ADOPTION OF HUMAN CAPITAL ACCOUNTING TOOLS IN KENYAN FIRMS

SAN LIO
Chandaria School of Business, United States International University-Africa

LEVI MBUGUA
Technical University of Kenya

ELIZABETH KALUNDA
Chandaria School of Business, United States International University-Africa

Abstract:
Purpose- The study investigates the influence of awareness of existing Accounting (ACC) for Human Capital (HC) tools by key constituents in Kenyan organizations on Human Resource Accounting (HRA) discipline which promotes firm market value.
Design/methodology/approach- The study employed an explanatory-mixed method cross-sectional survey on Chief Finance Officers (CFOs) in the Kenyan Medium and Large Organizations.
Findings- The study found that creating awareness on the HC accounting tools among key constituents in Kenyan organizations is fundamental in actualizing the HRA discipline for improved decisions which augment Kenya's firms' market value. The CFOs supported the notion that the International Financial Reporting Standards (IFRSs) technical writers as key constituents in Kenyan organizations are well aware of the ACC for HC tools. This implies that the HRA discipline adoption in Kenya for superior firm market value is feasible as the IFRSs technical writes provide legal stipulations adopted in 93% (133/143) jurisdictions.
Originality/value-Awareness of ACC for HC tools would corroborate the HRA discipline for superior decisions which enhance firm market value in Kenya.
Key words: market value, Competitive advantage, Tools, Human resource accounting discipline, Organizations
Type of paper: Research paper

1.0 Introduction

In the knowledge information service economic dispensation, HC is organizations' foremost asset (Andrade & Sotomayor, 2013; Chaudhry & Roomi, 2010; Chen & Lin, 2004; Rimmel, 2003; Flamholtz, Bullen, & Hua, 2002, 2003). Accordingly, successful firms employ HC as the overriding factor of competitive advantage (Gamerschlag, 2013). The resource based view of the firm theory presupposes that organizations seek those rare HC competencies and skills such as value, immobility or not being imitable that are essential for their survival and competitive edge (Barney, 1991). However, according to the transaction cost economy theory, the hiring and training costs matter to organizations when making decisions relating to HC deployment, as they elect to employ HC in the most efficient manner (Chaudhry & Roomi, 2010).

The sole purpose of the HRA discipline is ACC for HC as material investments in organizations for improved decisions which enhance firm market value (Flamholtz, 2005; Flamholtz, Bullen, & Hua, 2002; Cascio, 1998; Dobija, 1998; Sveiby, 1997; Mercer, 1989). This has been interpreted to mean that the HRA is a process of

identification and measurement of HC financial data, and the communication of the information to interested stakeholders (Flamholtz, 1999).

1.1 Accounting for Human Capital in the HRA Discipline

The successes of HRA discipline can be linked to the key HC accounting tools developed by researchers. Flamholtz (1999) found that research in HRA has focused on the problem of developing valid and reliable tools of measuring the cost and value of HC to organizations.

The ACC tools are summarized in Table 1

Table 1: Accounting for Human Capital Tools in Human Resource Accounting Discipline

Tool	Original Author and Year	Other Key contributors	HC financial measures included in the ACC	Quantification of HC Amount
Adjusted Present Value Technique (APVT) Or Un-Purchased Goodwill Approach (UPGA).	Hermanson 1964	Levi and Schwartz (1971), Brummet, Flamholtz and Pyle (1968), Turner (1996).	Future wages till retirement adjusted by performance efficiency; firm's future earnings; value added by workers.	APVT Calculates the present value of the financial measures (future wages, future earnings, value addition by workers) Or UPGA forecasts future earnings for a firm minus expected industry average earnings.
The Stochastic Rewards Valuation Model (SRVM).	Flamholtz (1972)	Flamholtz (1973, 1999, 2005), Hekimian and Jones, 1967; Brumment, 1968.	Acquisition Cost; Learning Cost; Future services of an individual worker in various service states of the firm; future such services of groups of workers; future such services of the total human firm.	Calculate the present worth of the set of the future services (individuals). The model also calculates historical/acquisition, learning, and opportunity costs. It however ignores future services by groups and total human firm.
The Intangibles Monitor (IM).	Sveiby (1997)	Not known to this researcher.	Growth & renewal, efficiency, stability, innovation, and relationships.	Calculate educational, training and professional costs of each worker, then measure the value

				added by each worker to firm profits based on their competencies. Monitor and report innovation and relationships as non-financial measures in organizations.
Return On Investments Metric Model (ROIMM).	Mercer (1989)	Not known to this researcher.	Workers' problem solving abilities	Calculate the cost of the problem solved by HC, followed by a calculation of the cost of the solution, and then finally calculate the value of the improvement to the firm after implementing the HR solution to arrive at total HC value.
Capitalization Model (CM).	Dobija (1998)	Not known to this researcher.	Experience, professional education, and living conditions.	Use compound interest formula to capitalize the value of the three financial measures (Cost of living, cost of professional education, and the value gained through experience).
Behavioral Model (BM).	Cascio (1998)	Not known to this researcher.	Innovation, attitudes, and knowledge.	Calculate both cost (acquisition, learning and opportunity) and output (present value of future earnings/cash flows) of workers.

Source: Researcher 2017

1.2 Adoption of Human Capital Accounting Tools

In this study, awareness has been defined as an organization's key constituents' ability to identify and successfully adopt the existing HC tools in ACC and deriving optimum competitiveness from its HC as material investments.

Flamholtz, Narasimhan & Bullen (2004) used Content Analysis (CA) method which codifies qualitative and quantitative information and found that a major bottleneck in the success of HRA as a unique discipline whose main aim is ACC for HC as material investments in firms for improved decisions which enhance firm market value, has been the unawareness of its exiting ACC for HC tools by key constituents

in organizations. Bontis (1999) employed CA in a comprehensive literature review from a variety of managerial disciplines and established that modern efforts in ACC for HC tools adoption originate from the awareness of the field of HRA, which has evolved as a discipline of measuring employees as material investments. In their investigation of market based HC investment and stock for Canada over the period 1970 to 2007 using the methodology developed by Jorgenson and Fraumeni; Gu and Wong (2010) and World Bank (2011, 2006) found that devising a robust tool of the monetary ACC for HC is of utmost importance as this measurement represents the most important component of the total capital stock in progressive organizations. In a survey conducted on 350 entities by Jensen (2001), a decisive barrier to ACC for HC in the financial statements of organizations is lack of a concrete tool; occasioned by unawareness of how HRA tools would work. Cantrell, Benton, Laudal, and Thomas (2006) presented empirical findings based on unstructured in-depth interview of selected panel of HR practitioners specialising on HC accounting and determined that a key disconnect between most leaders' concern on the importance of HC measurement is the lack of tools they require. This is despite the fact that there exists six key ACC for HC tools in the HRA discipline.

In a longitudinal case study of CEOs, CFOs, and managers in Italian firms, Giuliani, Chiucchi, and Marasca, (2016) established that ACC for HC is an on-going challenge to accountants and managers in organizations, and one reason is the lack of appropriate ACC tools. Kannan and Aulbur (2004) undertook a detailed review of existing HC accounting techniques and presented empirical findings of its inherent benefits in organizations, such as: the identification and mapping of employees, recognition of workers flow patterns within the organization, acceleration of learning patterns, identification of HC best practices, appreciating how knowledge creates interrelationship, identifying change agents, increasing employees self-perception as well as increased innovation.

Unawareness of the HRA tools inhibits the benefits in organizations. In a survey of the social councils of Spanish universities, Ramirez and Gordillo(2014) concluded that ACC and management of HC has become the underlying factor for competitive advantage in organizations and hence the need to have a renown concrete tool. In a case study of a manufacturing company that was a newcomer in the HC accounting discourse in Italy, Giuliani (2016) found that the focus is not the ACC for HC per se, as to exemplifying HC competitive advantage in organizations. Antonelli, Antonietti, and Guidetti (2010) undertook an exploratory exercise on HC accounting conceived in a labor demand perspective of Italian manufacturing firms and acknowledged the competitive edge of HC and the need to develop renowned measurement theoretical frameworks. Slottje (2010) established that awareness of HC accounting is a vital step in efforts to assess the policy impacts of investments in HC stocks. In their survey of the retrospective and prospective methods of estimating the value of HC investments, Folloni and Vittadini (2010) revealed evidence on the shortcomings and unawareness of contemporary accounting tools, and found that this had opened up exciting areas of research. According to a study on main approaches to the ACC of HC in Russian firms by Soboleva (2010), interest in the challenge of ACC for HC is very high in contemporary entities hence the need to create awareness on the existing ACC for HC tools. In a quantitative survey of 104 HR executives, Gates and Langevin (2010) identified the assessment of performance in form of share value in firms as a key reason why they endeavour to ACC for HC. Accounting for HC in

organizations is paramount, as a greater impact of firm performance is communicated in ACC numbers presented in their financial statements (Catasus, Martensson, & Skoog, 2009).

In a review of HC accounting history, Theeke (2005) promoted that, ACC for HC would be successful if a HC measurement method acceptable to accountants was unveiled. Flamholtz, Narasimhan and Bullen (2004) identified lack of a meaningful system of ACC as one key impediment to HC accounting in organizations; casting doubt as to whether existing ACC for HC tools were known by key constituents in organizations. In their case study based on a survey of 118 Royal Australian Navy, Massingham, Nguyen, and Massingham (2011) found that interest in ACC for HC in firms is multi-disciplinary, and has been analyzed in various disciplines such as economics, strategy, marketing, human resources, information systems, legal, intellectual property, financial reporting, and accounting; and hence the need for renown ACC for HC tools. They add that suitable tools of HC accounting in organizations ought to be observable, auditable, and objective.

However, several ACC for HC tools have been promoted by disparate authors to support ACC for HC in firms. Sveiby (1997) identified 21, Andriessen (2004), 30, and Massingham et al (2011) 46, authenticating the apparent interest in HC accounting and the need of a renown concrete tool. These were rationalized into six key tools in this study taking into account their overriding metrics. A key question was, are key constituents in organizations aware of the tools? Alvarez (2015) used CA to study 105 Spanish listed companies' HC disclosure recommendations and established that existent references were insufficient for companies to adopt HC accounting; making it impractical for the firms to report information on the contribution of HC to corporate performance. Furthermore, all the existing ACC for HC tools were unadopted by key constituents in organizations (Butt, 2013; Kirfi & Abdullahi; 2012; Mello, 2011; Theeke, 2005; Chen & Lin, 2004; Flamholtz, Narasimhan, & Bullen, 2004; Flamholtz, Bullen, and Hua, 2002).

2.0 Methodology

2.1 Study Hypothesis

Key constituents in organizations are those stakeholders who would influence their decisions making processes. These were identified in this study to include: the Kenya Government, IFRS writers, professional accountants, investors, HR managers, and the financial markets, as shown in Figure 1.

Figure 1

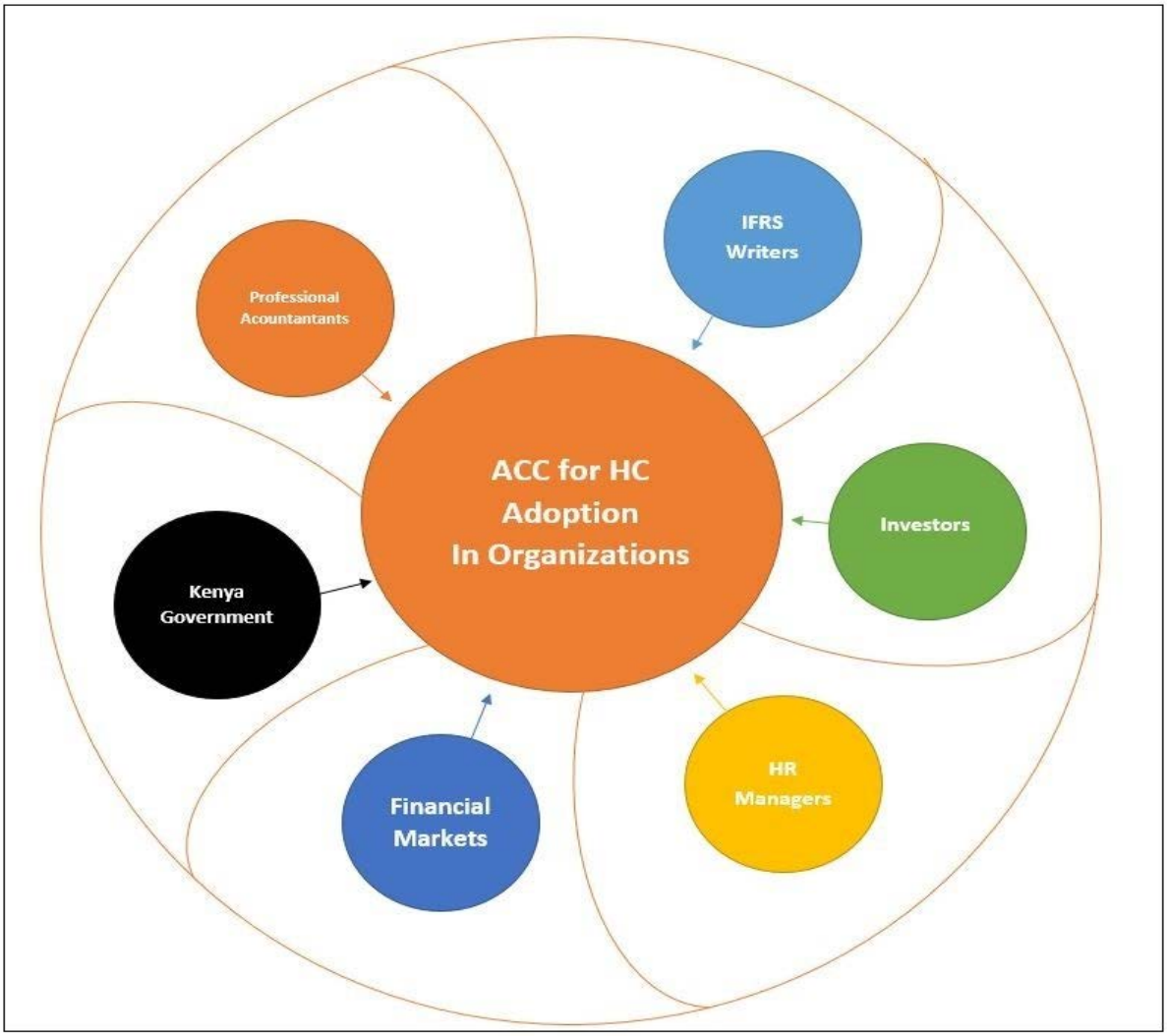

Figure 1 Awareness of ACC for HC tools by Key Constituents in Kenyan Organizations

The H_0 hypothesis was assessed on the basis of: Professional accountants awareness of the existing ACC for HC tools (AW1), IFRS technical writers awareness of the existing ACC for HC tools (AW2), HR managers awareness of the existing ACC for HC tools (AW3), investors awareness of existing ACC for HC tools (AW4), financial markets awareness of existing ACC for HC tools (AW5) and the Kenya Government awareness of existing ACC for HC tools (AW6). The study variables were measured using both the ordinal and the Likert type scales because they both have more informational value and are respondent centred studies (Kothari, 2011).

Ho There is a significant relationship between accounting for Human Capital tools' awareness by key constituents in Kenyan medium and large organizations and the HRA discipline adoption.

H_1 There is no significant relationship between accounting for Human Capital tools' awareness by key constituents in Kenyan medium and large organizations and the HRA discipline adoption.

Human Resource Accounting discipline was the control variable and its only goal is the adoption of ACC for HC as material investments in organizations for improved decisions which augment firm market value. Respondents were required to state whether the HRA discipline had been adopted 'in my organization'. They were also required to state whether ACC for HC is complete when Total Human Capital Value (THCV) is placed in the statement of financial position (balance sheet) or in both general purpose and other management financial reports. All the questions were asked using the seven-point Likert scale.

2.2 Sample and Data Collection

The study was an explanatory mixed methods design. Mixed method was selected due to its suitability as it allows the collection of both qualitative and quantitative data, as well as their integration into meaningful research findings (Johnson, 2015). The explanatory research design helps the researcher to answer the 'why' questions, which were fundamental in this study. The target respondents were 165 CFOs in two strata as follows: The 100 Kenyan best medium firms in the year 2016 (as ranked by KPMG on the basis of their financial performance); and the 65 Kenyan large organizations listed at the Nairobi Securities Exchange (NSE) in 2016. The firms were selected for this study on HC accounting practice because of their robust financial reporting. Primary data was collected from a sample of 116 CFOs through the survey strategy and a response rate of 51% achieved. The criteria for medium firms in Kenya include: turnover in Kenyan shillings between 5-800 million ($50,000-$8,000,000) and employees between 50 and 99. These were part of the nominal portion of the data collection instrument. The data were collected using both hard copies (34) as well as web-based questionnaires (25). A t-test was employed to analyse any disparities and it was found that there was no significant difference in the average scores of the variables between the two survey methods with a ($p>0.05$). The questionnaire was pre-tested on a pilot set of respondents from the technical staff of the Institute of Certified Public Accountants of Kenya (ICPAK) for comprehension, logic and relevance. All the aspects of the questionnaire were pre-tested including question content, question difficulty, layout wording, sequence, and form and instructions. The feedback obtained was used to revise the questionnaire before administering it to the study respondents.

The study variables were measured using both the ordinal scale and Likert-type scale (1= Very strongly disagree; 2= strongly Disagree; 3= Disagree 4= Not sure; 5= Agree; 6= strongly agree; 7= Very Strongly Agree). The relationship between HC accounting tools' awareness and the HRA discipline adoption in the Kenyan MLOs was modelled using the simple linear regression model. The study used model (1)

$$Yi = \beta 0 + \beta 1X1 + \varepsilon \quad (1)$$

Where: Yi = Dependent variable (HRA Discipline adoption) β0 = Constant or intercept which is the value of dependent variable when all the independent variables are zero. β 1 = Regression coefficient for the independent variable. X1 = Awareness of existing ACC for HC tools by key constituents in Kenyan MLOs, and ε = Error term.

3. Results

The empirical evidence of the study was presented as follows: First, the profile of the respondents was described, followed by the results of the hypothesis testing using SPSS version 24.

3.1 Descriptive Statistics

A total number of 116 questionnaires were administered to different respondents and a total of 59 questionnaires were returned for analysis. All the 59 returned questionnaires were complete and met the study requirements. This represented a 51% response rate. Cronbach's Alpha test was used to test the reliability of the proposed constructs. A coefficient of 0.70 and above implies high degree of reliability of the data. HRA tools' awareness had a coefficient of 0.908, and HRA discipline use had a coefficient of 0.754. All the proposed constructs were therefore found to be reliable.

3.1.1 Gender of the Respondents

According to the study findings, 73% of the respondents were male while 27% were female. This implies that empirical findings were influenced by male CFOs in Kenyan MLOs.

3.1.2 Listing at NSE

Sixty two percent of the respondents indicated that their organizations were not listed in the NSE, while 38% indicated that their organizations were listed. This is in tandem with the identified strata and implies that none of the Kenyan medium firms was listed at the NSE.

3.1.3 The Organization's Sector of the respondents

Sixty four percent of the respondents worked in the service sector organizations, 22% in the manufacturing sector, while the minorities (14%) were in the merchandising sector. This implies that Knowledge Information Service Sector (KISS) firms were the majority in Kenya and dominated data findings in the study.

3.1.4 Membership in Professional Bodies

According to the research findings, 66% of the respondents were found to be members of ICPAK while 34% belonged to other professional bodies; implying that ICPAK members were the majority in Kenyan MLOs and their responses influenced the study's empirical results.

3.1.5 Respondents opinion on Effect of ACC for HC Tool's awareness on the HRA Discipline Adoption

Results are presented in Table 2.

Table 2: Respondents opinion on Effect of ACC for HC Tools' awareness on HRA Discipline Adoption

Item	1(%)	2(%)	3(%)	4(%)	5(%)	6(%)	7(%)	mean	SD dev
AW1	4(6.8)	2(3.4)	15(25.4)	16(27.1)	20(33.9)	1(1.7)	1(1.7)	3.90	1.255
AW2	2(3.4)	0(0.0)	5(8.5)	23(39.0)	20(33.9)	4(6.8)	5(8.5)	4.54	1.222
AW3	3(5.1)	0(0.0)	22(37.3)	17(28.8)	9(15.3)	6(10.2)	2(3.4)	3.93	1.311
AW4	4(6.8)	2(3.4)	20(33.9)	22(37.3)	8(13.6)	2(3.4)	1(1.7)	3.64	1.186
AW5	4(6.8)	2(3.4)	14(23.7)	23(39.0)	11(18.6)	3(5.1)	2(3.4)	3.88	1.301
AW6	5(8.5)	1(1.7)	16(27.1)	22(37.3)	12(20.3)	1(1.7)	2(3.4)	3.78	1.287

Table 2 shows descriptive statistics for the hypotheses measuring awareness of ACC for HC tools by key constituents in Kenyan MLOs. Based on empirical findings, 33.9% of the respondents agreed that professional accountants were aware of the existing ACC for HC tools in HRA (AW1), 1.7% very strongly agreed, 1.7% strongly agreed, 27.1% were not sure, 25.4% disagreed, 3.4% strongly disagreed and 6.8% very strongly disagreed. On average, the respondents were not sure on the proposition as indicated by a mean of 3.90 and a standard deviation of 1.255. This implies that not all professional accountants were aware of the existing ACC for HC tools in Kenya, and hence were unable to support the HRA discipline adoption for better firm value.

Asked whether the IFRS technical writers were aware of the existing ACC for HC tools in HRA (AW2), 3.4% of the respondents very strongly disagreed, none strongly disagreed, 8.5% disagreed, 39% were not sure, 33.9% agreed, 6.8% strongly agreed while 8.5% very strongly agreed. On average, the respondents agreed on the proposition as indicated by a mean of 4.54 and a standard deviation of 1.222. This implies that IFRS technical writers were aware of the existing ACC for HC tools and hence able to issue HRA discipline IFRS(s) stipulations to make the practice a reality among Kenyan MLOs.

On whether HR managers were aware of the existing ACC for HC tools in HRA (AW3), 5.1% of the respondents very strongly disagreed, none strongly disagreed, 37.3% disagreed 28.8% were not sure, 15.3% agreed, 10.2% strongly agreed while 3.4% very strongly agreed. On average, the respondents were not sure of the notion as indicated by a mean of 3.93 and a standard deviation of 1.311. This implies that HR managers in Kenya may not have been aware of the existing ACC for HC tools and hence unlikely not support the HRA discipline adoption.

Asked whether Investors were aware of the existing ACC for HC tools in HRA (AW4), 6.8% of the respondents very strongly disagreed, 3.4 strongly disagreed, 33.9% disagreed, 37.3% were not sure, 13.6% agreed, 3.4% strongly agreed while 1.7% very strongly agreed. On average, the respondents were not sure of the view as indicated by a mean of 3.64 and a standard deviation of 1.186. This implies that investors in Kenya may not have been aware of the existing ACC for HC tools and hence would not support the HRA discipline adoption.

The respondents were asked whether financial markets were aware of the existing ACC for HC adoption tools in HRA (AW5). The findings indicated that 6.8% very strongly disagreed, 3.4 strongly disagreed, 23.7% disagreed, 39% were not sure, 18.6% agreed, 5.1% strongly agreed, while 3.4% very strongly agreed. On average, the respondents were not sure of the proposal as indicated by a mean of 3.88 and a standard deviation of 1.301. This implies that financial markets may not wholly support the HRA discipline adoption as they may not have been ware of existing ACC for HC tools.

Finally, on whether the Kenya government was aware of the existing ACC for HC tools in HRA (AW6), 8.5% of the respondents very strongly disagreed, 1.7% strongly disagreed, 27.1% disagreed, 37.3% were not sure, 20.3% agreed, 1.7% strongly agreed while 3.4% very strongly agreed. On average, the respondents were unsure of the notion as indicated by a mean of 3.78 and a standard deviation of 1.287. This implies that the Kenya government may not wholly support the HRA discipline as it may not have been ware of existing ACC for HC tools.

3.2 Correlation Analysis

3.2.1 Explanatory and response Variables

A simple linear regression was conducted with the HRA discipline as the dependent variable and ACC for HC tools' awareness by key constituents in Kenyan MLOs as the independent variable. According to the research findings, the independent variable explained 7.1% of the variation in the dependent variable. The model was therefore found to significantly predict the HRA discipline adoption as indicated by an F-value of 5.208 and a significant p-value of 0.026.

The regression equation would be written as:

Y = 15.149 + 0.274 X7

Where Y = the HRA discipline adoption and X7 = ACC for HC tools' awareness.

There was a positive and a statistically significant linear relationship between the HRA discipline adoption and ACC for HC tools' awareness by key constituents in Kenyan MLOs as indicated by a significant p-value (p =0.026<0.05). A unit change in ACC for HC tools' awareness would increase the HRA discipline adoption in Kenyan MLOs by 0.274 units. This means that ACC for HC tools awareness by key constituents in Kenyan MLOs would abet their HRA discipline use.

Table 3 shows Pearson's correlation coefficient between the HRA discipline adoption and the hypotheses measuring ACC for HC tools' awareness by key constituents in Kenyan MLOs. The findings revealed that all the hypotheses measuring ACC for HC tools' awareness had a significant linear relationship with the HRA discipline adoption as indicated by significant p-values at 5% level of confidence ($p<0.05$). This implies that ACC for HC tools' awareness by key constituents in organizations would corroborate the HRA discipline adoption in the Kenyan MLOs for improved firm market value.

Table 3 Pearson's correlation coefficient between the HRA Discipline Adoption and the hypotheses measuring ACC for HC tools' awareness

		Sqr_Adoption of HC	sqr_AW1	sqr_AW2	sqr_AW3	sqr_AW4	sqr_AW5	sqr_AW6
Sqr_Adoption of HC	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	56						
sqr_AW1	Pearson Correlation	.270*	1					
	Sig. (2-tailed)	.041						
	N	56	59					
sqr_AW2	Pearson Correlation	.467**	.362**	1				
	Sig. (2-tailed)	.000	.005					
	N	56	59	59				
sqr_AW3	Pearson Correlation	.438*	.642**	.474**	1			
	Sig. (2-tailed)	.049	.000	.000				
	N	56	59	59	59			
sqr_AW4	Pearson Correlation	.339*	.715**	.382**	.709**	1		
	Sig. (2-tailed)	.007	.000	.003	.000			
	N	56	59	59	59	59		
sqr_AW5	Pearson Correlation	.305*	.573**	.500**	.563**	.678**	1	
	Sig. (2-tailed)	.022	.000	.000	.000	.000		
	N	56	59	59	59	59	59	
sqr_AW6	Pearson Correlation	.337*	.527**	.561**	.526**	.546**	.863**	1
	Sig. (2-tailed)	.011	.000	.000	.000	.000	.000	
	N	56	59	59	59	59	59	59

* and ** means Pearson correlation value is significant at 5% and 1% level of significance respectively

3.2.2 The HRA Discipline as a Control Variable

The HRA discipline was not in use among the Kenyan MLOs. While remaining neutral on the HRA discipline adoption being the placement of the THCV in the statement of financial position, the CFOs supported the placement of THCV on both the general purpose as well as other management financial reports as follows: 3.4% very strongly disagreed, none strongly disagreed, 6.9% disagreed, 27.6% were not sure, 37.9% agreed, 12.1% strongly agreed while 12.1% very strongly agreed. On average the respondents supported the proposition with a mean score of 4.81 and standard deviation of 1.304.

4.0 Discussion

Correlation analysis on ACC for HC tools' awareness by key constituents in Kenyan MLOs revealed that the variable had a significant positive linear relationship with the HRA discipline adoption in Kenyan MLOs with r=0.297. Further analysis using regression showed that the model would significantly predict the HRA discipline use with an F-value of 5.208 and p-value of 0.026. Moreover, the independent variable explained 7.1% of the variation in the dependent variable. Adoption of the HRA discipline in Kenya would lead to better firm market value.

The hypotheses on ACC for HC tools' awareness by key constituents in Kenyan organizations was conceptualized as displayed in Figure 1. This implies that the awareness of ACC for HC tools by professional accountants, IFRS writers, investors, HR managers, financial markets, as well as the Kenya Government would support the HRA discipline adoption in the Kenyan MLOs for improved firm market value.

From the empirical evidence derived from the research findings, CFOs in the Kenyan MLOs supported the fact that the IFRS technical writers were well aware of ACC for HC tools; although they were not sure whether other organizational key constituents including professional accountants, HR managers, investors, the financial markets, and Kenya Government were aware. This implies that the HRA discipline is feasible in Kenya for superior firm market value as the IFRSs technical writers provide legal stipulations adopted in 93% (133/143) jurisdictions according to empirical evidence by Pacter (2016). While acknowledging that the HRA discipline had been hindered by unawareness and supporting the variable's predictive power, Flamholtz, Narasimhan and Bullen (2004) established that the successful use of the HRA discipline in organizations dependent on creating awareness to receive the approval of key constituents in those organizations. Other earlier research works by Grojer and Johnson (1998) as well as Theeke and Mitchell (2008) found that unawareness of ACC for HC tools had led to the believe that the process would treat people as financial objects, or liabilities, further affirming the awareness predictive power, and in support of the study findings. However, Giuliani, Chiucchi and Marasca (2016), the World Bank (2011), Gu and Wong (2010), Cantrell et al (2006), and Jensen (2001) supported the view that key constituents in organizations were unaware of the existing ACC for HC tools, contrary to the research findings, while Massingham et al (2011), Andriessen (2004), and Sveiby (1997) identified various ACC for HC tools for use in organizations.

These findings imply that creating awareness on the ACC for HC tools among key constituents in organizations is fundamental in supporting the HRA discipline adoption for improved decisions which augment firm market value in Kenyan MLOs.

5.0 Conclusion

The study established a positive significant relationship between ACC for HC tools' awareness by key constituents in Kenyan MLOs, and the HRA discipline adoption in those organizations. This led to the conclusion that ACC for HC tools' awareness would corroborate the HRA discipline adoption in Kenya. Accordingly, ACC for HC tools' awareness by professional accountants, IFRS writers, HR managers, investors, financial markets, and the Kenya government would promote the HRA discipline use in Kenya for superior firm market value. Accordingly, there was the need to create awareness on ACC for HC tools amongst the key constituents in

Kenyan MLOs. Thus the null hypothesis was supported and the alternative hypothesis rejected.

6.0 Limitations

The HRA discipline is a new concept in Kenya. Accordingly, it was unlikely that Kenyan CFOs were adequately familiar with the innate HC accounting tools. The data may therefore not have been consistent in eliciting the required information necessary for the research findings.

References

Andrade, P., & Sotomayor, A.M. (2013). Measurement Models of Human Capital Accounting: A Case Study*. Journal of Economics, Accounting and Finance*, 2(4), 86-92.

Andriessen, D. (2004). *Making Sense of Intellectual Capital.* Elsevier Butterworth-Heinemann, Burlington, MA.

Antonelli, G., Antonietti, R., & Guidetti, G. (2010). Organizational Change, Skill Formation, Human Capital Measurement :Evidence From Italian Manufacturing Firms. *Journal of Economic Surveys*, 24(2), 206-247.

Barney, J. (1991). Firm Resource and Sustained Competitive Advantage*. Journal of Management*, 17(1), 99-120.

Bontis, N. (1999). Managing Organizational Knowledge by Diagnosing Intellectual Capital : Framing and Advancing the State of the Field. *International Journal of Technology Management*, 18(5-8), 433.

Brummet, R.L. (1968). Accounting for Human Resources. *Michigan Business Review*, 20-25.

Brummet, R.L., Flamholtz, E.G., & Pyle, W.C. (1968). Human Resource Measurement: A Challenge for Accountants. *Accounting Review*, 217-224.

Butt, S.A. (2013). How to Bring Human Resource Asset into Balance Sheet. *Pensee Multidisciplinary Journal,* 75 (2), 1-12.

Cascio, W.F. (1998). The Future World of Work: Implications for Human Resources Costing and Accounting. *Journal of Human Resource Costing ad Accounting*, 3(2), 9-19.

Catasus B., Martensson M., & Skoog, M. (2009). The Communication of Human Accounts: Examining Models of Sense Giving. *Journal of Human Resource Costing and Accounting*, 13(2), 163 –179.

Cantrell, S., Benton, J.M., Laudal, T., & Thomas, R.J. (2006). Measuring the Value of Human Capital Investments. *Strategy and Leadership*, 34(2), 43-52.

Chaudhry, N.I., & Roomi, M.A. (2010). Accounting for the Development of Human Capital in Manufacturing Organizations: A Study of the Pakistani Textile Sector. *Journal of Human Resource Costing and Accounting*, 14(3), 178-195.

Chen, H.M., & Lin, K.J. (2004). The Role of Human Capital Cost in Accounting. *Journal of Intellectual Capital*, 5(1), 116-130.

Dobija, M. (1998). How to Place Human Resources into the Balance Sheet. Journal of *Human Resource Costing and Accounting*, 3(1), 83-92.

Flamholtz, E.G. (1972). Towards a Theory of Human Resource Value in Formal Organizations. *Accounting Review, 47(4), 666-678.*

Flamholtz, E.G. (1973). Human Resource Accounting: Measuring Positional Replacement Costs. *Human Resource Management*, 6-17.

Flamholtz, E.G. (1999). *Human Resource Accounting: Advances, Concepts, Methods and Applications*, Boston MA: Kluwer academic publishers.

Flamholtz, E.G. (2005). Conceptualizing and Measuring the Economic Value of Human Capital of the Third Kind. *Journal of Human resource Costing and Accounting*, 9(2), 78-93.

Flamholtz, E.G., Bullen, M.L., & Hua, W. (2002). Human Resource Accounting: A Historical Perspective and Future Implications. *Management Decision*, 40 (10), 947-954.

Flamholtz, E.G., Bullen, M.L., & Hua, W. (2003). Measuring the ROI of Management Development : An Application of the Stochastic Rewards Valuation Model. *Journal of Human Resource Costing and Accounting,* 7(1), 21-40.

Flamholtz, E.G., Narasimhan, R.K., & Bullen, M.L. (2004). Human Resource Accounting Today: Contributions, Controversies and Conclusions. *Journal of Human Resource Costing and Accounting*, 8(2), 23-37.

Folloni, G., & Vittadini, G. (2010). Human Capital Measurement: A Survey. *Journal of Economic Surveys, 24*(2), 248-279.

Gamerschlag, R. (2013). Value Relevance of Human Capital Information. *Journal of Intellectual Capital*, 4(2), 325-345.

Gates, S., & Langevin, P. (2010). Human Capital Measures, Strategy, and Performance: HR Managers' Perceptions. *Accounting, Auditing and Accountability Journal*, 23(1), 111-132.

Giuliani, M. (2016). Sensemaking, Sensegiving and Sensebreaking: The Case of Intellectual Capital Measurement. *Journal of Intellectual Capital*, 17(2), 218-237.

Giuliani, M., Chiucchi, M.S., & Marasca, S. (2016). A History of Intellectual Capital Measurements: From Production to Consumption. *Journal of Intellectual Capital*, 17(3), 530-552.

Grojer, J.E., & Johanson, U. (1998). Current Development in Human Resource Costing and Accounting: Reality, Present Researchers Absent? *Accounting, Auditing, & Accountability Journal,* 11(4), 495-506.

Gu, W., & Wong, A. (2010). *Estimates of Human Capital in Canada: The Lifetime Income Approach*. Statistics Canada Catalogue, No. 11F0027M, Economic Analysis Research Paper Series No. 62, Ottawa, Ontario.

Hekimian, J.S., & Jones, C.H. (1967). Put People to your Balance Sheet. *Harvard Business Review*, 45(1), 105-113.

Hermanson, R.H. (1964). *Accounting for Human Assets*. Occasional Paper No. 14, Bureau of Business and Economic Research, Michigan State University, East Lansing, MI.

Jensen, H. (2001). Policy and Company Perspectives for IC Reporting. *Journal of Human Resource Costing and Accounting*, 6(1), 11-28.

Johnson, J.S. (2015). Broadening the Application of Mixed Methods in Sales Research. *Journal of Personal Selling & Sales Management*, 35(4), 334–345345.

Kannan, G., & Aulbur, W.G. (2004). Intellectual Capital Measurement Effectiveness. *Journal of Intellectual Capital*, 5(3), 389-413.

Kirfi, M.M. & Abdullahi, A. (2012). Human Capital Accounting: Assessing Possibilities for Domestication of Practice in Nigeria. *Research Journal of Finance and Accounting*, 7-11.

Kothari, C. R. (2011). *Research Methodology: Methods and Techniques*. New Age International Publishers.

Lev, B. & Schwartz, A. (1971). On the Use of the Economic Concepts of Human Capital in Financial Statements. *Accounting Review*, 103-112.

Massingham, P., Nguyen, T.N., & Massingham, R. (2011). Using 360 Degree Peer Review to Validate Self-Reporting in Human Capital Measurement. *Journal of Intellectual Capital,* 12(1), 43-74.

Mello, J.A. (2011). *Strategic Human Resource Management* (3rd ed.). South-West Cengage Learning. Mason, OH.

Mercer, M. (1989). *Turning Your Human Resources Department into a Profit Center*. Amacom: NY.

Pacter, P. (2016). *Pocket Guide to IFRS Standards: the Global Financial reporting Language*. The IFRS Foundation, London, UK.

Ramirez, Y., & Gordillo, S.(2014). Recognition and Measurement of Intellectual Capital in Spanish Universities. *Journal of Intellectual Capital*, 15(1), 173-188.

Rimmel, G. (2003). *Human Resource Disclosures: A Comparison of Information, Providers and Users in Two Corporations*. Presented in the 17th Nordic Conference on Business Studies, Scandinavian Academy of Management, NFF.

Slottje, D. (2010). Human Capital Measurement: Theory and Practice. *Journal of Economic Surveys*, 24(2), 201-205.

Soboleva, I. (2010). Paradoxes of the Measurement of Human Capital. *Problems of Economic Transition,* 52(11), 43-70.

Sveiby, K.E. (1997). *The New Organizational Wealth*: *Managing and Measuring Knowledge-Based Assets*. Berrett-Korhler. San Francisco, CA.

Theeke, H.A. (2005). A Human Resource Accounting Transmission: Shifting from Failure to Future. *Journal of Human Resource Costing & accounting*, 9(1), 40-59.

Theeke, H.A., & Mitchell, J.B. (2008). Financial implications of Accounting for Human resources Using Liability Model. *Journal of Human Resource Costing and Accounting*, 12 (2), 124-137.

Turner, G. (1996). Human Resource Accounting-Whim or Wisdom. *Journal of Human resource Costing and Accounting,* 1(1), 63-73.

World Bank. (2011).*The Changing Wealth of Nations: Measuring Sustainable Development in the New Millennium*. The World Bank, Washington D.C.