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Determinants of Government Agencies' Readiness in Adopting Accrual Accounting System – A Study in the Local Agencies of Indonesian Ministry of Religious Affairs

Hasan BASRIa

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Human Resource Capacity, Use of Information Technology, Organizational Commitment, Accrual Accounting.

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Abstract

This study intended to examine the effect of the capacity of human resources, the use of information technology and organizational commitment on the readiness of government agencies in the implementation of an accrual based government accounting system. The population in this study was all budget authorities within the Office of Religious Affairs Agencies of Banda Aceh with a total of 80 respondents. Data was collected from questionnaires and analysed by using multiple linear regression. The number of returned and usable questionnaires were 75 copies or 93.75% of the total distributed. The results showed that the capacity of human resources, the use of information technology organizational and commitment simultaneously and partially have a positive effect on the readiness of government agencies in the implementation of accrual based accounting. Further studies are recommended to include interviews with the informants and agencies from different ministries and local governments.

1. Introduction

The application of a cash-based accounting system in government institutions is under criticism since it cannot provide information on the costs associated with the institutions activities. Consequently, allocating resources effectively was very challenging. Accrual accounting therefore has been introduced so that public expenditures can be managed in a more rational way and the quality and quantity of offered public goods can be enhanced. Accrual accounting has also been adopted by the Indonesian local and central government. The law No 1 of 2004 on *Anggaran Pendapatan dan Belanja Negara* (Indonesian National Revenues and Expenditure/APBN) stated that the provisions on the recognition and measurement of accrual based revenue and expenditure is implemented at the latest in 2008. However, the government found it difficult to implement a full accrual-based system, and until 2014, cash accounting was still being adopted by the government when preparing their financial reports (Halim, 2012).

The change of government accounting policy toward accrual accounting will have a positive impact, even if it is a small one. The controversies surrounding this change concern the readiness of the government in implementing it. Some commentators encourage the application of accrual accounting in public organizations. One reason could be that the system can enhance the relevance, neutrality, timeliness, completeness and comparability of financial reports (Hara, 2006). Thus, accrual accounting will improve the integrity and reliability of the reporting information, reduce the opportunity for manipulation inherent in traditional cash accounting systems, and potentially alter the public sector's view of how this service is operated (Mellor, 1996). Additionally, the preparation of accrual financial statements requires organizations to include their assets on the face of the balance sheet, which enables them to manage assets more effectively (Hoque and Moll, 2001).

However, others writers argued that the application of accrual accounting in public sectors has inherent risks and is incompatible with the nature of public sector entities. Barton (2000) argued that accrual accounting cannot be used to value public goods because they are provided on a non-commercial basis and are funded primarily from taxation revenue. Moreover, he explains that commercial accounting principles are irrelevant and unreliable for public heritage facilities because these facilities play a special role in the provision of social benefits to the public at large, maximization of financial value is not an appropriate goal for their management (Barton, 2000). Moreover, accrual

accounting is more costly and complicated to maintain because it requires the bookkeeper to record more transactions (Wynne, 2003).

One of the factors that affect the readiness of the implementation of an accrual-based government accounting system is human resources. Competent and reliable human resources in the accounting department are required to successfully adopt an accrual accounting system (Simanjuntak, 2010). Therefore, the central and local governments must demonstrate serious planning and placement of human resources in the department. In addition, it is also important to have organizational commitment, or commitment of the organizational leader or internal authorities in charge of decision making.

Another supporting factors are information technology infrastructure including adequate hardware and software to implement Accrual Based Government Accounting Standards. The urgency of the implementation of accrual based accounting requires identification of factors influencing the readiness of government agencies in its implementation so that the each government agency can put maximum efforts.

In a previous study, Ardiansyah (2012) documented that there was positive impact from providing quality personnel in human resources and communications toward the readiness of the government in the implementation of accrual-based accounting. Therefore, this study also attempts to discover if human resources also influences the readiness of government agencies within different organizations. Herlina's study (2013) also posed similar conclusions that the information, behaviour and skill level influences the readiness of local governments in the implementation of accrual-based accounting. This study is an extension of a previous study by Rahmalia (2013). While the previous study looked at - revenue and expenditure of local government budget, this study looks at working units in charge of national revenue and expenditure budget (APBN) at the Office of Religion Affairs of Banda Aceh. This is one of the vertical offices with many working units in Banda Aceh, 22 units to be exact. Additionally, this study is different from previous study as it was carried out in government instutions with lack of human resources with an accounting background.

The purpose of this article is to examine if the human resource capacity, the use of information technology, and the organizational commitment have influences, both simultaneously and partially, on the readiness of government agencies in the implementation of accrual based government accounting system at the working units of the Office of Religious Affairs of Banda Aceh.

This paper begins by discussing how accrual based accounting is applied. The second part reviews literature on accrual based government accounting system, human resource capacity, use of information technology, and organizational commitment. The third part discusses research methods used in this study. The fourth part discusses the findings and the last part provides some conclusions and suggestions based on the results of this research.

2. Literature Review

2.1 Accrual Based Government Accounting System

In New Public Management reform (NPM reform), accounting plays a crucial role in the fulfilment of its objectives. The reform emphasizes the displacement of traditional administrations of public services with managerial emphasis that can be identified as a result results-orientation, a shift to quantification, incentives for managers and a "voice" for the citizens as consumer (Hood, 1995). In this reform, accounting has been regarded as a major element (Hood, 1995) by providing sufficient information for process reform e.g. for further a more business like approaches that is adopted in public sectors.

The history of accrual accounting in the public sector began in Australia and New Zealand at the end of the 1980s (Mahat and Ali, 2014). Over the ensuing years, accrual accounting adoption has become a primary agenda of public sector reform both in developed and developing countries. The Indonesian local government accounting reform is a national agenda with a single implementation model: top-down, radical, and coercive. In the last 15 years, the government has initiated significant change in Indonesian public sector accounting. The enactment of Indonesian Government Regulation (GR) No. 23 (2005) regarding the financial management of *Badan Layanan Umum* (or Public Service Agency/PSA) has become a new millstone in the Indonesian public sector accounting. In this case, the Indonesia government introduced a new form of public sector institution called *Badan Layanan Umum* (PSA) which are independent and adopted certain business concept of private sectors. The transformation of traditional public sector to PSA began many years ago and included hospitals, universities, local government units, etc.

The Indonesian government accounting system is created based on Government Accounting Standards (Ind. Abbr. SAP). SAP consists of accounting principles applied in the development and presentation of government financial reports. Thus, SAP is a requirement which has a legal standing in the effort to improve the quality of financial reporting in Indonesia. The mandate from PP No 71 of 2010 stated that accrual based SAP

should be implemented by 2015 at the latest.

Accrual based accounting within the government means that the reporting of revenues and expenditures of the government should be performed on an accrual basis, where revenues, assets, and equities are recognized based on the emergence of rights and obligation; not based only on the incoming and the outgoing cash flow. In practice, however, it is not easy for the government to implement fully-accrual based accounting. It can be associated with the unreadiness and lack of cordination amongs various units within the Indonesian governmenal institutions, particularly those in charge in preparing the government financial reports.

Halim and Kusufi (2012:53) argue that accrual bases are able to meet the reporting purposes which cannot be fullfilled by cash based reporting. The purposes of this reporting are for managerial and supervisory purposes. According to KSAP (2006:1) in accounting discourse, at the conceptual level, accrual based accounting is believed to yield more accountable and open information compared to cash based accounting. Accrual based accounting is more suited to operations dealing with public service expenditures. In the performance measurement, accrual based information provides accurate information on the use of economic resources. Therefore, accrual based accounting is one of the supporting infrastructures required for the transparency and accountability of the government.

2.2 Human Resource Capacity

Indriasari and Nahartyo (2008), in Fauzan (2013:5) stated that human resource capacity is the capability of a person or an individual, an organization, or a system to perform its functions and authorities to achieve the goals efficiently. There are two important elements in the evaluation of human resource capacity namely level of responsibility and competency. While The level responsibility of a staff can be seen from the job description which is the basis a good task performance, the competency of a staff is seen from his education background, prevously-joined training, the skill shown in performing his tasks. In the effort of its full implementation by 2015, the government applied a variety of strategies. According to implementation preconditions, there are two basic conditions, necessary condition and sufficient condition. Necessary condition refers to a precondition required in order that a condition can be met. Then, the goernment can develop so that this condition can be changed to sufficient condition. Within the necessary condition in which commitment, human resource capacity, and maintenance budget are included.

Another recent study conducted by Atan and Yahya (2015) in Malaysian government context uncovered that employee behaviour influences readiness for accural accounting adoption in an organization. Their study also found no relation between demographic factors of job position and length of services with readiness for change.

2.3 Use of Information Technology

Information technology is general term to explain any technology that helps humans in developing, changing, saving, dan communicating information (William and Sawyer, in Haryanto, 2012). Additional preconditions to change a condition to sufficient condition are accounting policy, procedures and technology. The development of accrual based accounting policy documents is needed to accommodate SAP. In the spending of APBN in previous years, every working unit was briefed and trained how to use computer applications which facilitate the management and reporting of APBN spending. As the system changes, changes in the use of applications also follow.

In this case, the government as the user of these applications should always have the understanding and should be up todate with changes and innovations within Ministry of Finance as the application provider. All applications, budget development, bookkeeping, and finance reporting applications, should be monitored for their innovations so that the expected accrual based finace reporting can be adequtely presented with transparency and accountability principles.

2.4 Organizational Commitment

According to Mitchell (1992), in Fauzan (2013:7), organizational commitment is a value orientation toward performance showing that individuals are concerned about their job, job that offers them the status and the meaning of life. Organizational commitment also refers to the behaviour tendency of personnels to maintain their position within the organization. Organizational commitment is as a sense of identification (belief in the values of organization), a sense of involvement (willingness to put the best effort for the interest of the organization), and loyalty (commitment to remain a member of the organization) which are stated and pledged by the staff to their organization (Steers, 1985,in Fauzan, 2013).

The implementation of accrual based accounting in the process of financial management and reporting of the government of Indonesia is essentially new. This can be observed by keeping up with the development of the information on the process itself and by giving full support to the budget authirities within work scope to obtoain information on various

activities which facilitate the implementation of accrual based accounting. Without strong and sound organizational commitment it is difficult to achieve the desired change of a system.

2.5 The Readiness of Government Agencies in the Implementation of Government Accrual Based Accounting System

Armenakiset et.al (1993) defined readiness as a cognitive sign of the behaviour of rejection or support toward the change. Resistance to the changes is also observed. However, because of the commitment and obligation to implement this accrual based accounting, all efforts have been made. This is indicated by the involvement of the staff in accrual accounting implementation campaign, education and training conducted in 2015. For the implementation of accrual based accounting at both central and local governments it has to be anticipated with a number of preparations, both from the internal and the external of the organization. In line with the main goal of the implementation of accrual based accounting which is to come up with a more transparent and accountable reporting, all government agencies, both those responsible for the APBN and the Local Revenues and Expenditure (APBD) have to be ready with all kind of possible changes and innovations. One of the efforts made for the working unit managing the budget is to follow the development of information and regulations issued by the Ministry of Finance.

Based on above discussion, following are the hyphotesis that tested in this study:

Ha1: Human resource capacity, use of information technology and organizational commitment affect the readiness of government agencies in the implementation of accrual based accounting system of the government

Ha2: Human resource capacity affect the readiness of government agencies in the implementation of accrual based accounting system of the government.

Ha3: Use of information technology affect the readiness of government agencies in the implementation of accrual based accounting system of the government.

Ha4: Organizational commitment affect the readiness of government agencies in the implementation of accrual based accounting system of the government.

3. Material and Methods

This is a quantitative study that tested hypotheses to define the existence of causality

relations between the variables. The timeframe of this study is cross-sectional. This study is a census by nature as the entire population is made the units of analysis. The data used are primary data obtained through questionnaire responses. Respondents in this study include all budget authorities at the Office of Religious Affairs of Banda Aceh with a total of 22 working units as units of analysis from 80 respondents consisting of Budget Authorities, SPM Signatory Officials, Commitment Making Officials, Treasurer, and Budget Management Staff.

Tabel.1
Definition and measurement of variables

Variabel	Indicators	Type of scale
Readiness for accrual adoption (Y)	 The adoption of Government Accounting Standard No.71 (2010) Vision and Mission of agencies Supporting Infrastructures 	Interval
Human resource capacity (X1)	 Number of staffs with accounting educational background Clear Job Description and position Frequences of traning 	Interval
The use of Technology Information (X ₂)	 The use of software and hardware The availability of internet access Computerized accounting system The update of software and hardware 	Interval
Organizational Commitment (X ₃)	 Commitment to adopt accrual accounting Accuracy and reability of financial reports 	Interval

For quantitative data analysis, this study employs Multivariate Linear Regression Analysis formulated as follows

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where Y is the readiness of government agencies in the implementation of accrual based accounting system of the government, α is constant, β_1 β_3 is coefficients of regression

direction, X1 is human resource capacity, X2 is use of information technology, X3 is organizational commitment, and ϵ is the épsilon (error terms).

4. Results

Out of 80 copies of questionnaires distributed in this study 75 (93.7%) were returned. All returned questionnaires were eligible to be used in the data processing.

4.1 Results of Hypothesis Examinations

The influence of human resource capacity, use of information technology, and organizational commitment on the readiness of government agencies in the implementation of accrual based accounting system

Simultaneous examination was performed to find out if there is simultaneous influence of independent variables on the dependent variables which was determined based on the hypothesis examination design. Determining coefficient is essentially intended to calculate the percentage of dependent variable variation which is explicable by independent variable variation. The value of determining coefficient is seen from the value of R Square, as shown in the table below.

Table.2
Results of determining coefficient

Mod el	R	R Square	Adjust ed R Squar e	Std. Error of the Estimate
1	.603a	.363	.336	3.952

Source: processed primary data (2015)

The table above shows the value of R Square of .363 which means that the inter-variable relation in this study is medium. Thus, 36.3% variable change of the readiness of the government agencies in implementing the accrual based accounting system is explicable by the three independent variables, human resource capacity, use of information technology, and organizational commitment, while the remaining 63.7% is explicable by other variables not included in this study. (H_a1 accepted).

Hypothesis examination is performed to test and analyse the formulated hypotheses through regression. The hypothesis examination was performed based on the designed

hypotheses. The table below shows the result of the hypothesis examination.

Table.3
Results of regression test

	Unstandardized		Standardized		
Model	Coefficients		Coefficients	T	Sig.
	В	Std. Error	Beta		
1 (Constant)	5,426	1,559		3,481	,001
Human					
Resource	,342	,082	,451	4,167	,000
Capacity					
Use of					
Information	,158	,294	,116	,537	,013
Technology					
Commitment	,177	,281	,132	,630	,030

Source: Processed primary data (2015)

The following multivariate regression equation is based on the computer output using SPSS from *coefficients*^a values above.

$$Y = 5,426+0,342X_1+0,158X_2+0,177X_3$$

The table above shows that the constant value (α) is 5.426. This value indicates that if the human resource capacity, use of information technology, and organizational commitment were considered constant, the value of the readiness of the government agencies to implement accrual based accounting at the Office of Religious Affairs of Banda Aceh is 5.426.

4.2 Discussions

The influence of human resource capacity on the readiness of government agencies in the implementation accrual based accounting system

The result of hypothesis test shows human resource capacity at the working units of the Office of Religious Affairs of Banda Aceh has the positive influence on the readiness of government agencies in the implementation of accrual based accounting system. This result explains that the human resource capacity which is medium on the average is able to improve the readiness of government agencies in the implementation of accrual based accounting system with a human resource capacity coefficient of .342, which means that every 100% increase of human resource capacity raises the value of the readiness of

government agencies in the implementation of accrual based accounting system as much as 34.2%. (H_a2 accepted).

Although the majority of the respondents (9.7%) do not have accounting background, the experience, training and coaching that have been acquired by the budget managers as the human resource at the Office of Religious Affairs of Banda Aceh have given positive influence on their readiness for the implementation of accrual based accounting system. This finding is in line with the conclusion of Ardiansyah (2012) that human resource capacity positively influences the readiness of government agencies in the implementation of accrual based accounting system. Herlina's study (2013) also posed similar suggestion that information, behaviour and human resource capacity influence the readiness of the local government of Nias Selatan in implementing accrual based accounting system.

The Influence of use of information technology on the readiness of government agencies in the implementation of accrual based accounting system

Test results show that the use of information technology has positive influence on the readiness of government agencies in the implementation of accrual based accounting system. This finding indicates that the value of use of information technology at the working units of the Office of Religious Affairs of Banda Aceh is high on the average in increasing the readiness of government agencies in the implementation of accrual based accounting system with a use of information technology regression coefficient of 0.158, which means that every increase of 100% of use of technology increases the readiness of government agencies in in the implementation of accrual based accounting system as much as 15.8%. (Ha3 accepted).

This finding is resonant with Arliana (2011) who suggested that the following factors supports for the implementation of accrual based accounting: communication, human resource (human resource and technology), attitude/disposition, and structure of bureaucracy. Rahmalia (2013) used human resource, organizational commitment and information technology as indicators and concluded Local Staffing Office and Education and Training Office of Palembang is ready to implement Government Regulation No 71 of 2010 on the full accrual based government accounting standards. Similarly, Setiawatis' study (2013) shows that human resource capacity, infrastructure, and information system

constitute important elements to influence accrual based accounting implementation at the local government of Jember.

This findings, however, differ from that of Kusuma's study (2013) which states that the level of staff's education, the quality of information technology, the support from consultants, experience, the leader's education background, and the size of working units do not influence accrual based accounting implementation.

The influence of organizational commitment on the readiness of government agencies in the implementation of accrual based accounting

Test results show that organizational commitment has positive influence on the readiness of the government agencies in the implementation of accrual based accounting system. This means that this hypothesis is accepted. This finding suggests that the level of organizational commitment at the Office of Religious Affairs of Banda Aceh is high on the average in increasing the readiness of government agencies in the implementation of accrual based accounting system with the organizational commitment regression coefficient of 0.177, which means that every increase of 100% of the organizational commitment increases the readiness of government agencies in the implementation of accrual based accounting system by 17.7%. (H_a4 accepted).

This finding is similar to the result of Putra and Aryanto's findings (2015) which highlighted that organizational commitment variable have positive influence on the readiness to implement accrual based government accounting system at the District of Badung, Bali.Similar result is also shown in Purnama's research (2015) which mentioned that organizational commitment as a measurement parameter of the readiness of the local government of Jember in the implementation of accrual based accounting system has a positive influence and it is Signiant.

This result differs from the finding of Ardiansyah (2012) which showed that there was no significant influence of organizational commitment variable on the readiness of the implementation of accrual based government accounting system. It was explained that organizational commitment was going to have the influence when accrual based government accounting system is implemented in budget year of 2015.

5. Conclusions

Based on the data analysis performed, it can be concluded that human resource capacity, use of information technology, and organizational commitment influence the readiness of the implementation of accrual based government accounting system at the Office of Religious Affairs of Banda Aceh, simultaneously and partially. Because of limited human resources with accounting education background at the government agencies, regular training and coaching remain important, so that the budget authorities at the Office of Religious Affairs have the understanding and capability to make the best use of accrual based government accounting system, and eventually inform decision making.

For further research, it is recommended that larger population is used, not only at the Office of Religious Affairs of Banda Aceh but also at offices at all districts and towns within the province of Aceh. Also, in addition to questionnaires, interviews with respondents are recommended so that stronger and more accurate data are acquired to support the result of the study. Other variables are also suggested to be used to find out their influences on the readiness of government agencies to implement the accrual based accounting system.

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