

The Determinants of AIS Alignment on Audit Firms in Malaysia

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Abstract

Accounting information system (AIS) is an important part increasing the adequacy of the decision making process on organisations. American Accounting Association (AAA) states that the AIS is aspect of Management Information System (MIS) that collecting data and categorises the data in decision making process, one need assurance that the information obtained are relevant, reliable and in timely manner with a reasonable cost. It is hard to take an advantage without implementation information technology (IT) in organisation. The objective of this study is to determine the factor influencing AIS alignment on audit firms in Malaysia. The total sample for this study is 100 firms. This study found that management knowledge, management commitment and external expertise have significant influence on AIS alignment on audit firms in Malaysia.

Keywords: AIS alignment, audit firms, Malaysia.

1. Introduction

Accounting information system (AIS) is an important part increasing the adequacy of the decision making process on organisations. American Accounting Association (AAA) states that the AIS is aspect of Management Information System (MIS) that collecting data and categorises the data in decision making process, one need assurance that the information obtained are relevant, reliable and in timely manner with a reasonable cost. It is hard to take an advantage without implementation information technology (IT) in organisation.

Computer technology innovation has expanded the use of information systems and one of them is the usage of accounting information system (Khairuddin, et al. 2010).

AIS have been widely accepted by an organisation, which is both the public and private sector (Rom & Rohde, 2007). However, AIS have a broader perspective and cover not only the intersection of accounting and information system, but also accounting and information system as separate domains (Steinbart, 2009). AIS also help to cover both structured and unstructured financial and non-financial for the decision making, management control and performance management. However, the successful implementation of the AIS depends on physically accepted by user within organisations (Aoun et al., 2010 and Pulakanam & Suraweera, 2010). This is because the user need to use wisely about AIS during do their work or for the decision making in future.

Based on existing research has largely focused on issues related to the development, design and performance effects of accounting information system (AIS) (e.g. Grabski et al., 2011, Vaassen & Hunton, 2009 and Vasarhelyi & Alles, 2008). Prior research on the acceptance of accounting technology and/or techniques—which is activity-based costing (Askarany and Yazdifar, 2012, Hopper and Major, 2007) and target costing (Yazdifar & Askarany, 2012)—has mainly focused on administrators and instructors, rather than accountants, even though accountants play a key role in the diffusion dynamics of the AIS. In fact, the problem existing from

organisations' point of view understands factors that contribute to accountants' behaviour towards the AIS adoption remained relatively undeveloped (Aoun et al., 2010). The objective of this study is to determine the factor influencing AIS alignment on audit firms in Malaysia.

2. Literature Review

2.1 Development of Accounting Information System.

The purpose of accounting systems is to provide an orderly method for gathering and organising information about the various business transactions so that it may use as an aid to management in operating the business (Copeland and Dascher, 1978). Accounting system can be describe as records, procedures, and equipment that routinely deal with the events affecting the financial performance and position of the organization.

Accounting systems are responsible for analysing and monitoring the financial condition of companies, preparation of documents necessary for tax purposes, providing information to support the many other organisational functions such as production, marketing, human resource management, and strategic planning (Amidu, 2005; Amidu et al., 2011; Ismail & King, 2005; Khairuddin et al., 2010). By using the system, it easier for the company to determine financial condition and forecast for future performance. When information is assembled, organised and presented in a way uniquely requested by management (in other words, using AIS), its allow managers to immediately locate the information that is useful for them (Khairuddin et al., 2010).

2.2 Management Knowledge

Swan et al.(1999) researched said that, the higher the management knowledge, the higher an effectiveness of the making decision. Management knowledge of AIS is very important in problem solving related with accounting system. In general, we found in the research that there is a positive relationship between management knowledge and AIS alignment. Without knowledge on higher-level participation, there is a big cause on AIS alignment.

To be strengthen, based on Zulkarnain (2009) researched, he believe the knowledge had been recognised as the most valuable asset as a mean to survive and be compete in 'knowledge society'. He also highlighted as the world moving into knowledge era, how the organisations will manages its knowledge in order to remain competitive amongst

the industry. Based on the finding above, the following hypothesis is developed:

H1: There is significant relationship between the management knowledge and AIS alignment.

2.3 Management Commitment

The management commitment is essential so that the top management and other resources can receive feedback well, and achieve the expected goals of the organisation (Cooper, 2006). It's an important part in organisation so that the organisation is following the right path in achieving organizational goals.

Managerial commitment in the form of AIS knowledge and participation in AIS implementation would encourage users to develop positive attitudes towards the use of AIS (Thong et al., 1996). In other words, the commitments from the management itself give the positive impact on AIS alignment. Based on the finding above, the following hypothesis is developed:

H2: There is significant relationship between the management commitments and AIS alignment.

2.4 Internal Expertise

One of the most important factors to be considered in the adoption of new technologies is the expertise of the people who are using the systems. In other words, internal expertise itself plays important roles in determining the effectiveness of AIS among user. According to Aion (2013), there is be positively related to the adoption of accounting information system. It means, without internal expertise, the organisation may be unaware of new technologies, and may not be prepared to invest in adopting these technologies because of uncertainties and risks (Aion, 2013). Based on the finding above, the following hypothesis is developed:

H3: There is significant relationship between the internal expertise and AIS alignment.

2.5 External Expertise

Information system expertise has the potential to create business strategies by focusing on internal and external IS applications (Clemons, 1986). It other words, external expertise help the company in developing implementation of AIS among user, such as consultation, and to achieve the effectiveness on AIS alignment.

Alongside with positive impact between external expertise and AIS alignment, as an outsourcing service provider, they can place a high value added on the quality of product or services if the organisation hired external expertise (Alamin et. al., 2015). Also, they believe a new system expected to operate smoothly and be compatible with other. Based on the finding above, the following hypothesis is developed:

H4: There is significant relationship between the external expertise and AIS alignment.

3. Research Methodology

3.1 Population and Sample Selection

The range of the population in this research will obtain from 100 firms in Klang Valley. Sampling technique that is use are non-probability sampling technique which has two type of sampling are convenience and purposive sampling. Convenience sampling is when the sample was selected based on the researcher's discretion for convenience (Sekaran & Bougie 2011). The firms were selected because the location is in Klang Valley and easy to access in term of cost, feasibility and time. Purposive sampling is where the researcher predetermines the specific sample of study (Sekaran & Bougie, 2011). The result is aim to generalized to that sample only. This research selects the firm in Klang Valley corresponding to the study of acceptance of implementing accounting information system (AIS) on the firms in selected areas. The manager or individuals in top management will be chosen as the respondent because they more understand in AIS. They are the one who has responsible to make decision and the one who contribute in the acceptance of AIS.

3.2 Data Collection

Data collection is one of the main parts of research methodology in which the researcher needs to gather all the information about the acceptance in implement of AIS in order to address the analytical aspects of the subject study. Primary data is collected through questionnaires which happen to the main research tool. The questionnaire is specifically designed to be distributed to the three department of the firm. A questionnaire was developing based on the aim of this research that mainly focuses on accounting, human resource and finance department. The questionnaires are subjective construct and have multiple element or item with multiple questions. It is a closed question where the questions are fixed to

certain answer and will help respondent to make quick decisions in a short period of time.

3.3 Measurement of Variables

The concept of alignment or fit has been debated in the literature and a number of approaches have been developed to operationalize the concept. The moderation and matching approaches have been used by a number of researchers in both the accounting and information system literatures. Other approaches are still in their exploratory stages and thus require further development. This study modelled fit using the moderation approach because of the weight of evidence in favour of this approach (see, for example, Cragg & Hussin, 2002;). The moderation perspective assumes that alignment reflects synergy.

Therefore, alignment is calculated as the interaction between two measures which, in this case, are accounting information system (AIS) requirements and AIS capacity. In terms of measurement, both AIS requirements and AIS capacity were measured using questions that drew heavily on the instrument developed by Chenhall & Morris (1986). AIS requirement and AIS capacity variables were measured in relation to nineteen accounting information characteristics using two separate five-point scales. First, respondents were asked to indicate their perception of the importance to their business of each of the nineteen information characteristics (1 = strongly disagree; 5 = strongly agree).

This study measured management knowledge using a list of seven applications commonly found in the organisations. Using a five-point scale (1 = no knowledge; 5 = extensive knowledge), the respondents were asked to indicate the extent to which they were familiar with word processing, spread sheet, database, accounting, e-mail, internet and computer-assisted production management applications. Using the same scale, respondents were then asked to indicate their knowledge level relating to financial and managerial accounting techniques. Management commitment was measured based on the degree of their participation in IT projects. This study adopted a similar instrument used by Cragg & Hussin (2002) to measure management participation in information system implementation. The instrument which was originally developed by Jarvenpaa & Ives (1991) was tested and validated by Cragg & Hussin (2002) in the specific context of the organisations. Using a five-point scale (1 = no participation; 5 = high participation), respondents were asked to indicate their level of participation in the following five areas: definition of needs

(information requirements), selection of hardware and software, implementation of systems, systems maintenance and problem solving, and planning for future IT deployment.

4. Results and Discussion

4.1 Normality Test

Normality the test was to determine the data collected for this study. For this test, we had decided to test the data using the Kolmogorov-Smirnov (K-S Test). We using this test are because the sample size is 100, more than 50. Basically, it's a normal range for normality test in between -1 to +1 for acceptable data. The result obtained from the range of normality was exceeded the normal range -1 to +1 of skewness. Table 4.1 shows the result of K-S Test.

Variable	Kolmogorov-Smirnov	Significant (Sig.)
Information characteristics	0.054	0.200
Management information	0.101	0.014
Management commitment	0.126	0.001
Internal expertise	0.384	0.000
External expertise	0.196	0.000

Table 4.1: Kolmogorov-Smirnov (K-S) Test Result.

4.3 Correlation Analysis

The correlation analysis is a computation of the relationship between two variables, which is dependent variable and involving one or more independent variable to identify whether the hypotheses that had been developed is accepted or rejected. For correlation coefficient analysis, these project papers were used Spearman correlation. The sample size (N) is 100.

		AIS
MK	Spearman Correlation	.506**
	Sig. (2-tailed)	.000

MC	Spearman Correlation	.430**
	Sig. (2-tailed)	.000
IE	Spearman Correlation	-.035
	Sig. (2-tailed)	.730
EE	Spearman Correlation	.291**
	Sig. (2-tailed)	.003

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 4.2: Correlation Analysis Table

4.3.1 Management Knowledge

According to Table 4.2, it shows a significant relationship between management knowledge and AIS alignment, (sig < .01, r = 0.506). After conducting the analysis and result were obtained, H1 is accepted. The result of this study supported by previous studies made by Swan et al. (1999) which proposed a relationship between manager with information technology (IT) and accounting knowledge with AIS alignment. The result also verified with research done by Zulkarnain (2009), stated that the knowledge in management, especially top management can influencing success or failure of the organisation in term of business decision and other related factors. For that reason, employee in high level of management such as director and senior manager should concern with any new knowledge and technology that related with their skill, especially in AIS. In order to get clear picture and more understanding of AIS requirement, the manager specifically in both accounting and IT must apply their knowledge in general application such as accounting-based application, word-processing, database and spreadsheets.

4.3.2 Management Commitment

Table 4.2 shows that there is significant relationship between the management commitment and AIS

alignment, (sig: $< .01$, $r = .430$). The result are supported by Cho (2007) stated that the higher the management participation, the higher the degree of effectiveness. Similar with the alignment of AIS, management must fully cooperate in term of selection of hardware and software, implementing the major system, and also give a commitment in problem solving such as system maintenance and planning for future deployment. Moreover, the management can show their commitment in motivating other employees by giving training and workshops to increase their level of knowledge and experience. To support more in this variable, Cooper (2006) also had mentioned that the management commitment is essential so that the top management and other resources can receive feedback as well as to achieve the goals of the organisation. To be conclude, based on the result showing in Table 4.7, we know that the management commitment are one of the main factor that can give positive impact in influencing the alignment of AIS. Therefore, H2 which stated there is significant relationship between the management commitment and AIS alignment is accepted.

4.3.2 Internal Expertise

Table 4.2 signify that the existing of significant relationship between independent variable, internal expertise; and dependent variable, AIS alignment. The results indicate there is insignificant relationship between internal expertise and AIS alignment, (sig: $> .01$, $r = -.035$). The results are contradicted with earlier hypothesis stated that there is relationship between internal expertise and AIS alignment. In addition, it's also differ from previous researchers such as Aion (2013) who claims there is be positively related in adopting AIS.

4.3.4 External Expertise

Table 4.2 indicates that the existing of significant relationship between external expertise (independent variable) and AIS alignment (dependent variable), (sig. $< .01$, $r = .291$). These significant relationships support the findings which state consultants, vendor, government agency, and accounting firm influencing alignment of AIS as suggested in the previous researches. The result of this study supported by previous studies, Alamin et al. (2015) stated that when external expertise work as a team with senior manager can improve business efficiency and increase business performance. As a result, he said that the cooperation can used strategy as a determinant factor that may affect AIS alignment. Thus, H4 which states that there is relationship

between external expertise and AIS alignment is accepted.

5. Conclusion

The objective of the study is to examine the factors in influencing accounting information system alignment among firms in Klang Valley. The result of this study is examined by using a questionnaire that is adapted from Ismail et al., (2005). From this study, 100 questionnaires were collected out of 120 which have been distributing to firm that located in Klang Valley. This indicated a total 83.33% response rate collected for this study.

The result developed thoroughly in previous chapter. Four hypotheses were used to determine whether there is significant relationship between management knowledge, management commitment, internal expertise and external expertise with alignment of AIS. Based on the result been established, it shows that there is significant relationship for all the hypotheses tested, except for internal expertise (H3). On the other hand, there are still some limitations or flaws in this research that need to be taken into account. From all data analysis that been made in the previous chapter, it can conclude overall findings of the study. This analysis is depending on the objectives of the study. The objectives of this study are to determine one or the other factors are influencing accounting information system (AIS) alignment or not. As a result, from the finding and analysis, three out of four of hypotheses tested in the study was valid. Only one hypothesis (H3) is not significant. Thus, the researcher knows that sum of factors are being necessary in relationship with dependent variable. Also, some limitation can be used in future research to give more support and understanding in practicing the AIS.

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