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**FACTORS RELATED TO THE LEVEL OF READINESS IN ACCRUAL-BASED
ACCOUNTING IMPLEMENTATION AMONG MALAYSIAN PUBLIC
HEALTHCARE IN NORTHERN REGION**

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ABSTRACT

The aim of this study was to identify the level of readiness in the implementation of accrual-based accounting among Malaysian public healthcare in the Northern region. It also examined the relationship between human resources competency, software and technology capability, accounting policies and standards suitability and the level of readiness in the implementation of accrual-based accounting. Quantitative approaches were used in this study with questionnaire as the research instrument. Data were collected from a sample of 200 administrative officers in the Finance Department at 20 public hospitals and state health departments. Descriptive and inferential analysis techniques were used to analyse the data. The finding showed that the level of readiness to implement accrual-based accounting in Malaysian public healthcare was moderately high ($M = 3.97$, $SD = 0.719$). The results also revealed that there were significant relationships between human resources competency ($r=0.300$, $p=0.001$), software and technology capability ($r=0.514$, $p=0.001$) and accounting policies and standards suitability ($r=0.706$, $p=0.001$) and the level of readiness to implement accrual-based accounting. The results implicated that users of accounting system in Northern Malaysian public healthcare are ready to implement accrual-based accounting. However, improvement should be directed towards relevant areas as identified in the study to ensure a more successful and beneficial implementation of this new accounting system in Malaysian public sector.





FAKTOR-FAKTOR BERKAITAN TAHAP KESEDIAAN PELAKSANAAN PERAKAUNAN BERASASKAN AKRUAN DALAM KALANGAN SEKTOR KESIHATAN AWAM DI KAWASAN UTARA

ABSTRAK

Kajian ini bertujuan mengenal pasti tahap kesediaan pelaksanaan perakaunan berasaskan akruan dalam kalangan sektor kesihatan awam di Malaysia di kawasan utara. Kajian ini juga mengkaji hubungan antara kecekapan sumber manusia, keupayaan perisian dan teknologi dan kesesuaian polisi dan piawaian perakaunan dengan tahap kesediaan dalam melaksanakan perakaunan berasaskan akruan. Pendekatan kuantitatif digunakan dalam kajian ini dengan soal selidik sebagai instrumen kajian. Data dikumpul daripada 20 kakitangan pentadbiran Bahagian Kewangan di 20 hospital awam dan Jabatan Kesihatan Negeri. Kaedah deskriptif dan inferens digunakan untuk menganalisis data. Dapatan kajian menunjukkan kesediaan untuk melaksanakan perakaunan berasaskan akruan dalam kalangan sektor kesihatan awam di Malaysia berada pada tahap sederhana tinggi ($M = 3.97$, $SD = 0.719$). Kajian ini juga mendapati terdapat hubungan yang signifikan antara kecekapan sumber manusia ($r=0.300$, $p=0.001$), keupayaan perisian dan teknologi ($r=0.514$, $p=0.001$) dan kesesuaian polisi dan piawaian perakaunan ($r=0.706$, $p=0.001$) dengan tahap kesediaan dalam melaksanakan perakaunan berasaskan akruan. Implikasi kajian menunjukkan pengguna sistem perakaunan di sektor kesihatan awam di kawasan utara Malaysia bersedia untuk melaksanakan perakaunan berasaskan akruan. Walau bagaimanapun, penambahbaikan perlu disasarkan kepada bahagian yang relevan seperti yang dikenal pasti dalam kajian ini untuk memastikan kejayaan dan keberkesanan proses pelaksanaan sistem perakaunan yang baharu ini dalam kalangan sektor awam di Malaysia.



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LIST OF ABBREVIATIONS

ACCA	Association of Chartered Certified Accountants
DMC	Developing Member Country
ERP	Enterprise Resource Planning
ETP	Economic Transformation Programme
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards
IMF	International Money Fund
IPSAS	International Public Sector Accounting Standard
IPSASB	International Public Sector Accounting Standard Board
IT	Information technology
JANM	Accountant General's Department of Malaysia
MASB	Malaysia Accounting Standard Board
MIA	Malaysia Institute of Accountant
MPSAS	Malaysia Public Sector Accounting Standard
NEM	New Economic Model
NKEA	National Key Economic Areas
OECD	Organizations for Economic Co-operation and Development
PFR	Public Finance Reform
PWC	Price Waterhouse Coopers
SPSS	Statistical Package for the Social Science
SRI	Strategic Reform Initiatives
UiTM	MARA University of Technology
UK	United Kingdom
WHO	World Health Organization





LIST OF APPENDICES

- A Questionnaire
- B Reliability Test for Human Resources
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CHAPTER 1

INTRODUCTION



There are two basic accounting methods which are cash-based method and accrual-based method. Cash-based method is a method where revenue and expenses are recognized when payment is made or received. Although it is easier to record in cash-based accounting, it is argued that the income statement and balance sheet under this method do not show financial information on recent activity (Hassan, 2012). Opposite to that, accrual-based method is a method where a transaction is recorded when the item is delivered or services occur. Therefore, the financial information on balance sheet and income statement are more accurate because the revenue is recorded when the sales occur while expenses is recorded when goods or services are received (Hassan, 2012).





According to Tudor, Adriana and Blidisel (2007), public sector used traditionally cash-based accounting to record the transactions occurred while accrual-based accounting is known as modern accounting system and used in private sector. Cavanagh, Flynn and Moretti (2016) found that 41 governments of the world have completed the transition from cash accounting to accrual-based accounting, 16 governments' are account on a modified accrual basis, 28 governments are on a modified cash basis and 114 governments remain on cash-based accounting. Many research have been conducted in various countries regarding the implementation of accrual-based accounting in their public sector such as New Zealand and Australia (Deaconu, Nistor & Filip, 2011; Connolly & Hyndman, 2006). It is primarily argued that using accrual-based accounting, the financial statements will show the true and fair value of equity financial situation and profit and losses (Tudor et al., 2007). Based on the findings, the researchers concluded that majority of the governments in the world are still using cash-based accounting instead of changing to accrual-based accounting in their public sector.

In May 2011, the Malaysian government announced its plan to implement accrual-based accounting in the public sector (Muhammad Iqbal Mohamed Azahari, 2013). The decision to move from cash-based accounting to accrual-based accounting is triggered by the growing demand for a greater transparency and better performances of the government sector and the companies controlled by the government (Ropidah Omar, Noor Afza & Norhani Ariffin, 2005). According to Bontas and Petre (2009), accrual-based accounting provides information on financial position and current assets and liabilities in balance sheet. This information is important in managing their cash position and financing requirements. Besides, accrual-based accounting also helps in





managing resources through income statement which is more useful than cash-based accounting because performance can be measured more reliably when full costs for a certain period are taken into account. It also provides non-cash information such as revaluations, consumption of assets through depreciation and pension liabilities. Thus it will provide greater transparency since more financial information are included when recorded using accrual-based accounting method.

A number of scholars believe that the migration to accrual-based accounting is part of the process of adopting the style of financial statements practised by companies in the private sector into the public sector (Hassan, 2012; Tickell, 2010; Rozaidy Mahadi, Raman Noordin, Rasid Mail & Kaziemah Sariman, 2014). The transformation will also provide sustainability, give better measure of policies effect, improve organizational efficiency and effectiveness, and to promote greater integrity (Auditor General Report, 2014) and provide greater accountability (Murni Subroto, Norida Hassan, Azimon Abdul Aziz, & Azlina Ahmad, 2014). Heeks (1998) stated that the creation of a new accounting system which is accrual-based accounting is a main component in the creation of accountability. Accountability means that some set of recipients such as the citizen receives information about outcomes of decisions made by the source decision makers such as Prime Minister and the decision makers can explain on their decisions with proves (Heeks, 1998). For instance, Minister may be held accountable by the public for corrupt activities within their ministry. It is claimed that the use of accrual-based accounting may reduce corruptions since all the financial information are included in financial statements (Heeks, 1998).





Further, the International Federation of Accountants (IFAC) in November 2013 have drawn a transition plan (2015 – 2019) based on International Monetary Fund recommendations in which revenue from taxes will be recognized on accrual-based accounting. The transition plan of the implementation of accrual-based accounting is as shown in Figure 1.1. Until 2011, the implementation of accrual-based accounting in public sector was in accordance with the proposed transition plan in which all federal ministries and departments should already move to accrual-based accounting in 2015. However, the transition to accrual-based accounting has been delayed since all federal ministries and departments are still preparing for the full adoption process in 2017.

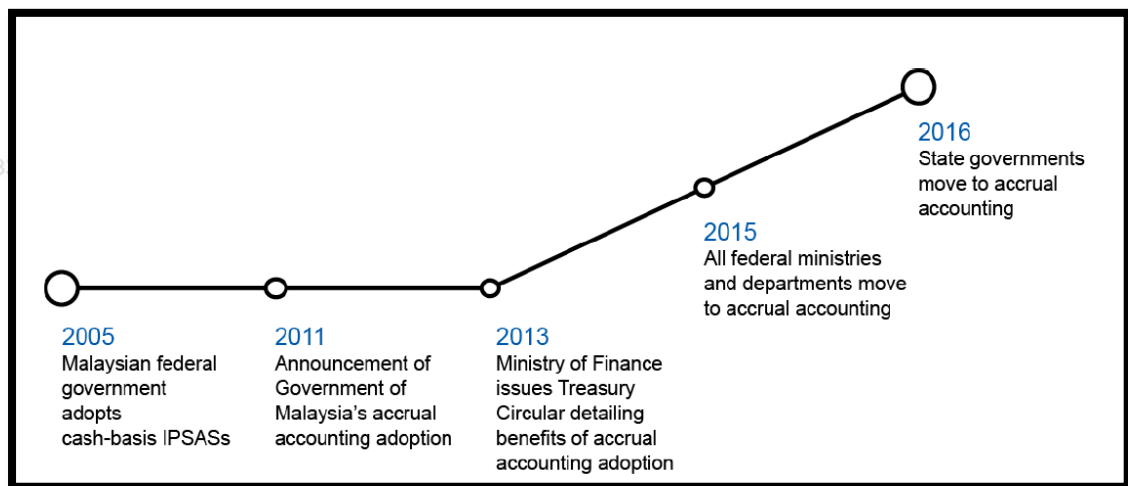


Figure 1.1. Accrual-based Accounting Transition Plan of Public Sector in Malaysia. Adapted from International Federation of Accountants (IFAC) (2013)

Accrual-based accounting in public sector in Malaysia is expected to provide more efficient and effective fiscal management. The question is, how can accrual-based accounting help to achieve this objective? In 2017, federal government and state government are still using modified cash basis. However, the modified cash basis is





based on the International Public Sector Accounting Standards (IPSAS) that have been revised compared to the year 2006 before. Modified cash basis comply with the cash basis IPSAS standards where assets are not capitalized and liabilities are recorded outside the accounting system. Thus, this poses challenges for the government to implement accrual-based accounting in limited time.

1.2 The Move towards Accrual-Based Accounting: Malaysian Context

There is increasing public interest on the performance of Malaysian public sector especially in the aspect of education, health and public services. The public has moved from a passive service recipient to demand for greater transparency and accountabilities for public sector performance and management (Tooley, Hooks & Norida Basnan, 2009). The public and other users such as investors or stakeholders could not make judgement on the performance of Malaysian government without knowing the true cost of the services provided and also the quantity and quality of the services. The implementation of accrual-based accounting is viewed as one of the best ways in helping the users to evaluate the entity's performance by presenting the true cost of the services through financial reporting.

The main objective of the implementation of accrual-based accounting in Malaysian public sector is to have better transparency and greater accountability (Wan Selamah Wan Sulaiman, 2013). Accounting standards for accrual-based accounting set by IPSAS promote openness and access to information by citizens and their understanding on decision-making mechanisms (Ijeoman, 2014). Therefore, the





decision making will be more transparent and corruption can be reduced. According to the Corruption Perception Index in 2015 (Deinert, 2015), Malaysia is ranked at 54 from 175 countries in the world with a score corruption of 50 which means that the level of corruption in Malaysia is average. Therefore, it can be argued that one of the reasons for Malaysian government to implement accrual-based accounting in the public sector is to seek for greater transparency and also to reduce the level of corruption in Malaysian public sector.

Besides, accrual-based accounting is to be implemented in Malaysian public sector as it can determine the full cost of the whole government activities including non-cash costs such as depreciation and pension. According to Khan and Meyes (2009), the full cost information will help the government to identify assets and liabilities in the public sector. Thus, it will improve public sector performance and the government can provide a better financial planning since they have a complete information regarding the cost of government activities including assets and liabilities. According to the former Accountant General, Wan Selamah (2011) costing data enables more effective evaluation of alternatives in achieving better decision making besides lead to a better management of asset and liabilities.

Another reason that urge the government to implement accrual-based accounting in Malaysian public sector is the quality of the information that helps in improving decision making process (Nurul Nadiah Ahmad, Santer Nurfarahinas, Saiyidah Diyana & Muhamad Hadi Zulfadli, 2015). Accrual-based accounting will show the financial position of Malaysian public sector and its current assets and liabilities. Therefore, the information will help the public sector to make decisions





regarding the financing of the service provided by the public sector. Moreover, the implementation of accrual-based accounting has been established as one of the policy measures in the New Economic Model (NEM) as a means to improve decision making processes and strengthen public finance management of Malaysian public sector (Raja Abdullah & Nik Mustapha, 2010).

Rodan (2000) found that the Asian economic crisis in 1998 increase the tendency of the government such as Singapore and Malaysia to have a better transparency and accountability system. Greater transparency will give a good perception to the investors about the system in a country. The increase of investor confidence will in turn contribute to the growth of economy. Therefore, it is important for Malaysia to have a good accounting system to improve transparency and accountability hence, attract foreign investments to stimulate economic growth. The move to accrual-based accounting will help the government to provide a better cost information that helps to increase transparency, improve decision making and consequently provide a better performance of Malaysian public sector.

1.3 Background of the study

The move from cash-based accounting to accrual-based accounting in the public sector has been an interchanging debate and widely discussed. Some of the developed countries such as the United Kingdom (UK), Australia and New Zealand have obtained the benefits of the accrual-based accounting in many sections especially in terms of public sector financial reporting (Connolly & Hyndman, 2006). These countries





generally adopt accrual-based accounting in their public sector due to perceived benefits of accrual-based accounting system such as increase in budget transparency and government efficiency through performance-based management (Champoux, 2006). Thus, it will provide more reliable and accurate financial information that can be used in making financial decisions.

However, one of the primary challenges in its implementation is that the whole process will take several years to realize the benefits of accrual-based accounting. For instance, according to the UK National Audit Office in 1993, the benefits of accrual-based accounting cannot be identified at the preliminary stage of the implementation. The UK government need to overcome many obstacles in order to gain its benefits and it took several years to complete the transformations. By contrast, according to Wynne (2007) a survey conducted in the UK public sector revealed that majority of the public servants (63%) disagree with changes to accrual-based accounting. They viewed that the process of changing from cash-based accounting to accrual-based accounting seemed to be unnecessary mainly due to uncertainty of risks that the government is unable to assess.

The IFAC Public Sector Committee has set the task of developing a full set of international public sector accounting standards which includes recognition of asset and liabilities (IFAC, 2011). The Committee has also developed accounting standard on financial reporting using accrual-based accounting and ensuring that these are adopted as widely as possible. Many countries are interested in implementing accrual-based accounting because it is claimed that accrual-based accounting in public sector will bring more advantages (Hassan, 2012). According to Wynne (2007), the presumed





advantages of accrual-based accounting are; (1) it provides more comprehensive financial information, (2) it allows better management of assets and (3) it can provide the full cost of public services. Comprehensive financial information will help in making financial decisions for the country so as to have a better fiscal position. According to Ian Ball, the Chairman of International Chartered Institute of Public Finance and Accountancy, a good accounting system will help the government to achieve better fiscal decisions and give a better position in the future (Care, 2016).

However, a number of scholars such as Ouda (2004), Rowles (2004), Khan and Meyes (2009) argue that accrual-based accounting is not suitable to be implemented in public sector because the nature of economic reasoning in the public sector is totally different from the private sector. For example, the government has certain types of assets and liabilities that do not exist in the private sector. Public assets such as heritage-type assets and environmental assets are known as 'public' goods (Ouda, 2004) and full accrual-based accounting are irrelevant to the assessment of the efficiency of 'core' public sector activities since the performance measurement is different (Rowles, 2004). According to the International Public Sector Accounting Standard (IPSAS) 17, heritage assets refers to an asset that has cultural, environmental and historical interests, for example historical building, monument, archaeological site and artifacts while environmental assets refer to living and non-living resources such as mineral resources (IFAC-IPSASB, 2010).

Besides, government also needs to make selection on the appropriate accounting policies that are relevant to the local accounting standards and suit with national circumstances. A researchers argue that accounting system and budgeting system need





to be closely aligned to provide good financial information (Khan & Meyes, 2009). Additionally, the obstacles of implementing accrual-based accounting can only be noticed after the accrual-based accounting policy has been successfully implemented in OECD countries such as Australia and Canada (Khan & Meyes, 2009).

In Malaysia, the idea to implement accrual-based accounting in the public sector has begun in the year 2000 due to deemed benefits to be derived from the implementation of accrual-based accounting in the public sector. Besides providing better financial management and more accurate information for decision making process, accrual-based accounting can also improve assets management (Nurul Nadiah Ahmad et al., 2015). In order to make sure the implementation of accrual-based accounting is successful, there are many aspects that need to be considered including the high implementation cost. Gomes (2013) stated that customisation was necessary in the accrual-based accounting because different countries possess different socio-economic and political environments. Some of the aspects that need to be considered include changes of accounting policies and standards, new technology and human resources.

1.4 Problem statement

Public sector organisations prefer to choose cash-based accounting than accrual-based accounting because cash-based accounting is said to be simpler and more understandable to record (Tudor et.al, 2007). It is simpler because cash-based accounting omits fixed assets, debtors, creditors and other liabilities and even





unpresented cheques at year end are omitted from the accounts (Cordery, 2010). However, cash-based accounting does not show the actual financial information needed by the external and internal users of the company. It also does not reflect the true value of public sector performance compared to accrual-based accounting (Hepworth, 2003).

Up to this date, it has been more than eight years since the process of implementation of full accrual-based accounting in public sector in Malaysia begun in 2011. Compared to the previous experiences from other countries, the period given by the Malaysian government are shorter which means there is a limited time for the public sector to be fully prepared to implement accrual-based accounting. Within the short period of time, the government had faced many challenges, in terms of creating awareness about accrual-based accounting and actions taken to reform the legislative and regulatory structure (MIA, 2011). In addition, they also need to integrate a new system, and improve skill and knowledge of human resource in accrual-based accounting. In doing so, the government provides training but this involves high cost (Rozaidy Mahadi et al., 2014)

A transition plan to implement accrual-based accounting has been developed at the federal level. According to the transition plan, the accounting system follow the Malaysia Public Sector Accounting Standards (MPSAS) which is drawn primarily from IPSAS with some minor changes in order to accommodate the national circumstances. The opening balances of assets and liabilities will be taken in progressively from 2015 to 2019. The planning shows that they will be a change of accounting practice in the Malaysian public entities especially in public healthcare since the sector involving various type of assets. The process had forced the accountants of governmental





financial reporting to develop the strategies to ensure successful implementation of accrual-based accounting in the public sector.

The International Public Sector Accounting Standards Board (IPSASB) has identified three main aspects that are crucial in the implementation of accrual-based accounting in public sector, which are accounting policies and standards, software and technology and human resources (IPSASB, 2015). These important aspects need to be emphasized by the government to ensure that the implementation of accrual-based accounting in Malaysian public sector is successful. Based on previous research (Muhammad Iqbal Mohamed Azahari, 2013), countries that implement accrual-based accounting experience longer adoption time than what was initially expected. For example, countries such as New Zealand, Sweden and the UK took more than 10 years in order to fully gain the benefits (Connolly & Hyndman, 2005).

Based on the experiences from these countries, this suggests that there are many challenges and obstacles that need to be overcome in the process of implementation. In addition, many aspects need to be considered for successful implementation which requires careful and high level strategy of implementation. For instance, they need to reformulate accounting policies suitable to the country itself primarily with respect to the valuation of assets and liabilities of public sector. Besides, they also need to make sure that the financial information provided from the new accounting system fulfil the information needed by the whole government.

Blondal (2003) identified the issues that arise in adopting accrual-based accounting in public sector. In the study, the researcher focused on culture change in





public sector which includes the need for communication system, accountancy skills and selection of software system. By contrast, Wynne (2007) stated that the willingness of public sector employees to accept the transformation of accounting practice would first require comprehensive training that involved the whole organization including lower ranked staff. It is the most important pre-condition to implement accrual-based accounting in public sector.

Muhammad Iqbal Mohamed Azahari (2013) found that there are still many government servants in Malaysia with limited knowledge in the accrual-based accounting. Although the management had already provided training and seminar for them, these employees are still unwilling to participate. Therefore, the management and also the government should provide more initiatives to attract the employees. Another reason why Malaysian public sector did not manage to fully implement accrual-based accounting until today is because of the inadequacy in the readiness of accounting information system applications such as equipment, software customization and systems familiarization (Rozaidy Mahadi et al., 2014). Further, the researchers argued that the harmonization of accounting standard give impact to the implementation process. It will provide clearer and understandable guide for the governments' servants to implement accrual-based accounting.

Public sector consists of various services such as education, healthcare, transportation and others. However, this research will be focusing on public healthcare sector. According to Lee (2015), healthcare in Malaysia has been recognised with a strong public sector presence as it acted as a primary source in improving the health status in Malaysia. Meanwhile, Ribbink (2014) stated that healthcare sector in





Malaysia is a leading driver of economic growth that is growing at a rapid rate of 11% a year compared to other sectors such as education and transportation. For example, in 2010, the World Health Organization (WHO) ranking showed that Malaysia is in the Top 50 among 190 countries that have the best world's health system. The increasing demand on public hospitals in Malaysia has urged the government to provide a better management in this sector. Table 1.1 illustrates the increase of domestic investments and foreign investments in 2017 compared to 2016. In addition, Table 1.2 shows that the expenses in public healthcare sector have increased by 93.6% while the provisions provided by government for public healthcare sector have increase by 93.11% in 2015. Therefore, the government needs to make better decisions in managing the cost involved in the public healthcare sector.



Domestic and Foreign Investment in Malaysian Health Services

Sector	Domestic investment (RM million)		Foreign Investment (RM million)	
	2016	2017	2016	2017
Health services	184.7	374.8	3.8	70.3

Source: Ministry of Health (2016)



Table 1.2

Provision and Expenses in Malaysian Public Healthcare

Sector	Provisions (RM million)		Expenses (RM million)		Percentage (%)	
	2014	2015	2014	2015	Provisions	Expenses
Public healthcare	149.5	217.1	138.9	2171.4	93.11	93.6

Source: Ministry of Health (2015)

Most importantly in Malaysian Economic Transformation Programme (ETP), healthcare industry has been identified as one of the National Key Economic Areas (NKEAs) which means the sector will receive prioritised government support and which will lead to greater Malaysia's economic growth. To ensure the growth of this sector in NKEAs, Strategic Reform Initiatives (SRIs) that include public policy areas are built to support the government's goal of transforming Malaysia into a high-income economy. Accrual-based accounting is one of the initiatives under Public Finance Reform (PFR) which aims to strengthen government's finances. Further, there are many initiatives to increase healthcare economic growth under NKEAs. One of them is to provide a retirement village where it residents will be provided with medical services, daily convenience and nursing care. Therefore, accrual-based accounting will help in managing cost in providing the retirement villages by providing cost information. This example suggests of how accrual-based accounting would benefit Malaysian public healthcare sector because accrual-based accounting helps in managing the cost of production hence ensuring the quality of the output at the same time.



However, to ensure the adoption is successful, the government needs to overcome many obstacles during the process in healthcare sector. One of the challenges is on the aspect of human resources. In a study done by Cleary, Molyneux and Gilson (2013), they maintained that the government needs to focus on the attitude and perception of the employees to improve accountability in the healthcare sector through accrual-based accounting. The cooperation from the government servants including top management is important so that the training provided to them is beneficial. Besides human resources, there are other factors that are equally important in the implementation. For example according to Eriotis, Stamatiadis and Vasilion (2011), accounting standards, organizational and financial scarce resources are some of the main issues that can cause the delay in the process of implementation.



accounting in public sector, such issues and challenges are inevitable. Although many countries have moved to accrual-based accounting, there are still arguments and critics on the implementation. The recommendation to implement the accounting system in Malaysia has been proposed around 20 years ago but the attempts failed because there was no universal agreement on the approaches to the valuation of assets (Rozaidy Mahadi et al., 2014). Therefore, Malaysia needs to develop its own standards relevant with the Malaysian context by modifying international accounting standards. Another challenge is problems associated with the employees. For example, Monteiro and Gomes (2013) suggested that cultural changes are needed to ensure success in implementation accrual-based accounting. Apart from that, the government is facing problem in building new software based on accrual-based accounting because it takes times since training in using the software is also needed (Rozaidy Mahadi et al., 2014).





Based on these discussions, this current study is conducted with the aim to investigate the factors that related to the level of readiness of Malaysian public sector in the implementation of accrual-based accounting in public healthcare. The factors are are (i) human resources, (ii) software and technology and (iii) accounting policies and standards. To this date, very limited study have been done on healthcare sector in developing country in this particular field of research. Previous research focus more on the issues and challenges faced by developing countries that have succeeded in implementing accrual-based accounting (Rozaidy Mahadi et al., 2014). Therefore, this study will provide more useful insights on accrual-based accounting particularly in the light of its implementation in public healthcare, which is one of the most significant sectors in Malaysia.



1.5 Aims of study

This study aims to investigate factors that related to the readiness of public sector in the implementation of accrual-based accounting especially in public healthcare. The move from cash-based accounting to accrual-based accounting requires a lot of changes. Nevertheless, if the process of implementation is carefully administered, it will bring many advantages to the public sector. To make sure the implementation is successful, Malaysian government needs to focus on the factors that are important in the process of accrual-based accounting implementation especially in public healthcare. Thus, the objectives of the study are:





- a) To identify the level of readiness in the implementation of accrual-based accounting in Malaysian public healthcare.
- b) To examine the relationship between human resources competency and the level of readiness in the implementation of accrual-based accounting in public healthcare.
- c) To examine the relationship between software and technology capability with the level of readiness in the implementation of accrual-based accounting in public healthcare.
- d) To examine the relationship between accounting policies and standards suitability with the level of readiness in the implementation of accrual-based accounting in public healthcare.



Based on the objectives of the study stated above, these are the research questions that will be answered in this study:

- a) What is the level of readiness in the implementation of accrual-based accounting in Malaysian public healthcare?
- b) Is there any relationship between human resources competency and the level of readiness in the implementation of accrual-based accounting in Malaysian public healthcare?
- c) Is there any relationship between software and technology capability and the level of readiness in implementation of accrual-based accounting in Malaysian public healthcare?





d) Is there any relationship to accounting policies and standards suitability and the level of readiness in implementation of accrual-based accounting in Malaysian public healthcare?

1.7 Research hypotheses

The hypotheses that will be investigated in this study are:

H₀ 1: There is no relationship between human resources competency and the level of readiness in implementation of accrual-based accounting in public healthcare.

H₀ 2: There is no relationship between technology and system capability and the level of readiness in implementation of accrual-based accounting in public healthcare.

H₀ 3: There is no relationship between accounting policies and standards suitability and the level of readiness in implementation of accrual-based accounting in public healthcare.

1.8 Theoretical and Conceptual framework

The implementation of accrual-based accounting in public healthcare involves the change of accounting system from cash-based accounting to accrual-based accounting in order to achieve more transparent financial information and increase accountability. According to Mehrolhassani and Emami (2013), public organizations engage in institutional, organizational and managerial changes to overcome the increasing demand in public service for greater financial accountability. Such changes involved





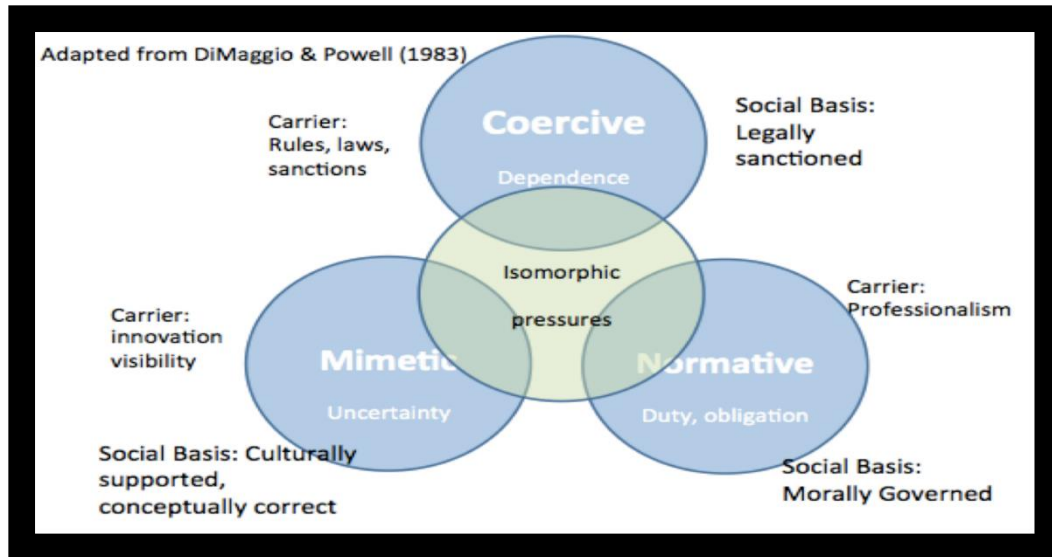
many processes and factors that need to be considered so that the intended changes become successful. This concept match Kurt Lewin's Change Theory. Therefore, the conceptual framework of this study is built to match Kurt Lewin's Change Theory.

Besides, the researcher will also use institutional theory to explain the transformation to accrual-based accounting in Malaysian public healthcare. This research will be based on the institutional isomorphism change theory by Dimaggio and Powell (1983). Figure 1.2 indicates that institutional isomorphism change theory means similarity of processes or structure of one organization to another under the same constraints (Dimaggio & Powell, 1983). There are three mechanisms in this theory which are coercive isomorphism, mimetic processes and normative pressure. In this research, the decision made by public healthcare in Malaysia to change the accounting system is because of certain factors that lies under these mechanisms.

The first mechanism that lies under institutional theory is coercive pressures where the pressure to change driven by other organizations such as government or regulatory requirements. Since public healthcare are one of the government organizations, it needs to change accounting system as the government has made a decision to change to accrual-based accounting. The second mechanism is mimetic pressures which defines "a pressure resulting from standard responses to uncertainty" (p.150). Malaysian public healthcare takes other countries that already implement accrual-based accounting as an example to achieve a better financial management. The third mechanism is normative pressure which refer as consequences of professionalism within certain organizational fields (Dimaggio & Powell, 1983). In this research, professionalism refers to the changes that have been encouraged by IPSAS to



implement accrual-based accounting as it gives more benefits and helps in providing better financial management.



Based on Figure 1.3, the purpose of this research is to examine the factors that related to the level of readiness of Malaysian public healthcare in implementing accrual-based accounting and it is design based on Kurt Lewin's Change Theory. The independent variables are the factors that the researcher investigate in the research. There are three main factors considered in this particular study which are human resources, system and technology, accounting policies and standards.

For human resources, the research examine the training provided for the human resources involved and the readiness of human resources to engage or participate in the changes of accounting system. Besides that, knowledge and skills in accrual-based accounting also examined in this research. For software and technology, the researcher



investigate the capability of the information technology in Malaysia and whether it is sufficient to support the new software. Further, the availability of software suitable with accrual-based accounting is also important in the implementation process. The reformulation of policy and accounting standards that meet the national circumstances is also one of the factors that the researcher will investigate. The researcher believes that these factors will related to the level of readiness in the implementation in Malaysian public healthcare.

The dependent variable which is the level of readiness of public healthcare in the implementation of accrual-based accounting represent the perceived benefits consisting of accountability, improved decision making and better financial information. It is argued in this study that the consideration of these factors in the implementation process will result in improving the accountability which means increase in the transparency on government activities in the healthcare sector. In addition, the information provided from the implementation of accrual-based accounting will improve the decision making process. For instance, the government can make more informed decisions in the allocation of resources for the sector which consequently is expected to result in better public financial management.



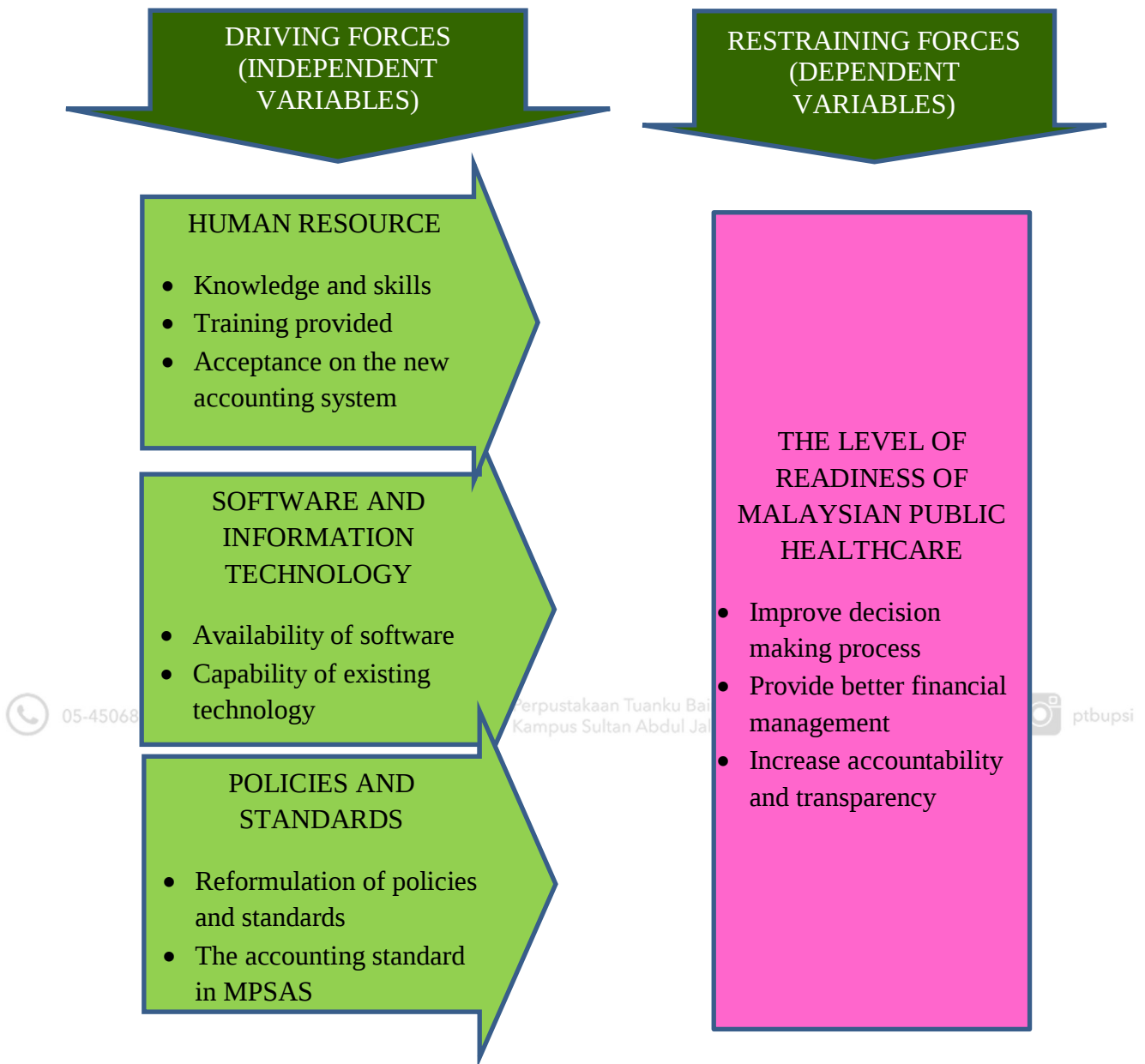


Figure 1.3. Conceptual Framework of the Implementation of Accrual-based Accounting in Malaysia Public Healthcare

In general, this research utilise two theories which are Kurt Lewin's change theory and institutional isomorphism theory. Kurt Lewin's Change Theory explain on the factors involved in the process of implementation of accrual-based accounting in public healthcare. Meanwhile, the institutional isomorphism theory used in this



research to explain on the forces that drive the Malaysian government to move towards transforming its public sector accounting into an accrual-based accounting regime, specifically in the context of public healthcare sector.

1.9 Operational definitions

1.9.1 Public sector

Sikhungo and Hollyman (2011) in his book Supplemental Guidance: Public Sector Definition stated “that public sector consist of all the entities such as agencies and enterprises that are all deliver public programs, good and services”. Figure 1.4 shows the diagram of public sector organizations. Core government consist of all the department, ministries or branches of the government where there are accountable to report directly to the central authority. Agencies consist of public organizations that deliver public program good and service while public enterprise difference with agencies in how they operate. Public enterprise operates independently and have their own source of revenue to direct public funding.

Based on the diagram, the grey zone or boundary consists of the organization that might or might not be a part of public sector which is state businesses and public contractors. State businesses are the business that are controlled and owned by the government that sell goods and services for profit in the private market. Public contractors are independent entities that receive public funding through contract or agreement to provide public program, goods or services. According to IPSASB (2011),



public sector includes federal, provincial, territorial and local governments and government organizations.

In this research, the researcher chooses public healthcare sector to represent public sector. According to Novick, Morrow and Mays (2008), public healthcare are organizations that organize community effort to address the public interest in health to prevent disease and promote health by applying scientific and technical knowledge. In Malaysia, public sector healthcare is organized under a civil service structure and organized by the Ministry of Health (Safurah Jaafar, Kamaliah Mohd Noh, Khairiyah Abdul Muttalib, Nour Hanah Othman & Judith Healy, 2013).

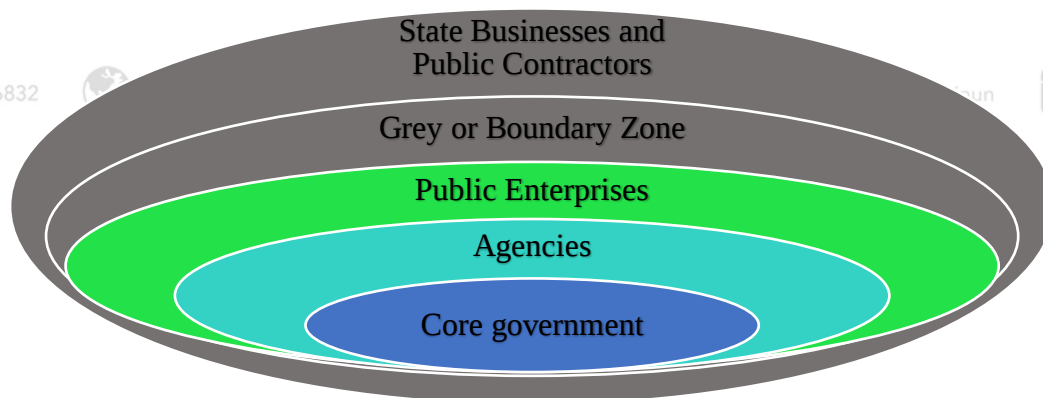


Figure 1.4. The Diagram of Public Sector Organizations. Adapted from Sikhungo and Hollyman (2011)

1.9.2 Accrual-based accounting

Accrual-based accounting or accrual accounting is an accounting method that uses the revenue recognition principle and matching concept. In accrual-based accounting, revenue is recognized and recorded when the product or service is given to the customer



without considering whether the payment or cash has been received. According to James (2008), accrual-based accounting is an accounting method that has an ability to measure assets and liabilities. A wide range of assets and liabilities can be used to measure the financial position of an organization. In this research, accrual-based accounting term refers to the accrual-based accounting system that will be implemented in Malaysian public healthcare. According to MPSAS 1- Presentation of Financial Statements, accrual-based accounting means a basis of accounting which transactions and other events are recognized when transactions occurred. The elements recognized under accrual-based accounting are assets, liabilities, equity, revenue and expenses.

1.9.3 Competency of human resources



According to Randhawa (2007), human resources are the people who work in an organisation while competency means a cluster of related knowledge, skill, abilities, and characteristics that are related to the performance of a significant aspect of the practice of a profession. Competency of human resources in this research means that the knowledge and skills on accrual-based accounting, and their attitudes or acceptance of people who work in finance department of public healthcare hospital on the implementation of accrual-based accounting in public healthcare. In this research human resources refers to the people who work in the public healthcare sector that involves in the implementation of accrual-based accounting such as finance department of hospital.





Tripathi and Agrawal (2014) states that competency of human resources is a set of skill, related knowledge and attributes that allow and individual to perform a task or job successfully. In this research, researcher examine training provided for the human resources to improve their skill and knowledge on accrual-based accounting in public sector.

1.9.4 Capabilities of Software and Technologies

Heineman and Council (2001) stated that software infrastructure is a set of interacting software components designed to ensure that a software system using those component will satisfy clearly defined performance specifications. Sazali Abdul Wahab, Raduan Che Rose and Suzana Idayu Wati Osman (2012) defined “technologies as a physical component which comprises of items such as products, equipment, techniques, processes and blueprints” (p.62). Besides that, the researcher also defined “technology as the informational component which consists of know-how in management, marketing, production, and quality control” (p.62). According to Vincent (2008), capability is a feature, faculty or process that can be developed or improved.

According to Alejandra (2012), software and technologies capabilities are ability to make use of software and technology in production, engineering and innovation. In this research, software refers to the accounting software that is used by government servants in public hospital and technology refer to the equipment and tools such as computer in the workplace. The capabilities of software and technologies refers





to the ability of current software and technologies that will be used in the implementation of accrual-based accounting to achieve the outcomes.

1.9.5 Accounting Policies and Standards

According to Malaysian Accountant General's Department (2014), accounting policies are the specific principles, bases, conventions, rules and practice applied by an entity in preparing and presenting financial statements. The accounting policies help in the application of accounting standards in Malaysian public sector which are known as Malaysian Public Sector Accounting Standards (MPSAS). MPSAS are accounting standards based on accrual-based accounting that issued by Accountant General's Department of Malaysia which were drawn up from International Public Sector Accounting Standards (IPSAS). In this research, accounting policies and standards refers to the laws and regulations regarding accrual-based accounting and MPSAS. This research will examine the suitability of accounting policies and MPSAS with the national circumstances.

1.9.6 Readiness

According to Andreasan (1991), "readiness to change is a willingness to act, possibly in vague ways and in some relatively distant future time period" (p.139). In the research, readiness refers to the perceived benefits that Malaysian public healthcare will get when accrual-based accounting are fully implemented in the sector. The perceived benefits





include improved decision making process, better financial management and increased accountability and transparency of Malaysian public sector. Therefore, the readiness of Malaysian public healthcare will be measured using these three perceived benefits.

1.10 Significance of the Study

This study focuses on the factors that related to the level of readiness on the implementation of full accrual-based accounting in the Malaysian public sector especially in public healthcare. Fard and Nazari (2012) stated that the factors that influence the implementation of accrual-based accounting in Ministry of Health are necessary to be investigated since accrual-based accounting is an effective system in recording the financial event of the public sectors.

This research contribute to the literature or body of knowledge since this research are new to the Malaysian public healthcare regarding the implementation of accrual-based accounting. This research employs two theories which are the Kurt Lewin's Change Theory and institutional isomorphism change theory to investigate the factors that related to the level of readiness in implementing accrual-based accounting in Malaysian public healthcare. In addition, the researcher also has developed new questionnaire to answer the first research question which is level of readiness in implementing accrual-based accounting.





This study will also contribute to public sector which include employees or government servants, public or user and government. The study is expected to help in improving the public healthcare sector employees in the future. The research done will guide Malaysian government in providing an effective and suitable training for human resources in order to increase their knowledge and skills in accrual-based accounting. Besides knowledge in accrual-based accounting, training in using the accounting system is also needed to ensure the successful of the implementation in accrual-based accounting. According to Ouda (2004), government servants with advanced knowledge in accrual-based accounting are not enough especially in developing countries. Besides that, this study may also help in determining the acceptance and readiness of the government servants' in public sector towards the implementation of accrual-based accounting.



Apart from that, the outcome of this research is expected to facilitate the public sector in overcoming the weakness of the accounting practice in public sector in the future. Based on the result of the findings, this research provide guidance for the public sector whether the accounting standard issued by MPSAS are suitable for public healthcare or not. This is particularly useful since Nesbakk (2010) suggested that although the plans of the implementation of accrual-based accounting in public sector is not an easy path, it basically reflects the reality that is considered by developers of accounting standards. Furthermore, this study will also help the researchers in the future to study more on the associated costs and benefits of accrual-based accounting in Malaysia especially subsequent to its full-implementation in the near future. The ability and opportunity to gain insights on these costs and benefits of the new accounting





system implementation should facilitate the government in formulating better mechanisms for public financial management in the future.

1.11 Limitations of the study

There are nevertheless some limitations in conducting this research. One of them is related on the sample of this research which only focused on the Malaysian public hospitals where the questionnaires were distributed to the staff in the public hospitals in the northern region of Malaysia. Therefore, the opinions of those who are not from public sector and public hospitals in other regions are not being considered due to the limited time frame of the study. The study also acknowledges that the opinion from other stakeholders are also important as it might offer different sets of opinion.



Besides, this research only focus on human resources, system and technology, accounting policies and standards as the factors that related to the level of readiness in implementation of accrual-based accounting in Malaysian public healthcare which are. Other factors that might related to the implementation of accrual-based accounting were not investigated in this research. There could also be a multitude of factors which are not considered in the implementation of accrual-based accounting such as type of assets and liabilities.





1.12 Summary

This chapter provides an overview on the implementation of accrual-based accounting in Malaysian public sectors. This study focuses on factors that related to the level of readiness in implementation accrual-based accounting in Malaysian public sector especially in public healthcare. The insights gained on the implementation should be useful for the government to ensure successful implementation of the new accrual-based accounting system. Therefore, the study will investigate the relationship between factor of human resources, software and technology, and accounting policies and standards regarding on the readiness of these factors in the implementation of accrual-based accounting in public healthcare.

