

## ASSET MANAGEMENT PRACTICES: MALAYSIAN GOVERNMENT DEPARTMENTS PERSPECTIVE

Aida Hazlin Ismail\*<sup>1</sup>  
Noor Fariza binti Saidin<sup>3</sup>  
Shukriah Saad<sup>2</sup>  
Mohd Ridhuan Mat Dangi<sup>2</sup>  
Razana Juhaida Johari<sup>2</sup>

<sup>1</sup> Faculty of Accountancy, Universiti Teknologi Mara (UiTM), Malaysia, (E-mail: [aidah348@uitm.edu.my](mailto:aidah348@uitm.edu.my))

<sup>2</sup> Faculty of Accountancy, Universiti Teknologi Mara (UiTM), Malaysia,

<sup>3</sup> Jabatan Audit Negara, Putrajaya, Selangor, Malaysia.

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**Abstract:** *The aim of this paper is to examine the factors that influence the asset management practices in Malaysian government departments. Over the years, the inefficient and ineffective of the mismanagement of the government's asset had been highlighted in the Auditor General Report. However, now there is an increase of people's awareness regarding the procedure taken by government in conducting procurement of assets. The main issue is increasing levels of misappropriation of assets in a government department. The people are aware because of the involvement of the public money in the procurement of assets. In fact, the credibility and accountability of the government's civil service are the focus of the people in lieu with the asset management practices. This study uses the purposive sampling method with the population comprised of employees involved in asset management units. Questionnaires have been distributed to 200 public sector employees working with the Federal Government in Putrajaya. An ordinary linear regression model was used to analyse the data. The findings show that employees' knowledge and internal control have significant positive influence on asset management practices. The results also indicate that there is no significant relationship between organizational culture and information system towards asset management practices. This study contributes to the financial reporting and public-sector accounting policies on asset management. The results of the study can also be generalized to the state government, statutory bodies and local authorities. Among the limitations of the study are concerns the influence factors of asset management practices among the public sector accounting areas.*

**Keywords:** *Asset management, Public Sector, Internal Control, Procurement of Assets & organizational culture*

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## **Introduction**

Asset management was developed as an approach in the public infrastructure sector, which promises to achieve more value with fewer resources (Moon, Athan, Furuta, & Dogaki, 2009). The key for an effective asset management is a preparation of a high-quality asset management policy and strategy which is supported by asset management plans. The process may focus on things that value for money and give support to councils in engaging with communities in order to keep a balance between service levels, risk and cost. The government has given serious emphasis on asset management because of the huge investments that have been made towards the development and provision of assets. A systematic, comprehensive and integrated asset management system must be established in line with the policy of continuous improvement of delivering system in the public sector service. Public sector employees are responsible to ensure that the assets always in perfect condition, safe to use, economical use and longer use life (Government Asset Management Policy, 2009). However, public organizations in Malaysia at every level whether the federal, state and local government levels, continued to be criticized for their lack of good governance (AuditorGeneral, 2011). The issue on asset management has been raised repeatedly in the Auditor General's reports. Among the most frequently reported issues were assets are not registered with their serial number, no 'Government Owned' identification sticker, broken and obsolete assets are failed to be disposed according to the procedure, incomplete maintenance listing, assets are not fully utilized, assets are not maintained properly, asset are not detectable, the record of asset movement is not detectable and misuse of assets (National Audit Report, 2011). The inefficiency of asset management will impose financial burden, affecting the government's reputation, affecting the quality and efficiency of service, safety and satisfaction of the customer.

## **Problem Statement and Research Objectives**

Over the years, the issue of misappropriation of assets is one of the major findings in the annual Auditor General Report. The public is interested in the asset management issues as it involves the utilisation of public money and the credibility of government civil service in managing the assets. Recently, the public was alerted with breaking news regarding the mismanagement of funds in the Education Ministry's which involved RM4 billion contracts for the 1BestariNet project (*Berita Harian online*, April 2017). The senior director was arrested, and this case was classified as asset misappropriation due to the employee steals the company's resources to gain self-interest benefit. The employees are able to use their powers and capabilities in daily tasks to get the illegal benefits and their actions are against their responsibility to the organization (Albrecht, Albrecht, & Albrecht, 2013). Another case of mismanagement of government assets involves two administrative assistants of the National Audit Department. The court charged both of them with 235 counts of stealing 'Touch n' Go' reload valued of approximately RM17,813 over a period of one year using the departments reload the terminal post (*New Strait Times online*, Nov 2017). The two recent cases discussed above highlighted that public asset management in Malaysia needs special attention for improvement.

It was clear that there are numerous issues involved in asset management practices (Majid et al., 2010; Hanis et al., 2011; Shardy, Arman, & Hamid, 2011; Norhidayah et al., 2015; Alhazmi, 2017). However, limited past studies have investigated the issue on asset management practices in Malaysia (Shardy, Arman, Hanizun, et al., 2011; Hanis et al., 2011; Ali & Zahari, 2015; Shah, McMann, & Borthwick, 2017). Prior research has not comprehensively considered the factors influence the asset management practices (Alhazmi, 2017). Moreover, none of these studies had looked into the relationship between employees' knowledge, internal control, organization culture and computerized information system in government departments.

Therefore, there exists a research gap concerning factors that might have significant impact on the asset management practice. Hence, this study intends to add to the existing corpus of knowledge regarding asset management practices factors that might influence government departments. Hence, the main objective of this research is to examine the influence factors on the asset management practices in the Malaysian government departments.

## **Literature review and hypotheses development**

### **Definition and concepts of Asset Management Practice**

In the financial world, assets can be classified into two major classes which are tangible and intangible (Fernholz, 2006). In the public sector perspective, tangible assets have been categorized into assets which are movable, non-movable, biological and store (inventory). While intangible assets, called as intellectual property consist of a pattern, trademark, copyright, geographical indication and industrial design (AM 1.1; AM 2.1; AM 7.1). Public sector specifies the definition of asset as “assets that been purchased or hire purchase with government money, received through donations or gifts or obtained through legislation”. Asset can also be a continuous process-improvement strategy to improving the availability, safety, reliability and longevity of assets which include the systems, facilities, and equipment as well as processes (Davis, 2007).

The term asset management refer to the public real property or public management varies substantially depending on the country, the institutional and professional development (Kaganova & Nayyar-Stone, 2000). In regards to the Malaysian public sector, asset management defined as the combination of processes in maintaining the function of an asset compatible with the effectiveness of performance, cost and risk control in accomplishing the objectives and ensure the services delivery from an agency are occurs (*Total Asset Management Manual*, 2009). A key issue in managing asset is ensuring the long-term sustainability of the asset, not being used for personal interest. Effective asset management will provide better accountability, sustainability, risk management, service management and financial efficiency. This can be achieved through strong governance and accountability.

### **Employees' Knowledge**

It is important to evaluate the knowledge of all managers, their skills and experiences in performing their given tasks during assessing the performance of the asset management team (Arnaboldi & Lapsley, 2009). The absence of supporting databases makes assets management decision making a matter of guesswork whilst insufficient, ill-trained and inexperienced staff militates against efficient effective and quality asset management services in public sector (Hanis et al., 2011). While results of other studies suggest greater level of knowledge is necessary if higher level benefits are to be achieved in maintenance management information system in physical asset management (Hipkin, 2001).

Furthermore, a study by Shah et al. (2017) found that employees' knowledge have a significant relationship with asset management practice. Managers are required to improve their asset management capability in order to ensure that an appropriate perception of knowledge were gained by employees (Shah et al., 2017). This supported by Hanis et al. (2011) that knowledgeable employees would lead to an effective assets management practice in government department. Knowledgeable employees lead to an effective asset management practices in the government department. Hence, this study examines the influence of knowledge

which is expected to motivate public sector's officers in enhancing their practices. This leads to the following hypothesis:

*Hypothesis 1: Employees' knowledge may influence the asset management practices in Malaysian government departments.*

### **Internal Control**

Internal control can assess the effectiveness of financial control in administrative government units for internal control units by the amount of its commitment to the rules and regulations and financial instructions provided in the Jordanian regime (Omar & Zaid, 2016). The assets must be used properly and are not being diverted for inappropriate, illegal, inefficient or ineffective purposes (Steinhoff, 2005). Purpose of yearly inspection is to ensure that assets are used accordingly, in good condition and record of assets being updated upon any changes made to the assets (*Treasury of Malaysia Circular*, 2011). The financial performance of business entities that have strong internal control systems is better than the performance of those entities that have weak systems. Firms with weak internal controls experienced a lower market value (Tseng, 2007).

Cuomo (2005) explained that internal control would help to protect the assets of an organization that contributes to effective operation of organizational goals. The effective implementation of internal control system will ensure that organization would meet their objectives, such as providing services to the community professionally, while utilizing resources efficiently and minimizing the risk of fraud (Morehead, 2007). Mathenge (2014) suggested that the ability of individuals to follow policies and procedure will prevent him from getting involved in fraudulent action such as misappropriation of the organization's asset. A good internal control system would benefit an organization by preventing the incidence of poor financing. In addition, it would help organizations to work effectively while detecting errors and irregularities in their operation (Pathak, 2005; Wardiwiyo, 2012). This study expects that a similar internal control system could improve the effectiveness of asset management practices. Hence, this hypothesis is developed:

*Hypothesis 2: Internal control on policies and procedures may influence the asset management practices in Malaysian government departments.*

### **Organizational Culture**

Organizational culture and performance were considered interrelated to each other by nature and scope of culture especially in working culture and personnel behavior. Rousseau (2000) finds that the organization culture helps in measuring limitation to overcome performance measurement such as the performance of asset management practices. This result is consistent with David, Maribeth & Rebecca (2010) which stated that the ethical leadership is positively related to employee behaviors. When the leaders are a moral person such as high integrity personal, and moral managers, they are preferable to create a perfect environment which doing the right things. Brunetto et. al (2013) found that the public-sector employees' attitudes towards change and their perception of autonomy was significantly related to organizational asset management culture. Employees are intended to use their powers and capabilities in their daily tasks to get the wrong benefits (Zimelman et al., 2012). In addition, Hassan and Hatmaker (2015) indicated that there is a strong connection between leadership and performance where asset sustainability requires management and supervisors to promote proactive culture. The ability of an individual to follow policies and procedures will prevent him from getting involved

in fraudulent actions such as misappropriation of the organization's asset (Mathenge, 2014). Organizational culture can influence the performance of asset management practices through employee's attitude towards change and their perception of autonomy. A proactive organizational culture could be promoted by the leadership of asset manager, enhancing supervisor's and employees' autonomy and building a changing management in organizations. However, the following hypothesis is developed:

*Hypothesis 3: Organizational culture may influence the asset management practices in Malaysian government departments.*

### **Computerized Information System**

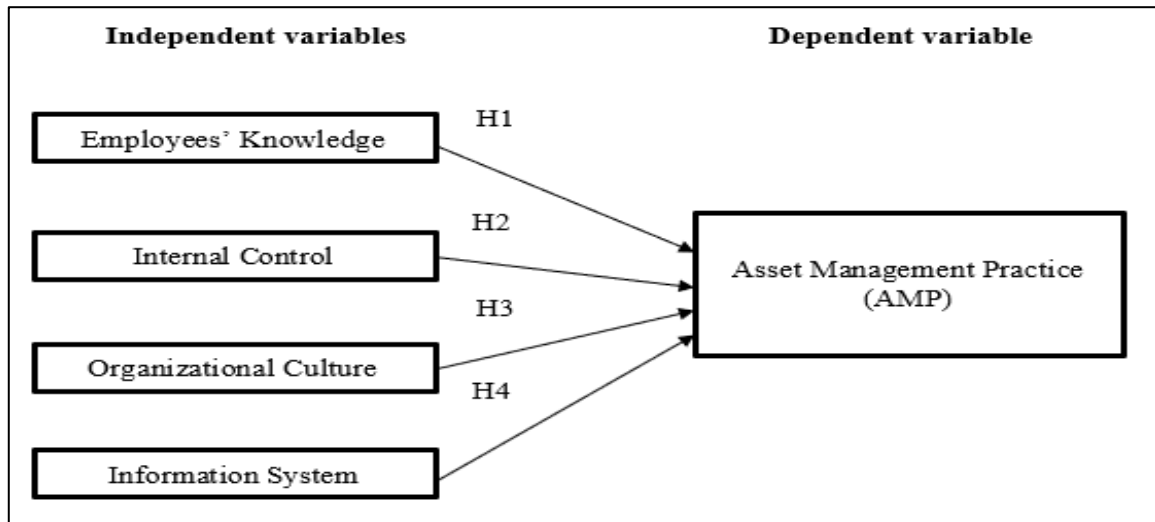
The primary justifications for using asset management information systems is to improve business and data reporting procedures (Mathew, Ma, & Hargreaves, 2008). Having such information enables asset managers to influence organizational decisions that affect their operations. It also enables organizations to run their operations with access to financial information, ensuring that there are no unpleasant surprises due to "in the dark" decision making (Kooymans & Abbott, 2006). Many asset managers expressed their concerns over the quality of data contained in the information systems they rely on (Wijnia & Herder, 2009). The system will enable an organization to give accurate information to a government department. In addition, Dahlia et al. (2017) found that the system technology provides more timely and accurate enterprise-wide information in decision making process and reduce the documentation cost of the organization. The study proved that applying the latest system is the efficient strategy to enhance the performance of the public sector.

Although most of the studies found that there is significant relationship between information system and asset management practice, Ossai and Degoke (2014) had found the insignificant. Lack of computer skills was equally identified as a key challenge and major difficulty to the development of information system (Ossai and Degoke, 2014). The finding demonstrated that information system has significant negative impact on asset management practice. When the employees have no interest to learn computer skills, this would have result in the lack of information used for asset management practice. However, Alshehri and Drew (2010) found that there are several barriers of successful implementation of government system such as technical (privacy and security), organizational (top management support, lack of qualified personnel and resistance to change to the electronic ways), social (culture) and financial (high cost). Therefore, quality information system criteria would enable users for easy access, interpret and helps to make good decisions. Given this inconclusive evidence, the following hypothesis is developed:

*Hypothesis 4: Computerized information system may influence the asset management practices in Malaysian government departments.*

### **Conceptual Framework**

Figure 1 represents the conceptual framework for the current study. As shown in the Figure, employees' knowledge, internal control, organizational culture and information system are the factors (independent variables) that influence asset management practices in Malaysian government departments (dependent variable).



**Figure 1: Factors Influence the Asset Management Practices in Government Departments**

Figure 1 indicates that the independent variables, which are employees' knowledge, internal control, organizational culture and information system, might have a positive relationship with the dependent variable, which asset management practices. The current study is using the agency theory as it will shed light on how the principal and the agent interact for the benefit of government. Improving of asset management practice is perceived to be the main factor of the government department in enhancing public confidence towards their responsibility.

### **Research Methodology**

A total of 135 questionnaires were returned to the researcher out of the 200 questionnaires being distributed earlier. The employees in the selected ministries are appropriate respondents to give input on factors that influence asset management practices of government departments in this study. The survey method was used as the research instrument for the purpose of obtaining data in this study. The data was gathered using a structured questionnaire because it is cheap, reduces bias error, allow greater anonymity and easy coding (Vaus, 1996). Besides, it is quick and efficient way of obtaining large amounts of information from large sample (McLeod, 2014) and maintain the confidentiality of the respondent's information (Sekaran, 2016). The questionnaires were distributed to 200 public sector employees working with the Federal Government in Putrajaya who possessed knowledge about the asset management process. The appropriate questions to measure the variables were developed based on arguments from previous literature. The measurement of variables in this questionnaire was based on a 5-point Likert scale, ranging from Strongly Disagree - 1 to Strongly Agree - 5. The questionnaire consisted of six sections representing the measurement for each variable. Section A related to demographic information; Section B represented the measurement of asset management practice; Section C represented the measurement of employees' knowledge; Section D represented the measurement of internal control; Section E represented the measurement of organizational culture and last section represented the measurement of computerized information system. The questions were developed based on the guidelines introduced by the National Audit Department and modified based on previous literature reviews to suit this study (Omar & Zaid, 2016). The questions were modified based on previous literature reviews to suit this study. A pilot test was conducted one month before the questionnaires were sent out to respondents in the thirteen selected ministries in Putrajaya. Some feedback received from the pilot study helped to improve the questionnaire for better understanding.

**Table 1: Summary of the Development the Research Instrument**

|                               | <b>Variables of the study</b>   | <b>Source of Reference</b>                                      |
|-------------------------------|---------------------------------|---|
| <b>Dependent variable:</b>    | Asset management practice       | Financial Index Reporting Management (2014); Omar & Zaid (2016) |
| <b>Independent variables:</b> | Employees' knowledge            | Financial Index Reporting Management (2014)                     |
|                               | Internal control                | Financial Index Reporting Management (2014)                     |
|                               | Organizational culture          | Omotayo, Adenji & Anthonia (2015)                               |
|                               | Computerized information system | Yusdira (2013); Davis (1989)                                    |

### **Data Collection and Analysis**

A cover letter was attached to every questionnaire to clarify the objective of the survey and protect the respondent's identity. The researcher's contact number and email address were also attached to the cover letter in case the respondents had any queries about the study. The questionnaires were distributed to respondents through email and online survey, which is an easy survey platform for respondents and they can answer the questionnaire anytime, anywhere. The email was used as a medium for distributing the questionnaire because in the public sector, email is one of the effective ways of communication and the government employees usually check their email daily. It is a reliable method for reaching target respondents in a stipulated time. Furthermore, a follow-up email was used to remind respondents before the second week of the set dateline because of a slow response in returning the questionnaires. A total of 135 questionnaires were returned to the researcher out of the 200 questionnaires being distributed earlier. A total of 67.50% response rate out of all the questionnaires distributed. Baines and Langfield-Smith (2003) indicates that such response rates (i.e., 25%) are now common in accounting research and is considered sufficient for statistical analysis. The data collected were coded and analyzed using both descriptive and inferential statistics. The result was computed using IBM SPSS version 24 for Windows. Several analyses were carried out include descriptive analysis, validity test, reliability analysis, normality test, correlation analysis and multiple regression test to fulfill the objective of the study. The analyses data are presented in figures and tables, summary statistics of the mean and standard deviation.

### **Data Analysis and Results of the Study**

In this study, the employees working with asset management units in the Malaysian government departments represented the unit of analysis. This section presents the demographic data of respondents comprising level of position, name of the ministry or department, educational background, years working in the asset management department and type of assets being managed. Out of 135 respondents, 43 respondents or 31.9 percent of them were management and professional group, and 92 respondents or 68.1 percent were support group. This shows that both levels of position were involved in this study. The proportion of support group within the asset management department of the sample study (68.1 percent) is a reasonable proportion. This is because the study included asset management department in thirteen ministries and the support group employees are the key personnel that have major responsibility for monitoring government assets representing the department. The total distribution of questionnaires and percentage of feedback respondents are as Table 2.

**Table 2: Distribution of Questionnaires and Percentage of Feedback Respondents**

| No.          | Departments / Ministries   | No. of questionnaires distributed | Total feedback % of respondents | Frequency  | Percentage (%) |
|--------------|--|-----------------------------------|---------------------------------|------------|----------------|
| 1            | Ministry of Finance (MOF)  | 25                                | 12.5%                           | 24         | 17.8           |
| 2            | Ministry of Health (MOH)   | 20                                | 10.0%                           | 15         | 11.1           |
| 3            | Ministry of Defense (MOD)  | 10                                | 5.0%                            | 3          | 2.2            |
| 4            | Ministry of Rural and Regional Development (KKLW)                  | 23                                | 11.5%                           | 13         | 9.6            |
| 5            | Ministry of Home Affairs (KDN)                                     | 12                                | 6.0%                            | 7          | 5.2            |
| 6            | Ministry of Communication and Multimedia (KKMM)                    | 14                                | 7.0%                            | 8          | 5.9            |
| 7            | Ministry of Women, Family and Community Development (KPWKM)        | 3                                 | 1.5%                            | 2          | 1.5            |
| 8            | Ministry of Energy, Green Technology and Water (KeTTHA)            | 10                                | 5.0%                            | 10         | 7.4            |
| 9            | Ministry of Domestic Trade, Co-operatives and Consumerism (KPDNKK) | 23                                | 11.5%                           | 18         | 13.3           |
| 10           | Ministry of Agriculture & Agro-Based Industry (MOA)                | 11                                | 5.5%                            | 10         | 7.4            |
| 11           | Ministry of Works (MOW)  | 17                                | 8.5%                            | 13         | 9.6            |
| 12           | Ministry of Education (MoE)  | 10                                | 5.0%                            | 7          | 5.2            |
| 13           | Ministry of Science, Technology and Innovation (MOSTI)             | 22                                | 11.0%                           | 5          | 3.7            |
| <b>TOTAL</b> |  | <b>200</b>                        | <b>100%</b>                     | <b>135</b> | <b>100</b>     |

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## Data Analysis and Results of the Study

### Demographic Information

In this study, the employees working with asset management units in the Malaysian government departments represented the unit of analysis. This section presents the demographic data of respondents comprising level of position, name of the ministry or department, educational



background, years working in the asset management department and type of assets being managed.

### **Respondent of the study**

Table 2 shows detail results of the demographic profile representing the department or ministries. Data analysis on respondent's department or ministry shows that 24 respondents or 17.8 percent were from Ministry of Finance (highest respondents). 15 respondents or 11.1 percent were from Ministry of Health. Another 3 respondents or 2.2 percent were from Ministry of Defence. In addition, 13 respondents or 9.6 percent were from Ministry of Rural and Regional Development, 7 respondents or 5.2 percent were from Ministry of Home Affairs, 8 respondents or 5.9 percent were from Ministry of Communication and Multimedia. 2 respondents or 1.5 percent were from Ministry of Women, Family and Community Development (lowest respondents), 10 respondents or 7.4 percent were from Ministry of Energy, Green Technology and Water, 18 respondents or 13.3 percent were from Ministry of Domestic Trade, Co-operatives and Consumerism. Lastly, 10 respondents or 7.4 percent were from Ministry of Agriculture & Agro-Based Industry, 13 respondents or 9.6 percent were from Ministry of Works, 7 respondents or 5.2 percent were from Ministry of Education and 5 respondents or 3.7 percent were from Ministry of Science, Technology and Innovation.

### **Respondent's Education Background**

Table 3 shows detail results of demographic profile representing the education background of the respondents as follows:

**Table 3: Education Background**

| <b>Question</b>      | <b>Item</b>       | <b>Frequency</b> | <b>Percentage (%)</b> |
|----------------------|-------------------|------------------|-----------------------|
| Education background | Master's degree   | 19               | 14.1                  |
|                      | Bachelor's degree | 38               | 28.1                  |
|                      | Diploma           | 51               | 37.8                  |
|                      | STPM / SPM        | 27               | 20.0                  |
| <b>TOTAL</b>         |                   | <b>135</b>       | <b>100</b>            |

Results on education background indicates that 19 respondents or 14.1 percent had a master's degree qualification, followed by 38 respondents or 28.1 percent with bachelor's degree, 51 respondents or 37.8 percent with diploma and 27 respondents or 20.0 percent had STPM/SPM certificates. This implied that respondents were well educated and could respond to research questions with ease. This demonstrates that employees in the asset management department are qualified to conduct the practices efficiently and effectively.

**Table 4: Period of Experience Managing Asset, Type of Asset Being Manage and Level of Position**

| <b>Question</b>                     | <b>Item</b>       | <b>Frequency</b> | <b>Percentage (%)</b> |
|-------------------------------------|-------------------|------------------|-----------------------|
| Period of experience managing asset | More than 5 years | 46               | 34.1                  |
|                                     | 4 to 5 years      | 25               | 18.5                  |
|                                     | 2 to 3 years      | 39               | 28.9                  |
|                                     | Less than 1 year  | 25               | 18.5                  |

|                             |   |    |      |
|-----------------------------|---|----|------|
| Type of assets being manage | Movable asset                                   | 84 | 62.2 |
|                             | Movable asset; Non-movable asset                | 34 | 25.2 |
|                             | Movable asset; Non-movable asset; Biology asset | 2  | 1.5  |
|                             | Non-movable asset                               | 14 | 10.4 |
|                             | Store   | 1  | 0.7  |
| Level of Position           | Management and Professional group               | 43 | 31.9 |
|                             | Support group                                   | 92 | 68.1 |

Most of the respondents are highly experienced in the field of asset management as stated in Table 4. The results indicate that 46 respondents or 34.1 percent has more than 5 years working experience followed by 25 respondents or 18.5 percent has between 4 to 5 years of working experience 39 respondents or 28.9 percent has between 2 to 3 years working experience and 25 respondents or 18.5 percent has experienced less than 1 year. However, this is an indication that the employees in the asset management department have enough expertise to carry out the functions and ability to assess the effectiveness of asset management practices. Data analysis indicates that 84 respondents or 62.2 percent managed movable asset, followed by 34 respondents or 25.2 percent managed movable and non-movable asset, 2 respondents or 1.5 percent managed movable, non-movable asset and biology asset, 14 respondents or 10.4 percent managed non-movable and 1 respondent or 0.7 percent managed store. This implied that, respondents had managed different types of asset and are able to practice asset management efficiency.

Table 4 identifies that out of 135 respondents, 43 respondents or 31.9 percent of them were management and professional group, and 92 respondents or 68.1 percent were support group. This shows that both levels of position were involved in this study. The proportion of support group within the asset management department of the sample study (68.1 percent) is a reasonable proportion. This is because the study included asset management department in thirteen ministries and the support group employees are the key personnel that have major responsibility for monitoring government assets.

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## **Instrument Validation**

### **Reliability Test**

The study uses various statements to gauge the perception of respondents on the five dimensions, namely employees' knowledge (10 statements), internal control (10 statements),

organization culture (10 statements), computerized information system (10 statements) and asset management practice (10 statements). The use of statements to measure people's perception of something (dimension) requires that these statements are reliable or consistent.

**Table 5: Cronbach's Alpha by Dimension**

| <b>Dimension</b>                          | <b>No Of Statements</b> | <b>Cronbach's Alpha</b> |
|---|-------------------------|-------------------------|
| <b>1. Employees' Knowledge</b>            | 10                      | 0.907                   |
| <b>2. Internal Control</b>                | 10                      | 0.913                   |
| <b>3. Organizational Culture</b>          | 10                      | 0.954                   |
| <b>4. Computerized Information System</b> | 10                      | 0.982                   |
| <b>5. Asset Management Practice</b>       | 10                      | 0.878                   |

An alpha score of above 0.75 generally indicates a scale of high reliability, 0.5 to 0.75 is generally accepted as a moderately reliable scale, while a figure below this is generally a scale of low reliability (Hinton et al., 2004). Table 5 presents the Cronbach's alpha values of the five dimensions, ranging from 0.907 (employees' knowledge), 0.913 (internal control), 0.954 (organizational culture) and 0.982 (computerized information system) and 0.878 (asset management practice). The various Cronbach's alpha values above 0.8 indicate that the statements used can reliably measure the perception of respondents on the five dimensions.

#### **Normality Test**

Results for normality test shows that the skewness and kurtosis value for all the variables are in the range of -0.887 to 1.060. The value of skewness and kurtosis in the range of -2 to +2 is considered as a normal distribution (George & Mallery, 2010). This indicates that the mean score for employees' knowledge, internal control, organizational culture, computerized information system and asset management practice are normally distributed. Following this conclusion, the study used the parametric statistical tool in the following analysis. There is a small difference between the mean of asset management practices in this normality test with the trimmed mean which results 0.0312. The small difference can be considered insignificant to this study and not affect the normal distribution of data. Thus, it can be assumed that no violation of normality occurred.

#### **Regression Analysis**

Table 6 shows the summary of the multiple linear regression model.  $R^2$  is a goodness of fit measure for linear regression models (Frost, 2017). The results show that 49.2% of the variation in Asset Management Practice is explained by the variation in variation of employees' knowledge, internal control, organizational culture and computerized information system. The adjusted  $R^2$  indicates that 47.6% of the variation in Asset Management Practice is explained by the variation in employees' knowledge, internal control, organizational culture and computerized information system, taking into account the sample size and number of independent variables. Hence, the effect of employees' knowledge, internal control, organizational culture and computerized information system as a whole on asset management practice is moderately high.

Table 6 indicates that the result shows significant value at 1% ( $F = 31.463$ ,  $p = .000$ ) and there is a linear regression exists between a dependent variable with at least one independent variable.

**Table 6: Coefficients**

| Model                  | Unstandardized Coefficients |                       | Standardized Coefficients | t                          | Sig.     |                   |
|------------------------|-----------------------------|-----------------------|---------------------------|----------------------------|----------|-------------------|
|                        | B                           | Std. Error            | Beta                      |                            |          |                   |
| <b>1</b>               |                             |                       |                           |                            |          |                   |
| (Constant)             | 1.311                       | 0.304                 |                           | 4.318                      | 0.000    |                   |
| Employees' Knowledge   | 0.227                       | 0.073                 | 0.249                     | 3.107                      | 0.002    |                   |
| Internal Control       | 0.459                       | 0.071                 | 0.543                     | 6.430                      | 0.000    |                   |
| Organizational Culture | 0.124                       | 0.072                 | 0.132                     | 1.718                      | 0.088    |                   |
| Information System     | -0.099                      | 0.049                 | -0.162                    | -2.018                     | 0.046    |                   |
| <hr/>                  |                             |                       |                           |                            |          |                   |
|                        | R                           | R Square              | Adjusted R Square         | Std. Error of the Estimate |          |                   |
|                        | .701 <sup>a</sup>           | .492                  | .476                      | .39892                     |          |                   |
| <hr/>                  |                             |                       |                           |                            |          |                   |
|                        |                             | <b>Sum of Squares</b> | <b>df</b>                 | <b>Mean Square</b>         | <b>F</b> | <b>Sig.</b>       |
| Regression             |                             | 20.027                | 4                         | 5.007                      | 31.463   | .000 <sup>a</sup> |
| Residual               |                             | 20.687                | 130                       | .159                       |          |                   |
| Total                  |                             | 40.715                | 134                       |                            |          |                   |

a. Dependent Variable: Overall means for asset management practice

b. Predictors: (Constant), Overall means for information system, Overall means for organizational culture, Overall means for knowledge, Overall means for internal control system

c. Dependent Variable: Overall means for asset management practice

d. Predictors: (Constant), Overall means for information system, Overall means for organizational culture, Overall means for knowledge, Overall means for internal control system

Table 6 explains the influence of the employees' knowledge, internal control, organizational culture and computerized information system on asset management practices. H<sub>1</sub> suggested the employees' knowledge will influence the asset management practices. The result showed beta = 0.227, t = 3.107, meaning that high employees' knowledge would lead to effective asset management practice. The employees' knowledge p-value = 0.002 < 0.01. There is an evidence that employees' knowledge affects asset management practices at a 0.05 significance level ( $\alpha=0.05$ ).

Thus, H<sub>1</sub> is supported. H<sub>2</sub> suggested the internal control will influence the asset management practices. The result identified that beta = 0.459, t = 6.430, meaning that strong internal control would increase the quality of asset management practice. Internal control with a p-value = 0.000 < 0.01 significance level ( $\alpha=0.05$ ) indicates that there is evidence that internal control significantly affects the asset management practices. Thus, H<sub>2</sub> is supported. H<sub>3</sub> suggested the organizational culture will influence the asset management practices. The coefficient of organizational culture with beta = 0.124, t = 1.718, meaning that there is no relationship between organizational culture and asset management practices. Organizational culture with a p-value = 0.088 > 0.01 significance level ( $\alpha=0.05$ ) indicates that there is no significant

relationship between organizational culture and asset management practices. The result implies that the changes in organizational culture have no impact on asset management practices. Thus, H<sub>3</sub> cannot be further supported and H<sub>3</sub> is rejected.

H<sub>4</sub> suggested the computerized information system will influence the asset management practices. The coefficient of computerized information system with  $\beta = -0.099$ ,  $t = -2.018$ , indicate that there is a significant relationship between computerized information system and asset management practices. Computerized information system with a  $p$ -value =  $0.046 > 0.01$  significance level ( $\alpha=0.05$ ) indicates that there is a significant relationship between computerized information system and asset management practices. However, the negative relationship implies that an increase used in information system would reduce the effectiveness of asset management practices. Thus, H<sub>4</sub> is supported.

### **Discussion of Findings of the study**

The first objective of the study is to examine the influence in employees' knowledge towards asset management practices in the Malaysian government departments. Hypothesis (H<sub>1</sub>) test results support previous literature by showing that there is a significant and positive correlation between employees' knowledge and asset management practice in Malaysia. The correlation indicates that knowledgeable employees would lead to effective asset management practice in a government department. The findings support Hanis et al., (2011) where a low-level of employees' knowledge due to ill-trained and lack experience to manage the assets would impact the assets practices in government departments. As a matter of facts, employees are the most valuable assets to organization where the relevant skills, adequate experiences and technical knowledges are all vital and important for asset management practices in the Malaysian government departments (Shardy et.al, 2011). Hence, the government employees should receive an adequate training to have the skills and abilities to facilitate the department (Norhidayah et. al, 2015).

Safeguarding the government assets is crucial. It is an important responsibility for every employee. However, the efforts might be wasted due to the absence of capable guardians. On top of that, the situation has created the opportunity for fraud to happen. Perhaps, long term education needs to be developed to make fraud unacceptable (Rosmawati et al., 2015). Therefore, employees' knowledge is reflecting the asset management practice. The managers are required to improve their asset management capability in order to ensure that an appropriate perception of knowledge was gained by employees (Shah et al., 2017). The second objective of the study is to explore the influence of internal control towards asset management practices in a government department. Hypothesis (H<sub>2</sub>) test results support previous literature by showing that there is a significant and positive correlation between internal control and asset management practice in the Malaysian government department. Findings best indicate that the higher the internal control, the better the asset management practice. (Coram et al., 2008) supports that organization with an internal audit function are more likely to detect and self-report fraud through misappropriation of assets than those that do not have the internal control function of the organization. This explains that the internal control system is helpful in detection of any mismanagement of government assets. An effective internal control system refers to the effective control measures established by an organization with the aim to protect their assets (Badara and Saidin 2013). The implementation of internal control such as physical control over assets would influence the financial accountability of government departments. The better the application of internal control will influence better performance of the government sector (Cecilia, 2017).

The third objective of the study is to investigate the influence of organizational culture towards asset management practices in a government department. Hypothesis (H<sub>3</sub>) test results show the existence of insignificant relationship between organizational culture and asset management practices in the Malaysian government departments. Based on the findings, organizational culture has no influence on the asset management practice in a government department. Therefore, the relationship cannot be further supported. The hypothesis is rejected. However, the results were supported by findings from Hanim et al. (2017) study which showed that the organizational culture, such as integrity does not have critical impact on asset misappropriation. Phelps (2010) also supports the notion that it is not easy to describe and define the characteristic of organizational culture whilst the existence of a supportive organizational culture. Cultural differences and individual behavior patterns play an important role in the acceptance of the government system. Working culture is important to drive the asset management practice (Mason, 2006). An organizational culture is difficult to study partially because it is not an easy concept to define (West, 2001).

The last objective of the study is to examine the influence of computerized information system towards asset management practices in a government department. Hypothesis (H<sub>4</sub>) results indicate that there is an inverse relationship between computerized information system and asset management practice in the Malaysian government department. The result indicates the increasing usage of information system would reduce the effectiveness of asset management practice. However, the results were supported based on a study by Ossai and Degoke (2014) which found lack of computer skills was equally identified as a key challenge and major difficulty in the development of IS. There is a lack of general computer skills amongst the employee in the organization. Most of the elderly employee have no interest and willingness to learn computer skills which resulting in high negative impact on the operation of the organization. Alshehri and Drew (2010) also highlight that the barrier to successful implementation of government system such as technical (privacy and security), organizational (top management support, lack of qualified personnel and resistance to change to electronic ways), social (culture) and financial (high cost). The results might be due to most employees in the government department are not familiar with the computerized asset system and lack of training in information systems for the government employees. Therefore, the government must take appropriate action, such as providing more training and awareness on a computerized system, and apply the enforcement for the usability of the system.

### **Conclusions and Future Research**

This research study explored the factors of asset management practices in the Malaysian government departments. In general, the government's asset management were only focused on the registration process, maintenance and disposal of assets which have been devoted to respective officers only. Other officials who were not directly involved in the procedure would not border anything. They are strictly out of control to the process and hold no power to involve such procedure. In public sector, the asset management practice was not affected by the organizational culture. This is due to the segregation of duties that have been made to individuals, units or specific departments (Treasury Circular, 2015). The power and enforcement for such procedure were limited to the specific department (treasury) only. As a result, it is difficult to inculcate asset management culture in the government department.

The overall findings indicated that employees' knowledge and internal control had met the expectations of the research objectives and hypotheses. The results provide evidence that

employees' knowledge and internal control had a significant influence on asset management practices in a government department. This would lead to effective asset management practices in a government department. Hence, the employees will perform a better-asset practice. In addition, when the employees are more knowledgeable, they have wider knowledge and experience to perform an effective practice. Consequently, it is proven the underpinning of Agency Theory in asset management literature, which indicates that the knowledgeable employees and having a good internal control will lead to the better asset management practices. As a result, the public community is confidence with government service. However, based on the findings, organizational culture and computerized information system did not have a significant impact on asset management practice in a government department.

The result of this study showed several directions for future research on asset management practices. Future research would have been more convincing if the researchers relate more factors to effectiveness of asset management practices in the Malaysian government department. The question is one that deserves empirical scrutiny. Apart from that, future research can broaden the scope of research regarding the roadmap and implementation strategies of asset management practices in government department or agencies.

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