FINANCIAL RECORD COMPETENCIES REQUIRED FOR EFFECTIVE UTILIZATION OF E-ACCOUNTING PLATFORMS IN GOVERNMENT MINISTRIES IN EBONYI STATE

BY

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Abstract

The study investigated financial record competencies required for effective utilization of electronic accounting platforms in government ministries in Ebonyi State. Two purposes of the study with two corresponding research questions and hypotheses guided the study. The population of the study comprised all the accountants in government ministries in Ebonyi State. A sample size of 70 respondents was drawn using stratified random sampling. A structured questionnaire was used to elicit response from the respondents. Out of the 70 copies of questionnaire distributed, 58 were correctly filled and returned. The data collected were analyzed using mean and standard deviation while t-test was used for testing the hypotheses at 0.05 level of significance. The findings revealed that accountants in government ministries highly require spreadsheet competencies for effective utilization of e-accounting platforms in government ministries. The researchers recommended among others that Government at all levels should encourage massive acquisition of spreadsheet competencies by all accountants in government ministries.

Keywords: E-Accounting platforms, Financial records, Competencies, Utilization

Introduction

The success of any establishment largely depends on its financial management. With adequate provision for management of the financial resources through keeping necessary records, enterprise (both public and private) can effectively manage their finances thereby achieving success (Norwell, 1998; Stefanou, 2006). Financial management of different enterprises has been positively affected by technological improvements. Consequently, the introduction of computer and other technologies in accounting is another way of ensuring effective financial record keeping in organizations. Other persons handling the financial records of any organization by virtue of their training are expected to have necessary competencies to effectively utilize the opportunities in electronic accounting (Amidu & Abor, 2005; Tavakolian, 1995). The transition from paper accounting to electronic requires accounting practice to call for adoption of new methods in keeping an organization's financial records. The method calls for retraining of accounting staff on requisite competencies for effective utilization of electronic accounting platform in keeping financial records (Agwu & Emeti, 2014; Akande, 2011). Government e-accounting systems are time-saving and accurate in completing transactions. Apart from providing appropriate information, implementation and monitoring of preparation of the general budget, it assists also in making the general state policies (Muijs, 2011).

Financial records are documents used in keeping necessary financial information about the transaction of a business organization. Effective keeping of financial records contributes to the success of any business enterprise (Munoz, 2010). Some of the records that could be maintained by business organizations include statement of retained earnings, cash flow, income statements, balance sheet, tax return among others (Business dictionary, 2014). Financial records include all the documents be it in traditional format or via electronic that are used in recording all financial transactions of an organization. According to Wikipedia (2014), financial records are records of income and expenditure of a business organization that are kept for different purposes. These records include all the formal

records of the financial activities of an enterprise. Government ministries and business organizations keep different financial records to help them in knowing the organization's financial positions and changes in such positions which serve as a prerequisite for decision making (Al-Majadi& Mat, 2011; Costello & Osborne, 2005).

Electronic accounting also known as on-line accounting is the utilization of computers and other information and communication technologies in preparing, classifying and managing financial information (Ghobakhloo, Zulkifli, &Azizi, 2010). According to Azih and Igboke (2014), electronic accounting involves carrying out accounting functions, research and training through various computer based and other ICT tools such as internet resources, web based accounting software and electronic financial spreadsheet to facilitate efficient decision making. To benefit from electronic systems, the basic components that could achieve the purpose of government electronic accounting information systems must be provided (Granlund, 2011). The Ministry of finance and Government bodies use a number of computer systems applications such as income treatment and debt management systems that have been programmed in different software (Ingro, Oracal, foxpro) through the study of the basic components in accounting information systems that enable information systems achieve the objectives needed and study the government accounting information properties treated in government e-accounting information systems as well.

Mohammed, John and Joshua (2011) noted that the major difference between e-accounting and traditional accounting practices is that the later consist of paper ledgers, typewriters and calculators. They explained that typewriters were used in typing invoices and cheques and calculations were performed using calculators. It therefore means that e-accounting refers to any accounting system that operates mainly through the use of ICT's. In the same vein, Stefanou (2006) posited that e-accounting involves the collection and recording of information regarding events that have economic impact on organizations and the maintenance, processing and communication of such information to internal and external stakeholders. The primary objective in government e-accounting information systems is the production and delivery of information to the parties concerned, both internal parties such as government units managers and external parties such as the control bodies, the Audit Bureau of the Ministry of Finance and other government agencies, external bodies that present loans and assistance to government units.

With regards to effective utilization of e-accounting platform, the personnel involved in keeping financial records through the use of technology are required to possess some basic competencies such as spreadsheet competency, electronic payroll register preparation competency, academic skills, information processing skills to mention but a few (Jegede, 2009; Jeon, Hanb, & Leec, 2006). Under the spreadsheet competency, an accounting staff using electronic platform should be able to create spreadsheet for specific accounting purpose, use spreadsheet in manipulating accounting data, appropriately label and format cells, etc. On the other hand, the preparation of electronic payroll register demands that the personnel handling it should be able to accurately calculate gross pay, register an employee's personal data, verify accuracy of already prepared payroll register, journalize and post payroll transactions and so on (Jouini, Rabia, &Aissa, 2014). Therefore, these systems should be designed based on the needs and requirements of the activities of the government, so that these systems' outputs will represent the best of this information. And to achieve this goal in the output system it must be taken into account that these systems must be simply and easily understood by users, with periodic and regular reports, that contain appropriate information relevant to the subject, and that directly addresses the beneficiary category.

It is inarguable that the academic level of an individual plays a vital role in the manner that such an individual handles financial records of an organization. With adequate academic training, an individual will be equipped with necessary critical and information processing skills. Critical and information

processing competencies entail the ability of an individual to accurately analyze adjustment transactions to comply with accepted procedures, ability to journalize as well as post adjustment entries, ability to verify that debit equals credit among others (Kadiri, 2012). Also, information processing skills entail that an accounting staff should be able to prepare worksheet that contains data needed to prepare an income statement and other financial records. The accounting staff using electronic platform should be able to electronically estimate bad debts according to established procedures as well as accurately record and adjust entry for bad debts (Kanellou & Spathis, 2013). An accounting staff using electronic platform in preparing financial record should be able to record journal entries for uncollectible accounts receivables according to established procedures. The government e-accounting information systems personnel must keep up with developments in information technology and communications as IT world is a rapidly changing industry (Kibly, 2000). Moreover, there is an increasing trend today to use wireless networks in data exchange and transmission of information, henceforth, the government units should keep pace with these developments.

Statement of the Problem

Technological advancement has affected all aspects of human existence and accounting is not left out. Most modern offices have changed from manual accounting to electronic accounting which involves the use of ICT in preparing, maintaining and communicating accounting information to both internal and external users. Based on the above fact, it is obvious that most accounting staff in these offices seem not to be conversant with the use of electronic resources in preparing and managing financial records. This undoubtedly has led to non-utilization of ICT resources in accounting information management in this technological era. Though electronic accounting platform seems to be offering opportunities to organizations in areas such as fraud detection, adequate security and storage of accounting records and faster preparation, processing and retrieval of records, it is heartbreaking that this platform seems not to be effectively utilized due to lack of competent staff. It is surprising to note that organizations still procure and install most information and communication technologies needed in account information management but they are being handled by incompetent staff thereby leading to continuous mismanagement of different accounting records. Therefore, there is need to investigate financial record competencies required for effective utilization of electronic accounting in government ministries in Ebonyi State.

Purpose of the Study

The main purpose of this study is to investigate the financial record competencies required for effective utilization of electronic accounting platforms in government ministries in Ebonyi State. Specifically, the study sought to investigate:

- 1. Spreadsheet competencies required for effective utilization of e-accounting in Ebonyi State ministries.
- 2. Critical and information processing competencies required for effective utilization of e-accounting in Ebonyi State ministries.

Research Ouestions

The following research questions guided the study:

- 1. What are the Spreadsheet competencies required for effective utilization of e-accounting in Ebonyi State ministries?
- 2. What are the critical and information processing competencies required for effective utilization of e-accounting in Ebonyi State ministries?

Hypotheses

The following hypotheses were tested at 0.05 level of significance

H0₁: There is no significant difference between the mean ratings of respondents on Spreadsheet competencies required for effective utilization of e-accounting in Ebonyi State ministries based on gender.

H0₂: There is no significant difference between the mean ratings of respondents on critical and information processing competencies required for effective utilization of e-accounting in Ebonyi State ministries based on experience.

Methodology

The design for this study was a descriptive survey as it aimed at describing the opinion of the respondents on financial record competencies required for effective utilization of e-accounting platforms in government ministries in Ebonyi State. The area of the study was Ebonyi State government ministries and the population consisted 135 accountants from all the government ministries in Ebonyi State. The sample size was 70 accountants drawn using stratified random sampling technique. The instrument for data collection was a structured questionnaire titled "Financial Record Competencies Required for Effective Utilization of E-Accounting Platforms (FRCREUEP)" which contained 19 items. The responses were patterned thus: Very Highly Required (VHR) = 4 points, Highly Required (HR) = 3 points, Lowly Required (LR) = 2 points and Very Lowly Required (VLR) = 1 point. Three experts in accounting validated the instrument. The instrument was subjected to reliability test using cronbach alpha and it yielded an index of 0.73 indicating that the instrument is reliable. Seventy copies of the questionnaire were distributed while 58 were correctly filled and returned. The statistical tool used for data analyses were mean and standard deviation while t-test was used for testing the hypotheses at 0.05 level of significance. Items with mean score of 2.50 and above were adjudged as required while items having a mean score below 2.50 were adjudged asnot required.

Result Research Question One: What are the Spreadsheet competencies required for effective utilization of e-accounting in Ebonyi State ministries?

Table 1: Spreadsheet competencies required for effective utilization of e-accounting

S/N	Spreadsheet Competencies	VH		HR		LR	VL		SD	Decision
	2 F-1000000000000000000000000000000000000	R					R		~-	
1	Opening a spreadsheet application software	3	2	1	8	7	1	3.40	0.77	Required
2	Creating spreadsheet for specific accounting purpose									
		2	9	2	3	4	1	3.34	0.70	Required
3	Using spreadsheet in processing accounting data	2	3	2	9	6	-	3.29	0.65	Required
4 5	Ability to appropriately label cells in spreadsheet	3	4	2	0	2	2	3.48	0.83	Required
	Ability to format spreadsheet cells for accounting purposes	2	7	1	9	10	2	3.22	0.86	Required
6	Ability to insert boarders in a worksheet	1	9	2	8	7	4	3.07	0.86	Required
7	Applying formula to carryout accounting computations	3	2	1	5	8	3	3.31	0.90	Required

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							E-IS	SSN 270	5-2508	
8	Ability to delete unwanted columns and rows	2	5	2	3	6	4	3.19	0.89	Required
9	10110	2	7	1	7	9	5	3.14	0.98	Required
10	Ability to preview and print worksheet	2	9	2	1	5	3	3.31	0.84	Required
11	Ability to upload worksheet content to the internet	3	0	2	4	3	1	3.43	0.68	Required
	Ability to save text in a worksheet							3.2	0.81	
	Grand mean									

The data in table one above shows that all the items on spreadsheet competencies required for effective utilization of e-accounting in government ministries were rated above 2.50 which was the criterion level of acceptance. From the findings, item 4 had the highest mean rating indicating high acceptance that accountants require for the ability to appropriately label cells in spreadsheet.

Research Question Two: What are the critical and information processing competencies required for effective utilization of e-accounting in Ebonyi State ministries?

Table 2: Critical and information processing competencies required for effective utilization of e-accounting

S/N	Critical and information processing	VH	R	HR	LR	VLR	X	SD	Decision
2,21	competencies	,				,		~-	_ ••••
1	Ability to analyze adjustment transitions in compliance with accepted procedure	2	7	24	4	3	3.29	0.82	Required
2	Ability to electronically journalize adjustment entries								
3	Ability to electronically post adjustment entries	3	0	21	5	2	3.36	0.79	Required
	Ability to utilize double entry principle	2	5	16	12	5	3.05	1.00	Required
4	Ability to verify e-payroll registers	2	3	28	6	1	3.26	0.71	Required
5	Ability to prepare electronic income statement	2	6	20	11	1	3.22	0.82	Required
6	Ability to estimate bad debts	2	2	24	9	3	3.12	0.86	Required
7	electronically	2	9	18	7	4	3.24	0.92	Required
8	Ability to record e-journal entries for uncollectible accounts								
	Grand mean	2	7	21	8	2	3.26	0.83	Required
							3.23	0.84	

From table 2 above, the result shows that respondents rated all the critical and information processing competencies as required for effective utilization of e-accounting in government ministries by accountants. Item 2 which is on ability to electronically journalize adjustment entries had the highest mean rating showing that respondents highly require this competency.

Hypotheses

H01: There is no significant difference between the mean ratings of respondents on spreadsheet competencies required for effective utilization of e-accounting in Ebonyi State ministries based on gender.

Table 3: t-test analysis of mean rating of the respondents on Spreadsheet competencies required for

effective utilization of e-accounting in government ministries

S/N	Spreadsheet competencies	Gender	X	SD	t-cal	t-critic	DF	Decision
1.	Opening a spreadsheet application	Male	3.50	0.73				
	software	Female	3.29	0.81	1.03	2.00	56	NS
2.	Creating spreadsheet for specific	Male	3.27	0.79				
	accounting purpose	Female	3.46	0.75	0.94	2.00	56	NS
3.	Using spreadsheet in processing	Male	3.40	0.72				
	accounting data	Female	3.18	0.55	1.31	2.00	56	NS
4.	Ability to appropriately label cells in spreadsheet	Male	3.63	0.67				
	spreausiect	Female	3.32	0.77	1.63	2.00	56	NS
5.	Ability to format spreadsheet cells for accounting purposes	Male	3.30	0.93				
		Female	3.18	0.80	0.53	2.00	56	NS
6.	Ability to insert boarders in a worksheet	Male	3.07	0.84				
		Female	3.07	0.90	0.56	2.00	56	NS
7.	Applying formula to carryout accounting	Male	3.43	0.77				
	computations	Female	3.18	1.02	1.05	2.00	56	NS
8.	Ability to delete unwanted columns and	Male	3.01	0.96				
	rows	Female	3.39	0.79	1.69	2.00	56	NS
9.	Ability to preview and print worksheet	Male	3.33	0.80				
		Female	2.93	1.12	1.59	2.00	56	NS

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10.	Ability to upload worksheet content to	Male	3.07	0.83	E-13	3IN 27U3-	2508				
the internet	Female	3.43	0.74	1.74	2.00	56	NS				
11.	Ability to save text in a worksheet	Male	3.60	0.62							
		Female	3.25	0.70	2.01	2.00	56	NS			
	Grand t-test				1.55	2.00	56	NS			

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The t-test analysis in table 3 shows that the calculated t-values of all items except item 11 were less than the critical value of 2.0 at 0.05 level significance and degree of freedom of 56. With the grand mean of 1.55, the respondents did not differ on spreadsheet competencies required for effective utilization of e-accounting in government ministries.

 $H0_2$: There is no significant difference between the mean ratings of respondents on critical and information processing competencies required for effective utilization of e-accounting in Ebonyi State ministries based on experience.

Table 4: t-test analysis of mean rating of the respondents on Critical and information processing competencies required for effective utilization of e-accounting in government ministries in Ebonyi State based on their experience.

S/N	Spreadsheet competencies	Experience	X	SD	t- cal	t- critic	DF	Decision	
1.	Ability to analyze adjustment	1 – 10yrs	3.43	0.71					
	transitions in compliance with accepted procedure	11yrs and above	3.14	0.94	1.26	2.00	56	NS	
2.	Ability to electronically	1 – 10yrs	3.43	0.67					
	journalize adjustment entries	11yrs and above	3.46	0.97	1.25	2.00	56	NS	
3.	Ability to electronically post adjustment entries	1 – 10yrs	3.20	0.85					
		11yrs and above	2.89	1.18	1.09	2.00	56	NS	
4.	Ability utilize double entry	1-10yrs	3.13	0.63					
	principle	11yrs and above	3.39	0.82	1.29	2.00	56	NS	
5.	Ability to verify e-payroll	1-10yrs	3.10	0.78					
	registers	11yrs and	3.35	0.86	1.12	2.00	56	NS	

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		above						
6.	Ability to prepare electronic income statement	1-10yrs	3.03	0.89				
	meome statement	11yrs and above	3.21	0.86	0.77	2.00	56	NS
7.	Ability to estimate bad debts electronically	1-10yrs	3.23	0.96				
		11yrs and above	3.25	0.89	0.08	2.00	56	NS
8.	Ability to record e-journals entries for uncollectible accounts	1 – 10yrs	3.20	0.78				
		11yrs and above	3.32	0.91	0.52	2.00	56	NS
	Grand t-test				1.31	2.00	56	NS

From table 4, there is no significant difference between the mean ratings of respondents on Critical and information processing competencies required for effective utilization of e-accounting in government ministries in Ebonyi State based on their experience. This is evident as the grand t-test of 1.31 was less than the critical t-value of 2.00.

Discussion

The analysis of research question one in table 1 revealed that accounting from government ministries highly require spreadsheet competencies for effective utilization of e-accounting in government ministries in Ebonyi State. This finding is supported by the position of Phil (2011) when he posited both basic book-keepers and high profiled accountant greatly need spreadsheet skills in order to be faster with output production and as well meet the demand of top management.

Detailed analysis of the answers to research questions two in table 2 revealed that accountants in Ebonyi State ministries to a high extent require critical and information processing competencies for effective utilization of e-accounting platform. Bahador and Abrar (2012) agreed with this finding when they revealed that accountants' acquisition of critical and information processing skills such as problem solving, creative thinking, analytical skills among others is very necessary. Possession of these skills no doubt will help accountants in their use of technologies in creating, processing and managing accounting information. When accountants at all levels acquire relevant skills, they can easily analyze adjustment transactions in compliance with accepted procedures, electronically journalize adjustment entries, electronically post adjust entries, verify e-payroll registers, prepare electronic income statements to mention but a few.

Analysis of the hypothesis in table 3 shows no statistical difference on the mean rating of the respondents on spreadsheet competencies required for effective utilization of e-accounting in government ministries based on their gender.

The analysis of hypothesis as contained in table 4 showed no significant difference between the mean rating of respondents on critical and information processing competencies required for effective utilization of e-accounting in government ministries in Ebonyi State based on their experience. Acquisition of spreadsheet competencies by accountants will assist them in creating spreadsheet for

specific accounting purpose, using spreadsheet in processing accounting data among others (Muhrtala & Ogundeji, 2013).

Conclusion

Accountants are one of the major stakeholders in the management of financial businesses of governments at all levels. From the findings of the study therefore it is concluded that accountants in recognition of their immense roles in driving the financial activities of their governments are required to embrace new technologies in their operations. Consequently the use of spreadsheets and other ICT gadgets in their day to day programmes are very imperative.

Recommendations

From the findings of this study, the following recommendations were made:

- 1. Government at all levels should encourage massive acquisition of spreadsheet competencies by all accountants in government ministries.
- 2. Accountants and other stakeholders should intensify efforts in the procurement of ICTs especially personal computers.
- 3. Heads of government ministries should encourage their accounting staff to update their skills in line with changing technological needs.

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