

The Shift from Cash to Accrual Budgeting in the Malaysian Public Sector

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Abstract

Purpose: This qualitative study mainly aims to examine the awareness of budget preparers on accrual-based budgeting in the Malaysian Public sector and their perception of its challenges. Specifically, the objectives of this paper are twofold. Firstly, to provide a critical review of the literature on the accrual-based budgeting. Secondly, to examine the awareness of budget preparers of the key concepts of accrual-based budgeting and its challenges to successfully implement accrual-based budgeting in Malaysia.

Design/Methodology/Approach: This study employs face-to-face and semi-structured interviews conducted with six (6) budget preparers who have been carefully identified and selected within the public sector in Malaysia.

Findings: Our results indicate that there is a high level of awareness of accrual-based budgeting among budget preparers, but this is not the case with other employees who do not have hands-on practice in accounting. Our findings also reveal that knowledge and understanding, upper management enforcement and aggressive promotion is important in determining awareness of accrual budgeting. A further examination of implementation challenges reveals that understanding, cost increment, resistance to change, information and training are the main concerns in implementing accrual-based budgeting. Our results are very similar to studies in other countries.

This article is part of a research on Modelling Budget Preparers' Awareness on Accrual-Based Budgeting in the Malaysian Public Sector, supported by the Accountant General's Department of Malaysia through *Geran Penyelidikan Perakaunan dan Kewangan Sektor Awam Bil. 1 Tahun 2021* (JANM.IPNCPD.100-3/3/2 Jld. 2(6)).

Practical Implications: This study sheds light on awareness of the concept of accrual-based budgeting among budget preparers in the Malaysian public sector and has certain implications pertaining to policy-making.

Originality/Value: Our study is among the first to provide an in-depth analysis of accrual-based budgeting in the Malaysian setting. The findings of this study are expected to provide information to regulators and standard setters on the awareness and the implementation issue of accrual-based budgeting.

Keywords: Accrual-based budgeting, public sector, qualitative, awareness, challenges

1.0 Introduction

A public sector reform trend in Malaysia has brought to light the necessity for the government to adopt aspects of accrual accounting as the basis of its budgeting and reporting. There is no evidence to indicate that this trend is reversing. Similar to other governments, the Malaysia government also plans to move from cash accounting towards accrual accounting in their budgeting reporting. Proponents of accrual accounting argue that accrual-based budgeting (at the national level) provides better information and increases government accountability. On the other hand, at the organisation level accrual-based financial statements provide better measures of organisational efficiency and effectiveness. At the same time, opponents contend that implementation and operation are expensive and more complex to understand. Lessons regarding the implementation of accrual accounting have been identified from the experience of developed countries (Athukorala & Reid, 2003). Despite the noticeable benefits, approximately only a quarter of OECD countries prepare their annual budgets on an accrual basis. The vast majority of countries actually prepare accrual financial statements using cash appropriations for their budgets (OECD/IFAC, 2017).

The transition from cash accounting to accrual accounting in public sector organisations does not only remain under scrutiny, but is also seen as controversial, particularly in respect to public budgeting. For instance, among OECD member countries there appears to be a growing consensus concerning the benefits of adopting accrual accounting in the public sector, despite the apparent lack of consensus regarding the adoption of accrual budgeting (Blondal, 2004). Accordingly, accrual-based budgeting, which would be significantly affected by accrual accounting, is also under the review of various agencies or organisations in the public sector. The impact of accrual-based budgeting is significant, similar to the impact of accrual accounting. Initially, accrual accounting was customised for private enterprises to generate income. Revenues and costs are matched to yield timely financial result (profit or loss), which may indicate the efficiency of a private entity. Conversely, the government raises tax revenues to be spent on public expenditure. This expenditure is not matched to revenue, but must be approved by legislation that enables government spending for specific purposes. The aim is

not greatly inclined towards profit or loss, but rather the social outcome of public expenditure. Nevertheless, governments, particularly those in developed countries, have taken several initiatives to reform their accounting system, not only in terms of accounting practices, but also budgeting, consolidation, accounting standard setting and recently, external audit practices. The motivation for the writing of this paper has arisen from various issues. Firstly, the inability of past accounting research to reflect the understanding of budget preparers on key issues revolving around accrual-based budgeting in Malaysia. There are few studies on accrual accounting, whereas much less focus has been given to accrual-based budgeting. Secondly, the status of accrual-based budgeting in other countries, which is in various stages of implementation. For example, France applies accrual-based financial reports, but has not revealed any intention to adopt accrual budgeting. The United Kingdom in the initial stage implemented accrual accounting and reporting only for its executive agencies and subsequently has proceeded to adopt accrual accounting and budgeting for central government. Australia introduced annual accrual reporting and several years later decided to adopt accrual budgeting. New Zealand, on the other hand, introduced accrual reporting and budgeting at the same time (Khan & Mayes, 2009). The main concern here is “Will Malaysia implement both accrual accounting and budgeting or decide to implement accrual accounting while still maintaining cash appropriations in the basis of its budgeting?”

Although many budgetary reforms taking place in developed countries have been successful, the same cannot be said for developing countries. Developing countries have not been able to simply adopt the format used by developed countries for the reason that the process could become disruptive and chaotic (Allen, 2009). Thus, the adoption of budgetary reform should be developed based on each country's realities (Bale & Dale, 1998).

On May 11th 2011, the Prime Minister of Malaysia officiated the implementation of accrual accounting with effect from Fiscal Year 2015, followed by the issuance of the Malaysian Public Sector Accounting Standards (MPSAS) by the Accountant General's Department (AGD). The implementation of accrual-based MPSAS has been strongly encouraged in order to increase transparency and accountability of the Malaysian public sector (Accountant General Department, 2013; Mahadi, Noordin, Mail, & Sariman, 2014; Pasukan Pelaksanaan Perakaunan Akruan [PPPA], 2013). All federal ministries had been scheduled to move to accrual accounting in 2015, with state government to follow suit. Nevertheless, full adoption of accrual accounting has not been achieved as yet due to several factors such as postponements, delays and transitions. Among additional factors that should be considered are the need to amend the Financial Procedures Act 1957 and other relevant legislation in order to provide an enabling environment for the move to accrual-based accounting. At present, accrual implementation processes are also still ongoing at the state government, local government (city councils, municipal councils and district councils), statutory bodies and federal levels of government agencies (Mohd Ali, Abdullah, Ab Majid, Basri, & Noor Minhad, 2020). Despite facing obstacles and challenges (such as postponements and delays) during the implementation of accrual accounting in the public sector, it is quite clear that the research on accrual-based budgeting would be the next step forward. However, the government may

decide to carry out an analysis as the first step before embarking on the more complex task of introducing accrual budgeting. It is an established fact that two differing systems, i.e. accrual accounting and cash budgeting, are inadvisable because of incompatibility issues and conflicting goals between the two reportings (Diamond, 2006; Monteiro & Gomes, 2013). Without change in the budgeting regime, a move to accrual accounting would fail to foster the necessary change in culture and incentives and, in effect, accrual accounting would only produce limited benefits (Khan & Mayes, 2009). In response to such calls, this study focuses on the understanding of budget preparers (accountants and non-accountants) regarding accrual-based budgeting concepts and issues. This research mainly aims to increase understanding of the level of awareness of budget preparers in the public sector of Malaysia pertaining to accrual-based budgeting.

Adoption of an accrual accounting system in preparing budgets for the public sector requires an accounting system that records economic events at the time of their occurrence, instead of instances when cash is collected or disbursed. Therefore, highly supported human resources and an improved environment are necessary to ensure that accounting information for budgets is complete, timely and accurate. Despite the importance of this type of budgeting system, there is a significantly lack of studies on the adoption of accrual-based budgeting. Thus, the motivation exists of a need to investigate awareness of accrual-based budgeting and whether efficient human resources, a supportive environment and a positive attitude influence such awareness. It is hoped that the study may answer the question of the following issue: "Are Malaysian public sector budget preparers aware of budgeting based on accrual accounting?"

In the case of Malaysia, lessons regarding accrual-based accounting may be extracted from the literature of Nik Wan, 2005; Saleh & Pendlebury, 2006; Hasan & Yeow, 2012; Mahat & Ali, 2012; Ahmad, Ahmad, Mazlan & Pangat, 2013; Hasan, Saleh, & Isa, 2013; Ahmad, Ahmad & Mohamed, 2014; Azmi & Mohamed, 2014; Mahadi et al., 2014; Salleh, Ab Aziz & Bakar, 2014; Ahmad, Mazlan, Ahmad & Pangat, 2015; Ahmad, 2016; Ismail, Siraj & Baharim, 2018; and Yusof & Jaafar, 2018. However, to the best of our knowledge, there has never been any study conducted from the perspective of budget preparers on the awareness and the implementation of accrual-based budgeting in Malaysia. This lack of study leads to our research questions:

Research Question 1: Are budget preparers aware of the accrual-based budgeting? What are the factors that could influence awareness of accrual-based budgeting?

Research Question 2: What are the challenges that could be faced by the Malaysian public sector in the implementation of accrual-based budgeting?

The objectives of this paper are twofold. The primary objective provides a critical review of literature pertaining to accrual-based budgeting. The second objective, which is the core research of this paper, is to examine awareness of budget preparers regarding key concepts of accrual-based budgeting, such as the advantages, disadvantages, challenges and

prerequisites of successful implementation of accrual-based budgeting in Malaysia. Hence, this research sheds light on awareness of the concept of accrual-based budgeting among budget preparers in the Malaysian public sector.

This study employs face-to-face and semi-structured interviews conducted with six (6) budget preparers who have been carefully identified and selected from the public sector in Malaysia. Our results indicate that there is a high level of awareness of accrual-based budgeting among budget preparers, but this is not the case with other employees who do not have hands-on practice in accounting. Our findings have also revealed that knowledge and understanding, top management enforcement and aggressive promotion is important in determining awareness of accrual budgeting. A further examination of implementation challenges reveals that understanding, cost increment, resistance to change, information and training are the main concerns in implementing accrual-based budgeting. Our results are very similar to studies in other countries.

The remaining part of the paper proceeds as follows. Section 2 reviews studies on the advantages and disadvantages of accrual-based budgeting, its implementation and challenges. Section 3 outlines the research method. Section 4 discusses findings and results. Section 5 contains concluding comments.

2.0 Literature Review

2.1 Accrual accounting, accrual-based budgeting and reporting

In this sub-section, fundamental concepts of accrual accounting, accrual-based budgeting and reporting will be explored. In layman's terms, cash accounting records receipts when cash is received or banked and payments when cash is paid, whereas accrual accounting recognises events and transactions when they are incurred, regardless of whether cash is exchanged (Athukorala & Reid, 2003). The move to accrual accounting is taken by countries to improve performance and financial management for coordination and control, correctly understand programme costs (attribute costs to appropriate time periods and events, visibility of long term effects), expand and improve information for resource allocation, improve transparency, compare with the public sector, improve quality and consistency in financial reporting, facilitate improvements in asset and cash management and also reduce opportunities of fraud and corruption (Athukorala & Reid, 2003; Carlin, 2004; Guthrie, 1998; Jagalla, Becker & Weber, 2011; Mellor, 1996).

Although the goals of moving into accrual accounting are similar between countries, however their respective design and implementation of the system differ. The International Organisation of Supreme Audit Institutions (INTOSAI) has classified four types of financial reporting systems in the public sector: full cash accounting, modified cash accounting, modified accrual accounting and full accrual accounting. Cash and full accrual accounting basically represent two end points on a spectrum of possible accounting and financial reporting bases

(Van der Hoek, 2005). There are various adaptations or degrees of accrual implementation by governments. In the implementation of accrual accounting, most countries require the preparation of at least four reports i.e. an operating statement reflecting revenues and expenses, a statement of assets and liabilities of the entity, a cash flow statement related to operating, investment and financing activities, and a statement presenting additional information on a disaggregated basis (detailed management reports on segments of operations) (Barton, 2005a; Van der Hoek, 2005). However, for countries that implement cash accounting, the only report issued is the Cash Flow Statement and the only asset reported is the cash balance. Alternatively, countries which implement partial accrual accounting prepare two statements: cash flow statement and a summary of external transactions (both for cash and credit) (Barton, 2005a).

Accrual-based budget is a budget prepared based on accrual accounting concepts. Accrual-based budgeting is a part of a more comprehensive financial management and management accounting reforms in the public sector, and is an instrument and technique to assist in the decision making of an organisation (Jagalla et al., 2011). At the aggregate level, accrual-based budgeting is expected to provide for better control by parliament, increased compliance and reporting discipline (Mellor, 1996), improve the management of public capital, provide better creditor information, provide information about sustainability of fiscal policies, provide a stronger basis for government accountability, provide a better measure of the effects of government policies on aggregate economic demand and also for intergenerational fairness (Athukorala & Reid, 2003; Jagalla et al., 2011; Robinson, 1998). In other words, accrual-based budgeting could answer questions such as: how are changes in the structure of government spending likely to affect the economy overall, in the short-, medium- and long-term? To what extent has the government delivered on its stated objectives? Are tax reductions sustainable in the long-term? (Athukorala & Reid, 2003).

The public observe the activities of the government and its agencies by viewing budgets, forecasts, appropriations and reports. Nevertheless, governments that have successfully implemented accrual accounting may not use the same bases for budgets, forecasts, appropriations or reports. For example, within government budgets may be prepared on a modified accrual accounting basis, appropriations may be made on a cash basis, while reports may be presented on an accrual basis. These circumstances occur due to different challenges faced by different countries such as a hostile environment towards successful reform, capacity constraints, lack of resources, limited infrastructure and other issues (Athukorala & Reid, 2003). After briefly explaining the concepts of accrual accounting, accrual-based budgeting and reporting, the next section will further investigate the benefits and disadvantages brought about by accrual-based budgeting.

2.2 Accrual-based budgeting - is it truly beneficial?

The term 'accrual budgeting' is defined by many as the extent to which accrual accounting records and measures are used in the budgeting process (Monteiro & Gomes, 2013). Accrual

budgeting entails planning that includes revenues and expenses in the budget of the year in which the underlying economic events are expected to occur (including all projected non-cash transactions), not necessarily in the year in which the related cash is expected to be received or paid, thus providing full resource implications on planned activities (Khan & Mayes, 2009).

Accrual-based budgeting is a type of budgeting which plans, controls and measures public expenditure in terms of accrual accounting (Likierman, 2000; Robinson, 2009). A transaction is accounted in the time period when activity causing the transaction takes place. The examples of such events are depreciation, provisions, account payable, arrears, non-monetary nature expenses, revaluation, contingencies, pension entitlements, financial instruments (Khan, 2013). In contrast, cash-based budgeting is an approach where a government would recognise transactions when the cash is received or paid out, which is often different than when the event actually happens. This is the current practice among public sector agencies, departments and organisations in Malaysia.

In the private sector, budgets are targets rather than plans, in the sense that budgets reflect that which the organisation hopes to achieve. Accrual budgeting acts as a decision tool for managers and as a way to measure results (Barton, 2005b; Likierman, 2000; Monteiro & Gomes, 2013; Robinson, 2009; Salinas, 2002; Van der Hoek, 2005). This type of budgeting could improve public sector financial management and performance while at the same time enhancing transparency and accountability (Salinas, 2002). Moreover, accrual-based budgeting moves away from the focus on limited indicators of fiscal policy toward multiple indicators (e.g. operating balance, cash surplus/deficit and net worth), which allows flexibility to use indicators that are relevant (Khan, 2013). The move to accrual-based budgeting effectively changes the role of budgeting from public expenditure authorisation and a financial control tool to a planning and management tool (Monteiro & Gomes, 2013). The International Monetary Fund also considers the accrual basis superior and more comprehensive because all resource inflows and outflows are recorded, including internal transactions, in-kind transactions and other economic flows, which eventually allow the integration of flows with changes in the statement of financial position (Athukorala & Reid, 2003). In fact, accrual budgeting is considered as being among the most prominent reforms on the budget agenda (Schick, 2007).

It has been suggested that the moving of financial reporting to accruals has increased transparency regarding cost of public services (e.g. pension cost, loans and guarantee programs, heritage assets, military assets, infrastructure assets) and improving information on costs and liabilities for decision making (Department of Treasury and Finance, 2003; Khan, 2013; Monteiro & Gomes, 2013; OECD/IFAC, 2017). Increased transparency, on the other hand, will improve public spending and accountability of executive government (Athukorala & Reid, 2003; Department of Treasury and Finance, 2003; Monteiro & Gomes, 2013). More complete estimates could be made by implementing accrual-based budgeting. Future contingencies, which have not been accounted for by cash budgeting will be accounted for in accrual-based budgeting (Blondal, 2004; Monteiro & Gomes, 2013).

Accrual-based budgeting corresponds with the GAAP used in financial reporting, thereby allowing comparison of budget and actual information prepared on a consistent basis (Monteiro & Gomes, 2013). In addition, accrual-based budgeting is said to be more comparable, consistent and offer more accurate comparisons with other governments because the practice is becoming standard throughout the public sector worldwide (Athukorala & Reid, 2003; Nunavut Department of Finance, 2007; Perrin, 2020). Generation of information on the same basis as accounting information will bring about consistency between budgeting and reporting (Blondal, 2004; Khan, 2013).

In Tasmania, the Department of Treasury and Finance (2003) has provided an Accrual Budget Framework and highlighted a number of advantages of accrual-based budgeting for the government, parliament and community, and agencies, e.g., a more effective basis for undertaking comparisons, establishing trends and identifying performance benchmarks. This indicates that accrual-based budgeting would be more comprehensive (Athukorala & Reid, 2003).

Accrual-based budgeting also leads to better management of resources such as capital investment and better management of liquidity (debtors, creditors and stocks). Unneeded assets will be disposed and investment will be carefully thought of before the acquisition is being made because such investment leads to increase in depreciation. Moreover, a government might need to review its decisions with caution when making commitments, which could have a significant impact in the future but an ineffective impact in the current year. In this way, the potential cost of long-term commitments could be determined and measured (Robinson, 2009; Salinas, 2002). Furthermore, allocation of expenditure would be improved with the maintenance of public assets. Accordingly, in accrual-based budgeting, the long-term consequences of current decisions would be highlighted and, in turn, would provide financial information on the sustainability of fiscal policies (Athukorala & Reid, 2003; Blondal, 2004). In short, accrual-based budgeting promotes better choices pertaining to expenditure priorities (Robinson, 2009). More importantly, accrual-based budgeting could reduce opportunities for fraud and corruption (Athukorala & Reid, 2003).

Despite the highlighted advantages of accrual-based budgeting, there seems to be scepticism among its opponents. Primarily, there are suggestions that accrual-based budgeting would increase the budget complexity process. This situation would reduce the understanding of Parliament, politicians, civil servants and society at large regarding the concept of accrual-based budgeting. Accrual-based budgeting involves accounting estimates and technical complexity in a budget and therefore creates uncertainty. Accrual-based budgeting is said to be less objective and difficult to understand due to the technical nature of accruals. Instead of making the budget more transparent, detractors argue that the process of budgeting becomes less transparent and less comprehensible. The transaction process of accrual-based budgeting would involve restructuring of current reporting and budgeting, which could remain in place for considerable time. Connolly and Hyndman (2006), in the case of the Northern Ireland Department, noted that the management and employees of the department found

accrual-based resource accounting too complicated to understand. This situation rendered the benefits of accrual accounting to a limited level. This issue of complexity cannot be viewed lightly because it is the main factor why Germany and Sweden decided not to adopt accrual accounting (Blondal, 2004; Khan, 2013; Monteiro & Gomes, 2013).

Many scholars argue that there would be an increase in costs and capacity requirements. External consultants may have to be brought in, which would result in high costs (Athukorala & Reid, 2003; Khan, 2013). There would also have to be a substantial increase in training, sophisticated IT facilities and system upgrade costs. A register of government assets would have to be set up and assets evaluated (Blondal, 2004; Khan, 2013). New recruitment of staff, particularly accounting staff, with the technical know-how would need to be hired to train the Ministry of Finance, other ministries and politicians for the new system. Accountants and financial managers would have to be upskilled.

Due to uncertainty and inherent complexity in accrual-based budgeting, there are opportunities for manipulation in capitalising expenses, application of depreciation, valuation, revaluation, etc (Blondal, 2004; Khan, 2013). For instance, under accrual-based budgeting, fiscal estimates and assumptions about interest rates or tax arrears, other noncash items, discount rates, capitalisation of expenses, revaluation of assets could be adjusted and changed. Manipulation of accrual budgets is also harder to detect (Schick, 2007).

2.3 Implementation and challenges of accrual-based budgeting

Accrual budgeting is a recent development for the majority of countries that have implemented accrual accounting. A general public sector reform trend in Malaysia has seen the government need to adopt aspects of accrual accounting as the basis for its budgeting and reporting. Many practitioners and academics suggest that there are many advantages to accrual-based budgeting. In fact, many countries, particularly developed ones (New Zealand, Australia, Canada and the United States), have implemented accrual-based budgeting (OECD/IFAC, 2017).

In principle, accrual accounting has been fully implemented by the federal government since 1st January 2015, using the accrual-based IPSAS as standard in financial reporting (Azmi & Mohamed, 2014). However, the sole implementation of accrual accounting without the support of accrual budgeting for appropriation of budgetary revenue and expenses could limit the capacity of financial statements as decision-making tools and result in their usefulness solely for bureaucratic purpose (Monteiro & Gomes, 2013).

New Zealand was the first country to fully implement accrual budgeting and accounting simultaneously in government in 1995 (Van der Hoek, 2005). According to Athukorala and Reid, (2003) and Blondal (2004), by having both reforms in accounting and budgeting, the overall reforms improved sustainability of fiscal control, efficiency, allocation of expenditure with maintenance of public assets (Monteiro & Gomes, 2013).

Despite this, there are challenges in the form of resistance. For countries that have attempted to implement accrual-based budgeting, it was found that resistance from many has restricted their efforts to implement budgetary reform. Abdul Rashid, Sambasivan and Abdul Rahman (2004) have discovered that when information about a specific change is not communicated well, employees and managers may exhibit resistance or even become confrontational. Thus, there is a need to foster a cultural change among public servants from the focus on cash-based information to accrual-based information (Monteiro & Gomes, 2013). In fact, the environment in developing countries is known to be more hostile to successful reform when compared to developed countries due to constrained resources, inadequate skills and lack of reserves available should they encounter surprises and difficulties during their implementation (Athukorala & Reid, 2003). Resistance to change is another challenge to accrual-based budgeting implementation due to lack of cooperation and coordination between departments and agencies. Moreover, the workload of accounting staff and budget providers would increase and need to be carefully and efficiently managed as a working team. Resistance to change may also prevent implementation, especially among senior staff who may be set in their ways. Previous studies have indicated that some of the motivators of resistance to change include institutional power, ontological insecurity, trust, inertia, lack of knowledge, acceptance of routines and loose coupling (Angonese & Lavarda, 2014). Thus, management must understand the factors that may influence the success of accrual-based budgeting implementation in the future.

Before deciding on a move to accrual-based budgeting, governments should perform systematic analysis of the realities in their countries and make necessary changes. Among the prerequisites of successful implementation of accrual-based budgeting is strong political support, a good cash-based system and a phased approach towards implementation of accrual-based budgeting (Khan, 2013).

Athukorala (2003) highlighted various lessons from certain countries' implementation of accrual-based budgeting, among which include quality assurance, communication, accounting personnel, financial management information systems, information quality and timeliness, guidance and accounting policies, and consistent budget and reporting bases.

A phased approach to implementation would enable the move to accrual-based budgeting to run smoother. The first step of the approach is to improve capacity, infrastructure (including the system) and the institutional structure. It is not at all possible to solely adopt the private sector approach in implementing accrual-based budgeting within the public sector. Based on past experience, developed countries with sufficient skills were able to implement accrual-based budgeting within two to five years, however countries with constrained resources might need a longer time frame in order to adapt (Khan, 2013).

It is also crucial that accrual-based budgeting should have political support at the executive and legislative levels. This support should be backed up with a carefully laid-out plan such as change management and a communication programme. The framework and format of the

budget must be surrendered beforehand and should be communicated to the legislature and agencies before being adapted. Apart from political support, sound cash budgeting with a strong budgeting and accrual accounting process, and reliability of estimation are considered to be prerequisites of successful implementation of accrual-based budgeting (Khan, 2013).

In Malaysia, the International Public Sector Accounting Standards Board (IPSASB) has identified four main focal areas in order to ensure success in the implementation of accrual accounting, namely policies and standards, laws and regulations, process and technology and human resources. The scope of area includes data collection for assets and liabilities, preparation of an accrual accounting manual, a proposed and implemented change management plan, and implementation of data collection training and accrual accounting manual training (Mahadi, Noordin, Mail, & Sariman, 2014). Therefore, it is expected for accrual-based budgeting that the prerequisites for successful implementation are somewhat similar. To prepare employees for the change, intensive training must be provided to ensure organisations have employees equipped with advanced skills and strong technical capability. Not only must new staff be hired, but existing staff must be upskilled with proper knowledge and techniques. In the Malaysian public sector case, Nik Wan (2005) has indicated that the government needs to provide training for staff to ensure they are competent with the accrual-based accounting system. They need to keep abreast with knowledge and skills in handling the system. In addition, senior staff have also faced difficulty in using computers with this new system. Nik Wan (2005) has also argued that accountants in the government sector were not recognised as having the expertise or as specialists. Therefore, an allocation of funds is needed to organise training programmes.

An IT system would also be one of the major factors that could ensure the success of accrual-based budgeting implementation. The system would require substantial resources to integrate financial management with the accrual-based budgeting system. Other influential factors to successful accrual-based budgeting implementation are quality assurance, communication and early issuance of guidance and accounting policies. Last but not least, national professional accounting organisations, such as the Accountant General's Department of Malaysia, National Audit Department of Malaysia and Malaysian Institute of Accountants should be able to facilitate the smooth transition (Athukorala & Reid, 2003; Blondal, 2004; Khan, 2013; OECD/IFAC, 2017). In fact, similar to accrual accounting (Mahadi et al., 2014), the journey towards accrual-based budgeting is expected to be challenging whereby commitment, full support and cooperation from all parties involved are needed to make the implementation successful.

3.0 Research Method

This study uses the qualitative research approach to meet its objectives, which are to examine the awareness of budget preparers on accrual-based budgeting in the Malaysian public sector and their perception of the challenges regarding the implementation. Budget preparers in the public sector are the main respondents since they are the main key players to ensure

that a budget has been properly prepared. Data collections are based on in-depth interviews. The rationale for applying the multi-case study approach is to be able to gain beneficial and holistic material to be used as a comparison with previous studies (Sharma, Lawrence, & Lowe, 2010). Face-to-face and semi-structured interviews have been conducted with six (6) budget preparers that have been rigorously screened and selected previously. All possess between 6 to 15 years experience in their respective fields. Before the analysis could be performed, the verbatim transcription was obtained for all interview sessions by employing Computer Assisted Qualitative Design Analysis Software (CAQDAS), namely Atlas.ti version 8.0. The software was used to facilitate the process of transcribing interviews and data coding. The respondents were coded based on their group type and position so that the confidentiality of the data would be ensured. All interviewees remained nameless to ensure research participant anonymity.

Table 1 below presents a list of the respondents and their positions.

Table 1: Details of Interviewees

Code	Interviewee	Position
Interviewee No. 1	Audit Officer	Assistant Audit Director
Interviewee No. 2	Chief Executive Officer	Chief Executive Officer of a Government Foundation
Interviewee No. 3	Finance Officer A	Assistant State Finance Officer
Interviewee No. 4	Finance Officer B	Assistant State Treasurer
Interviewee No. 5	Finance Officer C	Senior Assistant State Finance Officer
Interviewee No. 6	Finance Officer D	Finance Officer

4.0 Findings and Discussion

Research Question 1: Are budget preparers aware of accrual-based budgeting? What are factors that could influence awareness of accrual-based budgeting?

From the interview with the Chief Executive Officer (CEO), it is solely budget preparers involved in accounting who are aware of the accrual-based budget concept, unlike other employees or staff who possess no hands-on experience in accounting. According to the CEO:

Knowledge is very important. Normally, they are not aware because they have insufficient knowledge. They don't know how to implement it. It would be a big headache for them. So first and foremost, we need to provide them with the knowledge, especially budget preparers.

This view is shared by Finance Officer C:

I don't think there is enough knowledge or understanding among our staff (regarding accrual-based budgeting). We as budget preparers are familiar with

the concept because we have the basic knowledge in accounting. Specifically, we learnt about it in during our studies. We also get the opportunity to put this knowledge into practice, so it is easier for us to master the concept.

Although budget preparers are aware of accrual-based budgeting, they still have a lack of understanding in relation to the concept, including upper management and heads of departments who are not aware of such a concept. Management should provide more initiatives to draw management and staff towards understanding the concept of accrual-based budgeting (Yusof & Jaafar, 2018). Similar to accrual accounting, accrual-based budgeting also faces a lack of management support. A top-down approach is anticipated to ensure the successful implementation of accrual-based budgeting. As suggested by the CEO:

The source of managerial power. This factor plays a crucial role. Formal instruction from upper management is important for budget preparers and employees. When there is no enforcement, they will give plenty of excuses for not doing so (implementing accrual-based budgeting). I think numerous awareness campaigns would have no effect if there is no enforcement. When upper management enforces budgetary reform, then by hook or by crook they must carry it out. To me, enforcement is another form of an awareness campaign.

In the same manner as accrual accounting (Mahadi et al., 2014), the journey towards accrual-based budgeting is also expected to be challenging, whereby one hundred per cent support would be required for accrual-based budgeting to become a reality.

In the implementation process of accrual accounting, Finance Officer A recognised that there is a campaign, but it is still insufficient. In the case of accrual-based budgeting, if it is to be implemented a holistic campaign and promotion covering the whole organisation must be actively put up on various media platforms.

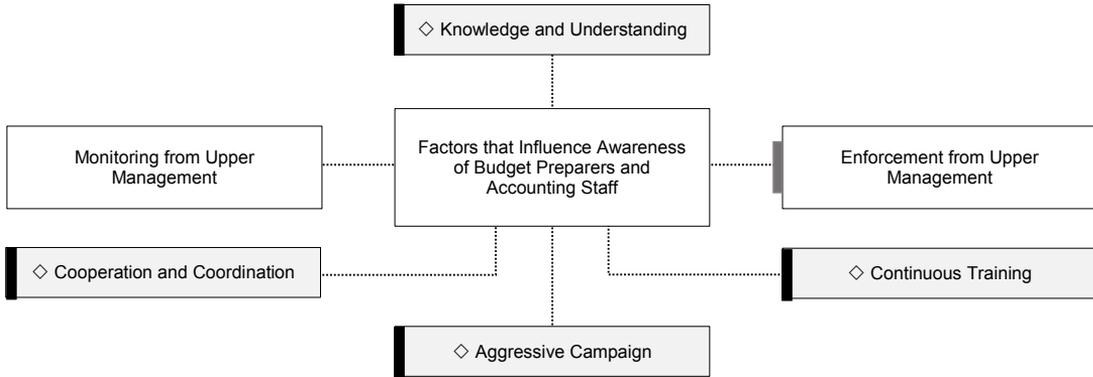
I think it should be done aggressively. Not only aimed at budget preparers and accounting staff, but also every member of the entire organisation. At the very least, them should all have a basic knowledge (regarding accrual-based budgeting). Of course, we should focus on budget preparers, but we must not exclude non-accounting staff in the campaign.

Finance Officer A added that training could also increase awareness of civil servants (Athukorala & Reid, 2003; Blondal, 2004; Khan, 2013; OECD/IFAC, 2017).

Of course, some of them (employees) will complaint because of the continuous training. Afterwards, when the system is implemented, they will understand the benefit of it. In fact, it is difficult to acquire new knowledge and skills. That is why we need a great deal of training and promotion.

Our interview results in relation to factors influencing awareness of accrual-based budgeting are illustrated in Diagram 1 below.

Diagram 1: Factors Influencing Awareness of Accrual-based Budgeting



Research Question 2: What are the challenges to be faced by the Malaysian public sector in the implementation of accrual-based budgeting?

4.1 Understanding

Our findings indicate inconsistencies in understanding about the objectives and importance of accrual budgeting between upper management and personnel in charge of preparation of annual budgets. Such inconsistencies lead to lack of motivation by upper management and budget preparers to spur the change and provide clear instructions to subordinates. This situation has the potential to retard organisational commitment to execute budgetary reforms and the momentum to produce high quality accrual information. Having a common understanding about the nature of accrual budgeting is vital in order to shape the transition and gain the necessary cooperation and sense of ownership within a public sector organisation (Mahadi et al., 2014). The need to comprehend the substance about accrual budgeting is emphasised by Finance Officer C:

I think the most important thing is understanding (of accrual-based budgeting). Understanding of the concept is the first step before we are able to develop the skills. Skills will be developed later at the implementation stage. Before that, they must understand it first.

Moreover, this study indicates the absence of sufficient technical expertise with regard to accrual budgeting and budgetary documentation guidelines to support implementation during the transition phase, in addition to the need for an integrated government IT system, which is currently considered to be obsolete and necessary to be upgraded. Production of a budgetary user manual accompanied by investment in well-functioning IT systems are essential to guarantee more reliable internal management information, proper human resource training

and recruitment, more efficient management of government assets, stricter controls over expenditure arrears and financial oversight of extra-budgetary entities (Athukorala & Reid, 2003; Blondal, 2004; Khan, 2013; OECD/IFAC, 2017). A further suggestion was made by Finance Officer C when she highlighted the need for a publicly accessible channel to expedite the process:

So if we want to implement the budget (accrual), we need to go all out in order to raise awareness at least two years before we implement it. In the future, we should develop a website dedicated to providing information (regarding accrual-based budgeting).

4.2 Cost increment

Overall, our interviews have revealed that implementation of accrual-based budgeting will increase cost, which may be divided into two factors: system and human factor. The increase in costs is due to the necessity of producing the new accounting system, such as equipment and software prior to implementation, and also to establish sustainable support for system operations. Previous studies indicate that building, modification and maintenance of a new accounting system and improving the support system is very important prior to the implementation of accrual-based budgeting (Athukorala & Reid, 2003; Khan, 2013; Mahadi et al., 2014).

Human factor, on the other hand, may be further divided into two sub-factors: external and internal. External refers to the consultants or training providers who advise the government on the implementation of accrual-based budgeting. Finance Officer C provided her opinion regarding cost:

I think that we the state government will incur unexpected costs (when implementing accrual-based budgeting). For example, we will have to appoint consultants such as architects, surveyors, whose professional fees are somewhat high.

The CEO agreed:

It will incur substantial costs. For example, in the case of transition from cash basis to accrual-based accounting in the MPSAS implementation, we will have to spend a great deal on training purposes in order that staff understand the accrual concept.

Internal human factor refers to budget preparers and accounting employees that need training to prepare themselves with the knowledge and skills of accrual-based budgeting. A systematic training module with real life examples should be developed because accounting employees come from different educational backgrounds and some of them lack knowledge in accounting.

According to Finance Officer B, most employees would need sufficient in-house training, seminars and workshops to enhance their understanding and skills during the implementation of accrual-based budgeting:

Knowledge and skills capacity for existing staff are not sufficient to implement accrual-based budgeting. Moreover, this type of budget (accrual basis) is more towards estimation, so they can come up with an appropriate estimation. So, there's a need for training.

Training on the accrual-based mode should be conducted continuously for budget preparers and accounting staff, as well as non-accounting support staff (Blondal, 2004; Khan, 2013). Previous studies indicate that without proper training and sufficient time, accounting employees would not be able to cope with the new accounting system (Connolly & Hyndman, 2006; Irvine, 2011).

4.3 Change

The CEO accordingly noted that resistance to change would be another challenge to accrual-based budgeting implementation due to a lack of cooperation and coordination between departments and agencies:

If there is no enforcement (from upper management), there will be no progress in the transition phase. Plus, there will be some problems in term of coordination among departments, because not all departments will implement it (accrual-based budgeting) simultaneously. The challenge is in terms of coordination.

Finance Officer C agreed, adding:

There would be a blame game for sure. For example, if we wanted to evaluate a building built by the Public Works Department on land owned by the District Office, it would create conflict due to a lack of cooperation and coordination among agencies.

In addition, the workload of accounting staff and budget providers would increase and have to be carefully and efficiently managed, as stated by both the CEO and Finance Officer C:

I think our staff would have to do OT (overtime). They would have to allocate additional hours after office hours to familiarise themselves with the new system. Therefore, there would be an increase in their workload.

Resistance to change may hamper the implementation, especially among senior staff as they may be set in their ways with the old system. The Audit Officer expressed that:

The transition (from cash based budgeting to accrual-based budgeting) will be difficult for the government sector. I believe there will be resistance to change because most of the accountants and accounting units (in the government sector) are already familiar with the cash basis method, which is easier to understand, especially for reporting and explaining the contents of reports to upper management. So for them to change to accrual-based budgeting voluntarily is not possible. Surely they will be reluctant.

Finance Officer A agreed:

It will be a struggle to change accounting concepts that have been in use for years; in my case 15 years. I think it would be easier for younger colleagues to adapt to the new system. Of course, there will be conflict. It will be hard for us senior staff to let go of the old concepts and replace them with a new one (accrual basis).

Finance Officer C added:

Of course, there will be resistance. Especially involving new changes. We (budget preparers) will be somewhat reluctant. Even now, if we want to change the daily work routine of staff, such as adding a new job scope, it is painfully difficult. I think that would also be the case if we were to implement accrual (based budgeting).

The findings are in line with previous studies that indicate some of the motivators of resistance to change include institutional power, ontological insecurity, trust, inertia, lack of knowledge, acceptance of routines and loose coupling (Angonese & Lavarda, 2014). Thus management must understand the factors (including change) that may influence the success of accrual-based budgeting implementation in the future.

4.4 Information and training

The process of collecting data in order to prepare the estimated budget is complicated, as because the documentation is not complete and not updated. Thus, the objective of financial reporting/budgeting issued by accountants/preparers to provide useful information may not be achieved. Budget preparers have to make their own adjustments to recognise budget information that better suits their objectives (Madah Marzuki, Abdul Rahman, Marzuki, Ramli & Wan Abdullah, 2021).

Finance Officer C claimed:

We would have to collect data such as details of land ownership, which is a set of documentation consisting of 10 individual documents. Could you imagine

the process we have to go through to cover all our (state government) assets especially real estate.

Finance Officer A stated that information regarding accrual-based budgeting is voluminous.

4.5 Training

Accountants need detailed planning to train staff. When we mentioned this to the interviewees, most of them agreed. Finance Officer A highlighted that:

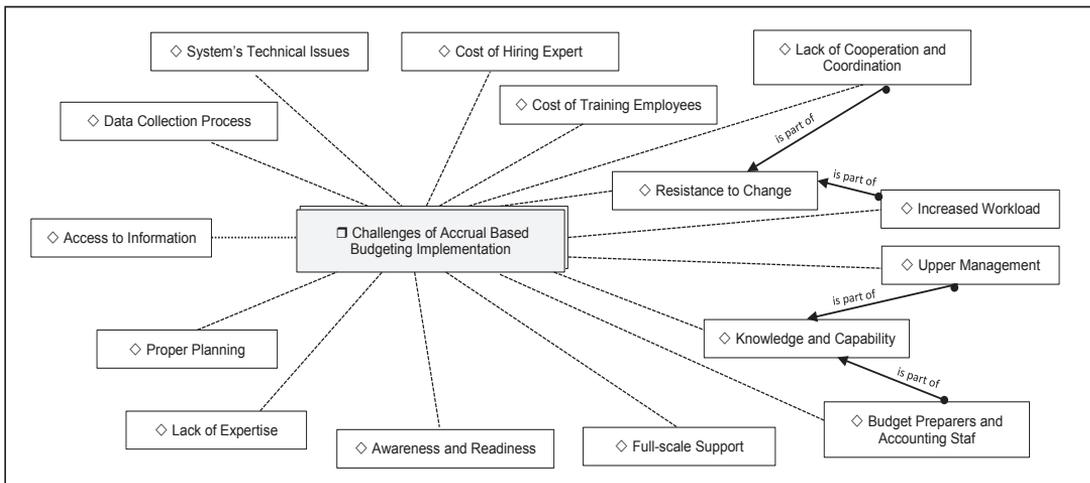
If we want to implement budget (accrual), we need to go all out in order to raise awareness at least two years before we implement it. In the future, we should develop a website dedicated to providing information (regarding accrual-based budgeting).

This was supported by Finance Officer B who expressed the following:

Let say we want to go live in April. Therefore, two years before we go live, we have to plan the transition properly. When to hold a workshop, what kind of training, what topic we want to discuss and so on.

According to Blondal (2004) and Khan (2013), providing continuous training on accrual-based budgeting is not only vital for budget preparers and accounting staff, but also for non-accounting support staff at departmental level. Our interview results in relation to the challenges in implementing accrual-based budgeting are illustrated in Diagram 2 below.

Diagram 2: Challenges in Implementing Accrual-based Budgeting



5.0 Concluding Comments

Accountability is considered to be the primary motivation for governments to shift to accrual budgeting as it is believed that accrual-based budgeting, together with accrual accounting, will improve accountability. This paper has discussed the views of budget preparers and attempted to shed light on the awareness and many challenges surrounding accrual-based budgeting implementation.

What clearly emerges from the interviews is the consensus of views among the budgeting community of the awareness of accrual budgeting. Budget preparers, particularly accountants, are aware of the concept but this is not the case with other employees who do not have hands-on practice in accounting. The interviews have also revealed that knowledge and understanding, upper management enforcement and aggressive promotion is important in determining the awareness of accrual budgeting. An examination of implementation challenges further reveals that understanding, increase in costs, resistance to change, information and training are major concerns in implementing accrual-based budgeting. The results are very similar to similar experiences in other parts of the world.

This survey of Malaysian public sector budget preparers has revealed that although the current budgeting reporting system is generally felt to have been able to meet its main objectives, there is also a clearly felt need for improvements, including a move to accrual-based budgeting. Such a move would require a new recruitment of staff, particularly accounting staff, with the technical know-how to train and advise policymakers, such as the Ministry of Finance, other ministries, departments, agencies and politicians, for the new system. Accountants and financial managers would be required to be upskilled. Given that costs are likely to be significant, it would seem reasonable to extend the scope of this survey and seek a broad range of authoritative opinions on the likely benefits as much as possible.

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