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The Adoption and Implementation of the International Public Sector Accounting Standards: The challenges faced by the United Nation in producing UN-IPSAS compliant financial reports in Kenya.

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Abstract

Purpose: The purpose of this study was to assess the challenges faced by United Nations, Nairobi in adopting and implementing IPSAS.

Methodology: The study used a mixed research design involving both descriptive and explanatory research designs to describe the state of affairs of the study variables as well as test the cause and effect relationships between variables. According to United Nations (UN) website, there are 13 United Nations agencies in Nairobi Kenya with a total of 540 accountants. The choice of accountants as a population is because they are the most knowledgeable users. The study units for this study were the junior and senior accountants. The sampling units for the study were drawn from the 13 agencies in the UN team of Kenya. A sample size of 20% of the population was taken as the sample size. This yielded 108 accountants. Random sampling was done. A close ended questionnaire based on a likert scale was used to collect data. Data was analyzed by use of descriptive and inferential statistics. Specifically, frequencies count and regression analysis results were generated using SPSS version 20.

Results: The study concluded that; technological challenges, organization challenges, financial challenges and perceived usefulness challenges significantly influence the rate of IPSAS adoption by UN agencies.

Unique contribution to theory, practice and policy: The study recommended that practitioners in the field of financial management and IPSAS software development should address the technological challenges associated with the adoption of IPSAS accounting. In particular, technical support from trained accountants, adequate ICT infrastructure and provision of training manuals would improve IPSAs adoption.

Keywords: *challenges faced by the UN, producing UN-IPSAS, financial reports.*

1.0 INTRODUCTION

Since time in memorial accounting systems have been undergoing reforms in a bid to perfect in accountability and transparency. For instance, the public sector organizations have used a variety of financial reporting processes, mostly cash-based accounting systems. However, they face challenges caused by a lack of standardized international reporting practices. Many public sector entities are now adopting uniform standards but are still experiencing new challenges. Adoption of uniform standards will enhance comparison of data between states (IPSAS, 2009).

Progressively there has been an increase in the number of governments and intergovernmental organizations using the accrual-basis of accounting in accordance with IPSAS or IPSAS-similar standards to produce financial statements. They consider the information contained in accrual accounting IPSAS financial statements useful, both for accountability and for decision-making purposes. This has led to improved consistency and comparability of financial statements as a result of the detailed requirements and guidance provided in IPSAS standard. Accounting for all assets and liabilities improves internal control and provides more comprehensive information about costs that will better support results-based management (Deloitte and Touch, 2013).

Many countries have already introduced IPSAS or similar standards while more countries have expressed plans to adopt IPSAS in the future. In addition, many supranational organizations including the European Commission, NATO, the Organization for Economic Co-operation and Development (OECD), and the United Nations currently use IPSAS-based financial accounting and reporting or have decided to do so in the near future. For instance, Nigeria is currently in the process of adopting the Cash-basis IPSAS and has plans to implement accrual-based IPSASs across its three tiers of government (federal, state and local) by January 2016 (IPSAS Outlook, 2014; IPSAS, 2009).

Feedback from organizations using accrual accounting based on IPSAS revealed that their previously existing accounting procedures had to undergo major changes to deliver IPSAS-compliant information. Nonetheless, achievement of these changes is dependent on a joint effort by accountants, auditors, and management to identify the starting point for implementing SAP for Public Sector solutions, not neglecting cooperation with the consultants performing the implementation (IPSAS, 2009).

In the past, governments had few qualified accountants in their civil service because of the simplicity of their cash accounting systems. For instance, in 2002 Norway had only one professionally qualified accountant on the staff of its Ministry of Finance. Since time in memorial the UK public sector, especially local government, employ qualified accountants whereby they even have their own professional body GIPFA. As a result, the number of professionally qualified accountants working across the UK central governments increased nearly fourfold from almost 600 in 1989 to 2200 in 2003 (the period over which accrual based accounting was introduced) (Wynne, 2007). In addition, the auditors fees for the UK national Audit office increased by 67% with the introduction of accrual accounting in 2001/02 (NAO, 2002).

IPSAS is developed by the International Public Sector Accounting Standards Board (IPSASB), a private, independent standard setting body under the auspices of the International Federation of Accountants (IFAC). IFAC's International Public Sector Accounting Standards Board (IPSAS

Board) has set itself the task of developing a full set of accruals – based international public sector accounting standards, promoting its standards and ensuring that these are adopted as widely as possible (IPSAS Board,2008b). The Board arranges its meetings in different places around the world, for instance, China, Ghana, Russia, Switzerland and several of the central governments of the largest economies in the world (IPSAS, 2009; Laughlin, 2012).

In summary, IPSAS compliance calls for adherence to all applicable standards. As with private sector frameworks such as IAS, compliance is certified for an organization's or groups entire body of general-purpose financial statements only. In order to be in compliance, an organization must faithfully represent transactions, other events, and conditions in accordance with the requirements set out in IPSAS. During annual audits, auditors must determine that the accounting and reporting practices of the organization have been carried out in accordance with the requirements stated in the pertinent standards within IPSAS (IPSAS, 2009;Christiaens,Reyniers, & Rollé, 2010; Bergmann, 2012).

The United Nations (UN) emerged in 1945 from the devastation of global conflict. Its main aim is to save succeeding generations from the scourge of war. Its mission is to maintain international peace and security and to promote friendly relations between countries. The UN Charter upholds human rights and proposes that states should work together to overcome social, economic, humanitarian and cultural challenges. UN is led by Ban Ki-moon, a former South Korean foreign minister, who took up the post on 1 January 2007 (BBC News, 2011).

The UN comprises 193 member states having South Sudan as the newest member since it joined in July 2011. Membership grew as colonies became independent and the Soviet Union disintegrated. The Vatican and Taiwan remain non-members. Most members have permanent missions at the UN's main headquarters in New York. Potential members are recommended by the Security Council and are admitted by a two-thirds majority vote in the General Assembly. Member nations contribute to the running costs of the UN whereby a country's contribution is assessed on its ability to pay. The US is the top most contributors (BBC News, 2011). The UN system comprises of fourteen independent agencies alongside them many of the organization's own programmes and agencies. The independent agencies include the World Bank, the International Monetary Fund and the World Health Organization. They are linked to the UN by cooperation agreements (BBC News, 2011).

1.2 Problem Statement

Many countries are yet to adopt and implement IPSAs which are set by International Public Sector Accounting Standards Board (IPSAS Board). For example, China, Germany, Italy, Japan and Russia had not implemented IPSAS by the year 2008. (IPSAS Board,2008b) . In December 2007, Mike Hathorn (chair of the IPSAS Board) said that only six governments across the world had actually issued financial statements on the full accrual basis (at the FEE Public Sector meeting, Brussels).The motivation of this study stems from the low adoption and implementation of IPSAS by the public sector.

Various studies have been conducted in line with the adoption and implementation of IPSAS. For instance, Ernst and Young (2010) developed a survey to investigate the adoption of accrual accounting and the difference in adoption of IPSAS the public sector in Europe and identified the cost of accounting reforms as the most common reason governments cite for not adopting accrual

accounting. This posed an interesting contrast to the most common justification given for choosing accrual accounting “to improve cost awareness and efficiency”. UN (2009) sought to find out whether UNICEF should adopt IPSAS. Results showed that most bodies in the UN approved the adoption of IPSAS. Biraud (2010) sought to understand why and how United Nations system organizations had decided to transit to IPSAS, with the main benefits, challenges and difficulties involved. Results revealed that some United Nations system organizations have long been using accrual-based accounting to record certain revenues or expenses while are in their initial stages. There exists a gap in that no study yet has sought to identify the challenges facing UN Nairobi in adoption and implementation of IPSAS. This study seeks to fill this gap.

1.3 Study Objective

To identify the challenges faced by the UN in producing UN-IPSAS compliant financial reports.

2.0 LITERATURE REVIEW

2.1 Theoretical Literature Review

2.1.1 Innovation Diffusion Theory (IDT)

Rogers (1983) used the innovation diffusion theory (IDT) to explain the process of innovation adoption. The IDT theory which was founded on sociology has five different set of variables (including variables for perceived characteristics of innovations and nature of social systems) which have been used to study a variety of innovations since 1960's.

Rogers (1983) identified five general attributes that consistently influenced the adoption of innovations. Relative Advantage: - The degree to which an innovation is perceived as being better than its precursor (Rogers, 1983; Moore & Benbasat, 1991). Compatibility:- The extent to which the innovation is perceived as being in line with values, needs and experiences of perspective adopters (Hernandez and Mazzon, 2006); Complexity:- The degree to which an innovation is perceived as difficult to understand and use (Rogers, 1983). Observability:- The degree to which the results of an innovation are visible to others (Rogers, 1983). Trialability:- The extent to which the innovation can be experienced before its actual adoption (Hernandez and Mazzon, 2006).

With the exception of the complexity construct which has a negative relationship with each of the remaining four constructs namely: Relative Advantage, Compatibility, Observability and Trialability, has a positive relationship with the intention to adopt an innovation. Figure 4 shows variables determining the rate of adoption of innovation.

Moore and Benbasat (1991) reinforcing Tornatzky and Klein argument, explained that the very definition given to relative advantage in the model puts the emphasis on the perception that people have on the innovation itself which is different from the perception someone has on a person actually using the innovation in question.

Thus to Moore and Benbasat , the key to innovation diffusion lies in the positive perception of the status (image) that one is perceive to acquire by using that innovation. For the voluntariness of use construct, Moore and Benbasat reasoned that whether individuals are free or not free to adopt or reject an innovation must be considered. The more free an individual is to adopt or the greater the pressure on an individual to reject an innovation, the higher the odds that these innovation or

technology will be adopted. This theory is relevant to this study since the study is addressing the challenges in adoption and implementation of IPSAS at the UN Nairobi.

2.2 Empirical Literature Review

The study reviewed a research conducted by Nongo (2014). He used qualitative research design to explain the challenges facing IPSAS adoption and implementation in Nigeria. The study used primary data which he obtained from an in-depth-interview on the Roadmap for the Adoption of IPSAS. Results showed that one of the greatest challenges was inadequate information and appropriate communication technology (ICT) to facilitate the program. The study recommended that at the federal level, the introduction of GIFMIS would resolve this issue.

The study also reviewed a research conducted by Biraud (2010). His study sought to understand why and how United Nations system organizations had decided to adopt and transit to IPSAS with reference to the main benefits, challenges and difficulties involved in the entire business process engagement. The study used preliminary desk review, interviews and in-depth analysis. Results showed that the use of accrual-based accounting in public management not only impacts financial matters but also affects regular work practices, from political decision-making to daily operations. More results revealed that some United Nations system organizations have started using accrual-based accounting to record certain revenues or expenses while others are still in their initial stages. The implication is that some are better placed for IPSAS implementation while others are not. The need to incorporate many changes such as the installation of new IT software and changing the entire work practices can lead to many complexities in the form of serious incidental challenges.

The study reviewed a research conducted by Hyndman and Connolly (2005), researchers from Queens University. They studied the cost-benefit analysis of adopting IPSAS in Northern Ireland. Their study used a quantitative research design whereby primary data was collected through interviews. Results showed the challenges hindering the implementation of IPSAS because there was a serious shortage of qualified personnel and the change was pushed on the unprepared work force and this led to an uneven implementation process. Also several Members of the UK parliament complained about the complexity of the Government's financial reporting protocols and procedures. They argued that even members with financial or business experience struggled to understand the pros and cons of the financial information provided. Thirdly, the ministry of finance in the UK recognized that the use of IPSAS can indirectly cause confusion and making parliamentary scrutiny of public spending difficult. The study made two observations: The public sector accounting legislation in many European countries seems to be driven by local business accounting rules, whilst IPSAS maintains international orientation. It was also observed that there were some differences in the interpretation and application of the standards and legislation. Second, many governments are reluctant to embrace change.

The study focused on an explanation given by Poggiolini (2014). She explained the extent of IPSAS adoption and implementation in South Africa. The study used a qualitative research design. The study used primary data obtained after conducting an in-depth-interview. Results showed that entities that failed to properly plan and establish processes for the adoption of accrual-based standards failed to comply with asset recognition and measurement requirements. In addition results revealed that there existed possible risk in identifying the exemptions that affected fair presentation and compliance with IPSAS. This would weaken the ongoing application of certain

standards. The study recommended that lack of segment information could be assumed to affect compliance and fair presentation arguing that reconfiguring and/or renaming the different categories of exemptions using less neutral language, such as voluntary and mandatory exemptions could minimize the potential risk to fair presentation.

The study focused on a research conducted by Hyndman and Connolly (2005), researchers from Queens University. They sought to find out the costs and benefits of adopting accrual accounting in Northern Ireland (NI). Their study used a quantitative research design wherein primary data was collected through in-depth-interviews. Results showed that the costs of implementing accrual accounting are also difficult to estimate irrespective of the fact that they are generally accepted to be substantial.

The study reviewed a research conducted by Diamond (2002). He sought to find out the contribution of multinational institutions in provision of financial support towards accrual accounting to different public sectors in different countries. The study used an explanatory research design. Secondary data was obtained from an IMF working paper. Results showed that this support for accrual accounting has not always been consistent. For instance, frequently upcoming economies have accepted to adopt accrual accounting overlooking a number of important issues. They agree that accrual accounting systems are more comprehensive and provide a wealth of financial information. On the other hand it is important at the same time not to overstate the case. The experience of OECD Countries is that the implementation of accrual accounting is not easy especially with regards to financial constraints.

The study focused on a research conducted by Hyndman and Connolly (2005), researchers from Queens University. They sought to find out the perceived usefulness of adopting accrual accounting in Northern Ireland (NI), a region of the UK. Their study used a quantitative research design whereby primary data was collected through in-depth-interviews. Results showed that there was little evidence that accrual accounting information was extensively used in decisionmaking within the NI public sector. In addition, many interviewees identified the problems of unnecessary complexity and incomprehensibility of their information undermining its potential use.

The study reviewed a research conducted by Mellet (2007). He sought to find out the benefits of adoption of accrual accounting in the UK health service. The study used an in-depth review research design. The international public sector bulletin published in February, 2008 was reviewed. Results showed that there was no evidence that the perceived benefits from the introduction of accrual accounting were realized. Further, the results indicated that no positive impact on decision making was found, that is, accounting measures did not affect rent or buy or retain or dispose decisions. In addition, no evidence was found of the opportunity cost of capital expenditure being recognized as reflected through the measures based on resource accounting as this being a matter for active concern when acquiring or constructing fixed assets. The study concluded that governments which have undertaken to implement accrual accounting should be aware of the likelihood that that any potential benefits may not actually be realized.

3.0 RESEARCH METHODOLOGY

The study used a positivism paradigm since the research instruments were designed in a way that would only allow a rigid answering of questions which are based on a Likert scale. This study used

a mixed research design to achieve the study objective. The mixture included the descriptive and explanatory research designs. The target population was 13 United Nations agencies in Nairobi Kenya with a total of 540 accountants. The study units for this study were the junior and senior accountants. The sampling units for the study were drawn from the 13 agencies in the UN team of Kenya. A sample size of 20% of the population was taken as the sample size. This yielded 108 accountants. Random sampling was done. Primary information was gathered by use of a Likert scale questionnaire. The questionnaires consisted of close ended questions only. The questionnaires were self-administered by the researcher with the help of two well experienced research assistants. The pilot study in this study was pretested on a selected sample, similar to the actual sample that is intended for this research. Data analysis involved the use of quantitative data analysis techniques (descriptive and inferential) and the tool of analysis was SPSS version 20. Descriptive techniques made use of descriptive statistics such as means, frequencies and counts. Binary logistic regression model was used for the inferential statistics.

4.0 RESULTS AND DISCUSSIONS

4.1 Response Rate

The number of questionnaires that were administered was 100. A total of 80 questionnaires were properly filled and returned. This represented an overall successful response rate of 80% as shown on Table 1.

Table 1: Response Rate

Response	Frequency	Percentage
Returned	70	65%
Unreturned	38	35%
Total	108	100%

4.2 Demographic Characteristics

4.2.1 Gender

Table 2 presents the gender of the respondents, which indicates that 68.6 % constituted of male respondents while 31.4% comprised of female respondents. From this conclusion it was noted that majority of the accountants working in the UN agencies in Nairobi, Kenya are male who comprised of 68.6% of the respondents.

Table 2: Gender of respondents

Indicator	Frequency	Percent (%)
Male	48	68.6
Female	22	31.4
Total	70	100.0

4.2.2 Work Period

Figure 2 presents the work period of the accountants working in the UN agencies. Based on the results majority of the respondents have been working with UN for 6-7 years. This explains the high level of validity of the data collected. This also implies that majority of the accountants who filled the questionnaires were the senior accountants.

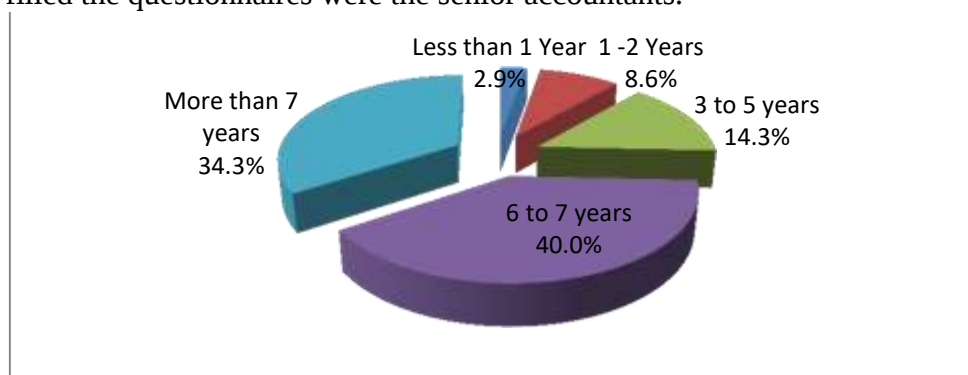


Figure 2: Work Period

4.3 Descriptive Statistics

4.3.1 Technological Challenges in Adoption and Implementation of IPSAS by UN

Table 3 displays results of data analysis regarding the technological challenges on adoption and implementation of IPSAS.

Table 3: Technological Challenges

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Our agency has already fully fledged ICT systems for IPSAS implementation	2.90%	11.40%	14.30%	48.60%	22.90%	3.8	1.03
There exists adequate ICT to drive adoption of IPSAS	0.00%	5.70%	14.30%	60.00%	20.00%	3.9	0.77
Staff have been trained on how to use the new IT systems	11.40 %	14.30%	14.30%	42.90%	17.10%	3.4	1.27
Accountants are competent in computer programming languages necessary for IPSAs implementation	8.60 %	20.00%	20.00%	40.00%	11.40%	3.3	1.17
Accountants have the ability to use computerized techniques presentation which are necessary in implementing IPSAS	11.40%	17.10%	14.30%	45.70%	11.40%	3.3	1.23
IPSAS accrual based system are easy to use compared to the old cash system	11.40%	17.10%	14.30%	42.90%	14.30%	3.3	1.26
IPSAS accrual based system are compatible with other operating systems in the agency	14.30%	37.10%	20.00%	22.90%	5.70%	2.7	1.16

IPSAS accrual based system							
have triability: they can be tested before full implementation	14.30 %	34.30%	20.00%	28.60%	2.90%	2.7	1.13
IPSAS accrual based system							
have observability: its results can be verified before full implementation	14.30 %	31.40%	28.60%	17.10%	8.60%	2.7	1.17
IPSAS accrual based system							
have flexibility: they allow additional of more modules	14.30%	20.00%	14.30%	37.10%	14.30%	3.2	1.32
Average						3.2	1.15

Results indicate that majority of 71.5% of the respondents agreed that their agencies had already fully fledged ICT systems for IPSAS implementation, 80 % of the respondents agreed that there exists adequate ICT to drive adoption of IPSAS, 60 % of the respondents agreed that Staff have been trained on how to use the new IT systems, 51.4 % of the respondents agreed that accountants are competent in computer programming languages necessary for IPSAs implementation, 57.1 % of the respondents agreed that accountants have the ability to use computerized techniques presentation which are necessary in implementing IPSAS, 57.2 % of the respondents agreed that IPSAS accrual based system are easy to use compared to the old cash system, 51.4 % of the respondents disagreed that IPSAS accrual based system are compatible with other operating systems in the agency, 48.6 % of the respondents disagreed that IPSAS accrual based system have triability: they can be tested before full implementation, 45.7 % of the respondents disagreed that IPSAS accrual based system have observability: its results can be verified before full implementation while 51.4 % of the respondents agreed that IPSAS accrual based system have flexibility: they allow additional of more modules. The implies that fully fledged ICT systems and existence of adequate ICT factors acted as positive push factors while compatibility, triability and observability acted as negative pull factors that hindered the adoption of and implementation of IPSAS compliant financial reports. The overall mean score of 3.2 indicates that the level of agreement is ambiguous as there are as many respondents who agreed and disagreed with the statements. This necessitates conducting more tests on the data.

4.3.2 Organizational Challenges in Adoption and Implementation of IPSAS by UN

Table 4 displays results of data analysis regarding the organizational challenges on adoption and implementation of IPSAS.

Table 4: Organizational Challenges

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev

Our Accountants have the relevant skills for the implementation of IPSAS	11.40%	14.30%	14.30%	45.70 %	14.30%	3.4	1.24
Our staff understands financial information formulated using IPSAS.	11.40%	17.10%	14.30%	42.90 %	14.30%	3.3	1.26
Our management has been very committed to the implementation of the IPSAS accrual system	14.30%	34.30%	17.10%	28.60 %	5.70%	2.8	1.19
Our agency has trained and retrained the staff for the purposes of IPSAS implementation	11.40%	17.10%	14.30%	40.00 %	17.10%	3.3	1.28
The management has allocated adequate financial and human resources to the implementation of IPSAS	20.00%	31.40%	17.10%	25.70 %	5.70%	2.7	1.24
The organization culture has been conducive to the implementation of IPSAS	17.10%	34.30%	11.40%	28.60 %	8.60%	2.8	1.29
The organization structure has been conducive to the implementation of IPSAS	8.60%	20.00%	20.00%	40.00 %	11.40%	3.3	1.17
The organization has adopted effective communication channels which have been conducive to the implementation of IPSAS	11.40%	17.10%	14.30%	42.90 %	14.30%	3.3	1.26
Average						3.1	1.24

Results indicate that majority of 60% of the respondents agreed that their accountants have the relevant skills for the implementation of IPSAS, 57.2 % of the respondents agreed that their staff understands financial information formulated using IPSAS, 48.6 % of the respondents disagreed that their management has been very committed to the implementation of the IPSAS accrual system, 57.1 % of the respondents agreed that their agency has trained and retrained the staff for the purposes of IPSAS implementation, 54.1 % of the respondents disagreed that their management has allocated adequate financial and human resources to the implementation of IPSAS, 51.4 % of the respondents disagreed that their organization culture has been conducive to the implementation of IPSAS, 51.4 % of the respondents disagreed that IPSAS accrual based system are compatible with other operating systems in the agency, 51.4 % of the respondents agreed that their organization structure has been conducive to the implementation of IPSAS while 57.2 % of the

respondents agreed that their organization has adopted effective communication channels which have been conducive to the implementation of IPSAS. The overall mean score of 3.1 which means that more respondents were agreeing with the questionnaires statement. Themeanscores for all statements were lower than 3.5 which is the lower cutoff/limit for agreement with statements. This is an indicator of general disagreement with the statements. A further implication is that in the absence of further statistical testing, one can tell organization challenges to IPSAS implementation existed.

4.3.3 Financial Challenges in Adoption and Implementation of IPSAS by UN

Table 5 displays results of data analysis regarding the financial challenges on adoption and implementation of IPSAS.

Table 5: Financial Challenges

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Costs of implementing accrual accounting are difficult to estimate.	8.60%	14.30%	22.90%	37.10%	17.10%	3.4	1.19
Financial Support for accrual accounting has not always been consistent.	5.70 %	17.10%	20.00%	42.90%	14.30%	3.4	1.12
Costs of research into IPSAS has been very high	11.40%	14.30%	17.10%	37.10%	20.00%	3.4	1.29
Costs of training users on IPSAS has been very high	11.40%	17.10%	14.30%	40.00%	17.10%	3.3	1.28
Costs of hardware and software for IPSAS implementation has been very high	5.70%	14.30%	14.30%	42.90%	22.90%	3.6	1.17
Costs of consultants for IPSAS implementation has been very high	5.70%	17.10%	8.60%	54.30%	14.30%	3.5	1.12
The costs of renewing licenses has been very high	11.40%	17.10%	14.30%	42.90%	14.30%	3.3	1.26
The costs of adding more modules and IPSAS maintenance has been very high	8.60%	20.00%	20.00%	34.30%	17.10%	3.3	1.23
Average						3.4	1.21

Results indicate that majority of 54.2% of the respondents agreed that Costs of implementing accrual accounting are difficult to estimate, 57.2 % of the respondents agreed that financial Support for accrual accounting has not always been consistent, 57.1 % of the respondents agreed that costs of research into IPSAS has been very high, 57.1 % of the respondents agreed that costs of training

users on IPSAS has been very high, 65.8 % of the respondents agreed that costs of hardware and software for IPSAS implementation has been very high, 68.6 % of the respondents agreed that costs of consultants for IPSAS implementation has been very high, 57.2 % of the respondents agreed the costs of renewing licenses has been very high while 51.4 % of the respondents agreed that the costs of adding more modules and IPSAS maintenance has been very high. The overall mean score of 3.4 which imply general ambiguity as far as distinction of clear cut agreement and disagreement were concerned.

4.3.4 Perceived Usefulness Challenges in Adoption and Implementation of IPSAS by UN

Table 6 displays results of data analysis regarding the perceived usefulness challenges on adoption and implementation of IPSAS.

Table 6: Perceived Usefulness Challenges

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
IPSAS Accrual accounting information is extensively used in decision making.	20.00%	14.30%	11.40%	37.10%	17.10%	3.2	1.42
IPSAS Accrual accounting information is more useful For identifying costs of goods and services in comparison to traditional methods	5.70%	17.10%	20.00%	37.10%	20.00%	3.5	1.17
There is improved comparability of financial information reported.	11.40%	17.10%	14.30%	42.90%	14.30%	3.3	1.26
IPSAS impacts operating procedures and reporting practices thereby strengthening good governance and relations.	20.00 %	34.30%	14.30%	25.70%	5.70%	2.6	1.24
IPSAS is more useful Evaluation of the entity's performance in comparison to traditional methods	8.60 %	20.00%	20.00%	40.00%	11.40%	3.3	1.17
IPSAS is more useful in Evaluation of effectiveness of product or service delivery in comparison to traditional methods	17.10%	17.10%	17.10%	34.30%	14.30%	3.1	1.35
IPSAS is more useful in Evaluation of efficiency of product or service delivery in comparison to traditional methods	5.70%	20.00%	17.10%	42.90%	14.30%	3.4	1.14
IPSAS is more useful in managing assets and liabilities in comparison to traditional methods	11.40 %	17.10%	14.30%	42.90%	14.30%	3.3	1.26
IPSAS is more useful in Evaluating the entity's cash flow needs in comparison to traditional methods	20.00 %	37.10%	20.00%	22.90%	0.00%	2.5	1.07

IPSAS is more useful in Help in asset acquisition decisions in comparison to traditional methods	11.40%	14.30%	14.30%	42.90%	17.10%	3.4	1.27
Average						3.2	1.23

Results indicate that 54.2% of the respondents agreed that IPSAS Accrual accounting information is extensively used in decision making, 57.1 % of the respondents agreed that IPSAS Accrual accounting information is more useful For identifying costs of goods and services in comparison to traditional methods, 57.2 % of the respondents agreed that there is improved comparability of financial information reported, 54.3 % of the respondents disagreed that IPSAS impacts operating procedures and reporting practices thereby strengthening good governance and relations, 51.4 % of the respondents agreed that IPSAS is more useful Evaluation of the entity's performance in comparison to traditional methods, 48.6 % of the respondents agreed that IPSAS is more useful in Evaluation of effectiveness of product or service delivery in comparison to traditional methods, 57.2 % of the respondents agreed that IPSAS is more useful in evaluation of efficiency of product or service delivery in comparison to traditional methods, 57.2 % of the respondents agreed that IPSAS is more useful in managing assets and liabilities in comparison to traditional methods, 57.1 % of the respondents disagreed that IPSAS is more useful in Evaluating the entity's cash flow needs in comparison to traditional methods while 60% of the respondents agreed that IPSAS is more useful in help in asset acquisition decisions in comparison to traditional methods. It was also noted that all statements yielded mean scores ranging from 2.5 to 3.4 which implies that as many respondents agreed and disagreed with the statements.

5.0 DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

5.1 Discussion

5.1.1 Influence of Technological Challenges on Adoption and Implementation of IPSAS Fully fledged ICT systems for IPSAS implementation have a positive influence on adoption and implementation of IPSAS. Adequate ICT to drive adoption of IPSAS was positive and statistically associated with odds of adoption and implementation of IPSAS. The economic implication of this is that organizations that invest in ICT systems are more motivated to adopt IPSAS. This in line with Rogers's theory of adoption that suggests that putting in place supporting infrastructure plays a significant role in adoption of innovations. This is also noted in Biraud (2010) and Nongo (2014). Staff training, accountant's competence in programming languages, ability to use computers techniques, ease of use of accrual based system and compatibility of accrual based system to other system were positive and statistically associated with odds of adoption and implementation of IPSAS. The economic implication is that organizations that invest in staff training reaped many benefits from that such as improved competence of the accountants, improved ability to use computer techniques and ease of use of accrual based systems. This in line with Rogers's theory of adoption that suggests that training plays a significant role in adoption of innovations. This is also noted in Malahleha (2013). Triability, observability and flexibility of accrual system were positive but not statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that triability, observability and flexibility may not present a significant

technological challenge to implementation of IPSAS complaint financial reports. **5.1.2 Influence of Organizational Challenges on Adoption and Implementation of IPSAS**

Proper understanding of financial information formulated using IPSAS by staff have a positive and statistically associated with odds of adoption and implementation of IPSAS. The economic implication is that proper understanding of financial information formulated using IPSAS by staff plays a significant role in adoption of innovations. This is also noted by Hyndman and Connolly (2005) and Nongo (2014).

Training and retraining the staff for the purposes of IPSAS implementation has a positive and statistically associated with odds of adoption and implementation of IPSAS. The economic implication is that existence of relevant skills plays a significant role in adoption of innovations. This is also noted by Hyndman and Connolly (2005) and Nongo (2014).

Allocation of adequate financial and human resources to the implementation of IPSAS have a positive and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that availability of resources plays a significant role in adoption of innovations. The results are congruent with those in Pelotletse (2014).

Commitment by management to the implementation of the IPSAS accrual system has a positive and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that commitment by management plays a significant role in adoption of innovations. This is noted by Nongo (2014) and Pogiolini (2014).

Effective communication channels have a positive and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that effective communication plays a significant role in adoption of innovations. This is noted by Nongo (2014) and Pogiolini (2014).

Conducive organization structure to the implementation of IPSAS has a positive and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that commitment by management, effective communication and conducive organization structure plays a significant role in adoption of innovations. This is noted by Nongo (2014) and Pogiolini (2014).

Conducive organization culture to the implementation of IPSAS have a positive but not statistically significant with the odds of adoption and implementation of IPSAS. The economic implication is that conducive organization structure may not present a significant organization challenge to implementation of IPSAS complaint financial reports.

5.1.3 Influence of Financial Challenges on Adoption and Implementation of IPSAS

The costs of implementing accrual accounting have a negative and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that high costs of implementation hinder adoption of innovations. This is in line with Deloitte and touch, (2011). Financial Support for accrual accounting has a negative and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that lack of financial support for accrual accounting can hinder adoption of innovations. This is in line with Hyndman and Connolly (2005).

Costs of training users on IPSAS have a negative and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that high costs of training can hinder

adoption of innovations. This is in line with Delloite and touch, (2011), Hyndman and Connolly (2005), Diamond (2002) and Ernst and Young (2010).

Costs of research into IPSAS have a negative and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that high costs of research can hinder adoption of innovations. This is in line with Hyndman and Connolly (2005). Costs of hardware and software for IPSAS implementation have a negative and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that high costs of hardware and software can hinder adoption of innovations. This is in line with Hyndman and Connolly (2005).

Costs of consultants for IPSAS implementation have a negative and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that high costs of consultants can hinder adoption of innovations. This is in line with Diamond (2002) and Ernst and Young (2010). Costs of renewing licenses have a negative and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that high costs of renewing licenses can hinder adoption of innovations. This is in line with Diamond (2002) and Ernst and Young (2010).

Costs of adding more modules and IPSAS maintenance have a negative and statistically significant with odds of adoption and implementation of IPSAS. The economic implication is that high costs of adding more modules can hinder adoption of innovations. This is in line with Diamond (2002) and Ernst and Young (2010).

5.1.4 Influence of Perceived Usefulness Challenges on Adoption and Implementation of IPSAS

Extensive use of IPSAS accrual accounting information in decision making has a positive and statistically significant with odds of adoption and Implementation of IPSAS. The economic implication is that extensive use of IPSAS accrual accounting information would lead to the provision of more meaningful information for decision makers and improve the quality of the financial reporting system. This is in line with Hyndman and Connolly (2005). Improved comparability has a positive and statistically significant with odds of adoption and Implementation of IPSAS. The economic implication is that improved comparability would lead more adoption of innovation. This is in line with Hyndman and Connolly (2005).

Impact of IPSAS on operating procedures has a positive and statistically significant with odds of adoption and Implementation of IPSAS. The economic implication is that increased effectiveness of operating procedures would lead to adoption of innovations. This is in line with Ijeoma and Oghoghomeh (2014). Reporting practices that strengthening good governance and relations have a positive and statistically significant with odds of adoption and Implementation of IPSAS. The economic implication is that better reporting practices would result to adoption of innovations. This is in line with Ijeoma and Oghoghomeh (2014).

Evaluation of the entity's performance in comparison using IPSAS has a positive and statistically significant with odds of adoption and Implementation of IPSAS. The economic implication is that successful and consistent evaluation of an entity's performance would lead to adoption of innovation. This is in line with Ijeoma and Oghoghomeh (2014). Evaluation of efficiency of

product or service delivery using IPSAS has a positive and statistically significant with odds of adoption and Implementation of IPSAS. The economic implication is that successful and consistent evaluation of the efficiency of a product or service would lead to adoption of innovation. This is in line with Mellet (2007).

Managing assets and liabilities using IPSAS have a positive but not statistically significant with adoption and Implementation of IPSAS. The economic implication is that managing assets and liabilities using IPSAS may not present a significant perceived usefulness challenge to implementation of IPSAS compliant financial reports. This is in line with Hepworth (2003). Evaluating the entity's cash flow needs using IPSAS have a positive but not statistically significant with adoption and Implementation of IPSAS. The economic implication is that evaluating the entity's cash flow needs using IPSAS may not present a significant perceived usefulness challenge to implementation of IPSAS compliant financial reports. This is in line with Hepworth (2003).

Use of IPSAS Accrual accounting information for identifying costs of goods and services have a positive but not statistically significant with adoption and Implementation of IPSAS. The economic implication is that use of IPSAS Accrual accounting information for identifying costs of goods and services may not present a significant perceived usefulness challenge to implementation of IPSAS compliant financial reports. This is in line with Hepworth (2003). The study concluded that the introduction of accrual accounting is costly, time consuming and requires a diversion of resources from other activities. It requires a great deal of co-operation from key actors and will need significant changes of substance to the organization, procedures and responsibilities of managers.

5.2 Conclusion

Technological challenges were found to significantly influence the rate of IPSAS adoption by UN agencies. Those agencies which gave high rating to statements such as: - Adequate ICT to drive adoption of IPSAS, Fully fledged ICT systems for IPSAS, Staff training, Accountant's competence in computer programming languages, Ability to use computer techniques, Ease of use of accrual based system, Compatibility of accrual system to other operating systems had significantly higher odds/probabilities of adopting IPSAS compliant financial reports compared to those agencies that gave a low rating.

Organization challenges were found to significantly influence the rate of IPSAS adoption by UN agencies. Those agencies which gave a high rating to statements such as: - relevant accounting skills for IPSAS implementation, Proper understanding of financial information formulated using IPSAS by staff, Training and retraining the staff for the purposes of IPSAS implementation, Allocation of adequate financial and human resources to the implementation of IPSAS, Commitment by management to the implementation of the IPSAS accrual system, Effective communication channels to the implementation of IPSAS and Conducive organization structure to the implementation of IPSAS had significantly higher odds/probabilities of adopting IPSAS compliant financial reports compared to those agencies that gave a low rating.

Financial challenges were found to significantly influence the rate of IPSAS adoption by UN agencies. Those agencies which gave a high rating to statements such as: - The costs of implementing accrual accounting was high, Financial Support for accrual accounting required is

high, costs of training users on IPSAS is high, and the costs of adding more modules and IPSAS maintenance was high had significantly lower odds/probabilities of adopting IPSAS compliant financial reports compared to those agencies that gave a low rating

Perceived usefulness challenges were found to significantly influence the rate of IPSAS adoption by UN agencies. Those agencies which gave a high rating to statements such as ; -the extensive use of IPSAS accrual accounting information in decision making, Improved comparability, Impact of IPSAS on operating procedures and reporting practices thereby strengthening good governance and relations, Evaluation of the entity's performance in comparison using IPSAS , Evaluation of efficiency of product or service delivery using IPSAS and IPSAS help in asset acquisition decisions had significantly higher odds/probabilities of adopting IPSAS compliant financial reports compared to those agencies that gave a low rating.

5.3 Recommendations

The study recommends that practitioners in the field of financial management and IPSAS software development should address the technological challenges associated with the adoption of IPSAS accounting. In particular, technical support from trained accountants, adequate ICT infrastructure and provision of training manuals would improve IPSAS adoption.

5.4 Areas for Further Studies

The study suggests that IPSAS adoption is not limited to UN agencies only. Therefore, future areas of research should focus on other institutions that have adopted IPSAS financial reporting. Future studies should also be designed to test more constructs and even check whether the interaction of the constructs affects adoption.

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