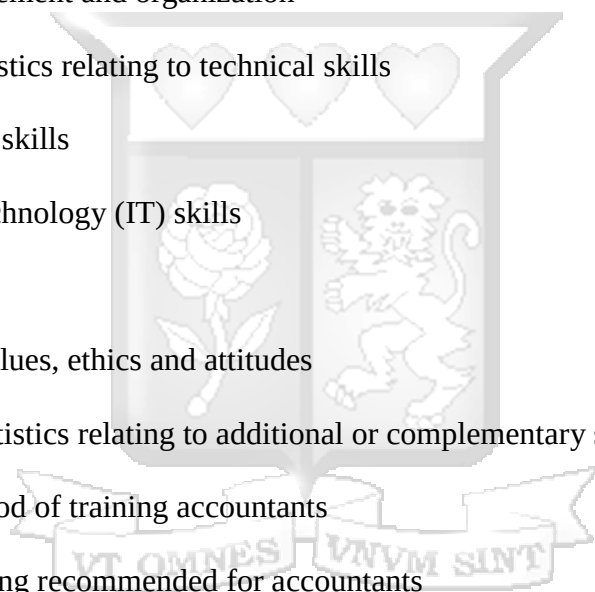


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CHAPTER ONE: INTRODUCTION

1.1Background

The accounting profession in Kenya is regulated by the Institute of Certified Public Accountants of Kenya (ICPAK). ICPAK is currently established under Section 3 of the Accountants Act No. 15 of 2008. ICPAK was initially established in 1978 under the Accountants Act Cap. 531 of the Laws of Kenya. This Act has since been repealed and replaced by the Accountants Act Number 15 of 2008.

The Accountants Act Number 15 of 2008 also reaffirmed the existence of the Kenya Accountants and Secretaries National Examinations Board (KASNEB) which is the body that is tasked with the examination of professional accountants in Kenya. The Accountants Act specifies the following functions of KASNEB: To prepare syllabuses for professional and technician examinations in accountancy, company secretarial practice and related disciplines; to make rules with respect to such examinations; to arrange and conduct examinations and issue certificates to candidates who have satisfied examination requirements; to promote recognition of its examinations in foreign countries; to investigate and determine cases involving indiscipline by students registered with the Examinations Board; to promote and carry out research relating to its examinations; to promote the publication of books and other materials relevant to its examinations; to liaise with the Ministry of Education in accreditation of institutions offering training in subjects examinable by the Examinations Board; and to do anything incidental or conducive to the performance of any of the preceding functions.

Among the major functions of ICPAK are: to promote standards of professional competence and practice among members of the institute; to promote research into the subject of accountancy

and finance and related matters and the publication of books, periodicals, journals and articles in connection therewith; to promote the international recognition of the institute; to advise the examinations Board (KASNEB) on matters relating to examination standards and policies; to advise the Minister of Finance on matters relating to financial accountability in all sectors of the economy; to carry out any other functions prescribed for it by or under any of the other provisions of the Accountants Act or any other written law, and to do anything incidental or conducive to the performance of any of the preceding functions (The Accountants Act, 2008).

1.2 The skills and competencies of professional accountants in Kenya-the ROSC Kenya 2010

According to the *Report on the Observance of Standards and Codes (ROSC) Kenya, Accounting and Auditing 20 April 2010*, 18,000 people had passed the KASNEB administered final level CPA examination by December 2008. Of these, 6,000 had gone on to become members of ICPAK.

Of the total membership of the ICPAK, 20% work in public practice, 65% in commerce and industry, 10% in other sectors including the public sector and academia and the rest do not work or are retired (ROSC, 2010).

According to the ICPAK, there were a total of 718 audit firms operating in Kenya as at December 2009. The local auditing scene is dominated by members of the large international accounting firm networks, the so-called Big Four. The local members of international audit firm networks perform most of the audits of the quoted companies in the banking, insurance, manufacturing and other sectors. Most of the local audit firms are small in size and are run by one partner and concentrate mostly on accounting services and the audit of small and medium size entities (SMEs) and small companies (ROSC, 2010).

The ICPAK is a member of the International Federation of Accountants (IFAC). As at December 2010, the ICPAK had met the requirements of most of the Statements of Membership Obligations (SMOs) that IFAC member bodies are required to abide by in order to sustain membership in IFAC (ROSC, 2010).

The ROSC Kenya 2010 report specifically observes that there is need to enhance academic and professional education and training. Further, the report notes that there is need for the university and professional-level accounting curricula to be reviewed to include the practical application of accounting and auditing standards.

1.3 Statement of the problem

Much has been written about teaching and learning deficiencies in accounting education. Universities have grappled with this challenge and developed a number of strategies to address the concerns raised. Many of the recommended strategies for addressing these deficiencies have included a focus on the development of professional capabilities and skills.

The increasingly dynamic environment in which accountants work has necessitated a reorientation of accounting education. In some countries, this issue has raised great interest among accounting educators and practitioners.

The Bedford Commission, in a report to the American Accounting Association (AAA) as well as the American Institute of Certified Public Accountants (AICPA) in 1986, noted that accounting education, as it was then approached, needed a major adjustment because this content, which had remained substantially the same for fifty years, was generally inadequate for the future of professional accounting education.

Traditionally, accounting education has always focused learners on accounting concepts and mastering the application of the technical aspects of debits and credits. Formats for the presentation of financial statements have also been overemphasized. Consequently, much of what the student accountant learns is memorized and subsequently assessed on the basis of one correct answer. Little attention has been given to the increased demand for enhanced decision-making from professional accountants.

Further research findings confirm that accounting education has been too focused on content which does not adequately prepare students for the challenges and ever-changing ambiguities of the business environment. This education has been found to be lacking in creativity, exposure to real businesses as well as in skills development (AICPA, 1998, 2000; Albrecht & Sack, 2000).

In its report on the progress achieved by the Practice Monitoring and Review Programme for the year 2010, the ICPAK noted that “many accounting firms face challenges in complying with the International Standards on Quality Control (ISQC-1) and this deficiency needs to be quantified and addressed”(ICPAK, 2010).

The UNCTAD, in its 2006 country case studies report on the implementation of IFRSs in Kenya observed that since the adoption of IFRSs and ISAs in Kenya, compliance levels had remained relatively low and accountants needed to continuously review and enhance their skills set so as to remain relevant (UNCTAD, 2006).

The ROSC Kenya 2010 report specifically makes recommendations to enhance academic and professional education and training in accounting. In particular, it recommends that the actual skills gap in critical competency areas in accounting should be mapped so that accounting curricula could be adjusted to fill these gaps. Further, the ROSC Kenya report 2010,

recommends that professional accounting curricula should be reviewed to include the practical application of accounting and auditing standards. Further, the report recommends that communication skills and professional judgement should be improved. This research will help pinpoint particular weakness areas and offer practical solutions.

Ehah and Sherif (2003) conducted a research in Oman focusing on accounting knowledge and the challenges of a global business environment and concluded that current accounting education and the skills levels of accountants were not in line with what was required in the dynamic environment of global business. They recommended that similar studies should be conducted in other countries to determine how well the skill sets of accountants (both technical and non-technical) attuned with different levels of the globalization of business. In particular, their interest was on how the gap between acquired and required skills could be bridged.

Harshini and Durden (2014) while conducting their research in Syria reviewed written and oral communication skills considered important with a view to highlighting what is known about existing and desired communication and other skills in the accounting profession. They found a disconnect and recommended further research in this area focusing on communication and other skills that would be of use to accountants.

It is imperative for accounting education to change from knowledge-based education to a process-oriented programme and to develop an approach of inquiry and a desire for life-long learning in the students. This would result in improved intellectual, communication and interpersonal skills as well as a better understanding of the broad picture in a business (Doost, 1993).

In view of the UNCTAD, ICPAK and ROSC reports referred to above, it is imperative that research on the skills gaps of accountants in Kenya be clearly mapped with a view to recommending how these gaps could be bridged. In addition, the research will be an extension of that conducted by Ehah and Sherif (2003) in Oman focusing on accounting knowledge and the challenges of a global business environment. Further, the research will also be an extension of that conducted by Harshini and Durden (2014) in Syria and will seek to identify non-technical skill gaps.

This research will analyse the skills gaps (both technical and non-technical) in professional accountants in Kenya and recommend how these skills could be infused into the training programmes for accountants. Further, this research will also analyse the various methods of training and examining accountants with a view to recommending the most appropriate ones.

1.4.1 Main objective

The main objective of this research is to investigate the skills gaps in professional accountants employed in different sectors of the Kenyan economy with a view to making recommendations on how these gaps could be addressed.

1.4.2 Specific objectives

This study was guided by the following specific objectives:

1. To determine what technical skills gaps exist in professional accountants employed in different sectors of the Kenyan economy.
2. To determine what non-technical and vocational skills gaps exist in professional accountants employed in different sectors of the Kenyan economy.

3. To identify what training and examination methods are most suitable for professional accountants in Kenya.

1.5 Research questions

1. What technical skills gaps exist in professional accountants employed in various sectors of the Kenyan economy?
2. What non-technical and vocational skills gaps exist in professional accountants employed in different sectors of the Kenyan economy?
3. What are the most effective training and examination methodologies for the professional accountant in Kenya?

1.6 The scope of the study

This study will be conducted among selected organizations that employ professional accountants in Kenya. These include sectors such as private practice, commerce, industry, academia, hospitality, medical and the public sector.

1.7 Justification of the study

This study will be useful to:

- (a) Universities, colleges and related tuition providers because the results will enable them to design programmes that would suit the needs of various employers and hence do away with programmes that do not meet the requirements of employers.
- (b) Employers because it would lead to the production of professional accountants who meet their needs.

- (c) Regulators who are responsible for oversight of the work of the accounting profession, principally the ICPAK.
- (d) Government authorities with responsibility for the oversight of education providers such as the Commission for University Education (CUE). This would enable these authorities to come up with more up- to- date regulatory frameworks for accounting education.
- (e) Other government bodies like the Kenya Institute of Curriculum Development (KICD).
- (f) Accountants and prospective accountants.

1.8 Definition of terms

1.8.1 Accountant

According to the Accountants Act No 15 of 2008 (Laws of Kenya), an accountant is a person who is registered as an accountant under the provisions of this Act. Sections 24 and 28 of this Act spell out in detail the qualifications that enable one to register as an accountant. For the purposes of this research, however, an accountant is any person who has completed Section 6 of the Certified Public Accountants (CPA) examination or an equivalent examination whether he is registered with ICPAK or not.

1.8.2 Professional skills

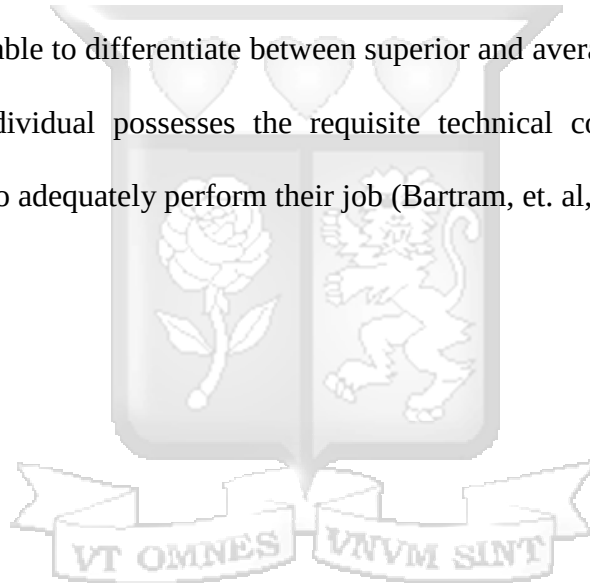
These are the various types of abilities required to apply professional knowledge, professional values, ethics and attitudes appropriately and effectively in a professional context (IFAC, 2007).

1.8.3 Training

This encompasses the pre- and post-qualification educational activities, within the context of the workplace, aimed at bringing a student or professional accountant to an agreed level of professional competence (IFAC, 2007).

1.8.4 Competency

The word competency originates from the Latin word “competentia” which means “suitable”. Thus, a competency could be viewed as an individual characteristic that is capable of measurement and hence able to differentiate between superior and average performers. As a rule, it is crucial that an individual possesses the requisite technical competencies at a certain minimum level in order to adequately perform their job (Bartram, et. al, 2002; Woodruff, 1992).



CHAPTER TWO: LITERATURE REVIEW

2.1 Technical skills for professional accountants

Literature on the skills, competence and practice benchmarks in the professional accounting field are generally set by international bodies mandated to prepare standards and to monitor their application. These bodies are:

1. The International Accounting Standards Board (IASB)

The IASB was founded on 1 April 2001 as the successor to the International Accounting Standards Committee (IASC). This body is responsible for developing international accounting standards and promoting the use and application of these standards. The international accounting standards have since been re-designated as international financial reporting standards (IFRSs).

2. The International Auditing and Assurance Standards Board (IAASB)

This is an independent standard-setting body that serves the public interest by setting high-quality international standards for auditing, quality control, review, other assurance, and related services. This body also endeavours to facilitate the convergence of international and national standards. In doing so, the IAASB enhances the quality and uniformity of practice throughout the world thereby strengthening public confidence in the global auditing and assurance profession.

3. The International Ethics Standards Board for Accountants (IESBA)

The IESBA serves the public interest by setting high-quality ethical standards for professional accountants and by facilitating the convergence of international and national ethical standards including auditor independence requirements. IESBA has developed a robust and internationally appropriate code of ethics.

4. The International Public Sector Accounting Standards Board (IPSASB)

The IPSASB develops high-quality international public sector accounting standards (IPSASs), guidance and resources for use by public sector entities around the world for the preparation of general purpose financial statements.

5. The International Accounting Education Standards Board (IAESB)

The IAESB is an independent standard setting body that serves the public interest by strengthening the worldwide accounting profession through the development and enhancement of accounting education. The IAESB sees accounting education standards as encompassing professional knowledge, skills, values, ethics and attitudes (IAESB, 2011).

As at December 2011, the IAESB had issued the following international education standards (IESs) to cater for both prequalification and post qualification standards:

IES 1: Entry requirements to a programme of professional accounting education.

IES 2: Content of professional accounting education programs.

IES 3: Professional skills and general education.

IES 4: Professional values, ethics and attitudes.

IES 5: Practical experience requirements.

IES 6: Assessment of professional capabilities and competence.

IES 7: Continuing professional development: A program of lifelong learning and continuing development of professional competence.

IES 8: Competence requirements for audit professionals.

The International Federation of Accountants (IFAC) has defined competency as “the ability to perform the tasks and roles expected of a professional accountant, both newly qualified and experienced, to the standard expected by employers and the general public” (IFAC, 1998).

Reports by various professional bodies have expressed concern that accounting education has tended to over-emphasize the technical abilities of graduates to the detriment of other competencies, and suggest the need for alternative instructional strategies. These instruction strategies include case-based methods, seminars, role-plays, and simulations to engage accounting students in the learning process to enable them develop skills such as creative and critical thinking (American Accounting Association, 1986; Accounting Education Change Commission, 1990; IFAC, 1996; Adler and Milne, 1997). Many accounting researchers have recommended abandoning a wholly technical approach to financial accounting (Zeff, 1989; Needles and Powers, 1990; Bonk and Smith, 1998; Albrecht and Sack, 2000; Herring and Williams, 2000). Hunton (2002), compellingly argues that many traditional accounting tasks can be reliably automated, thus supporting emerging claims that an accountant's true worth is now increasingly being reflected in higher-order skills, such as critical thinking, problem-solving and analytical skills.

IFAC has made it mandatory that all member associations and bodies comply with the stated competency standards. Given that all member associations and bodies are required to comply, the question is whether a set of competency skills developed mainly in the USA and to a lesser extent in the UK can be applicable to other countries particularly developing countries.

It should also be borne in mind that these other countries do not have the same history and experience of accounting education and professional conduct.

Most of the extant literature on technical skills also touches on non-technical skills and will be expounded on in Section 2.2 below.

2.2 Non-technical (vocational) skills for professional accountants

For a number of years now, there has been a robust and animated debate between various stakeholders about the need for accounting graduates to develop and demonstrate a broader set of skills to enable them pursue a career in the accounting profession. Accounting students are critically aware of employers' expectations in terms of communication, analytical, professional and teamwork skills. Although employers still expect a reasonably good understanding of basic accounting skills and strong analytical skills, they also require 'business awareness' and knowledge in terms of the 'real world'. Many employers report that a number of the 'essential' non-technical and professional skills and attributes are not being developed sufficiently in university accounting programmes.

Over the past twenty years, the accountants' skills agenda has been widely debated (Holmes, 2002). Many studies have cast a broad net in terms of the stakeholder groups examined and considered. These studies examined generic skills not necessarily specific for accounting graduates or the accounting profession (Bennett et al., 2000; Crebert, 2002; Leggett et al., 2004). It is worth noting that even within the accounting profession itself, critical competitive pressures as well as the impact of emerging technology have spawned expectations that accounting graduates should demonstrate additional competencies. Increased importance has been given to non-accounting capabilities and skills.

These capabilities, skills and competencies are important because they “enable the professional accountant to make successful use of the knowledge gained through education” (IFAC, 1996). A number of researchers have concluded that although technical skills are still regarded as implicit in the skills inventory of a person getting into an accounting career, accounting students need more than just technical skills to succeed (Deppe et al., 1991; Aikin et al., 1994; Watty et al., 1998). Further, it has been indicated that “personal characteristics”, perhaps more than anything else, have a greater bearing on accounting career success (Mathews et al., 1990; Agyemang and Unerman, 1998; DeLange et al., 2006).

Bui and Porter (2000) assert that since the mid-1980s, professional accounting bodies, employers of accounting graduates and academics have lamented the failure of universities to equip accounting graduates with competencies (knowledge, skills and personal attributes) required by members of the accounting profession in the modern, technologically-astute and rapidly changing business environment. They reported that though substantial and wide-ranging changes to the approach to accounting education had been made, the gap between the competencies which employers expect and perceive that accountants should possess, had not previously been examined holistically. They identified three major changes that had fundamentally affected the accounting profession. The first was that accounting services had become both broader and more specialized in nature. The second was that management advisory services, requiring specialized expertise, had over time gained prominence. Thirdly, the emergent and emerging competitive accounting market and environment required accountants to have a broadly-based education as well as knowledge of both accounting information systems and the role of the accounting function within an organization. Bui and Porter (2000) thus suggest that the “expectation gap” between employers and accounting educators primarily

emanates from inadequate communication and understanding between the parties involved. They recommend that this “expectation gap” should be narrowed through greater interaction between the “town” and the “gown”. They further suggest that part of the solution may also lie in the accounting profession having greater input into the accounting education and training process.

In support of the above view, it has been established that employers are seeking a more diverse range of skills and attributes in new accounting graduates. This would enable them to maintain a competitive advantage in spite of the fact that many countries face a shortage of skills in this area (Birrell, 2006).

A study conducted in Malaysia among accounting graduates from seven state-run universities namely Universiti Malaya, Universiti Kebangsaan Malaysia, Universiti Putra Malaysia, Universiti Islam Antarabangsa Malaysia, Universiti Teknologi Mara, Universiti Utara Malaysia and Universiti Sains Malaysia asked respondents to rank the level of importance and emphasis of thirteen competencies. These competencies were identified as communication skills, decision-making skills, leadership development, continuous improvement skills, professionalism, information development and distribution skills, knowledge in planning and budgetary control, management control systems, interpreting and analyzing financial statements, knowledge in accounting, knowledge in auditing and knowledge in taxation. The study concluded that there were huge gaps between the level of importance placed on certain competencies in the workplace and the demonstration of these competencies in the workplace. In addition, the study also found a positive correlation between personality traits and the level of competencies. In general, these findings are consistent with the findings from other studies. These findings should provide empirical and relevant input for assessing the content of the existing accounting programs (Rahman, Abdullah, Agus & Rahmat, 2007).

In support of the “beyond-the-technical-skills” school of thought, the findings of Kavanagh and Drennan (2008) on the perceptions and expectations of students and employers about the need for accounting graduates to develop a broader set of skills to enable them pursue a career in accounting are particularly important. Their research findings indicate that students are increasingly becoming aware of employers’ expectations in terms of communication, analytical, professional and teamwork skills. Although many employers still expect a thorough understanding of basic accounting skills as well as strong analytical skills, they also require “business awareness” and critical knowledge relating to the “real world”. Both students and employers reported that many of the “essential” non-technical and professional skills and attributes were not being emphasized and developed to the level required in university and professional accounting programs. They further assert that the attributes being developed should go beyond disciplinary or technical knowledge and expertise and incorporate qualities that adequately prepare graduates as lifelong learners, as “global” citizens, as agents for social good, and for personal development in the context of an unknown future.

Further, the expectations of professional performance placed on accounting graduates are complex and demanding, often requiring the accountants to develop broader skills and to be committed to continuing professional development and lifelong learning (Cooper, 2002; Howieson, 2003).

Communication skills have also been identified as being central to the intellectual interaction between the providers and the recipients of information. The importance of accounting, therefore, starts with the gathering and processing of information and ends with the communication of processed information. In this regard, findings from previous research indicating that new graduate accountants experience communication-related problems in early

employment are interesting. There is therefore need to emphasise communication skills in the accounting curriculum, a role which arises from the very nature of accounting which emphasises the processing and communication of information (Zaid, Abraham &Abraham 2010).

Gabric and McFadden (2000) investigated students' perceptions of the expected marketable skill base.They found that students agree that developing “personal transferable skills”, such as communication and time management, that can be used in a “. . . wide variety of career-related situations” is not only important for making them more skilled and employable but is also a “. . . fundamental part of achieving . . . a good education”(Haigh and Kilmartin, 1999). In terms of future career prospects, students rated developing teamwork and public presentation skills as the most important learning outcomes of the course. Students also emphasized the development of skills to equip them for learning, work and life. This view is supported by Candy et al. (1994) and developed further by Jones and Sin (2003), who emphasize that students must be prepared to be lifelong learners with a particular focus on developing attributes and skills over a lifetime of professional, social and cultural experience. The focus, therefore, must not be on the development of specific skills, but rather, the ability to develop, change, and renew these skills and knowledge throughout life (Crebbin, 1997).

Elliott and Jacobson (2002) suggest that accountants need education in complementary bodies of knowledge. These bodies of knowledge include organizational behaviour, issues in strategic management, measurement and analytical skills. Mathews (2004), on his part, suggests an interdisciplinary curriculum at university. Others argue that university educators of future professional accountants should be committed to developing the relevant attributes identified as desirable for the professional practice of accounting (American Accounting Association, 1986; Accounting Education Change Commission, 1990; IFAC, 2006). However, Howieson (2003)

sees the focus of the future accounting professional as being the management of knowledge and adapting the education of accounting professionals to capitalize on that.

A study of the Premier University in Ghana reported that the course outlines had limited coverage of ethical issues. They recommend that ethical issues should be integrated into the accounting course outline (Onumah et al., 2012).

The above views are supported by de la Harpe et al. (1999), who suggest that integrating professional skills across disciplines may be the answer. Current debate centres on whether it is better to develop these skills within the classroom or within the context of coming to know the discipline (Laurillard, 1984; Boud and Feletti, 1991).

Higher order skills are important because they “enable the professional accountant to make successful use of the knowledge gained through education” (IFAC, 1996). Several researchers have indicated that although technical skills are still regarded as implicit in the skills base of a person entering an accounting career, accounting and business students must develop more than technical skills to succeed (Deppe et al., 1991; Aikinet et al. 1994; Watty et al., 1998), and it is “personal characteristics” that enable career success (Mathews et al., 1990; Agyemang and Unerman, 1998; DeLange et al., 2006).

In contrast, some accounting researchers feel that it is unrealistic for universities as well as professional examining bodies to attempt to guarantee that graduates will possess all the necessary generic skills to meet the demands of employers especially across a range of disciplines (Clanchy and Ballard, 1995; Cranmer, 2006). In contrast, Albrecht and Sack (2000) emphasise the critical importance of skill development in professional accounting programmes and state that: “Students forget what they memorize. Content knowledge becomes dated and is

often not transferable across different types of jobs. On the other hand, critical skills rarely become obsolete and are usually transferable across assignments and careers”.

2.3 Training and examination methodologies for professional accountants

Albrecht and Sack (2000) suggest that creative and innovative methods need to be developed to teach and train accountants. Examples of these learning methods include teamwork assignments, dealing with real companies, oral presentations, written assignments and the participation of practising business professionals in the lecture theatre. In addition, Albrecht and Sack suggest the use of experiences outside the classroom (such as internships) which would offer the contextual experience to be found in an uncertain and nebulous global business environment.

Researchers are thus recommending that accounting educators incorporate pedagogical methods into their teaching that allow students to apply that knowledge in practice and not just encourage memorization of knowledge.

With regard to methods of examining accountants’ competencies, it has been observed that it is more complex to assess a candidate’s competence in non-technical areas than it is for technical ones. This is because technical knowledge can be assessed through traditional paper-based examinations (Lines and Gammie, 2004; Hancock et al., 2009).

An examination tool that helps professional bodies to assess desirable competencies in a non-traditional and flexible way, bringing out the entire range of capabilities necessary in today’s professional accountants, is the work-based method (Lines and Gammie, 2004). However, a common observation of the work-based assessment is the fact that very few students fail

assessments entirely anchored on a work-based setting (Ilott and Murphy, 1999) thus calling into question their validity as an assessment method.

Case studies are invaluable in assessing candidates' inter-disciplinary ability. This type of assessment can be deployed to transport students up Bloom's skills ladder, systematically moving from knowledge, comprehension, analysis, synthesis and evaluation (Bloom, 1956). However, case studies are both time-consuming and expensive to develop. Further, cases are more difficult to assess because of the absence of one correct answer.

Extended essays or theses are easy to construct and have the ability to test higher cognitive skills. However, their reliability is called into question especially if only one marker is involved (NASBA, 1998).

2.4 The theoretical framework of the research

2.4.1 The technocratic model

Knowledge, underpinned by the necessary skills, has always been a central plank of professional status as well as a key source of growth in developed countries (Montagna, 1974; Elliot and Jacobsen, 2002). The technocratic or technical-rational model of professional development which accounting has traditionally borrowed from, assumes that the requisite body of knowledge is fixed and constant thus failing to acknowledge the important fact that rapid changes in the business environment would stimulate rapid changes in the required knowledge foundation of a professional (Dochy, 2001). This model, therefore, is no longer appropriate because the knowledge base is ever-changing and expanding (Cheetham and Chivers, 2005). Further,

qualification as an accountant should signal the start of a life-long commitment to acquiring knowledge (Eraut, 1993).

2.4.2 The “reflective practitioner” model

Schon (1983) developed the concept of the reflective practitioner as a means of developing and continuously enhancing professional competence. In this model, the learner has to take ownership of whatever information is before him/her and make sense out of it in their own individual way. Lucas and Tan (2007) underline the importance of the reflective capacity in accountants because reflection is a fundamental part of professional judgement, ethical awareness and learning to learn.

2.4.3 The competence model

This model posits that the development of specific competencies in the workplace is the best way of preparing aspiring professionals (Boritz and Carnaghan, 2002). The theory and practice supporting the competency approach borrows heavily from the ground-breaking ideas of the American philosopher John Dewey. Dewey (1915) powerfully argued that “grounding theory in practical reality ensures that the theory in question always embodies what is most fit for the purpose”. In addition, when environmental circumstances change, the theory should also change.

Education literature, in support of the competency approach, suggests that many of the non-technical skills are best developed in the workplace (Gamet, 1997; Jackling and DeLange, 2009).

2.4.4 Social constructivist theory

This theory avers that effective learning takes place through social interaction. Wenger (1998) suggests that learning takes place in “communities of practice” where there is both participation in the learning process and participation of practice. Thus, observation in the “work context” is a better tool of measuring and predicting vocational skills than paper and pencil tests (Eraut, 1994; Cheetham and Chivers, 2005). This has led to the conclusion that work-based assessment is more precise in the judgement of competence to practise as a qualified accountant.

2.4.5 Choice of model or theory to employ

Given the multi-faceted nature of the practice of accounting, it is envisaged that a combination of the tenets of the “reflective practitioner” model, the competence model and the social constructivist theory will all be employed in this research.

The “reflective practitioner” model will be used because in their day-to-day work, accountants are called upon to exercise professional judgement and hence every assignment becomes a learning experience.

The competence model will also be applied because most of the competences that accountants possess are acquired in the work place through one form or the other of on-the-job learning.

The social constructivist theory will also be used because the social context in which accountants operate provides a fertile ground for the acquisition and perfection of additional skills.

2.4.6 Conceptual framework of the research

In Kenya, one can register for the Certified Public Accountant (CPA) examination if they have scored a mean grade of C+ as long as they have scored C+ in Mathematics and C+ in English. In addition, one can register for the CPA examination if he/she holds a diploma or a degree. The CPA examination consists of three parts with a total of 18 papers each testing either technical or non-technical skills. Thus, the fresh accountant who is released to the work place is a direct product of either professional accounting courses only or both professional and academic courses. This is the context in which skills are acquired.

On the other hand, the global business market has its own requirements and expectations with regard to the skills and competences that accountants must possess. This is the required skills context. The required skills are both technical and non-technical. Technical skills comprise accounting, taxation, auditing as well as business management and organization skills. Non-technical skills comprise communication, IT, soft skills as well as professional values, ethics and attitudes. These skills have to be taught for a certain period and assessed in the context explained above. The teaching methods that were explored included the lecture method, case methodology, tutorials, practical attachment, self-study and distance learning. The assessment methods that were examined included paper-based examinations, e-assessment, competency-based assessment, extended open-book assessment and real life business cases. In the above context, the gaps between the acquired and required skills were determined and appropriate measures recommended to bridge them.

CHAPTER 3: RESEARCH METHODOLOGY AND DESIGN

3.1 Introduction

This section seeks to delineate how the research was performed, the research design, the target population, the research instruments that were employed, the data analysis methods that were used as well as the quality assurance mechanisms that were employed. The chapter also provides information on the data analysis method that was used and how the analysis was used to meet the research objectives identified in Chapter 1.

3.2 Research design

A qualitative research design was used in this research. Qualitative research consists of an investigation that seeks answers to questions through the use of a predefined set of procedures to answer the said questions. It seeks to understand a given research problem or topic from the perspectives of the population it involves. Qualitative research is particularly effective in obtaining culturally specific information about the values, opinions as well as the social contexts of particular populations.

The qualitative method was more flexible because it allowed greater spontaneity and adaptation. In addition, participants had an opportunity to respond more elaborately and in more detail. For this reason, the responses were more meaningful and culturally relevant to the participant.

A descriptive approach was also taken in the sense that the information obtained was used to describe the characteristics associated with the target population and to estimate the proportion of a population demonstrating these characteristics.

3.3 Population and sampling

The target population of this research was composed of all the individual professional accountants working in the different sectors of the Kenyan economy who exercised a supervisory role in their day-to-day activities. These accountants were in a good position to identify which skills were demonstrated by the accountants under them and which ones were not.

The sectors of the economy which were targeted were the Government, audit firms, agriculture, automobiles and accessories, banking, commercial and services, construction and allied, energy and petroleum, insurance, investment, manufacturing and allied, medical, academia, hospitality and telecommunication and technology.

The method of sampling adopted was stratified sampling where an allocated sample was studied in each of the identified sectors.

According to ICPAK, there are 4 big international audit firms operating in Kenya. There are also 11 audit firms in Kenya which have three or more partners. These audit firms were included in the sample because it was envisaged that managers in these firms had a good idea about the skills possessed by the accountants working under them.

The Nairobi Securities Exchange (NSE) has 60 listed firms categorized into agricultural (7 firms), automobiles and accessories (4 firms), banking (11 firms), commercial and services (9 firms), construction and allied (5 firms), energy and petroleum (5 firms), insurance (6 firms), investment (3 firms), manufacturing and allied (9 firms) and finally telecommunication and technology (1 firm). All the Chief Finance Officers in these listed firms were part of the sample because they provided invaluable information about the skills of accountants working in the commercial sector.

The Government of Kenya currently (March 2014) has 18 ministries. All the Chief accountants of these ministries were to be interviewed.

Academia was represented by chartered universities (both public and private) that had campuses in Nairobi. According to the Commission of University Education (CUE), there are 9 fully accredited public universities, 11 chartered private universities and 8 private universities with letters of interim authority operating in Nairobi. All chief finance officers of these 28 universities were sampled as they formed a good representation of the academia in Kenya.

There are 18 5-star hotels in Nairobi according to the Kenya Association of Hotelkeepers and Caterers. The chief finance officers of these hotels were sampled because it was reckoned that they formed a good representation of the hotel and hospitality industry.

According to the Ministry of Health (GoK), there are 6 public and 25 registered private hospitals in Nairobi. The chief finance officers of these 31 hospitals were to be interviewed. This is because they were reckoned to be a good representation of health institutions in Kenya.

In total, 170 chief finance officers were sampled in this research.

The following is a summary of the composition of the sample.

Nature of organisation	Number sampled
Audit firms (big 4)	4
Audit firms (3 or more partners)	11
Government	18
Listed companies (NSE)	60
Hospitality	18
Medical	31
Academia	28
Total	170

3.4 Data collection methods

The instrument that was used in this research was a self-administered questionnaire. This questionnaire consisted of four parts. Part I of this questionnaire included items that were designed to solicit personal information about the responding supervisor accountant. This part of the questionnaire solicited information about the supervisor accountant's name (optional), the highest academic qualifications that the supervising accountants held, the professional accounting qualification they held, and the sectors of the economy they worked in.

Part II of the questionnaire solicited information about the accounting supervisor's perception of the level of adequacy of various skills in different sub-sets of competencies that accountants working under him or her demonstrated in technical areas. The sub-sets of competencies included accounting skills, taxation skills, auditing skills as well as business management and organization skills.

Part III of the questionnaire solicited information about the accounting supervisor's perception of the level of competence of the professional accountants who worked under him or her in non-technical, complementary or vocational skills. The sub-sets of competencies included communication skills, information technology skills, soft skills as well as professional values, ethics and attitudes.

A five-point Likert-type scale with the following response choices was used in this part of the instrument:

1= Very poor

2= Poor

3= Satisfactory

4= Good

5= Very good

Part IV of the questionnaire was designed to solicit information about the accounting supervisor's preferences with regard to training and assessment modes that were most appropriate for the training of professional accountants.

With regard to the method of training recommended, the supervising accountant was required to choose one of three alternatives: purely academic, purely professional or a combination of academic and professional. The supervising accountant also had the opportunity to express preference for any other mode of training.

With reference to the period of training recommended, the supervising accountant had three choices: 3 years and under, between 3 and 5 years and between 5 and 7 years. The supervising accountant also had the opportunity to recommend any other period of training time.

With regard to how long the practical training of student accountants should take, the supervising accountant had two choices: between 1 and 2 years as well as between 2 and 3 years. The supervising accountant also had the opportunity to recommend any other period of training.

As concerns the supervising accountant's preference for teaching methodologies for accountants, the respondents were required to indicate their ranking of various methodologies of teaching where: 1= most favoured and 6= least favoured. The respondents also had the opportunity to recommend other types of teaching methodologies.

With reference to the method (or combination of methods) of assessment recommended for accountants, the supervising accountant was required to choose one or more of the following: paper-based examination, e-assessment, competency-based assessment, real-life business or any other method.

3.5 Validity and reliability of the instrument

Validity refers to the ability of the questionnaire to actually measure what it purports to measure. Reliability is an indication of the extent to which data are free from errors and hence show consistent results. Face validity is an indication of the extent to which the questionnaire is pleasing to the eye whereas content validity is a measure of the extent to which the items in the questionnaire represent the objective of the instrument. A random group of 10 individuals were used to establish the face validity of the questionnaire. A pilot study comprising 30 individuals was also used to establish the reliability of the questionnaire.

In addition, in order to further improve the quality of data collected, interviews were used to clarify any information collected.

3.6 Administration of the data collection instrument

Data was collected from the intended respondents by using a direct visit and letting the respondents fill the questionnaire. An interview guide was also used to focus the areas of response.

3.7 Data analysis and presentation

Prior to the actual analysis of data, a pre-analysis screening was performed. This was designed to ensure the accuracy of the data collected and to deal with any missing or incomplete data. The responses in the questionnaires were coded to facilitate analysis. Qualitative data was processed through content analysis while quantitative data was analysed through percentages and mean scores using Minitab. Frequencies were used to screen the data for any irregularities. Percentages were used to analyse the prevalence and adequacy of various skills and competencies. Findings were related to pertinent information through interpretative analysis. The analysis was tailored to

respond to the objectives of the study. Data was summarized to provide the information and figures needed to answer the research objectives and consequently, the research questions.

3.8 Scoring and scoring interpretation

3.8.1 Scoring and scoring interpretation for technical skills gaps

The scoring, as well as the scoring interpretation of the professional accountants' skills gaps in each sub-competence area of technical skills was based on means. The lowest possible score for the mean was 1 and the highest possible score was 5. For this part of the research, the means were interpreted using the following scale:

1.0-1.49=Very Poor

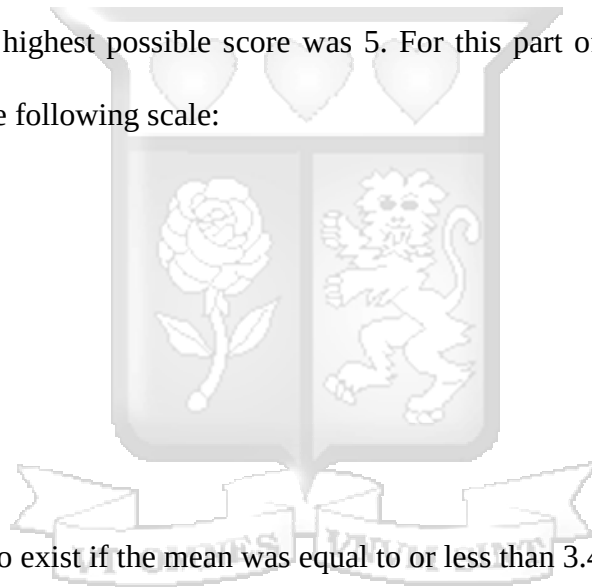
1.5-2.49=Poor

2.5-3.49=Satisfactory

3.5-4.49=Good

4.5-5.0=Very Good

A skill gap was deemed to exist if the mean was equal to or less than 3.49.



3.8.2 Scoring and scoring interpretation for additional or complementary skills gaps

The scoring, as well as the scoring interpretation of the professional accountants' skills gaps in each sub-competence area of additional or complementary skills was based on means. The lowest possible score for the mean was 1 and the highest possible score was 5. For this part of the research, the means were interpreted using the following scale:

1.0-1.49=Very Poor

1.5-2.49=Poor

2.5-3.49=Satisfactory

3.5-4.49=Good

4.5-5.0=Very Good

A skill gap was deemed to exist if the mean was equal to or less than 4.49. This is because professional accountants are required to exhibit the highest levels of complementary skills.

3.8.3 Scoring and scoring interpretation for training and examination methods suitable for professional accountants

The recommended methods of training accountants, the recommended period of training, the length of training period for student accountants and the methods of assessment of accountants were measured by percentages. The option with the highest percentage score was deemed to be the preferred one.

With regard to the preference of teaching methodologies for accountants, the measurement was based on means. The lowest possible mean was 1 and the highest possible mean was 6. For this part of the research, the means were interpreted using the following scale:

1.0-1.49=Least favoured

1.5-2.49=Less favoured

2.5-3.49=Moderately favoured

3.5-4.49=Favoured

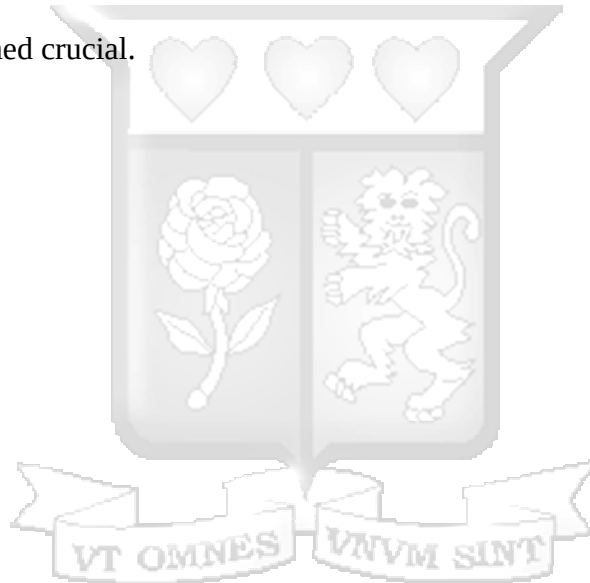
4.5-5.49=More favoured

5.5-6.0=Most favoured

If a teaching methodology obtained a mean score of 3.5 and above, then it was recommended for use. If the score was below 3.5, then it was not recommended for use.

3.9 Ethical considerations

A crucial ethical consideration in this research was the maintenance of confidentiality during the data collection and report writing phases. Thus, every care was taken not to compromise a respondent's identity or position by revealing details that might associate them with specific information. This was the only way to cultivate trust with target respondents whose participation in this research was deemed crucial.



CHAPTER FOUR: FINDINGS

4.1 Introduction

The main objective of this research was to investigate the skills gaps demonstrated by professional accountants employed in different sectors of the Kenyan economy. The results of the research were used to make recommendations on how these skills gaps could be addressed.

4.2 Specific objectives

The specific objectives of the research were:

1. To determine what technical skills gaps exist in professional accountants employed in different sectors of the Kenyan economy.
2. To determine what non-technical and vocational skills gaps exist in professional accountants employed in different sectors of the Kenyan economy.
3. To identify what training and examination methods are most suitable for professional accountants in Kenya.

4.3 Research questions

The research sought to answer the following research questions:

1. What technical skills gaps exist in professional accountants employed in various sectors of the Kenyan economy?
2. What non-technical and vocational skills gaps exist in professional accountants employed in different sectors of the Kenyan economy?

3. What are the most effective training and examination methodologies for the professional accountant in Kenya?

4.4 General findings

Responses were received from 129 chief finance officers out of the targeted 170 representing a response rate of 75.88%. This response rate was considered adequate for the research findings to be generalized to the whole population.

Table 1 below gives a summary of the highest academic qualifications of the respondents. The table shows that Diploma holders represented 1.6% of the respondents, undergraduate degree holders represented 33.1% of the respondents, postgraduate degree holders represented 51.2% of the respondents and doctorate degree holders represented 14.2% of the respondents.

Table 1- Highest academic qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
	Diploma	2	1.6	1.6	1.6
	Undergraduate degree	42	32.6	33.1	34.6
	Postgraduate degree	65	50.4	51.2	85.8
	Doctorate degree	18	14.0	14.2	100.0
	Total	127	98.4	100.0	
	System	2	1.6		
	Total	129	100.0		

Table 2- Professional accounting qualification held

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	CPA	103	79.8	83.1	83.1
	CA (Scotland)	3	2.3	2.4	85.5
	ACCA	15	11.6	12.1	97.6
	CCA (SA)	3	2.3	2.4	100.0
	Total	124	96.1	100.0	
Missing	System	5	3.9		
	Total	129	100.0		



Table 3 below shows the sectors the respondents worked in.

Table 3-Sectors worked in

		Frequency	Percent	Valid Percent	Cumulative Percent
	Audit firm	5	3.9	3.9	3.9
	Government	18	14.0	14.0	17.9
	Hospitality	14	10.9	10.9	28.8
	Agricultural	7	5.4	5.4	34.2
	Automobiles and Accessories	4	3.1	3.1	37.3
	Banking	10	7.8	7.8	45.1
	Commercial and Services	9	7.0	7.0	52.1
	Construction and Allied	5	3.9	3.9	56.0
	Energy and Petroleum	5	3.9	3.9	59.9
	Insurance	5	3.9	3.9	63.8
	Investment	3	2.3	2.3	66.1
	Manufacturing and Allied	8	6.2	6.2	72.3
	Telecommunication and Technology	1	.8	.8	73.1
	Academia	19	14.7	14.7	87.8
	Medical	16	12.2	12.2	100.0
	Total	129	100.0	100.0	

Table 3 shows the number of respondents according to the sectors of the economy worked in. Respondents from audit firms represented 3.9 % of the total number of respondents. Respondents from the government sector represented 14.0% of the total respondents. Respondents from the hospitality sector represented 10.9%. Respondents from the agricultural sector represented 5.4% of the total number of respondents. The banking sector provided 7.8% of the respondents, The commercial and services sector provided 7.0% of the respondents. The construction and allied sector represented 3.9% of the respondents. The energy and petroleum sector provided 3.9% of the total respondents. The insurance sector represented 3.9% of the total number of respondents.

The investment sector provided 2.3% of the total number of respondents. The manufacturing and allied sector represented 6.2% of the total number of respondents. The telecommunication and technology sector represented 0.8% of the total number of respondents. The academic sector represented 14.7% of the total respondents and the medical sector represented 12.2% of the total number of respondents.

4.5 Findings associated with objective one

Objective one sought to identify the technical skills gaps that might exist in professional accountants employed in various sectors of the Kenyan economy. The technical skills were divided into accounting skills, taxation skills, auditing skills as well as business management and organization. In each of these skill sub-components, percentages will be used to give an indication of the perception of competence in each skill identified.

4.5.1 Accounting skills

The accounting skills were divided into knowledge of international financial reporting standards (IFRSs), ability to prepare financial statements (interim and final), ability to read and interpret accounting statements, knowledge of IPSASs and competence in financial management.

With regard to knowledge of international financial reporting standards (IFRSs), 3.1% of the respondents rated the accountants as satisfactory, 7.1% rated the accountants as good and 89.9% rated the accountants as very good.

With regard to the ability to prepare financial statements (interim and final), 0.8% of the respondents rated the accountants as satisfactory, 3.1% of the respondents rated the accountants as good, and 96.1% of the respondents rated the accountants as very good.

With regard to the ability to read and interpret accounting statements, 0.8% of the respondents rated the accountants as satisfactory, 3.1% of the respondents rated the accountants as good and 96.1% of the respondents rated the accountants as very good.

With regard to knowledge of IPSASs, 3.9% of the respondents rated the accountants as poor, 48.4% of the respondents rated the accountants as satisfactory, 25.8% of the respondents rated the accountants as good and 21.9% of the respondents rated the accountants as very good.

With regard to competence in financial management, 3.9% of the respondents rated the accountants as good and 96.1% of the respondents rated the accountants as very good.

These results are presented in table 4 below.

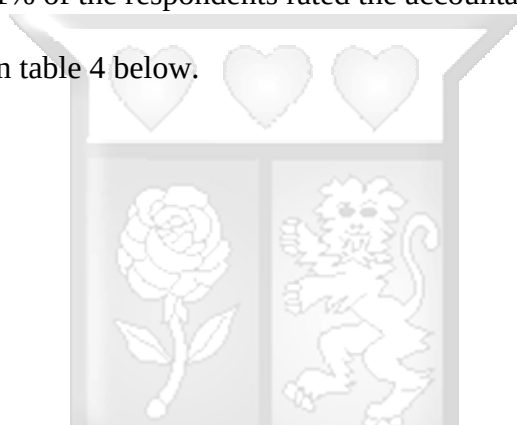


Table 4- Accounting Skills

	Poor		Satisfactory		Good		Very good		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%
Knowledge of International Financial Reporting Standards (IFRS)			4	3.1	9	7.0	116	89.9	129	100.0
Ability to prepare financial statements (Interim and Final)			1	.8	4	3.1	124	96.1	129	100.0
Ability to read and interpret accounting statements			1	.8	4	3.1	122	96.1	127	100.0
Knowledge of IPSASs	5	3.9	62	48.4	33	25.8	28	21.9	128	100.0
Competence in financial management					5	3.9	124	96.1	129	100.0

4.5.2 Taxation skills

Taxation skills were broken down into the following sub-skills: knowledge of general taxation concepts and philosophies, knowledge of the VAT Act, knowledge of the Income Tax Act, knowledge of the Customs and Excise Act and knowledge of the East African Tax Management protocol.

With regard to knowledge of general taxation concepts and philosophies, 18.6% of the respondents rated the accountants as satisfactory, 28.7% of the respondents rated the accountants as good and 52.7% of the respondents rated the accountants as very good.

With regard to knowledge of the VAT Act, 10.2% of the respondents rated the accountants as poor, 42.2% of the respondents rated the accountants as satisfactory, 27.3% of the respondents rated the accountants as good and 20.3% of the respondents rated the accountants as very good.

With respect to knowledge of the Income Tax Act, 14.1% of the respondents rated the accountants as poor, 39.8% of the respondents rated the accountants as satisfactory, 24.2% of the respondents rated the accountants as good and 21.9% of the respondents rated the accountants as very good.

With regard to knowledge of the Customs and Excise Act, 17.8% of the respondents rated the accountants as poor, 40.3% of the respondents rated the accountants as satisfactory, 24% of the respondents rated the accountants as good and 17.8% of the respondents rated the accountants as very good.

With regard to knowledge of the East African Tax management protocol, 28.1% of the respondents rated the accountants as poor, 31.3% of the respondents rated the accountants as satisfactory, 21.9% of the respondents rated the accountants as good and 18.8% of the respondents rated the accountants as very good. This information is presented in table 5 below.

Table 5- Taxation Skills

	Poor		Satisfactory		Good		Very good		Total	
	Count	%	Count	Count	%	Count	%	%	Count	%
Knowledge of general taxation concepts and philosophies			24	24	18.6	37	68	52.7	129	100.0
Knowledge of the VAT act	13	10.2	54	54	42.2	35	26	20.3	128	100.0
Knowledge of the Income Tax Act	18	14.1	51	51	39.8	31	28	21.9	128	100.0
Knowledge of Customs and Excise act	23	17.8	52	52	40.3	31	23	17.8	129	100.0
Knowledge of the East African Tax management protocol	36	28.1	40	40	31.3	28	24	18.8	128	100.0

4.5.3 Auditing skills

The auditing skills were divided into the following sub-skills: knowledge of ISQC 1, knowledge of ISAs and knowledge of forensic auditing.

With regard to knowledge of ISQC 1, 2.3% of the respondents rated the accountants as poor, 29.5% of the respondents rated the accountants as satisfactory, 31% of the respondents rated the accountants as good, 37.2% of the respondents rated the accountants as very good.

With regard to knowledge of ISAs, 7.8% of the respondents rated the accountants as poor, 42.6% as satisfactory, 24.8% of the respondents rated the accountants as good and 24.8% of the respondents rated the accountants as very good.

With respect to knowledge of forensic auditing, 12.4% of the respondents rated the accountants as very poor, 54.3% of the respondents rated the accountants as poor, 18.6% of the respondents

rated the accountants as satisfactory, 7% of the respondents rated the accountants as good and 7.8% of the respondents rated the accountants as very good. These results are presented in table 6 below.

Table 6- Auditing skills

	Very poor		Poor		Satisfactory		Good		Very good		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Knowledge of ISQC 1			3	2.3	38	29.5	40	31.0	48	37.2	129	100.0
Knowledge of ISAs			10	7.8	55	42.6	32	24.8	32	24.8	129	100.0
Knowledge of forensic auditing	16	12.4	70	54.3	24	18.6	9	7.0	10	7.8	129	100.0

4.5.4 Business management and organisation skills

The business management and organization skills were divided into the following sub-skills: business management, strategic thinking and management leadership, adaptability to change and finally risk management.

With regard to business management, 2.3% of the respondents rated the accountants as satisfactory, 3.9% of the respondents rated the accountants as good and 93.8% of the respondents rated the accountants as very good.

With regard to strategic thinking and management leadership, 3.9% of the respondents rated the accountants as good and 96.1% of the respondents rated the accountants as very good.

With respect to adaptability to change, 0.8% of the respondents rated the accountants as satisfactory, 9.3% as good and 89.9% as very good.

With regard to risk management, 9.3% of the respondents rated the accountants as poor, 27.9% of the respondents rated the accountants as satisfactory, 9.3% of the respondents rated the accountants as good and 53.5% of the respondents rated the accountants as very good.

These results are summarized in Table 7 below.

Table 7- Business management and organisation

	Poor		Satisfactory		Good		Very good		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%
Business management			3	2.3	5	3.9	121	93.8	129	100.0
Strategic thinking and management leadership					5	3.9	124	96.1	129	100.0
Adaptability to change			1	.8	12	9.3	116	89.9	129	100.0
Risk management	12	9.3	36	27.9	12	9.3	69	53.5	129	100.0



Table 8 below is a summary of the descriptive statistics (mean and standard deviation) associated with technical skills.

Table 8-Descriptive statistics relating to technical skills

	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge of International Financial Reporting Standards (IFRS)	129	3.00	5.00	4.8682	.42168
Ability to prepare financial statements (Interim and Final)	129	3.00	5.00	4.9535	.24560
Ability to read and interpret accounting statements	127	3.00	5.00	4.9528	.24747
Knowledge of IPSASs	128	2.00	5.00	3.6563	.86432
Competence in financial management	129	4.00	5.00	4.9612	.19377
Knowledge of general taxation concepts and philosophies	129	3.00	5.00	4.3411	.77557
Knowledge of the VAT act	128	2.00	5.00	3.5781	.92736
Knowledge of the Income Tax Act	128	2.00	5.00	3.5391	.98734
Knowledge of Customs and Exercise act	129	2.00	5.00	3.4186	.98185
Knowledge of the East African Tax management protocol	128	2.00	5.00	3.3125	1.07769
Knowledge of ISQC 1	129	2.00	5.00	4.0310	.87445
Knowledge of ISAs	129	2.00	5.00	3.6667	.93819
Knowledge of forensic auditing	129	1.00	5.00	2.4341	1.05212
Business management	129	3.00	5.00	4.9147	.35424
Strategic thinking and management leadership	129	4.00	5.00	4.9612	.19377
Adaptability to change	129	3.00	5.00	4.8915	.33635
Risk management	129	2.00	5.00	4.0698	1.09106

4.6 Findings associated with objective two

Objective two sought to identify the non-technical and vocational skills gaps that exist in professional accountants employed in different sectors of the Kenyan economy. The non-technical or vocational skills were divided into: communication skills, information technology skills, soft skills and finally professional values, ethics and attitudes.

4.6.1 Communication skills

Communication skills were sub-divided into oral communication (in English), written communication (letters, position papers etc), presentation skills (including use of visual analytics) and public speaking.

With respect to communication skills (in English), 3.1% of the respondents rated the accountants as satisfactory, 12.4% of the respondents rated the accountants as good and 84.5% of the respondents rated the accountants as very good.

With regard to written communication (letters, position papers etc), 1.6% of the respondents rated the accountants as poor, 3.9% of the respondents rated the accountants as satisfactory, 17.8% of the respondents rated the accountants as good and 76.7% of the respondents rated the accountants as very good.

With respect to presentation skills (including use of visual analytics), 1.6% of the respondents rated the accountants as poor, 30.2% of the respondents rated the accountants as satisfactory, 37.2% of the respondents rated the accountants as good and 31% of the respondents rated the accountants as very good.

With regard to public speaking, 3.9% of the respondents rated the accountants as poor, 45.3% of the respondents rated the accountants as satisfactory 19.5% of the respondents rated the accountants as good and 31.3% of the respondents rated the accountants as very good.

These results are summarized in Table 9 below.

Table 9- Communication skills

	Poor		Satisfactory		Good		Very good		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%
Oral communication (In English)			4	3.1	16	12.4	109	84.5	129	100.0
Written communication (Letters, position papers etc)	2	1.6	5	3.9	23	17.8	99	76.7	129	100.0
Presentation skills (Including use of visual analytics)	2	1.6	39	30.2	48	37.2	40	31.0	129	100.0
Public speaking	5	3.9	58	45.3	25	19.5	40	31.3	128	100.0

4.6.2 Information technology (IT) skills

The IT skills were sub-divided into: application of accounting packages and accounting systems, basic computer troubleshooting and problem solving skills, basic use of computer networks and finally use of social media.

With regard to application of accounting packages and accounting systems, 0.8% of the respondents rated the accountants as satisfactory, 3.9% of the respondents rated the accountants as good and 95.3% of the respondents rated the accountants as very good.

With regard to basic computer troubleshooting and problem solving skills, 10.9% of the respondents rated the accountants as satisfactory, 18.6% of the respondents rated the accountants as good and 70.5% of the respondents rated the accountants as very good.

With regard to basic use of computer networks, 9.3% of the respondents rated the accountants as satisfactory, 17.1% of the respondents rated the accountants as good and 73.6% of the respondents rated the accountants as very good.

With regard to the use of social media, 2.3% of the respondents rated the accountants as very poor, 7.8% of the respondents rated the accountants as poor, 34.1% of the respondents rated the accountants as satisfactory, 21.7% of the respondents rated the accountants as good and 34.1% of the respondents rated the accountants as very good.

Table 10 below summarises these findings.

Table 10- Information technology (IT) skills

	Very poor		Poor		Satisfactory		Good		Very good		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Application of accounting packages and accounting systems					1	.8	5	3.9	123	95.3	129	100.0
Basic computer troubleshooting and problem solving skills					14	10.9	24	18.6	91	70.5	129	100.0
Basic use of computer networks					12	9.3	22	17.1	95	73.6	129	100.0
Use of social media	3	2.3	10	7.8	44	34.1	28	21.7	44	34.1	129	100.0

4.6.3 Soft skills

Soft skills were sub-divided into the following categories: interpersonal skills, team playing, negotiation, time management, critical thinking, adaptability to different cultures, persuasiveness and networking.

With regard to interpersonal skills, 10.9% of the respondents rated the accountants as good and 89.1% of the respondents rated the accountants as very good.

With respect to team playing, 3.9% of the respondents rated the accountants as satisfactory, 15.6% of the respondents rated the accountants as good and 80.5% of the respondents rated the accountants as very good.

With regard to negotiation, 2.3% of the respondents rated the accountants as poor, 32.8% of the respondents rated the accountants as satisfactory, 23.4% of the respondents rated the accountants as good and 41.1% of the respondents rated the accountants as very good.

As regards time management, 0.8% of the respondents rated the accountants as satisfactory, 4.7% of the respondents rated the accountants as good, and 94.5% of the respondents rated the accountants as very good.

With regard to critical thinking, 1.6% of the respondents rated the accountants as satisfactory, 2.3% of the respondents rated the accountants as good, and 96.1% of the respondents rated the accountants as very good.

As regards adaptability to different cultures, 7.9% of the respondents rated the accountants as satisfactory, 19.8% of the respondents rated the accountants as good and 72.2% of the respondents rated the accountants as very good.

With regard to persuasiveness, 2.3% of the respondents rated the accountants as poor, 38.3% of the respondents rated the accountants as satisfactory, 25% of the respondents rated the accountants as good and 34.4% of the respondents rated the accountants as very good.

With regard to networking, 1.6% of the respondents rated the accountants as satisfactory, 8.7% rated the accountants as good and 89.8% of the respondents rated the accountants as very good.

This information is summarized in table 11 below.

Table 11- Soft skills

	Poor		Satisfactory		Good		Very good		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%
Interpersonal skills					14	10.9	115	89.1	129	100.0
Team playing			5	3.9	20	15.6	103	80.5	128	100.0
Negotiation	3	2.3	42	32.8	30	23.4	53	41.4	128	100.0
Time management			1	.8	6	4.7	120	94.5	127	100.0
Critical thinking			2	1.6	3	2.3	124	96.1	129	100.0
Adaptability to different cultures			10	7.9	25	19.8	91	72.2	126	100.0
Persuasiveness	3	2.3	49	38.3	32	25.0	44	34.4	128	100.0
Networking			2	1.6	11	8.7	114	89.8	127	100.0

4.6.4 Professional values, ethics and attitudes

Professional values, ethics and attitudes were divided into the following sub-skills: appreciation of different professional ethical dilemmas, Knowledge of the provisions of the code of ethics for professional accountants, demonstration of integrity, ethics and professionalism and finally objectivity.

With regard to appreciation of different ethical dilemmas, 4.8% of the respondents rated the accountants as good and 95.2% of the respondents rated the accountants as very good.

Concerning knowledge of the provisions of the code of ethics for professional accountants, 3.2% of the respondents rated the accountants as satisfactory, 4.8% of the respondents rated the accountants as good and 92.1% of the respondents rated the accountants as very good.

As concerns demonstration of integrity, 0.8% of the respondents rated the accountants as satisfactory, 4.8% of the respondents rated the accountants as good and 94.4% of the respondents rated the accountants as very good.

With regard to ethics and professionalism, 2.4% of the respondents rated the accountants as satisfactory, 2.4% of the respondents rated the accountants as good and 95.2% of the respondents rated the accountants as very good.

As concerns objectivity, 2.4% of the respondents rated the accountants as satisfactory, 9.5% of the respondents rated the accountants as good and 88.1% of the respondents rated the accountants as very good. These results are summarized in Table 12 below.

Table 12- Professional values, ethics and attitudes

	Satisfactory		Good		Very good		Total	
	Count	%	Count	%	Count	%	Count	%
Appreciation of different professional ethical dilemmas			6	4.8	120	95.2	126	100.0
Knowledge of provisions of the code of ethics	4	3.2	6	4.8	116	92.1	126	100.0
Demonstration of integrity	1	.8	6	4.8	119	94.4	126	100.0
Ethics and Professionalism	3	2.4	3	2.4	120	95.2	126	100.0
Objectivity	3	2.4	12	9.5	111	88.1	126	100.0



Table 13 below is a summary of the descriptive statistics (mean and standard deviation) associated with objective two.

Table 13-Descriptive statistics relating to additional or complementary skills

	N	Minimum	Maximum	Mean	Std. Deviation
Oral communication (In English)	129	3.00	5.00	4.8140	.46381
Written communication (Letters, position papers etc)	129	2.00	5.00	3.9767	.82410
Presentation skills (Including use of visual analytics)	129	2.00	5.00	3.9767	.82410
Public speaking	128	2.00	5.00	3.7813	.93857
Application of accounting packages and accounting systems	129	3.00	5.00	4.9457	.25951
Basic computer troubleshooting and problem solving skills	129	3.00	5.00	4.5969	.67915
Basic use of computer networks	129	3.00	5.00	4.6434	.64709
Use of social media	129	1.00	5.00	3.7752	1.07704
Interpersonal skills	129	4.00	5.00	4.8915	.31226
Team playing	128	3.00	5.00	4.7656	.50951
Negotiation	128	2.00	5.00	4.0391	.91705
Time management	127	3.00	5.00	4.9370	.27453
Critical thinking	129	3.00	5.00	4.9457	.28805
Adaptability to different cultures	126	3.00	5.00	4.6429	.62564
Persuasiveness	128	2.00	5.00	3.9141	.90517
Networking	127	3.00	5.00	4.8819	.36977
Appreciation of different professional ethical dilemmas	126	4.00	5.00	4.9524	.21381

Table 13-Descriptive statistics relating to additional or complementary skills (Continued)

	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge of provisions of the code of ethics	126	3.00	5.00	4.8889	.40442
Demonstration of integrity	126	3.00	5.00	4.9365	.27557
Ethics and Professionalism	126	3.00	5.00	4.9286	.33891
Objectivity	126	3.00	5.00	4.8571	.41404
Valid N (listwise)	112				

4.7 Findings associated with objective three

Objective three sought to identify the training and examination methods that are most suitable for professional accountants in Kenya.

4.7.1 Methods recommended for training accountants

Respondents were required to indicate their preference for training methods for accountants by choosing any one of the following: purely academic, purely professional or a combination of academic and professional. Respondents were also at liberty to recommend any other method of training. Out of the 129 respondents who answered this question, 3 (2.3%) preferred a purely professional method of training, 121 (93.8%) preferred a combination of academic and professional method and none recommended a purely academic method. In addition, 3 (2.3%) preferred continuous professional training, 1(0.8%) preferred work-based training and 1 (0.8%) preferred workshops. These results are summarized in Table 14 below.

Table 14- Preferred method of training accountants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Purely professional	3	2.3	2.4	2.4
	Combination of academic and professional	121	93.8	97.6	100.0
	Total	124	96.1	100.0	
Missing	System	5	3.9		
		124	96.1	96.1	96.1
Valid	Continuous professional training	3	2.3	2.3	98.4
	Work- based training	1	.8	.8	99.2
	Workshops	1	.8	.8	100.0
	Total	129	100.0	100.0	

4.7.2 Period recommended for training accountants

With regard to the training method recommended for accountants, respondents were given three options to choose from: 3 years and under, between 3 and 5 years and finally between 5 and 7 years. Respondents also had the liberty to recommend any other period of training. Out of the 123 respondents who answered this question, 19 (15.4%) chose 3 years and under, 102 (82.9%) chose between 3 and 5 years and only 2 (1.6%) chose between 5 and 7 years. These results are summarized in table 15 below.

Table 15- Period of training recommended for accountants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3 years and under	19	14.7	15.4	15.4
	Between 3 and 5 years	102	79.1	82.9	98.4
	Between 5 and 7 years	2	1.6	1.6	100.0
	Total	123	95.3	100.0	
Missing	System	6	4.7		
	Total	129	100.0		

4.7.3 Length of practical training of student accountants

With regard to the period of practical training for student accountants, the respondents had two choices: between 1 and 2 years and between 2 and 3 years. Respondents also had the opportunity to recommend any other period of practical training.

Out of the 129 respondents, 90 (69.8%) chose a duration of between 1 and 2 years, 13 (10.1%) chose between 2 and 3 years and the rest, constituting 20.1% recommended other periods of training as follows: 1 year 17 respondents (13.2%), 2 years 1 respondent (0.8%), 3 years 2 respondents (1.6%), 4 years 4 respondents (3.1%), and 5 years 1 respondent (0.8%). 1 respondent (0.8%) recommended any other period as per the student's needs and ability to learn. These results are summarized in Table 16 below.

Table 16- Length of practical training for student accountants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Between 1 and 2 years	90	69.8	87.4	87.4
	Between 2 and 3 years	13	10.1	12.6	100.0
	Total	103	79.9	100.0	
Missing	System	26	20.1		
Valid		103	79.8	79.8	79.8
	1 year	17	13.2	13.2	93.0
	2 years	1	.8	.8	93.8
	3 years	2	1.6	1.6	95.3
	4 years	4	3.1	3.1	98.4
	5 years	1	.8	.8	99.2
	Any other period as per the student needs and ability to learn	1	.8	.8	100.0
	Total	129	100.0	100.0	



4.7.4 Preferred teaching methodologies for accountants

With regard to preferred teaching methodologies for accountants, respondents were required to rank six teaching methodologies in their order of preference in such a way that the most favoured method would be ranked as 1 and the least favoured as 6. The methods the respondents were required to choose from were: the lecture method, case methodology, tutorials, practical attachment, self-study and distance learning. Respondents were also given the opportunity to recommend any other method of teaching.

With regard to the lecture method, 5 respondents (3.9%) indicated it as least favoured, 9 respondents (7.1%) as less favoured, 23 respondents (18.1%) as moderately favoured, 21 respondents (16.5%) as favoured, 20 respondents (15.7%) as more favoured and 49 respondents (38.6%) as most favoured.

With regard to case methodology, 5 respondents (3.9%) indicated it as least favoured, 17 respondents (13.4%) as less favoured, 53 respondents (41.7%) as moderately favoured, 24 respondents (18.8%) as favoured, 13 respondents (10.2%) as more favoured and 15 respondents (11.8%) as most favoured.

With regard to tutorials, 0 respondents (0%) indicated it as least favoured, 4 respondents (3.2%) as less favoured, 25 respondents (19.8%) as moderately favoured, 22 respondents (17.5%) as favoured, 32 respondents (25.4%) as more favoured and 43 respondents (34.1%) as most favoured.

With regard to practical attachment, 119 respondents (93.7%) indicated it as least favoured, 4 respondents (3.1%) as less favoured, 3 respondents (2.4%) as moderately favoured, 0 respondents (0%) as favoured, 0 respondents (0%) as more favoured and 1 respondent (0.8%) as most favoured.

With regard to self study, 110 respondents (86.6%) indicated it as least favoured, 9 respondents (7.1%) as less favoured, 8 respondents (6.3%) as moderately favoured, 0 respondents (0%) as favoured, 0 respondents (0%) as more favoured and 0 respondents (0%) as most favoured.

With regard to self study, 110 respondents (86.6%) indicated it as least favoured, 9 respondents (7.1%) as less favoured, 8 respondents (6.3%) as moderately favoured, 0 respondents (0%) as favoured, 0 respondents (0%) as more favoured and 0 respondents (0%) as most favoured.

With regard to distance learning, 6 respondents (4.7%) indicated it as least favoured, 1 respondent (0.8%) as less favoured, 22 respondents (17.3%) as moderately favoured, 28 respondents (22%) as favoured, 24 respondents (18.9%) as more favoured and 46 respondents (36.2%) as most favoured.

These results are summarized in table 17 below.

Table 17-Preferred teaching methodologies for accountants

	Least favoured		Less favoured		Moderately favoured	
	Count	%	Count	%	Count	%
Lecture method	5	3.9	9	7.1	23	18.1
Case methodology	5	3.9	17	13.4	53	41.7
Tutorials			4	3.2	25	19.8
Practical Attachment	119	93.7	4	3.1	3	2.4
Self-study	110	86.6	9	7.1	8	6.3
Distance Learning	6	4.7	1	.8	22	17.3

Table 18 below provides a summary of the descriptive statistics (mean and standard deviation) associated with the preferred teaching methodologies for accountants.

Table 18-Descriptive statistics for preferred teaching methodologies					
	N	Minimum	Maximum	Mean	Std. Deviation
Lecture method	127	1.00	6.00	4.4882	1.51640
Case methodology	127	1.00	6.00	3.5354	1.29587
Tutorials	126	2.00	6.00	4.6746	1.22526
Practical Attachment	127	1.00	6.00	1.1181	.55797
Self-study	127	1.00	3.00	1.1969	.53511
Distance Learning	127	1.00	6.00	4.5827	1.39410
Valid N (listwise)	126				

4.7.5 Preferred methods of assessment of accountants

With regard to the methods of assessment preferred by the respondents, the choices included the following: paper-based examination, e-assessment, competency-based examination, extended open-book examination and real life business case. Respondents also had the opportunity to choose any other method not listed here. In addition, respondents were at liberty to make more than one choice in this question.

In one of the combinations of the methods of assessment preferred (paper-based assessment and e-assessment), 126 respondents (97.7%) preferred paper-based assessment and 1 respondent (0.8%) preferred e-assessment. These results are summarized in table 19 below.

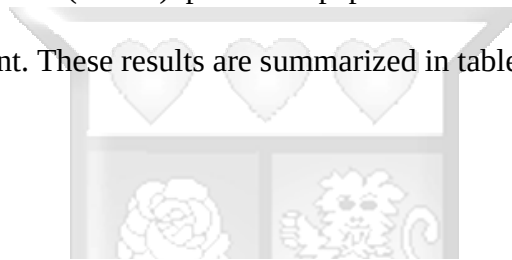


Table 19-Methods of assessment for accountants (combination 1)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Paper-based examination	126	97.7	99.2	99.2
	E-Assessment	1	.8	.8	100.0
	Total	127	98.4	100.0	
Missing	System	2	1.6		
	Total	129	100.0		

In another combination of assessment methods (e-assessment, competency-based examination and real life business case), 9 respondents (7%) opted for e-assessment, 98 respondents (76%) opted for competency-based examination and 20 respondents (15.5%) opted for real life business case. These results are summarized in table 20 below.

Table 20- Methods of assessment for accountants (combination 2)

		Frequency	Percent	Valid Percent	Cumulative Percent
	E-Assessment	9	7.0	7.1	7.1
	Competency-based	98	76.0	77.2	84.3
	Real life business case	20	15.5	15.7	100.0
	Total	127	98.4	100.0	
	System	2	1.6		
	Total	129	100.0		

The grand summary of the results relating to the assessment method preferred (paper-based examination, e-assessment, competency-based examination and real-life business case) are presented in table 16 below. This table shows that 34.9% of the respondents preferred paper-based examinations, 2.8% preferred e-assessment, 28.5% preferred competency-based examinations and 33.8% preferred real-life business cases.

Table 21- Grand summary of assessment methods preferred for accountants

		Responses		
		Number	Percent	Percent of Cases
	Paper-based examination	126	34.9%	99.2%
	E-Assessment	10	2.8%	7.9%
	Competency-based	103	28.5%	81.1%
	Real life business case	122	33.8%	96.1%
	Total	361	100.0%	284.3%

CHAPTER FIVE: DISCUSSIONS

5.1 Introduction

This research was designed to answer the following questions:

1. What technical skills gaps exist in professional accountants employed in various sectors of the Kenyan economy?
2. What non-technical and vocational skills gaps exist in professional accountants employed in different sectors of the Kenyan economy?
3. What are the most effective training and examination methodologies for the professional accountant in Kenya?

This chapter is a summary of this research, including conclusions drawn from the findings, implications, recommendations and suggestions for further research.

5.2 Discussions relating to objective one

Objective one of the research was to identify the skills gaps of accountants in technical areas. To answer this research question, reference will be made to table 8 which summarises the descriptive statistics relating to technical skills. According to the measurement and interpretation criteria already set, there shall be deemed to be a skill gap if the mean relating to a sub-skill is equal to or less than 3.49.

The sub-skill that scored the lowest mean was knowledge of forensic auditing under the auditing skill category (mean of 2.4314). This means that whereas accountants generally exhibit superior skills in knowledge of ISQC 1 (mean of 4.0310) as well as knowledge of ISAs (mean of 3.6667), there is a knowledge and skills gap in the area of forensic auditing that needs to be addressed.

The sub-skill that scored the second lowest mean was knowledge of the East African Tax Management protocol (mean of 3.3125) under the taxation skill category. This means that there is a skill gap in as far as tax matters as they relate to the greater East African region are concerned.

The sub-skill that scored the third lowest mean was knowledge of the Customs and Excise Act still under the taxation skill category (mean of 3.4186). Therefore, there is a skill gap in this very crucial area of taxation practice.

It is worth mentioning that knowledge of IPSASs under the accounting skills category scored a mean of 3.6563 which is only marginally higher than the mean cut-off of 3.49. This means that though a skill gap has not been identified with regard to knowledge of IPSASs, there is potential for a relapse meaning that a skill gap could be registered in this area in the future.

In general terms, the research findings confirm that in technical matters, the accountants employed in different sectors of the Kenyan economy do demonstrate remarkable competence in the discharge of their duties.

However, in as far as forensic auditing and taxation skills are concerned, it is a confirmation that to a certain degree, accounting education lacks creativity and exposure to real businesses (Albrecht & Sack, 2000).

5.3 Discussions relating to objective two

Objective two of the research was to identify skill gaps of accountants in relation to additional or complementary skills. The complementary skills were categorized into communication skills, information technology (IT) skills, soft skills and finally skills relating to professional values, ethics and attitudes. According to table 13 which summarises the descriptive statistics relating to additional or complementary skills, five sub-skills fell short of the 4.5 mean score benchmark for

identifying a skill competence. These sub-skills are use of social media, public speaking, persuasiveness, presentation skills (including use of visual analytics) and finally negotiation skills.

The use of social media had a mean score of 3.7752 out of a maximum of 5.0000. The research results thus indicate that accountants should diversify the communication media they use away from the traditional ones.

Public speaking had a mean score of 3.7813 out of a maximum of 5.0000. The research results confirm the widely-held notion that accountants can only communicate using figures.

Persuasiveness had a mean score of 3.9141 out of a maximum of 5.0000. There is a skill gap in as far as persuasiveness is concerned.

Presentation skills (including use of visual analytics) had the fourth lowest mean score at 3.9767. This means that a skill gap exists in matters to do with presentation. Thus accountants should enhance their presentation skills using the readily available tools.

Negotiation had a mean score of 4.0391 out of a maximum of 5.0000. The research results indicate that there exists a worrying skill gap in matters to do with negotiation. It is worth noting that in an increasingly interconnected world, negotiation skills are essential.

The research findings are at variance with those of Ahmed (2003) that the level of IT skills among accountants was low. The findings, however, confirm that in general terms, personal characteristics have the greatest bearing on accounting career success (Mathews et al., 1990; Agyemang and Unerman, 1998; DeLange et al., 2006).

With regard to communication skills, the findings are in tandem with those of Zaid, Abraham & Abraham (2010) that most accountants experience communication-related problems.

5.4 Discussions relating to objective three

Objective three of the research was to identify the most effective training and examination methodologies for the professional accountant in Kenya.

Table 14 has summarized the research findings relating to the preferred method of training accountants. According to this table, an overwhelming majority of the respondents (93.8%) are of the opinion that a combination of academic and professional courses would be the most ideal method of training accountants. The research findings suggest that an academic course like a university degree programme would be a good foundation for those wishing to undertake professional accounting courses like CPA. Only a meagre 2.3% of the respondents were of the opinion that a purely professional mode of training would be ideal for accountants.

With regard to the period of training recommended for accountants, a majority of the respondents (79.1%) prefer a period of between 3 and 5 years. This would seem to suggest that accountants should undertake academic and professional courses either concurrently or one after the other.

With regard to the period of practical training recommended for student accountants, 69.8% of the respondents were of the opinion that a period of between 1 and 2 years would be ideal. The other significant response came from those who believe that 1 year would be ideal (13.2%).

The findings with regard to the preferred methodologies for teaching accountants are summarized in table 18 (descriptive statistics for preferred teaching methods). According to the set criteria, any teaching method with a mean of 3.5 or more would be worthy of application. The

following teaching methodologies attained a mean score of 3.5 and hence recommended for teaching accountants. They are listed in order of preference:

1. Tutorials (mean score of 4.6746).
2. Distance learning (mean score of 4.5827).
3. Lecture method (4.4882).
4. Case methodology (3.5354).

Practical attachment (mean score of 1.1181) and self-study (1.1969) are the least favoured methods of teaching accountants.

As concerns the assessment methods preferred for accountants, the results are as summarized in table 21 (Grand summary of assessment methods preferred for accountants). According to this table, the most preferred method of assessing accountants is the paper-based examination (34.9%), followed by real life business cases (33.8%). E-assessment was the least popular with a score of 2.8%.

With regard to training methods, the research findings indicate that practical attachment was not a favoured method. This is not in agreement with Albrecht and Sach (2000) who suggested that the use of experiences outside the classroom would offer the contextual experience to be found in an uncertain business environment.

The research findings, however, are in agreement with the view that technical knowledge is best assessed through paper-based examinations (Lines and Gammie, 2004; Hancock et al., 2009).

5.5 Conclusion and recommendations

The research findings expose one critical discrepancy in technical accounting skills. The skills gap in the East African tax management protocol and knowledge of the provisions of the Customs and Excise Act are quite telling. This calls for an overhaul of the taxation curricula in both academic and professional courses. Additionally, training in taxation matters should focus more on the practicalities of taxation issues than just classroom learning of taxation theories and concepts.

Another skills gap in the technical accounting area is in forensic auditing. Students should be introduced to forensic auditing early enough in the academic and professional programmes. Forensic accounting specializations should also be emphasized in graduate accounting programmes.

With regard to additional or complementary skills, academic and professional programmes should place emphasis on communication skills in particular presentation skills (including the use of visual analytics) and public speaking as well as soft skills in particular persuasiveness and negotiation. On-the-job training should also be used to train accountants in IT skills especially on the use of social media.

5.6 Limitations and further research

One limitation of the research was the fact that it was conducted within a short time (2 months) and also involved chief finance officers mostly from the Nairobi County. There is scope for the research to be expanded to the whole of Kenya. In addition, there is need to conduct a comparative study between academic accounting programmes offered by universities and the professional ones offered by examining bodies such as KASNEB. This could lead to one unified

curriculum for accounting programmes instead of the current split between degree programmes and professional courses.



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APPENDICES

APPENDIX 1-LETTER OF INTRODUCTION

The office of the Dean, School of Management and Commerce

Strathmore University

P O Box 59857, Ole Sangale Road, Madaraka Estate

00200 City Square

Nairobi, Kenya

18 November 2013

Dear Sir/Madam

LETTER OF INTRODUCTION

The bearer of this letter (**Erasto Mukuria Ng'ang'a---Admission Number 060552**) is a student in **Strathmore University**. He has been authorized to undertake a research entitled:

“An inquiry into the perceived skills gaps of professional accountants in Kenya: the case for innovative training and examination methodologies”. The objectives of the research are:

1. To determine what skills gaps exist for professional accountants employed in different sectors of the Kenyan economy.
2. To determine what training methods are most suitable for professional accountants in Kenya.
3. To identify what examination methods are most suitable for professional accountants in Kenya.

This is a humble request to you to participate in this research. The research will take approximately three months from 6 January to 6 April 2014. Any information you provide will be treated with the utmost confidentiality.

The researcher can be contacted through mukuriae@yahoo.com or P O Box 41362 code 00100 **Nairobi, Kenya** or through the undersigned.

Yours Faithfully,

Dr.David Wang'ombe

Dean, School of Management and Commerce

Strathmore University

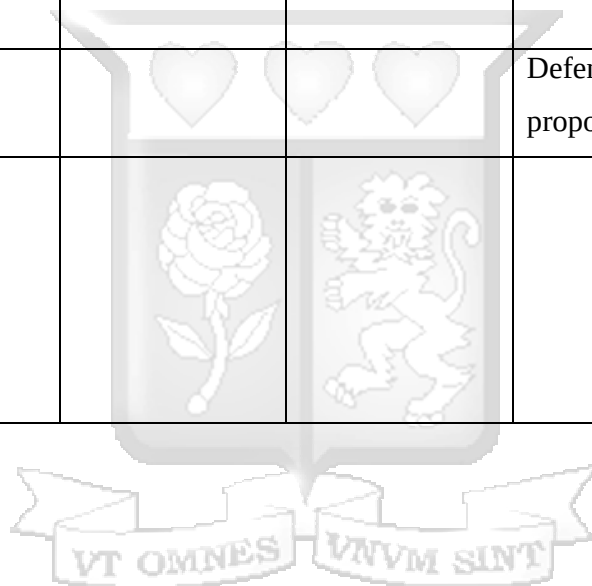
Nairobi



APPENDIX 2 - TIME SCHEDULE

The time schedule in which the research is to be conducted is about three months that is from February to April, 2014.

	September/October 2013	November 2013	January 2014	February 2014	March 2014
Activity	Developing the proposal				
Activity		Finalising the proposal	Finalising the proposal		
Activity				Defence of proposal	
Activity					Data collection, analysis and writing of the final report



APPENDIX 3 - QUESTIONNAIRE

INTRODUCTION

The research is aimed at identifying the skills gaps exhibited by professional accountants in different sectors of the Kenyan economy. The research is further aimed at identifying the best methods of teaching and training accountants.

In addition, the research is aimed at finding out the most efficacious methodologies of examining accountants.

Please take a few minutes of your precious time to fill this questionnaire. Your responses will be treated with utmost confidentiality.

There are four parts in this questionnaire. Please answer all sections.

PART I

This section is aimed at capturing the respondent's personal details. Please tick in the appropriate box where applicable.

1. Name _____ [Optional]

2. What is the highest academic qualification you hold?

Diploma ☐

Undergraduate degree ☐

Postgraduate degree ☐

Doctorate degree ☐

Other (Please specify) _____

3. Which professional accounting qualification do you hold?

CPA (state country) _____ ☐

CIMA ☐

ACA (state country) _____ ☐

CA (Scotland) ☐

CIPFA ☐

ACCA ☐

CCA (SA) ☐

Other [please specify] _____

4. Which sector do you work in?

Audit firm ☐

Government ☐

Non- Governmental ☐

Agricultural ☐

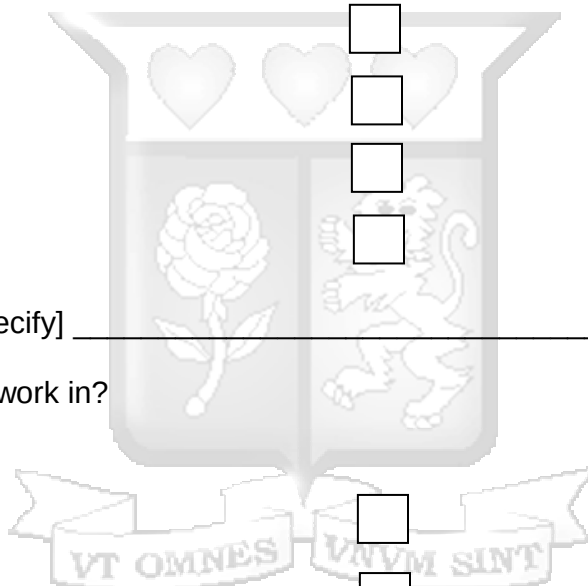
Automobiles and Accessories ☐

Banking ☐

Commercial and Services ☐

Construction and Allied ☐

Energy and Petroleum ☐



Insurance	☐
Investment	☐
Manufacturing and Allied	☐
Telecommunication and Technology	☐
Academia	☐
Medical	☐
Hospitality	☐

PART II

This section is aimed at identifying the adequacy or inadequacy of various technical skills in different sub-sets of competencies that an accountant should demonstrate. Indicate your rating by ticking in the appropriate space.

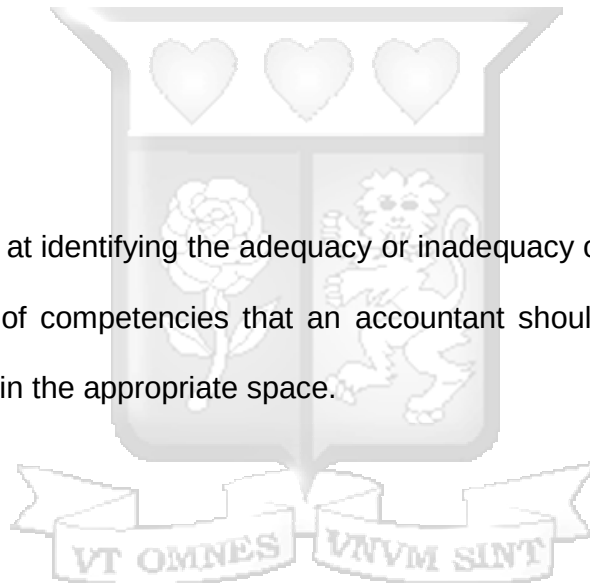
1= Very Poor

2= Poor

3=Satisfactory

4= Good

5= Very Good



5. Accounting skills: answer only those questions which are relevant to accountants working under you.

	Rating				
	1	2	3	4	5
Knowledge of International Financial Reporting Standards (IFRS)					
Ability to prepare financial statements (Interim and Final)					
Ability to read and interpret accounting statements					
Knowledge of IPSASs					
Competence in financial management					

6. Taxation skills

Rating

	1	2	3	4	5
Knowledge of general taxation concepts and philosophies					
Knowledge of the VAT Act					
Knowledge of the Income Tax Act					
Knowledge of Customs and Excise Act					
Knowledge of the East African Tax management protocol					

7. Auditing skills

Rating

	1	2	3	4	5
Knowledge of ISQC 1 (Quality control, reviews of financial statements, other assurance and related services engagements)					
Knowledge of ISAs (Objectives, requirements, applications)					

Knowledge of forensic auditing (fraud incident, investigation, resolution, action)					

8. Business management and organization

Rating

	1	2	3	4	5
Business management					
Strategic thinking and management leadership					
Adaptability to change					
Risk management					

PART III

This section is aimed at identifying the adequacy or inadequacy of additional or complementary skills that an accountant should demonstrate. Indicate the level of competence in these by ticking in the appropriate box where:

1= Very Poor

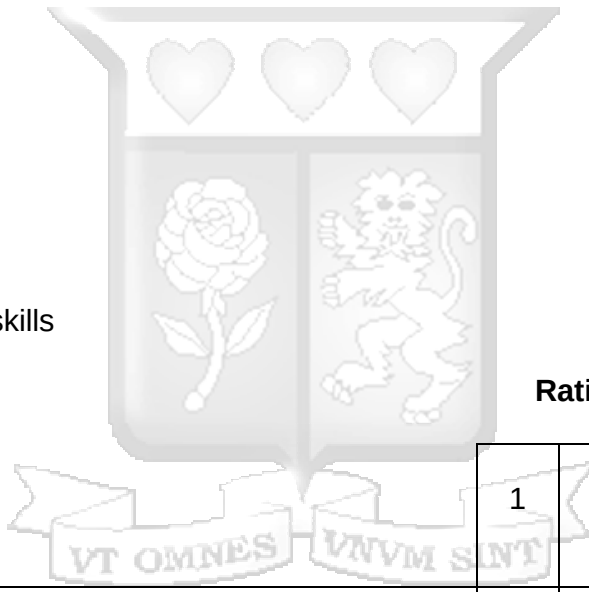
2= Poor

3= Satisfactory

4= Good

5= Very Good

9. Communication skills



	Rating				
	1	2	3	4	5
Oral communication (In English)					
Written communication (Letters, position papers etc)					
Presentation skills (including use of visual analytics)					
Public speaking					

10. Information technology (IT) skills

Rating

	1	2	3	4	5
Application of accounting packages and accounting systems					
Basic computer troubleshooting and problem solving skills					
Basic use of computer networks					
Use of social media					

11. Soft skills

Rating

	1	2	3	4	5
Interpersonal skills					
Team playing					
Negotiation					
Time management					
Critical thinking					

Adaptability to different cultures					
Persuasiveness					
Networking					

12. Professional values, ethics and attitudes

Rating

	1	2	3	4	5
Appreciation of different professional ethical dilemmas					
Knowledge of provisions of the Code of Ethics for Professional Accountants					
Demonstration of Integrity					
Ethics and Professionalism					
Objectivity					

PART IV

This section is aimed at finding out which teaching, training and assessment modes are most appropriate for the training of accountants. Please tick in appropriate box.

13. What method of training accountants would you recommend?

Purely academic

☐

Purely professional

☐

Combination of academic and professional

☐

Other : _____

14. What period of training (irrespective of method) would you recommend for accountants?

3 years and under

☐

Between 3 and 5 years

☐

Between 5 and 7 years

☐

Other (Please specify) _____

15. How long should the practical training of student accountants be?

Between 1 and 2 years

☐

Between 2 and 3 years

☐

Other (Please specify) _____

16. Indicate your preference of teaching methodologies for accountants by ranking the following methods of teaching where:

1= Most favoured 6= Least favoured

	Rating					
	1	2	3	4	5	6
Lecture method						
Case methodology						
Tutorials						
Practical Attachment						
Self – Study						
Distance Learning						

Other : _____

17. Which method (or combination of methods) of assessment would you recommend for accountants. You can tick more than one box.

Paper- based examination ☐

e-assessment ☐

Competency- based assessment ☐

Extended open – book assessment ☐

Real life business case ☐

Other (Please specify) _____

Thank you very much for taking your time to fill this questionnaire. Your contribution is greatly appreciated.

