

**CHANGE IN MANAGEMENT ACCOUNTANT ROLES: A COMPARATIVE STUDY
OF TWO PUBLIC SECTOR ORGANIZATIONS IN NIGERIA**

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ABSTRACT

The paper examines management accounting change and the changing roles of management accountants in two independent organizations in the Nigerian public sector. The sampling population was made up of 100 respondents in two public sector organizations. Using the Mann Whitney test the paper considers whether there are significant differences between respondents in both organizations on management accounting change, roles of management accountants as well as the drivers and barriers to the change. The results indicate that whereas there are significant differences in some aspects relating to the roles, tasks and skills of management accountants, there are no significant differences in the drivers and barriers in the change in management accountants' roles. Specifically, we found that the main triggers (drivers) of change in the roles of management accountants were: technology, globalization, competition while the barriers are: management stability, lack of adequate resources and shortage of accounting staffs. The paper concludes that there is change in the roles and tasks performed by management accountants in the public sector. The paper suggests that the results of this study have important implications for the training of management accountants by accounting faculties from universities and professionals bodies.

Keywords: Management accounting change, management accountants, roles, activities, triggers, barriers.

1.0. Introduction

Over the last decades, a lot of researches have examined the changing functions of management accounting and accountants following Johnson and Kaplan (1987) alerting the accounting community of management accounting and management accountants' apparent loss of relevance to management and other information users. The management accountant was known as someone who only provides financial information to users rather than a decision maker. Baines and Langfield-Smith (2003) argued that managers need specific forms of management accounting information to support their decision needs within increasingly environmental factors

and to assist them monitor progress against strategies. It has been argued that changes in organization's external environment lead to change in organization's management accounting systems (Waweru et al, 2004). In fact, environmental forces have driven organizational change due to advances in information technology, economic swings, new management strategies and a new focus on quality and customer service (Innes & Mitchell, 1990; Kaplan & Norton, 1996; Burns & Vaivio, 2001; Waweru; Hoque & Uliana, 2004).

Hopwood (2008) notes that the term "management accountant" is by nature vague: for example in the US, the title might refer to a person outside of the accounting profession altogether. In contrast, many European countries lack a term for management accountant and instead, several professional titles have risen to refer to employees responsible for management accounting tasks. As management accounting techniques and systems have increasingly become more business oriented, so have the demands and expectations set for management accounting professionals. The traditional role of management accountants as "bean counters" and "corporate watch dogs" has been questioned by academics (Voipio,2014). Role change of management accountants – often described as accountants becoming strategic business partners and trusted advisors – has garnered considerable interest in the academic community as of late. Nevertheless, ambiguity remains, particularly around the question what exactly management accountant's modern role consists of. Outsourcing of services has also been linked to support management accounting change (Smith, Morris & Ezzamel, 2005). As Burns and Vaivio (2001), and Hopper (2008) pointed out, "management accounting is becoming a dispersed knowledge within the organization". Moreover, professional bodies have made several commentaries in the recent years urging management accountants to take on more managerial responsibilities (Parker, 2002; Siegel & Sorensen, 1999; Clinton & White, 2012). Management accountants are increasingly working in cross-functional teams serving their internal clients, outside of the traditional, centralized accounting department and there are arguments on understanding the changing roles of management accountants (Baldvinsdottir, Burns, Norreklit & Scapens, 2009 a & b; De Loo, Verstegen & Swagerman,2011).

Even though researches on management accounting change and changing roles of management accountants have been conducted by academic researches and accounting professional bodies particularly in the developed countries since the late 1980s till date, there are limited and only a few known empirical evidences on the developing countries of Africa and Nigeria. Recently some studies have investigated the changing nature of management accounting and management accountants as well as the determinants of management accounting change in Nigerian organizations (Odia,2015a, Odia,2015b).This paper is an extension of these two studies as it considers whether there are significant differences in functions, roles (tasks) and skills of management accountants as well as the triggers and hindrances to change in management accountants' functions, roles (tasks), and skills in two independent public sector organizations in Nigeria. Therefore, the study provides answers to the following questions on what management accountants perceive as: (1).their functions/roles of the management accountants in the Nigerian public sector? (ii) their tasks/activities in the public sector in Nigeria? (iii) What do management accountants perceive as the skills required to perform these roles or tasks/activities in the Nigerian public sector in Nigeria? (iv)What are the triggers/drivers of change of management accountants' functions, roles or tasks and skills in the public sector? and (v) What are the likely triggers and hindrances (barriers) to change in management accountants' roles in the Nigerian public sector ?

The rest of the paper is divided into four sections as follows. The next section presents the literature review on the changing roles of management accountants, triggers and barriers of management accounting change, theoretical framework and hypotheses formulated for the study. The research methodology is in section three. The results of the survey and the discussion are then presented in section four. Section five is the concluding remarks.

2.0. Literature Review

2.1. Change in management accountant's functions and roles: From traditional to modern roles

The study of management accountants' traditional role has customarily been based on the work of Simon, Kozmetsky, Guetzkow and Tyndall (1954) in which they suggested three separate roles for accountants: score-keeping, attention directing and problem-solving. Simon et al (1954) argued that by understanding the information needs of their business counterparties management accountants could influence their role in the organization. Hopper (1980) proposed two archetypes of management accountants: book-keepers and service-aid accountants. Academic literature has concluded that the book-keeper model which prioritizes the production of periodic financial measures, best illustrates the traditional role of management accountants in organizations (Mouritsen,1996; Friedman & Lyne, 1997; Järvenpää, 2001; Byrne & Pierce, 2007; Lambert & Sponem, 2012).Moreover, studies have shown that management accountants representing the book-keeper archetype (Graham, Davey-Evans & Toon, 2012) have been described with a number of labels such as: “watchdog” (Granlund & Lukka, 1998), “number cruncher”(Vaivio & Kokko, 2006; Byrne & Pierce, 2007), “bean counter” (Burns & Baldvinsdottir, 2005; Järvenpää, 2007) and even “corporate police” (Yazdifar & Tsamenyi,2005). The bean counter role resembles closely that of a financial accountant (Pierce & O’Dea, 2003) with emphasis on reporting, control and compliant aspects of the accounting function (Byrne & Pierce,2007).

Nevertheless, management accountants are increasingly assuming the role of change agents in organizations. For instance, Russell et al (1999, p.41) claimed that “management accountants aren’t just managing change: they are initiating change”. Binnersley (1997, p. 36) argues that management accountants “need to recognize and facilitate the change taking place rather than resist them...they have the expertise to apply rigorous measurement discipline, ability to develop systems and a unique view across the business.” Sharma (1998, p. 24) agrees that management accountants will “be called upon to operate as managers of business value, and agents of

change.” Similarly, Zarowin (1997:38) claimed that “new accountants are change agents and more-much more.” Although there is strong support for accountants’ proactive involvement in change, Barbera (1996) revealed that “the role is seen as one of support rather than involving proactively on the part of management accountants.” Management accountant’s modern role is customarily defined as being business oriented, an internal consultant of sorts (Burns & Vaivio, 2001). Management accountants are providing customized and strategic support for organizations (Baldvinsdottir, Burns, Norreklit & Scapens, 2009a; Ma & Tayles, 2009).

According to Barbara (1996), the literature has viewed the modern roles or functions of a management accountant as: business analyst, strategy formulator, internal consultant or adviser (or ‘business partner’), change agent, information provider (or knowledge worker’ the ‘hub’ of data), leader of and/or participator in cross functional teams, designer and manager of information systems, designer and controller of performance measurement systems, teacher, guide or educator, and Internal and manager of complexity. Management accountant’s modern role has been characterized with greater emphasis on service, in contrast to information, provision. Contemporary accountant has been described as: “business analyst” (Baldvinsdottir et al., 2009a), “business oriented role” of management accountants (Burns & Baldvinsdottir, 2005), “business controller” and “business partner” (Järvenpää, 2001; 2007), “change agent” (Granlund & Lukka, 1997) “internal consultant” (Mouritsen, 1996) and even “co-pilot” (Lambert & Sponem, 2012) Management accountants’ are found to actively participate in strategic decision making (Lambert & Sponem, 2012)

The Institute of Management Accounting (IMA) study asked management accountants to define their position in the various organizations. In this, none of the respondents defined themselves as “management accountants”. Thirty nine percent said they work in Finance, thirty three said Accounting and twenty eight percent said something else (Russel, et al. 1999). The following quote attempts to explain why: “The most common reasons for people saying that they work in finance, rather than accounting, have to do with the positive connotations that respondents have

of finance and negative connotation they have of accounting. Finance is forward-looking, while accounting is backward looking. Finance is all-inclusive. Accounting refers to debit and credits. Accountants are number crunchers”(Siegel & Sorensen,1999, p. 13)

Similarly, in a study in UK, it was found that “in some businesses, accountants are changing their job titles, becoming ‘business analysts’ instead of corporate controllers (Burns et al.1999: 29). Barbera (1996: 53) found that the roles of management accountants expanded to include providing expert advice, team leadership, leadership in using statistical/analytical techniques, the design and management of information systems, the design and control of performance measurement systems, providing information, being teachers, guides, analysts, internal consultants, interpreters and managers of complexity. Moreover, the results of the studies conducted in the US and UK largely found that, increasingly, management accountants spent more time as “internal consultants or business analysts”, work on cross functional team”, are actively involved in decision making” and “work closely with their ‘customer’ to provide the right information and help use the information to make better decisions” (Russell et al, 1999: 40).Temporal orientation of management accountants positions to the present and future, instead of emphasizing past and historical information (Granlund & Lukka, 1998; Järvenpää, 2007), demanding greater flexibility and timeliness from management accountants (Pierce & O’Dea, 2003). The business partner role is founded upon principles of team work and cooperation.

2.2. Change in Management accountant tasks

Sharma (1998) reports on research conducted by Chenhall and Langfield-Smith (1998), involving a survey of 140 manufacturing firms in Australia. A number of current and future trends in management accounting tasks and activities were observed. In fact respondents believed that some traditional management accounting techniques such as budgeting for planning and control, variance analysis, capital budgeting, return on investment will continue to be used and given a high level of emphasis in Australia manufacturing firms. Moreover, Sharma (1998, p24) argues that “management will continue to place emphasis on financial performance

measures, relative to non-financial measures. Sharma (1998, p.24) claimed that future management accounting will develop in areas involving “a broad spectrum of cross-functional disciplines” such as: performance management (e.g. developing key financial and non-financial indicators) asset management (e.g. managing a product through its life cycle), business control management (e.g. corporate governance and internal control frameworks), environmental management (e.g. accounting for the environment), financial management (e.g. activity based management), intellectual capital management (e.g. measuring and managing employee satisfaction), Information Management (e.g. implementing and generating value from e-commerce and EDI), quality management (e.g. implementing TQM within and organization and managing quality improvement), and strategic management (e.g. value chain analysis for assessing competitive advantage).

Russell et al (1999, p41) reported on the findings of IMA study in the US which found that compared to five years ago, respondents spend more time performing the following tasks, and expect to continue to focus primarily on these activities: internal consulting, long term strategic planning, computer systems and operations, managing the accounting/finance function, process improvement and performance financial and economic analysis. They spend less time on: Accounting systems and financial reporting, consolidations, managing the accounting and finance function, accounting policy, short- term budgeting process, project accounting, compliance reporting, cost accounting systems and tax compliance. The UK study reported by Burns et al (1999) found that there had been a great change in the tasks conducted by management accountants, however, this change was primarily in the way management accounting information was used “ rather than change in management accounting systems and technique.

Table 1. Traditional and modern roles of management accountants

Perspectives	Traditional roles	Modern Roles
Commercial/business awareness	Poor (Pierce & O’Dea, 2003)	Good Pierce & O’Dea, 2003
Understanding of partner’s needs	Poor, different priorities between management accountant and business/operational manager (Chenhall & Langfield-Smith, 1998)	Good, priorities aligned with counterparties (Chenhall & Langfield-Smith, 1998)
Nature of management accounting tasks	Routine, statutory, standard (Burns & Baldvinsdottir, 2005)	Customized, ad hoc, based on needs (Burns & Baldvinsdottir, 2005)
Personal characteristics	Thorough, methodical (Vaivio & Kokko, 2006)	Flexible, team player (Vaivio & Kokko, 2006)
Professional skills emphasized	Technical, analytical (Järvenpää, 2007)	Good communicator, advisor Järvenpää, 2007
Nature of provided information	Historical (Ma & Tayles, 2009)	Strategic, forward-looking (Ma & Tayles, 2009)
Contextual factors	Centralized function (Hopper, 1980)	Decentralized function (Hopper, 1980)
Relationship with other functions	Clear boundaries, independent (Ahrens, 1996)	Member of a cross-functional team (Ahrens, 1996)
Terminology	Bean counter, book-keeper, watchdog, corporate police	Business oriented, business partner, internal consultant, co-pilot

Source: Adapted from Viopio (2014)

2.3. Change in management accountant skills

The Australian study by Birkett (1989) asked respondents to identify what the skill needs were at that time and likely future skills. Current skill needs identified were: computational, statistical, interpretative, analytical and financial information system design skills. Future skills identified were more progressive, for example adapting management accounting technologies to new forms of manufacturing process, using modern information technology in managing organizational change, using a deeper understanding of organizational structuring, functioning and processes, sponsoring and innovation. The Australian study by Barbera (1996b, p 67) found an increased emphasis on: personal skills-tolerance of ambiguity, ability to take leadership roles; interpersonal skills-to facilitate work in a cross-functional teams, employee empowerment, and the consultative/educative role; analytical/constructive skills- to facilitate the business analyst, change agent and strategy formulator roles; an ability to be intuitive, synthetic and creative thinking, proactivity, innovativeness and organizational design skills. Zarowin (1997) suggested that accountants must possess skills in persuasion and facilitation, as well as good presentation skills to be an effective change agent. They should have more foresight, be less backward looking and more risk taking. The possession of certain professional skills is readily associated

to the bean counter stereotype such as strong technical accounting know how (Byrne & Pierce, 2007) and analytical skills (Järvenpää,2001).However, modern roles is associated with increased interpersonal, social and communication skills (Ahrens,1996); the business oriented management accountants are expected to master a range of soft-skills and possess a strong commercial awareness (Granlund & Lukka, 1998; Burns & Baldvinsdottir, 2005)

2.4. Triggers (drivers) of change in Management Accounting and management accountant's roles

According to Shields (1997), the potential change drivers are competition, technologies, organizational design and strategies. Innes and Mitchell (1990) found a different set of circumstances linked with management accounting change, which they termed as follows: Motivators (eg. competitive market, organizational structure, and production technology), catalysts (eg poor financial performance, loss of market share, and organizational change) and facilitators (eg. accounting staff resources, degree of autonomy, accountant's requirements). Whereas institutionalized factors such as Sarbanes–Oxley (SOX) of 2002 increase the information provision and control emphasis of management accounting and management accountants (Byrne & Pierce, 2007; Clinton & White, 2012), technical developments have supported management accountants' move to the modern role (Byrne & Pierce, 2007; Järvenpää,2007).Moreover, organizational and contextual factors such as increased market competition, changes in strategy, complexity of operations and transitions of the structure of operations impact the role expectations set for management accountants (Burns & Baldvinsdottir,2005; Byrne & Pierce, 2007). Järvenpää (2001) argues that today's global competition and new customer needs have facilitated the move towards business oriented role for management accountants due to changed organizational priorities. Similarly, re-emergent focus on cost competitiveness has strengthened management accountants' organizational importance through their expertise in cost control analysis (Byrne & Pierce, 2007). Accordingly, recruitment, training and career planning have also received support as tools that promote the role change of management accountants (Järvenpää,2007; Goretzki, Strauss & Weber, 2013)

Yazdifar and Tsamenyi (2005) examine the process of MAC and the changing roles of management accountants. The drivers of change in ascending ranking order are: 1 information technology ; (2) organizational restructuring; (3) customer- oriented initiatives (4) e-commerce/electronic business; (5) new accounting software; (6) external reporting requirement; (7) new management styles; (8) core competency aims; (9) globalization; (10) quality oriented initiatives; (11) new accounting techniques; (12) take- over/merger; (13) external consultants advice; (14) product technologies. Grandlund (2001) suggested that low financial performance may put economic pressure on the firm to change its MAS to increase performance. Baines and Langfield-Smith (2003) suggested that if management accounting change is accompanied with as greater reliance on accounting information, it may result in improved performance. Odia (2015a) finds environmental and organizational factors such as advances in information and production technologies globalization, competition (2nd) and organization size exert greater influence on the roles of management accounting and management accountants in a survey of companies listed in the Nigerian Stock Exchange.

2.5. Hindrances to Management Accounting Change

Arbar (2011) finds the factors that delay management accounting change process to include: lack of accounting employees, lack of competition resources, management stability, problems in management, lack of accounting power, being assured of meeting legal requirements, lack of independence from parent company, Kasurinen (2002) added a final refinement to the accounting change model proposed by Innes and Mitchell (1990) and Cobb et al. (1995) by specifying the types of barriers that may hinder, delay, or even prevent management accounting change in practice. Kasurinen (2002) conducted a longitudinal case study in a strategic business unit of a multinational finnish based metal group, precisely investigating the barriers to balance scorecard implementation. He concluded that the barriers to change can be divided into three categories: Confusers which include individual aspects such as diverging goals of key individuals; Frustrators which refer to wider organizational phenomena such as organizational culture and existing reporting systems; and Delayers which are related to technical and

temporary issues such as inadequate information systems. According to Odia (2015a), the barriers to management accounting change include: the ignorance of scope of activities by management accountants, role misalignment and organizational culture, insufficient skills, employee dissatisfaction, demand for traditional roles and inability of organization and management accountants to adjust to change.

2.6. Theoretical Framework

Management accounting has used theoretical frameworks of contingency and institutional to explain management accounting change. This study uses institutional theory to explain management accounting change as in prior studies (Burns & Scapens,2000; Sisaye,2003; Ma & Tayles,2009). Institutional theory is an adaptive change process framework. It examines the impact of external environment factors and market conditions on organizational change and development (Barnett & Carroll,1995). Using this theory, Burns and Scapens (2000) have conceptualized management accounting as change in organizational rules and routines. Under old institutional economic (OIE) theory, management accounting is conceived as a routine and potentially institutionalized, organizational practice. By being institutionalized, management accounting practices can both shape and be shaped by institutions which rule organizational activity. Within OIE theory, institution is defined as: “a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of a people” (Burns & Scapens, 2000:5).

Burns and Scapens (2000) argued there are three dichotomies which offer insights into the process of management accounting change in the OIE. These are: (1) formal versus informal change; revolutionary versus evolutionary change; and (3) regressive versus progressive change. Formal change occurs through the introduction of new management accounting systems and techniques, which in turn, engender the organization to change (see Hasan,2005).In contrast, informal change occurs when change in an organization’s operation condition (i.e. organizational activity such as ownership structure or production technology) creates the need for change in

management accounting practice (Smith et al, 2005). The institutional approach to organizational change suggests that organizational structures affect an organization's learning strategy and ability to adapt to changes in the external environment. It suggests that the organization structural arrangement can successfully change if they implement either incremental or radical adaptive strategic change (Sisaye, 2003).

2.7. Research Hypotheses

The following null hypotheses were formulated for the study:

1. There is no significant difference in the roles of management accountants in public sector in Nigeria.
2. There is no significant difference in the tasks of management accountants in public sector in Nigeria.
3. There is no significant difference in the skills of management accountants in public sector in Nigeria.
4. There is no significant difference in the triggers of change in management accountants' roles in Nigerian public sector
5. There is no significant difference in the hindrances of management accounting change in public sector in Nigeria.

3.0. METHODOLOGY

The target population is made up of all government organizations in Nigeria. Specifically, the University of Benin and the University of Benin Teaching Hospital were used for the study. The organizations which have a well structured and developed accounting department are in the education and health sectors, semi-autonomous and fully funded by the Federal Government. The sample comprises 100 accountants in the bursary/accounting Departments of both organizations. The study was conducted using survey and purposive sampling method. The study examines management accountants' function, roles, tasks and skills in these organizations as well as the factors that trigger and hinder change in the management accountants function, roles,

tasks and skills. The degree of management accounting change was measured by the nature of activities (roles and functions) currently involved in as well as new skills in implementing these activities in the respective organizations. Data regarding the variables such as functions, roles, triggers, hindrances of management accounting change and new skills of accountants were collected by using questionnaire of four scale Likert type of “vitaly important” (VI), “averagely important”(AI), “fairly important”(FI) and “not important”(NI).The construction of the questionnaire was based on Yazdifar and Tsamenyi (2005). The questionnaire was divided into two sections: The first section asked respondents about job information, qualification and duration in the job or work experience. The second section questionnaire consists of several parts of questions, asking the respondents to rate as (see Appendix A). The questionnaire was distributed to 145 respondents. However 103 copies of the questionnaire were returned but only 100 questionnaires were used for analysis. This represent a response rate of 71%.The non-parametrical statistics (Mann-Witney U-test) was used to test the hypotheses whether there are significant differences between the organizations regarding the change in the management accountant’s roles or functions.

4.0. Data Analysis

In this section, we show the descriptive statistics as well as the analysis of questionnaire responses, test of hypotheses and discussion of the results.

4.1. Demographics of Respondents

Table 2. Background of the Respondents

		UNIBEN (%)	UBTH (%)	TOTAL SAMPLE (%)
1	Job Position/designation			
	Financial Accountants	82	64	73
	Management Accountants	6	16	11
	Managers/Supervisors	0	2	1
	Cost Accountants	0	4	2
	Others	12	14	13
2	Current qualification			
	Graduate	22	42	32
	PGD	20	8	14
	Masters	50	40	45
	Others	8	10	9
3	Duration on this job			
	1-5 years	64	44	54
	5-10 years	12	20	16

	10-20 years	12	28	20
	20 years and above	12	8	10
4	Change in roles, functions and skills			
	No	22	18	20
	Yes	78	82	80
5	Number of Total Employees in Organization	7581	3202	
6	Number of Accounting Staff	438	73	

Source: Field Survey (2015)

Table 2 reveals the background of the respondents. With regard to job position in UNIBEN Bursary department, 82% of respondents said they were financial accountants while in UBTH accounting department, 64% agreed they are financial accountants. Some of the deputy bursars in both organizations vividly agreed that they were financial accountants though they performed activities relating to management accounting. In UNIBEN Bursary department, only 6% of respondents agreed they were actively involved in management accounting while 16% agreed to this in UBTH accounting department. Only 4% respondents were cost accountants in UBTH accounting department, while respondents from UNIBEN bursary department have no response on this. Again about 80% of the respondents in both organization agreed that there has been change in their roles, functions and skills in the last five years.

4.2. Analysis of responses and tests of hypotheses

4.2.1. Management Accountants' Roles

Hypothesis 1: There is no significant difference in the roles of management accountants in public sector in Nigeria.

The responses relating to functions performed by management accountants in both independent organizations are shown in Table 3.

Table 3: Rankings of Management Accountants' roles

FUNCTIONS	UNIBEN				UBTH				UNIBEN		UBTH		Mann-Whitney U test (P-Value)
	NI (%)	FI (%)	AI (%)	VI (%)	NI (%)	FI (%)	AI (%)	VI (%)	Mean	Std	Mean	Std	
Business Analyst	2	14	36	48	0	8	26	66	3.30	0.78	3.5	0.6	0.058*

										9	8	42	
Strategy Formulator	0	20	40	40	0	4	48	48	3.20	0.75 6	3.4 4	0.5 77	0.130
Internal Consultant/adviser	0	14	40	46	6	16	24	54	3.32	0.71 3	3.2 6	0.9 44	0.871
Change Agent	6	22	34	38	8	12	40	40	3.04	0.92 5	3.1 2	0.9 18	0.623
Information Provider	0	14	30	56	0	2	30	68	3.42	0.73 1	3.6 6	0.5 19	0.117
Leader in cross functional team	4	20	52	24	2	10	36	52	2.96	0.78 1	3.3 8	0.7 53	0.005***
Designer/manager of information systems	6	12	42	40	2	20	32	46	3.16	0.86 6	3.2 2	0.8 40	0.747
Teachers, guide or educator	6	28	44	22	4	16	34	46	2.82	0.84 9	3.2 2	0.8 64	0.015**
Interpreter/manager of complexity	4	30	30	36	8	20	32	40	2.98	0.91 5	3.0 4	0.9 68	0.657
Designer of performance measurement	2	26	42	30	6	10	40	44	3.00	0.80 8	3.2 2	0.8 64	0.115

Note: NI= Not important; FI= Fairly Important; AI= Averagely Important; VI=Vitally Important; *, **, *** significant at 10%, 5% and 1% respectively

Source: Field Survey (2015)

The analysis in table 3 shows that information provider and business analyst are the top two vitally important functions of management accountants in both organizations. However, respondents in UBTH accounting department gave more support than UNIBEN Bursary department to the importance of other functions of management Accountants .The results of the Mann-Whitney U test) show a statistically significant difference between the two groups for business analyst, leaders in cross functional team and teacher, guide or educator. Respondents in UBTH accounting department have stronger support for the importance of these three functions of management accountants than those in UNIBEN Bursary department.The p-value of the U-test reveals no significant difference between the two organizations for other functions investigated. Therefore, because of the significant difference in the functions of the management accountants in both groups, we reject the null hypothesis and accept the alternate hypothesis.

4.2.2. Management Accountants' Tasks

Hypothesis 2: There is no significant difference in the tasks/activities involved in as a management accountant in public sector .

Table 4. Rankings of Management Accountants’ Tasks

Tasks	UNIBEN				UBTH				UNIBEN		UBTH		Mann-Whitney U test (P-Value)
	NI (%)	FI (%)	AI (%)	VI (%)	NI (%)	FI (%)	AI (%)	VI (%)	Mean	Std	Mean	Std	
Cost/financial control	0	12	14	74	0	6	22	72	3.62	0.697	3.66	0.593	0.982
Planning/managing budget	0	2	28	70	0	2	16	82	3.68	0.513	3.80	0.452	0.172
Interpreting/ presenting the management accounts	0	6	34	60	0	6	26	68	3.54	0.613	3.62	0.602	0.442
Profit improvement	2	10	32	56	0	12	30	58	3.42	0.758	3.46	0.706	0.846
Cost cutting	0	8	28	64	6	10	40	44	3.56	0.644	3.22	0.864	0.036**
Process improvement	2	10	44	44	2	16	42	40	3.30	0.735	3.20	0.782	0.526
Interpreting operational information	0	10	36	54	2	10	42	46	3.44	0.675	3.32	0.741	0.427
Accounting policy	0	16	22	62	0	18	24	58	3.46	0.762	3.40	0.782	0.685
Managing the accounting financial function	0	12	30	58	0	16	28	56	3.46	0.706	3.40	0.756	0.738
Performing financial and economic analysis	10	32	56	20	2	14	38	46	3.50	0.707	3.28	0.784	0.170

Note: NI= Not important; FI= Fairly Important; AI= Averagely Important; VI=Vitaly Important; *, **, *** significant at 10%, 5% and 1% respectively

Table 4 reveals “planning/managing budget” and “cost/financial control” as the top vitally important tasks for management accountants in both UNIBEN Bursary and UBTH Accounting department. Respondents in UBTH accounting department gave more support than those in UNIBEN bursary department to the importance of planning/managing budget, cost/financial control, interpreting/presenting the management accounts, profit improvement and accounting policy as the tasks/roles of management accountants. While respondents in UNIBEN bursary department gave more support to the importance of cost/financial control, planning/managing budget, cost cutting, interpreting/presenting the management accounts, accounting policy, and managing the accounting/financial function as the tasks/roles of management accountants. However, the results of the Mann-Whitney U test show a statistically significant difference between the two groups for cost cutting with a p-value of 0.036. There is no significant

difference between the two groups for the other tasks/roles examined. Thus, we reject the null hypothesis because of the significant p-value and accept the alternate hypothesis.

4.2.3. Management Accountants Skills

Hypothesis 3 Ho: There is no significant difference in the skills required to perform the tasks/activities by management accountants in the Nigerian public sector.

Table 5: Rankings of Management Accountants New Skills

New Skills	UNIBEN				UBTH				UNIBEN		UBTH		Mann-Whitney U test (p-value)
	NI (%)	FI (%)	AI (%)	VI (%)	NI (%)	FI (%)	AI (%)	VI (%)	Mean	Std	Mean	Std	
Personal Skills	0	6	30	64	0	2	38	60	3.58	0.609	3.58	0.538	0.814
Interpersonal skills	0	6	22	72	0	4	30	66	3.66	0.593	3.62	0.567	0.588
Communication skills	0	4	20	76	0	0	22	78	3.72	0.536	3.78	0.418	0.734
Analytical/Constructive skills	0	6	32	62	0	14	40	46	3.56	0.611	3.32	0.713	0.081*
Creative thinking skills	0	6	32	62	0	10	42	48	3.56	0.611	3.38	0.667	0.153
Computer skills	0	8	22	70	2	10	24	64	3.62	0.635	3.50	0.763	0.474
Ability to work in a team	0	4	26	70	0	0	30	70	3.66	0.557	3.70	0.463	0.897
Solid understanding of accounting	0	12	24	64	6	34	58	2.0	3.52	0.707	4.32	5.61	0.994
ABC/management	2	16	44	38	6	20	36	38	3.18	0.774	3.06	0.913	0.611
Data modeling	4	20	38	36	10	28	28	34	3.90	5.845	2.86	1.010	0.230
Making forecast and projections	8	16	40	36	8.0	26	34	32	3.04	0.925	2.90	0.953	0.433
Being strategic and forward looking	6	14	32	48	12	10	30	48	3.22	0.900	3.14	1.030	0.844

Note: NI= Not important; FI= Fairly Important; AI= Averagely Important; VI=Very Important; *, **, *** significant at 10%, 5% and 1% respectively

Table 5 presents twelve (12) skills of management accountants. Respondents from both UBTH Accounting department and UNIBEN Bursary department ranked “Communication skills” as the most important skill for management accountants. There was 78% and 76% support by

respondents from UBTH Accounting department and UNIBEN Bursary department respectively. While respondents in UNIBEN Bursary department were supportive of “analytical/constructive skills” and ranked it 7th, those in UBTH Accounting department ranked it 8th. The difference between the perception of the two groups for this skills is however statistically significant for analytical/constructive skills given the p-value of the Mann-Whitney U test of 0.081. Thus, no significant difference exists between the two groups for other skills. Therefore, we reject the null hypothesis and accept the alternate hypothesis for analytical/constructive skills.

4.2.4. Triggers of Management Accounting Change

Hypothesis 4 Ho: There is no significant difference in the triggers/drivers responsible for change in management accountants’ roles in the Nigerian public sector

Table 6: Ranking of Triggers of Management Accounting Change

Triggers	UNIBEN				UBTH				UNIBEN		UBTH		Mann-Whitney U test (p-value)
	N I (%)	F I (%)	AI (%)	VI (%)	N I (%)	FI (%)	A I (%)	V I (%)	Me an	Std	Mea n	Std	
Competition Market	8	8	46	38	4	14	4	3	3.14	0.881	3.14	0.808	0.843
Organizational Structure	4	14	40	42	2	8	4	4	3.20	0.833	3.32	0.713	0.552
Technology	2	12	40	46	0	12	2	6	3.30	0.763	3.48	0.707	0.201
Product Cost Centre	6	14	54	26	2	20	5	2	3.00	0.808	3.02	0.742	0.958
Short Product Life Cycle	1	3	38	20	4	40	3	2	2.66	0.939	2.76	0.870	0.695
Poor Financial Performance	1	1	38	34	8	24	3	3	2.90	1.055	2.90	0.931	0.811
Loss of Market Share	1	1	44	24	1	26	3	3	2.78	0.975	3.46	4.510	0.670
Launch of Competing Product	6	2	32	40	6	14	5	2	3.44	2.697	2.98	0.795	0.326
New Accounting Software	4	1	44	34	0	16	3	4	3.68	4.451	3.32	0.741	0.178
Globalization	4	1	44	42	0	20	3	4	4.04	5.678	3.24	0.771	0.749
Accounting Staff Resources	2	2	52	22	6	22	4	3	2.94	0.740	2.96	0.880	0.756
Degree of Autonomy	2	1	52	30	4	14	5	3	3.10	0.735	3.88	5.699	0.859
Accounting Requirement	2	1	46	38	0	16	3	4	3.2	0.75	3.30	0.7	0.510

		4					8	6	0	6		35	
Management Influence	2	2	32	44	0	10	4	4	3.9	5.83	3.34	0.6	0.505
		2					6	4	8	6		58	
Deteriorating Financial Performance	2	2	46	32	1	20	4	2	3.0	0.77	2.88	0.9	0.351
		0			0		2	8	8	8		39	

Note: NI= Not important; FI= Fairly Important; AI= Averagely Important; VI=Vitally Important; *, **, *** significant at 10%, 5% and 1% respectively.

The results of the perceived importance of various triggers of management accounting change by respondents are presented in Table 6. Both groups viewed “technology” as the top most important trigger of management accounting change with 60% and 46% for UBTH Accounting department and UNIBEN Bursary department respectively. However, respondents in UNIBEN Bursary department viewed “management influence” and “organizational structure or globalization” as the second and third most important triggers of management accounting change while those in UBTH Accounting department ranked them as fourth. Furthermore, UBTH Accounting department viewed New Accounting Software, Accounting Requirement as the second and third triggers of management accounting change whereas UNIBEN Bursary Accountants who ranked them as 5th and 4th respectively. There are no significant differences between the two organizations for these triggers. Hence we accept the null hypothesis.

4.2.5. Hindrances of Management Accounting Change

Hypothesis 5 Ho: There is no significant difference in the hindrances of management accounting change in public sector in Nigeria. Respondents were asked to indicate the hindrances to management accounting change and the results are presented in table 6. From the results in Table 7 , UNIBEN Bursary department ranked “lack of adequate computing resources” and management stability” as the topmost hindrances of management accounting change with 56% and 46% respectively, while UBTH Accounting department ranked “accounting staff shortage” and “need to meet statutory requirements” as the top two very important hindrances with percentage of 46% for both organizations. The hindrances to management accounting change by the two groups show no statistically significant differences given the results of the Mann-Whitney U test in Table 7. Therefore, we accept the null hypothesis.

Table 7: Ranking of Hindrance of Management Accounting Change

Hindrances	UNIBEN				UBTH				UNIBEN		UBTH		Mann-Whitney U test (p-value)
	NI (%)	FI (%)	AI (%)	VI (%)	NI (%)	FI (%)	AI (%)	VI (%)	Mean	Std	Mean	Std	
Accounting Staff Shortage	6	16	38	40	4	20	30	46	3.12	0.895	3.18	0.896	0.710
Lack of Adequate Computing Resources	0	12	32	56	4	18	36	42	3.44	0.705	3.16	0.866	0.106
Management stability	0	8	46	46	2	8	46	44	3.38	6.354	3.32	0.713	0.768
Poor Communication with Management	0	16	54	30	0	22	36	42	3.14	0.670	3.20	0.782	0.584
Lack of Authority of Accountant	0	26	46	28	0	14	48	38	3.02	0.742	3.24	0.687	0.134
Need to Meet Statutory Requirements	2	10	60	28	0	10	44	46	3.14	0.670	3.36	0.663	0.940
Lack of Autonomy	2	28	38	32	8	20	46	26	3.00	0.833	2.90	0.886	0.669

Source: Field Study (2015)

4.3. Discussion of Findings

The paper examines the results of whether there is a significant difference in the change of management accountants' roles, tasks, skills, triggers and hindrances to management accounting change in two public sectors organizations. The results of the analyses suggest that very little significant difference exist between the two groups in terms of the variables tested. For instance, in the perception of management accountants' roles, only three out of the ten functions were significant. These were business analysts, leader in cross functional team and teachers, guide or educator. The respondents from UBTH accounting department gave more support to the three significant functions than UNIBEN bursary department. This could be as a result of UBTH environment or activities which are more business related than providing absolute social services predominant in UNIBEN. Again, the significant difference recorded between the two groups for the management accountants' tasks was only in terms of cost cutting while for management accountants' skill was only in terms of analytical/constructive skills. For these significant differences, respondents from UNIBEN had more supports. The differences could be attributed to the disparities in the nature of the institutional activities and environment of these organizations (see Table 8).

The perception of management accountants’ tasks, only one task (cost cutting) was significant out of the 10 tasks. Here respondents from UNIBEN Bursary department gave more support of 64% compare to UBTH Accounting department with only 44% .This significant difference could be due to the absolute social services being rendered by UNIBEN compare to UBTH which is much more business-minded. The results on the perception of management accountants’ new skills, only one skill- analytical/constructive skills - is significant among the twelve skills that. Besides, UNIBEN Bursary department gave 62% support compare with 46% for UBTH Accounting department. The two groups agreed to be actively equipped with other skills. The respondents adequately agreed that all the triggers had contributed to the change in management accountants’ functions, roles and skills in both groups. However, the most influential trigger of management accounting change was technology. The perception of accountants on the triggers/drivers of management accounting change was found to have no significant difference. With regard to the hindrances of management accounting change, there were no significant differences in the result.

Table 8. Summary of statistically significant differences

Parts	Topics/sections	More Supportive Group
Roles	Business leader Leaders in cross sectional team Teachers, guide and educators	UBTH UBTH UBTH
Tasks	Cost cutting	UNIBEN
Skills	Analytical\ constructive skill	UNIBEN
Change drivers	-	-
Hindrances (barriers)	-	-

The results suggest that there are no significant differences in the variables tested. Based on the analysis, we found weak support for hypotheses 1- 3 whereas hypotheses 4-5 are strongly supported. The weak support could be explained by the disparities of institutional forces that face these organizations.

5.0. Conclusion

The paper examines change in management accountants' roles in two independent organizations in the Nigerian public sector. Besides, globalization and competition have changed the environment of organizations' operations with an increase uncertainty, intensified industry competition and advanced technology. They have prompted change to management accounting practices. Therefore, organizations are re-defining their existing organizational design and strategies to deal to deal with the change. Moreover, the demands to improve current performance have become very critical for organizations, they are striving to better fit with the environment in order to be more successful, sustainable and improved their performance. Therefore management accountants in the public sector should not limit themselves solely to the traditional roles of information provider. They should take up the modern roles in order to proffer solutions to challenges in organization through active participation in the decision making process. The results of this study have implications for the training of accountants by accounting faculties from universities and professionals bodies as well as those in the public service. However, the result is limited by a small proportion of the respondents who said that they were management accounting; most of whom even though they performed all the functions and tasks of management accountants preferred designations such financial accountants and other titles. We suggest future research in other sectors to examine the change in the roles of management accountants as well as the impact of other institutional factors.

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