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Accounting information system change in an agriculture company: Examination using burns and scapens framework

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Abstract. This paper presents the findings of investigation on the accounting information change (AIS) in an agriculture company following the change in its business model and organisational structure due to government policy. This study adopted the Burns and Scapens' framework that identified three dichotomies -- namely, evolutionary vs revolutionary, progressive vs regressive and formal vs informal in facilitating the understanding of change. Using an interview approach, this study found that the AIS structure has experienced a major transformation due to which the existing SAP system was upgraded and integrated with five new systems. The nature of change in the upgraded SAP is evolutionary in nature. In terms of a progressive or regressive change, the upgrading process of SAP seems to be a progressive one rather than regressive. Finally, the company adopted the top down approach, which is an indication that the company has adopted a formal change. Several strategic allocations such as sufficient resources and funds, the use of external and internal experts, top management participation and also education and training were provided to

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ensure the success of AIS change. The findings of this study can serve as a guideline for business practices and also contribute to academic knowledge and literature.

Keywords: organisational change, SAP, agricultural company, Malaysia.

JEL Classification: L25, M41, M48.

1. INTRODUCTION

Malaysia is a country, rich with natural resources that, if deployed wisely, would lead the country to high economic prospects and sustainability and subsequently, becoming a high-income developed nation. Realising this advantage, the fourth Prime Minister of Malaysia, Tun Dr Mahathir Mohamed launched the Vision 2020 back in 1990, and envisioned Malaysia to be a developed and a self-sufficient industrialized nation by the year 2020. The Vision 2020 focuses on economic prosperity, social well-being, world-class education, political stability and more. However, since the launch of Vision 2020, Malaysia has still relied on traditional, commodities-dominated economy and is still largely dependent on government's involvement in economic affairs. This has caused the prospects of economic growth be considerably weakened, therefore, Malaysia still finds itself within the middle income bracket.

The then Prime Minister of Malaysia, Dato' Sri Mohammad Najib Tun Abdul Razak realised that Malaysian economy needs to be transformed to ensure the Vision 2020 targets are achieved as initially planned. The country needs to radically change its economic development model through various economic, social and government transformations. Due to this, the Prime Minister had launched the New Economic Model (NEM) back in 2010. The NEM Report 2010 states that the NEM needs to be proactive and provide ways to uplift Malaysia to become a high-income developed nation with inclusiveness and sustainability. A new economic model needs to be introduced to replace the existing economic model so as to ensure sustainability in the long run, the wealth of the country is shared for the benefit of the public, thus enabling Malaysia to reach a high-income nation status by 2020 (National Economic Advisory Council, 2009). The ETP is a bold approach of the Malaysian government to transform Malaysian economy and to raise the standards of living among its nationals. In ensuring the success of the ETP, 12 National Key Economic Areas (NKEAs) known as the ETP Drivers and 6 Strategic Reform Initiatives (SRIs) known as the ETP Enablers were formulated. The NKEAs represent the economic sectors, most capable to contribute to the Malaysian GNI improvement. SRIs, on the other hand, are initiatives under the ETP focused on raising the competitiveness of Malaysian companies (Muhammad & Ghani, 2013). Therefore, the ETP directly impact companies and industries under the scope of the NKEAs and SRIs. It is expected that companies within these core industries would experience significant transformations as a reaction to the expectations of the ETP.

The objective of this study is to examine the transformation process occurring in one of the affected company called ALPHA¹. This study aims to examine the organisational change in ALPHA after the implementation of the ETP that led to its listing at the Malaysian Share Exchange Board known as Bursa

¹ The real name of the company is not disclosed and this case study used "ALPHA" as a disguised name for confidentiality reasons. The company is an investment holding company with its subsidiaries involved primarily in oil palm plantation and its related downstream activities.

Malaysia back in 2012. In particular, the focus of this study is on the changes in the AIS structure of ALPHA.

The remainder of this paper is structured as follows. Section 2 provides a review of the relevant literature. This is followed by the description of the research design in Section 3, while the findings and discussion of this study are in Section 4. Summary and conclusions are provided in the last section.

2. LITERATURE REVIEW

The Accounting Information System (AIS) is regarded as one of the important components in an organisation. Considered as the backbone in an organisation, the AIS needs to be structured in a way that it is complete and integrated with all business units and departments effectively. It is generally understood that when all business units could obtain fast and accurate information via an effective AIS, fast and accurate decision-making can be achieved. Especially for a large company, the provision of fast and accurate information is crucial as many business units are involved and therefore it becomes a major challenge. What more when the company changes its status from its current form (such as a government linked company) to a more challenging status (such as a listed company). However, studies have shown that the environment facing the organisation has a significant impact on the effectiveness of an accounting information system (Ouskel, Mihavics & Carley, 1997). One of the environments that an organisation could face is organisational change.

Organisational change has received much interest in the literature over the years (Mizruchi & Fein, 1999; Townley, 2002; Doyle, 2008, Sharifah Norzehan, 2011; Jabbour & Abdel Kader, 2015). Organisational change refers to the alteration that occurs in the overall working environment of an organisation. Change can occur when the system of an organisation is distracted by internal and external forces. Often, the change modifies the structure or process of a system and the consequence of such a change may have a favourable or unfavourable output. The change can affect the whole organisation or various parts of the organisation with varying degrees of speed and significance. Change affects many variables including people, structure, technology and other elements in an organisation. Burnes (2004) defines change as an ever present feature of organisational life in both the operational and strategic level. Organisational change arises when an organisation has undergone a transformation in its operational structure and activities which is seen as a departure from the norm and response to environmental and internal conditions. It is conceptualised as moving from the status quo to a new, desired, configuration to better match the environment (Nelson, 2003). Such transformation requires successful management of change to an organisation in order to survive and succeed in the present highly competitive and continuously evolving business environment. However, what constitutes an organisational change is often taken for granted despite the large number of studies having conducted on why and how organisational change occurs.

Studies have shown that organisational change within the organisation often takes place when a new environment is being introduced (Tsamenyi, Cullena & Gonzalez, 2006; Lukka, 2007; Wanderly, Cullen & Tsamenyi, 2011). This is because the organisation as well as the humans in it are often seen as contradictory and complicated towards the new environment and such contradictions serve as a basis for a constant challenge and if it gets responded, can help humans to develop and create successful organisational change. In other words, these contradictions would drive, empower and enable changes and development in an organisation. Contradictions cannot disappear but constantly re-generated and what one can do is to relate to them and handle them (Seo & Creed, 2002; Easterby-Smith & Lyles, 2003). Arguably, in the context of this study, the adoption of a government policy may lead to institutional contradictions which subsequently influence organisational operations and human praxis within an

agriculture company. Until these institutional contradictions are resolved, the organisational change would not be successful.

Change in the AIS can be caused by many reasons (Scapens, Ezzamel, Burns & Baldvinsdottir, 2003; Yazdifar & Tsamenyi, 2005). The change can be caused by a response to external sources such as government laws, social and political change or by internal pressures such as a change in the power dynamics of the organisation or a change in the size and complexity of the organisation (Greenwood, Diaz, Li & Lorente, 2010). Of consequence, change is not only seen as pressure from an organisation's external environment, but also from the actions of people within the organisation (Greenwood et al., 2010). The interaction of the external and internal pressures would shape the process of change in the AIS. (Scapens, 2006; Tsamenyi et al., 2006; Moll & Hoque, 2011). This leads to the interplay between the internal and external pressures to be a key element in the change in the AIS in an organisation.

A number of studies have used the Burns and Scapens framework (2000) to explain organisational change in their studies such as Soin, Seal and Cullen (2002) and Nor-Aziah and Scapens (2007). However, the Burns and Scapens framework is mostly applied in the management accounting literature. Wanderley and Soeiro (2016) noted that the process of institutionalisation is a process involving encoding rules and routines within the underlying assumptions that condition how people behave and then enacted by organisational members and gradually reproduced through their everyday actions and ultimately institutionalised and taken-for-granted by the organisational actors (Burns & Scapens, 2000). Burns and Scapens (2000) introduced the institutional theory in understanding the process of change. They discuss three dichotomies of the institutional framework in facilitating the understanding of change. They provide the categories of the different types of change processes. The three dichotomies are revolutionary versus evolutionary change, regressive versus progressive change and formal versus informal change.

Sanden and Divino (2014, p.9) referred to the evolutionary change as *incremental, meaning that the changes are many and small and the change process builds upon these small changes gradually. When applying an evolutionary change process one is able to circumvent major disruptions or impediments to the existing routines within an institution*". Evolutionary change provides no other functions apart from merely adapting and modifying existing routines (Scapens & Jazayeri, 2003). On the other hand, revolutionary change refers to *"a change process that poses more threat to the existing institutions. A revolutionary change process is often implemented top-down with little or no opportunities for employees to influence the changes. As such, a revolutionary change process can cause difficulties and complications so severe that they might challenge or question the institutions in place"* (Sanden & Divino, 2014, p.10).

Regressive refers to the accounting rules that are institutionalised ceremonially and constituting of fact rituals within the organisation and aim to keep the routines intact. Regressive is part of a ceremonial behaviour that often emerges when there is a general mistrust or resistance towards new rules and routines. (Burns & Scapens, 2000; Siti Nabiha & Scapens, 2005). On the other hand, progressive change refers to instrumental behaviour in organisations which are dedicated to change (Siti Nabiha & Scapens, 2005).

Formal change is implemented intentionally often as a result of new rules being introduced (Wanderley et al, 2011). It often involves a great deal of planning and is usually introduced by a powerful group in a ceremonial manner (Li, Shang & Slaughter, 2010). Formal change is more likely to be implemented through a top-down approach, neglecting the opinions and thoughts of employees but imposing change upon them. On the other hand, informal change is unintentional focusing on routines rather than rules and how existing routines adapt to the changing environment over a period of time. Informal change occurs at a tacit level as repeated actions become day-to-day operational routines (Li et al., 2010).

In sum, drawing on the literature discussed in this section, this study focuses on accounting change with a specific focus on accounting information change processes in a public listed agricultural company in Malaysia known as ALPHA. In particular, this study addresses why an accounting information change took place in ALPHA and how the AIS change occurred in ALPHA.

3. METHODOLOGY

This paper tests phenomena relating to the AIS change in a case study using the Burns & Scapens' three dichotomies of change as to whether the changes are evolutionary or revolutionary, regressive or progressive and lastly whether it is a formal or informal change. Therefore, the following hypotheses were developed.

1. The process of AIS change in the company is revolutionary.
2. The process of AIS change in the company is progressive.
3. The process of AIS change in the company is formal.

The hypotheses were developed based on the following reasons:

1. It significantly changes the status of the company from a private company into a public listed company which requires for the change to be done drastically.
2. It is properly planned and the management of change warrants a progressive change.
3. It is a relatively big organisation which has proper operating procedures and internal control systems which demand for any significant change to be done in a formal way.

3.1. Qualitative Research Method

This study chose a qualitative research design. Studies in organisational change have shown that qualitative research is widely used in examining organisational change in accounting (Sahrifah Norzehan, 2011). A qualitative research method would provide a broader and holistic perspective which often requires researcher's involvement and subsequently would provide researchers with a better understanding on how factors would interact for their function (Das, 1983; Patton, 1987; Bryman, 1989). Merriam and Simpson (2000) have argued that the key philosophical assumption in qualitative research is that the reality is constructed by individuals in interaction with their social world. That is, there are many realities rather than only one observable measureable reality.

This study chose a qualitative research method as previous studies have shown several advantages by adopting this method. Many researchers use this method when they study organisational change in an organisation that has changed its status, for example from a government department to a privatised enterprise in a privatisation exercises. Using a qualitative research method is appropriate since there is a change in the status from a government-linked private company to a public listed company (Shanikat, 2008). In particular, using an explanatory case study, this study presents an in-depth analysis of ALPHA which was transformed to be a public listed company with the vision and mission to be a global leader in agri-business and become the world's largest producer of crude palm oil (CPO) after the Malaysian government implemented the ETP.

3.2. Interpretive Approach

This study involves the understanding of the reasons for organisational change and the processes involved in such a change. The interpretive approach is deemed appropriate to understand a social phenomenon such as the situation after listing of a company. Ryan and Deci (2002, p.147) refer to the

interpretive approach as an approach that is used “to develop a theoretical framework that explains the quality of the observed social systems and the practices of human actors”. It focuses on understanding the actions of the individuals and their interactions in a social world and hence, focuses more on human sense as a significant factor and not on a framework that is created to understanding social phenomena in the social context (Fossey, Harvey, McDermott & Davidson, 2002; Neuman, 2004). In other words, the interpretive approach is used to explain the social processes at work. In addition, this study adopted the explanatory case study approach since it attempted to focus on describing and understanding a phenomenon that is in the context of this study, organisational change in the AIS within a company. In particular, this study chose an explanatory case study approach in explaining the event of organisational change, in-depth, particularly transformation in the AIS structure of a company due to changes in the company’s status from a private company to a public listed company.

3.3. Multiple Data Sources

The primary method of data collection employed was the semi-structured face to face interviews with employees of ALPHA. This study also employed content analysis of related documentation such as the company’s annual report and prospectus. Other methods such as informal observations of the operationalization of the company were also employed. This is due to the realisation that interviews in some cases could be explained and confirmed by similarities that are available from other sources. Hence accumulation of evidences from various sources could provide more comprehensive and robust evidence.

3.4. Participants

In total, ten interviews were conducted with ten individuals in eight separate visits. The respondents are the decision-makers and users in relation to the AIS in ALPHA. They have also participated in developing the new system by making decisions as well as providing feedback and responses. In a qualitative research, no magic number is suggested as the appropriate sample size since it depends on the methodological and epistemological perspective of the researcher (Baker & Edwards, 2012). Ragin and Becker (1992) suggested that once a qualitative researcher is conducting his research, he may get to a stage where the evidence is so repetitive that there is no need to continue further; that is, the information is considered to be saturated. Creswell (2011, p.209) noted that the sample size for a qualitative research is typically ‘study a few individuals or a few cases’. Sim and Lewis (2003) have suggested that qualitative samples for a single case study that involves individual interviews often lies below 50. Furthermore, the number of respondents in this study is appropriate since Creswell (2008) has identified the number of interviewees to be 5 to 20 for a qualitative case study and Morse (1994) suggests that the appropriate number of interviewees to be at least 6. Table 1 presents the list of the 10 interviewees with their position, area of occupation, date of interview and the duration of each interview session.

All the interviewees were present throughout the entire process of company listing. The number of interviews was determined based on practical considerations such as availability of the officers and time constraints. Selection of the interviewees was based on snowball approach, taking into consideration their positions at the top and middle management level. Such selection was deliberate to ensure that the interviewees would have adequate knowledge and awareness of the organisational changes that took place within the company and therefore, it is purposeful.

Table 1

Lists of Interviewees

No	Interviewee	Position	Area of occupation	Duration of interview
1	Officer A	Senior manager	Accounting and Finance	37 Minutes
2	Officer B	Manager	Accounting and Finance	35 Minutes
3	Officer C	Senior Manager	Internal Audit	1 Hour 1 Minute
4	Officer D	Head of department	Accounting and Finance	53 Minutes
5	Officer E	Manager	Accounting and Finance	1 Hour 20 Minutes
6	Officer F	Executive	Accounting and Finance	1 Hour 2 Minutes
7	Officer G	Executive	Accounting and Finance	1 Hour 7 Minutes
8	Officer H	Executive	Accounting and Finance	1 Hour 16 Minutes
9	Officer I	Head of Department	Information Technology	45 Minutes
10	Officer J	Manager	Accounting and Finance	35 Minutes

3.5. Data Collection

The interviews were conducted over a period of 16 months from January 2014 to January 2016. The interviews conducted were open, interactive and conversational in nature. Permission from the top management was obtained before approaching the interviewees. The interviewees were given a summary of the research objectives and the lists of questionnaire before the actual interview session. Each interview session lasted between 1 to 1.5 hours and sometimes 2 to 3 hours depending on the issues raised by the interviewees. All the interviews were tape recorded. However, three interviewees have asked the researcher to pause the recording of the interviews during the interview session due to sensitive political related issues. Political issues exist due to the company being a government linked company and therefore, certain policies and procedures as well as several important decisions of the company are seen to be influenced by the government.

The tape recordings made during the interview sessions were reverted to within 2 days in order to retrieve what transpired and was discussed during the interview sessions. Any issue that needed clarification or was unclear were highlighted and subsequently used to facilitate follow-up probing questions. The interviews were later transcribed and documented. The transcription process of the interview took about four months to complete. In total, 6 interviews were undertaken with 6 officers in 6 separate visits. The officers represented the top management and managers of the company. The number of interviewees in this study is considered appropriate since previous studies also have used more or less the same number of respondents.

This study also conducted content analysis on documents related to this study. Conducting content analysis in this study did not only allow the researcher to confirm the findings from the interviews but also to provide further findings that were not provided by the interviewees in the interview sessions. The documents retrieved by the researchers in this study were in hardcopy and also softcopy. Documents are often used in social science studies as the only data collection technique or combined with other techniques (Sarantokas, 1998). Information contained in documents varies in many forms and often is suitable to be used in case studies.

4. RESEARCH FINDINGS AND DISCUSSION

This section provides the findings in relation to the research objective of this study. The research objective is to examine the nature of change in the AIS in ALPHA. The study posed the following question “*How does the nature of change in the AIS occur in ALPHA*” This study adopted the Burns and Scapens framework (2000) to provide a systematic framework in achieving the research objectives. Burns and Scapens have identified three dichotomies of the institutional framework in facilitating the understanding of change. The three dichotomies are revolutionary versus evolutionary change, regressive versus progressive change and formal versus informal change. Each of these dichotomies is presented below.

4.1. Evolutionary versus Revolutionary Change

Evolutionary change refers to an incremental change that indicates that the changes are many and small and the change process builds upon these small changes gradually. Evolutionary change provides no other function apart from merely adapting and modifying existing routines (Scapens & Jazayeri, 2003). In other words, the organisation and its members would be able to influence the process of change and even though their behaviour might also change during the process, the core values and characteristics of the organisation would remain the same (Burns & Scapens, 2000). On the other hand, revolutionary change refers to the change process that poses more threat to the existing institutions. This process is often implemented top-down with little or no opportunities for employees to influence the changes.

In ALPHA, the AIS structure experienced a major transformation of which five new systems were developed and the existing system upgraded and integrated with the new systems upon listing of the company. The upgrading and integration of the new systems to the existing system is seen necessary in meeting the requirements of a listed company. As noted by Officer B ALPHA:

Even though as a listed company, we have new governance rules, risk management, we have to be more robust in risk management and have better governance. So in order to implement all that in an efficient way, we put in new systems. The systems if we see it, are not compulsory but having the systems make things a lot easier. Any committee formed? Not to the extent that we need a committee to implement new systems but we know that things that need to be done.

The existing SAP system which has been employed since 2000 has also been modified to enhance its functions and to be integrated with the new system. The SAP is a backbone system in ALPHA as it is the main system that provided the main data and information for many divisions. Once the new systems were developed, ALPHA had to ensure that the new systems can be readable and integrated with the existing SAP. The new systems would then ride on the upgraded SAP. The new systems require data from the SAP to generate the related report(s). Based on the interview with Officer D, it can be concluded that the modification of the existing SAP was an evolutionary change rather than revolutionary as it was a gradual modification. That is, the SAP has to be modified from time to time as and when every new system was developed. He explains:

“The change of existing SAP is more to the modification. The change on existing SAP itself is gradual modification because every new system developed need to link back to the SAP. Therefore, continuous modifications on SAP as a backbone system need to be done from time to time so that it can be readable and integrates with every new system developed.”

4.2. Regressive versus Progressive Change

Regressive refers to the accounting rules that are institutionalised ceremonially constituting fact rituals within the organisation whose aim is to keep the routines intact. Regressive is part of ceremonial behaviour that often emerged when there is a general mistrust or resistance towards new rules and routines exists (Burns & Scapens, 2000; Siti Nabiha & Scapens, 2005). On the other hand, progressive change refers to instrumental behaviour whose organisations are dedicated to the change (Siti Nabiha & Scapens, 2005).

The modification made on the SAP is necessary in order to integrate with the new systems and enhance the capability of the SAP in providing data for more advance report(s). The new systems developed require data from the SAP to generate report online and hence, reduce paper usage in reporting that led the SAP to be modified. The modifications were done over a period of time gradually. The end users of SAP and the new systems provided continuous feedbacks to ensure that the integration process between the systems functions well and succeeds. Acceptance to the benefits of the SAP among the end users has increased as they participated in the development of the system and this shows that the process modification of the SAP was a progressive change. As noted by Officer E:

"I am the user to the SAP and responsible to provide feedbacks if encountered any problems. In the process of integration with new systems, end user normally provides feedbacks to consultants to ensure the issues are resolved. We normally communicate with our internal IT consultant and sometimes directly to our external vendor. For me, SAP is one of the best systems as it able to accommodate many accounting requirements. For example, the accounting for replanting cost. Initial treatment in the SAP was captures the transactions and classified the replanting cost into Plantation development account or Immature plant account.

Officer F explained on the benefits of modifying the existing SAP:

Upon maturity, SAP automatically reclassified the replanting cost from immature plant into mature plant account. We can also do this according to the estates separately. We can also customise and extend according to our needs with SAP. Now we need to integrate SAP with our new system employed. We will discuss with our consultants on the requirement to modify and integrate between the systems and sometimes to the extend modification of the system to suit with new accounting policies requirements".

4.3. Formal versus Informal Change

Formal change is implemented intentionally often as a result of new rules being introduced (Wanderley et al, 2011). It often involves a great deal of planning and is usually introduced by a powerful group in a ceremonial manner (Li et al., 2010). Formal change is more likely to be implemented through a top-down approach, neglecting the opinions and thoughts of employees and instead imposing change upon them. On the other hand, informal change is unintentional focusing on routines rather than rules and how existing routines adapt to the changing environment over a period of time. Informal change occurs at a tacit level as repeated actions become day-to-day operational routines (Li et al., 2010).

This study interviewed the officers in ALPHA to determine whether the changes in the AIS in ALPHA were a formal or informal change. The outcome of the interviews showed that the company adopted the top down approach and the management was able to exert its power during the process of change and indicates that the company has adopted a formal change. The requirement to have better AIS was initially discussed during management meetings. A committee was then established to lead and take charge the execution of the development plan. That is, the adoption of the systems that involved proper

planning by a powerful group in a ceremonial manner is evidence of a formal change. Officer D mentioned that:

“...The parties who are responsible for the development of AIS structure in ALPHA are the top management. During the management meeting, chief of respective division will highlight his or her division requirement for a system. Once we agreed on a new system, a committee is form to take charge the execution of the plan”.

Modification on the existing SAP was also performed in a formal and organised manner. Based on interview with Officer C, it was noted that ALPHA has formed a committee to oversee the progress of the modification and development of the new systems including the process of modification to the existing SAP. Officers at ALPHA who hold the title “chief” represent the committee members. In order to facilitate the change process in order to achieve a comprehensive and accurate result, ALPHA had appointed internal and external consultants. The consultants conducted extensive and proper reviews as to the AIS requirements in ALPHA. Officer E mentioned the following:

“In ALPHA, we have a subsidiary company to take charge every development of information systems. Every new system should go through them (the subsidiary company). Even though we hired external consultants, but they must work together with the subsidiary company as it is empowered to take charge the development of the new system or even modification of the existing one. It is similar to for research and development activities for the company. Research and development for a new product in ALPHA need to be done by a designated subsidiary company”.

The cost to be incurred related to the development of new systems were budgeted beforehand. This is another indication that the change in the AIS was a formal one. Officer A confirmed that:

“We are always concern with the available budget for every development and modification of our system that has been approved by the board. Development expenditure to be spent must pass through the normal budgeting processes. It is starts with development plan and we need to ensure the related budget approved by the board of directors before we can start with the execution of the plan. The budget should also include payment to internal and external consultants”.

4.4. Discussion

The first dichotomy of the Burns and Scapens framework is evolutionary or revolutionary. Findings show that the nature of change for the modified SAP is an evolutionary change whereas the nature of change for the new systems is revolutionary. Thus, we conclude that the nature of change for the first dichotomy is mixed. Such a finding is consistent with Sanden and Divino’s (2014) findings. Other studies however provide different results where Soin et al (2002) indicate that management accounting changes in their case study of a bank experienced an evolutionary change while studies by Doyle (2003), Rothwell, Herbert and Seal (2011) and Jabbour and Abdel-Kader (2015) found that organisational change were evolutionary in nature.

As for the second dichotomy, that is a regressive versus a progressive change, this study indicates that the new AIS at ALPHA experienced a progressive change and this is consistent with Doyle (2008), Herbert and Seal (2011) and Jabbour and Abdel Kader (2015) and inconsistent with Soin et al. (2002) that shows a regressive change. Sharifah Norzehan (2011) found that the nature of change was mixed while the

result of Divido and Sanden (2004) was unclear.

Finding for the third dichotomy, that is formal versus informal change was also inconsistent among the studies. The finding of this study and studies of Soin et al. (2002), Herbert and Seal (2011), Sanden and Sanden (2014) Jabbour and Abdel Kader (2015) have skewed towards a formal change. Such a finding could be attributed to the top-down approach adopted in the organisation. However, Doyle (2003) and Sharifah Norzehan (2011) provide mixed results.

Comparing this study with previous studies has provided different results. This indicates that the nature of change in an organisation depends highly on the type of study conducted. For example: Sharifah Norzehan's (2011) study was conducted in Malaysia whereas the others were conducted in a developed country setting. The different setting used in the studies may have contributed to the inconsistent finding where Sharifah Norzehan (2011) was conducted using a Zakat institution to understand the nature of management accounting system change whilst this study was on an agricultural company. In addition, the setting of other studies is also different, for example Soin et al (2002) and Jabbour and Abdel Kader (2015) in the banking and insurance institutions, Doyle (2003) and Divino and Sanden (2014) in the healthcare industry and Herbet and Seal (2011) in the electricity industry. The context of the studies is also different where Soin et al (2002), Doyle (2003), Sharifah Norzehan (2011) and Sanden and Divino (2014) examined management accounting change whereas Herbert and Seal (2011) and Jabbour and Abdel Kader (2015) were on business support system change and enterprise risk management change, respectively. However, there is yet a study that has examined change in AIS using the Burns and Scapens framework (2000) in an agriculture setting. Although there are other studies that have examined organisational change and AIS such as Tsamenyi et al. (2006) and Shanikat (2008), these studies did not use the three dichotomies of the Burns and Scapens (2000) framework. This study is the first to examine organisational change and its impact on the AIS using the Burns and Scapens (2000) framework. Thus, this study is a unique one.

Table 2

Comparison with Previous Studies on Burns and Scapens Framework (2000)

Author	Soin et al.	Doyle	Herbert & Seal	Sharifah Norzehan	Sanden & Divino	Jabbour & Abdel Kader	This Study
Country	UK	UK	UK	Malaysia	Sweden	UK	Malaysia
Year	2002	2008	2011	2011	2014	2015	2017
Setting	Bank	Healthcare	Electricity	Zakat	Healthcare	Insurance	Agriculture
Evolutionary vs Revolutionary	R	E	E	Mix	Mix	E	R
Progressive vs Regressive	R	P	P	Mix	Unclear	P	P
Formal vs Informal	F	Mix	F	Mix	F	F	F

In addition, ALPHA has also adopted several strategies to ensure the success of change in the AIS. Among the strategies adopted are sufficient resources and fund, use of external and internal experts, top management participation and education and training. For example: ALPHA has allocated adequate financial resources to finance the capital expenditure for the purpose of improving efficiency in its

functions and operations. ALPHA has raised a substantial amount of cash from the IPO in 2012. Subsequently, ALPHA has allocated RM100 million to enhance efficiency in all business functions and operations including the AIS. Through utilisation of the proceeds, ALPHA could obtain a detailed analyses of the money spent for capital expenditure continuously and is updated in the management meeting and interval shareholders' presentation to maintain transparency and accountability in the transformation process.

5. CONCLUSION

This study examined changes in the AIS that occurred in an agricultural company. Interviews were conducted with the employees at ALPHA. The outcome of the interviews indicate that the AIS structure has experienced a major transformation of which new systems were developed and the existing system was upgraded and integrated with the new systems upon the listing of ALPHA. The upgrading and integration of the new system to the existing system is seen to be necessary in meeting the requirements of a listed company. The AIS change also seemed to be progressive in nature rather than regressive. The change in terms of reporting had become more efficient in terms of timing and accuracy of dissemination of information. Finally, the company adopted the top down approach, an indication that the company had adopted a formal change.

In sum, the main reason for upgrading the existing AIS structure is to raise efficiency of information dissemination. Despite being a new business model and new corporate structure, being a listed entity, the group is also subject to new governance rules and risk management policies which requires the group to adopt a better AIS structure. The findings provide an indication that there is a need to change the present structure of the AIS to become more efficient. This is because the implementation of the ETP has led to a change in the business model and corporate structure and subsequently its listing has driven the company to improve its accounting information structure. In addition the listing of the company has also driven the company to strive for a better AIS to support the vision of the company.

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