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Antecedents of Accounting Information System Effectiveness and its impact on SMEs Non-Financial Performance in Jordan: A Proposed Framework

Ahmad Y. A. Bani ahmad (Ayassrah)

Department of accounting information system, Irbid National University

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Abstract:
The paper identifies gap in the literature on lack of comprehensive AIS effectiveness framework that examines not only its determinants but also its impacts on SMEs performance. Following this discovery, the study integrates Information Processing Theory and DeLeon and McLean's Model to produce a conceptual framework on the influence of AIS alignment, AIS sophistication and AIS Commitment on AIS effectiveness, as well as the eventual impact of AIS effectiveness on SMEs performance in Jordan. The study is expected not only to bridge the identified gap in the extant literature but also to expand the existing body of knowledge in relation to understanding of AIS effectiveness. To the researcher's understanding, this study could be a pioneer in integrating the antecedents and consequence of AIS effectiveness in a single framework. Following its importance, the framework is expected to contribute to owner/manager in understanding the strategic position of AIS effectiveness in relation to SMEs. The fact is that effectiveness of AIS would likely enhance the competitiveness of SMEs and eventually boost their performance.

***Keywords**: AIS Alignment, AIS Commitment, AIS Sophistication, AIS Effectiveness, SMEs Performance*

1.0INTRODUCTION

Several studies within the extant literature investigated the determinants of Accounting Information System (AIS) effectiveness among firms (Ismail, & Zin, 2009; Lutfi, Idris & Mohamad, 2017; Shagari, Abdullah &Saat, 2017), however, the eventual the impact of AIS effectiveness on firms' performance is yet to be investigated within the extant literature. Most of the studies on the influence of AIS on firms' performance focus on either AIS alignment and AIS sophistication (Budiarto, Prabowo, Djajanto, Widodo, &Herawan, 2018), or Information System (IS) strategic alignment and IS strategic direction on firms' performance (Nabizadeh&Omrani, 2014), but not on AIS effectiveness on firms performance. This could not be surprising considering the assertion of Ismail (2009) and Lutfi, Idris and Mohamad (2017) that AIS effectiveness is the most common dependent variable being examine in the extant literature as claimed in many earlier studies such as DeLone and McLean (1992); Thong, Yap and Raman (1996); Seddon, (1997); Foong (1999); Thong

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(2001).Intestingly, DeLone and McLean's (1992) model offers insights on the possible influence of AIS effectiveness on firms' performance. Therefore, this highlights the need to understand the extent to which AIS effectiveness influence the performance of firms, more especially Small and Medium Enterprises(SMEs), because they need to compete effectively for better performance and survive in competitive business environment.

Following the above background, the study has three motivations. Firstly, there has been lack of existing comprehensive model which examines the antecedents of AIS effectiveness and its consequence on firms' performance. Most of the existing models examined only the antecedents or determinants of AIS effectiveness (Ismail, 2009; Lutfi, et al., 2017; Shagari, Abdullah &Saat, 2017) without linking AIS effectiveness to firms' performance in the same model. Thus, providing such comprehensive model will bridge important gap within the extant literature. Secondly, the owner/managers of firms and specifically SMEs have been availed with lots of information on how to improve the effectiveness of AIS; however, they are yet to be provided with equally important information on how effectiveness in AIS will boost the performance of their enterprises. Thus, the framework proposed in this study will provide such important information so as to improve owner/managers appreciation on the relevance of AIS effectiveness for their firms. Lastly, most of the literature in Jordan on the AIS focuses mostly on banks (Ali, et al., 2016; Raed, 2017;Borhan& Bader, 2018), real estate (Al-Dalaien& Khan (2018; Borhan& Nafees, 2018), industrial sector (Samer, 2016) and education sector (Abdullah, 2017) with only few focusing on SMEs, and even in such instance where the focus is on SMEs the available literature in Jordan is on the determinants of AIS effectiveness (Lutfi, et al., 2017)without linking same with firms' performance, hence, the need to provide additional evidence with respect to AIS effectiveness from the perspectives of SMEs and its performance.

In line with the motivations outlined above, the objective of this study is to propose a comprehensive conceptual framework on the influence of AIS alignment, AIS sophistication and AIS Commitment of the owner/manager on AIS effectiveness, as well as the eventual impact of AIS effectiveness of SMEs performance in Jordan. To achieve this objective, the paper is structured into four sections; with this first section as introduction, in which background, motivations and objective of the paper are presented. The second section is a literature review in which extensive review of literature on SMEs performance, AIS effectiveness, AIS alignment, AIS sophistication and AIS commitment has been discussed. In section three, conceptual framework was proposed on the basis of which hypotheses were developed. In the last section, conclusion and implications of the study to the SMEs and policymakers are presented.

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2.0 LITERATURE REVIEW

In this section, literature is reviewed on the overall concept of firms' performance which was later narrowed down to SMEs performance. The section also reviewed literature of AIS effectiveness as well as its determinants which led to the identification of three important determinants of AIS effectiveness; AIS alignment, AIS sophistication and AIS Commitment, consequently, literature was also discussed on these three important determinants and their linkage with AIS effectiveness.

2.1 SMEs PERFORMANCE

SMEs have been identified in economic policies of many countries as strong and most dynamic drivers for economic growth. Based on its high relevance and importance, evaluation of economic health of countries is made through the assessment of its SMEs sector (Alshir'ah, Abdul-Jabbar, &Samsudin, 2016). This is necessary considering that SMEs sector has been a major contributor to employment, Gross Domestic Product (GDP) and exports. World Bank (2020) disclosed that SMEs account for the majority of the existing businesses around the world; they contributed immensely in many terms such as employment generation and GDP. Specifically, they contribute about 90% of businesses and more than 50% of employment worldwide, equally, SMEs contribution to GDP accounts for 40% among emerging economies. Similar to other emerging economies, SMEs also contribute to Jordanian economy; it contributes about 40% of GDP, 70% of employment creation and 45% of export (Ministry of Planning and International Cooperation-MPIC, 2012). It is based on these contributions that governments of many countries are keen in improving the performance of its SMEsso as to address the employment gap, increase foreign exchange earnings and eventually boost overall economic growth. However, despite contributions to GDP, employment and foreign exchange earnings SMEs still experience performance related issues (Wan Ismail & Mokhtar, 2016). In support of this argument, studies reported that about 50% of SMEs around the world failed mostly after some few years of establishing them (Sohail Imran Khan, 2019; Sultan & Noor, 2017). Similarly, in Jordan, available reports indicate decrease in the number of SMEs; specifically, the number of registered SMEs fall from 166,000 in 2015 to 154,800 in 2016 (Association of Banks in Jordan, 2016), this failure could be attributed to poor performance. Therefore, looking at the contribution of SMEs to the economic growth and development of developing and emergingcountries as well as the challenges face by SMEs in relation to their development it is important to study the major drivers of their performance or nonperformance (Lussier &Halabi, 2010).

Several definitions of performance have been provided within the literature. In this, the definitions are of two categories; some relate to financial while others relate to non-financial performance. Generally, the words of Robbins (1987) give more comprehensive outlook of performance because it is neither align to financial performance nor liked to non-financial performance but rather offered an

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elaborative meaning of performance. Robbins (1987) considered financial performance as the degree to which a company operating as a social system utilizesit resources in such a way to achieve its desired goals. Consistent with this definition, Georgopoulos and Tannenbaum (1957) gave similar definition. Also, in more clearer but consistent approach, Cherrington (1989) the concept of organizational performance has been considered as a process used to evaluateeffectiveness or success of an organization, which indicates that such an organization is operating in a manner thatguarantees an effective achievement of its goals successfully. As mentioned earlier, the measurement of performance can be made through financial and non-financial approaches. In terms of financial measures, performance can be evaluated through success in financial activities of an organization as well as the degree to which financial goals has been achieved (Ganyam&Ivungu, 2013). There are two main measures of financial performance which investor are really interested (Glautier&Underdoon, 2009). These are profitability and values of company shares from the perspectives of its investors. In terms of profitability, performance is measured based on the ability of a firm to maximize its profit or to generate more profit specifically under competitive market conditions (Pandey, 2004). Through this approach some indicators are used; these are financial efficiency ratios measured using ratio of profit to sales or ratio of profit to assets. For value of firm, it is assessed through some number of ratios such as price-to-earnings ratio, dividend yield and earning per share.

For nonfinancial performance different measures are used mostly linked to productivity. In this, Sonnentag and Frese (2002) highlight that nonfinancial performance of a firm can be measured in form of numbers engine parts of cars assembled in a given factory, number sales in personal computers by given a distributor, number of children touch in basic reading skills in an elementary schools, or number of heart surgery successfully performed by a medical personnel in a given (Sonnentag&Frese, 2002). Though firms'performance can be measured through both financial performance (Grande, et al., 2011; Ironkwe&Nwaiwu, 2018) and non-financial performance (Budiarto, et al, 2018; Ironkwe&Nwaiwu, 2018), however, in relation to AIS much emphasis is given to financial performance (Grande, Estébanez, &Colomina, 2011; Harash, 2015; Nizar, Ahmad, & Mohamad, 2016), which few concentration of non-financial performance (Budiarto, et al., 2018). Therefore, in the current study, emphasis will be given to nonfinancial performance so as to provide more additional evidence to that effect, more especially from the perspectives of SMEs.

2.2 AIS Effectiveness

The AIS effectiveness has been defined by Raymond (1990) as the degree to which AIS significantly contributes towards attaining the goals and objectives of the organizations. Based on this definition, it can be seen that there could be possible link between AIS effectiveness and SMEs performance since one of the prime objectives of

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organizations is to improve their performance overtime, this could be in many forms; it could be financial, efficiency or productivity. However, the major challenge among AIS researchers is the operationalization of AIS; this is to say that the conceptualization of AIS varies among scholars within the extant literature(de Guinea et al., 2005; Ismail, & Zin, 2009). While some scholars deploy AIS usage as a measure of AIS effectiveness (Lai, 1994; Foong, 1999), some employ user satisfaction of AIS as measure of its effectiveness (Yap et al., 1992; Raymond & Bergeron, 1992; Foong, 1999), while others consider AIS effectiveness to be measured using AIS project success, AIS service success and economic success (Soh et al., 1992). While divergent measures of AIS effectiveness exist, the effort of DeLone and McLean (1992) which is duly acknowledged here, and reported inHunton and Flower (1997) and Ismail (2009), reviewed about 180 empirical and conceptual articles to arrive at six major dimensions that capture the wider conceptual domains of AIS effectiveness in terms of information quality, system quality, system usage, individual impact, user satisfaction, and organizational impact. Thus, these are the proposed dimensions to be utilized in understanding the effectiveness of AIS among SMEs(Hosam Alden Riyadh, 2020; Riyadh, Alfaiza, & Sultan, 2019).

Specifically, the first dimension of AIS effectiveness is the information quality which has been considered as the extent of qualitative and quantitative features of AIS output measures in terms of information completeness, accuracy, clarity and usefulness, whereas system quality is seen as technical features of AIS in terms of functions, features, reliability and response time (Ismail, 2009). As a measure of AIS effectiveness, the system usage is seen as utilization of AIS by its recipients of its output in terms of number of enquiries, regularity of use, frequency of reports requests and duration of use, while individual impact is considered as impacts of AIS information on attitude and behavior of its recipients in terms of problem identification, design effectiveness and individual improved productivity (Ismail & Zin, 2009). AIS effectiveness measured through user satisfaction implies the response of the AIS recipients in terms of enjoyment, software satisfaction, uniformity between information expected and information received as well as overall satisfactions, while organizational impact dimension of AIS effectiveness measures the influence of information in relation to AIS effectiveness on the organizational performance using various indicators such as achieving organizational objectives and goals, service effectiveness, cost/benefit ratio as well as overall productivity gains (Ismail, 2009). Therefore, out of these six dimensions of AIS effectiveness this study is concern with the last dimension which is organizational impact. The anticipation is that existence of effective AIS will influence the productivity of SMEs in Jordan.

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2.3 AIS ALIGNMENT

Information processing (IP) Theory of Galbraith (1973) is used to define the concept of alignment applied in this study. The IP Theory is among many others classified as theories of contingency by Bolon

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(1998); specifically, IP theory postulates thatthere should be match between organization's IP capacity and its information requirements, in as much as the capacity of IP is meant to significantly impact on performance (Galbraith 1973). One of the prime assumptions of the theory is that organizations maintain a complex system which the basic problem in relation to its operating environment and usage of information (Bolon 1998), eventually, the high the uncertainty and complexity of the organization, the greater will be the requirements of information that need to be processed to achieve high level of performance (Ismail & King, 2007), this implied that a well aligned information will result in effectiveness IS, and eventually impact on organizational performance. Therefore, to have a better alignment, Galbraith (1973) posits that organizations should respond to increase in the demand for information such that they can decide to increase or decrease their IP capacity to align with the level of such demand.

Though the initial application of IP theory had been witnessed in studies relating to larger and complex organizations (Ismail & King, 2007), however, several other studies applied IP theory in the context of small firms in relation to the IT alignment (El Luoadi 1998; Ismail & King 2005; Khazanchi2005; Ismail & King, 2007). Consequently, the influence of AIS alignment on AIS effectiveness and its eventual effect on SMEs non-financial performance have been proposed in this study. The approach applied here is consistent with the suggestion of Van de Ven and Drazin (1985) who expressed that an organizational outcome or performance is the consequence offit between two or more factors, which implies here that existence of well aligned AIS will result in its effectiveness and consequently impact on firm performance.

2.4 AIS Sophistication

In this study, AIS sophistication has been conceptualized in accordance with the definition given byIsmail (2009), which considered AIS sophistication as the portfolio of the number of applications implemented by respondingfirms. According to Huber (1990) the implementation of advanced or sophisticated IT would likely lead toaavailability and quicker retrieval of information from variety of sources which could be internal, external or even previously saved information within the organizational archives, thus, leading to enhanced accessibility of information. This simply means that firms that make heavy investment into sophisticated IT would have more likelihood to produce timely and accurate information for increased effectiveness in decision making (Huber, 1990), and eventually better performance. In fact, literature documented that AIS sophistication would have a significant and positive impact on the firms' ability to align IT strategy (Hussin et al., 2002;Ismail& King,2007). Thus, in line with support from the literature which highlight the relevance of IT sophistication, this study will hypothesized how AIS sophistication would affect AIS effectiveness and eventually, AIS effectiveness to impact on SMEs performance with Jordan as context of the study.

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2.5 AIS COMMITMENT

AIS commitment is considered here as the active engagement, level of commitment and necessary support the firms' management delivers towards the planning and implementation of technological systems with a view of its effective utilization by the relevant staff of the organization (Thong, Yap& Raman, 1996). The decision making of small firms is usually within the control of its owner/manager,therefore, it is critical to ensure their high level commitment towards the implementation of an effective AIS which could be used successfully for overcoming of hurdles associated with the natural resistance to technology usage (Grover, & Goslar, 1993; Teo, Tan, & Buk, 1997); which will ultimately ensure improvement in the performance of firms. In the context of SMEs, Thong(1999) asserted that it is common knowledge that manager who exact control in the operations of SMEs are mostly the owner of such enterprises, therefore, their commitment is critical factor for effective implementation of IT among SMEs. It was further explain by Ismail and King(2006)that in several cases relating to IT implementation among SMEs there still exists less efficiency in the process, consequently, commitment of owner/managers in such IT development is highly desirable because it will facilitate efficient selection process by a company so as to ensure that the technology selected is effective in achieving the organizational objectives.

In general terms, majority of SMEs lack dedicated IT department or even a single IT expert, therefore, owner/manager are the ones committed in ensuring that the SME has the desired technology for better alignment with its needs (Hussin, King, Cragg, 2002; Eztebanez, Grande, Colomina, 2010). Therefore, in this process, the owner/manager of SMEs with high commitment and understanding of IT functionswould try to select the one that will be more effective for the firm so as to avoid over investment (Ismail & King, 2007). Additionally, it was asserted that IT success among SMEs is not only assessed via company size butalso through the capability of the owner/manager in using IT (Thong, 1999). This view can be supported with that of Delone (1988) who argued that managers/owners of enterprises are the key to the successful implementation of IT. This means that in a situation where the manager/owner is conversant with, and actively participate in its implementation, such implementation would be more likely to be successful. It was further pointed out by Thong(1999) that owner/manager knowledge of IS has been considered among the key factors influencing the adoption of IS. This shows that effective implementation of AIS depends on the owners' commitment, knowledge and understanding. Therefore, for SMEs to survive in this digital era, the owners should be updating accounting information so as to make accurate and timely decisions (Budiarto, & Prabowo, 2015). This is required because implementation of AIS ensures effective accounting practices which eventually have implications for SMEs managers (Lohman, 2000;

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Amidu*et al*., 2011). Hence, the owner/managers of SMEs should be committed in the implementation of effective AIS to enhance organizational performance(Budiarto, & Prabowo, 2015).

3.0 Conceptual Framework and Hypotheses Development

The conceptual framework of this study is underpinned by two theories; these are IP Theory of Galbraith (1973) and DeLone and McLean's (1992) model. IP Theory postulates that there should be match between organization's IP capacity and its information requirements (Galbraith 1973), this implied the IT requirements in terms of effectiveness requires that AIS should have high level of fit or alignment, highly sophisticated and will also requires significant commitment from the owner/manager. In essence, it implied the link between AIS alignment, AIS sophistication, AIS commitment by owner/manager and AIS effectiveness. On the other hand, DeLone and McLean's (1992) model underpinned the link between AIS effectiveness and SMEs performance. The model provides a highly consolidated framework through the integration of previous research models, and eventually draws a comprehensive model for AIS effectiveness (Ballantine et al., 1996). In fact, it highlights that the effectiveness of IS, or more specifically AIS, could have impact on the performance of organizations (Ismail & Zin, 2009), in fact it highlights organizational impact as one of the six dimensions which would be impacted by AIS effectiveness (Ismail, 2009), in fact, several other empirical evidence also revealed significant effect of AIS implementation on firms performance (Ismail & King, 2005, Daoud &Triki, 2013; Mehdi, Mahmoud, Mostafa &Ebadollah, 2015; Nizar, Ahmad & Mohamad, 2016; Abdullah, 2017;Ironkwe&Nwaiwu, 2018; Borhan& Bader, 2018; Akanbi&Adewoye, 2018; Susanto &Meiryani, 2019; Van Dung, 2020), though not specifically AIS effectiveness. However, these evidences are a clear indication that AIS effectiveness would likely influence firm's performance. In line with these theoretical supports on the influence of AIS alignment, AIS sophistication and AIS commitment on AIS effectiveness and its eventual impact on the performance of SMEs, the following conceptual framework is presented as shown in Fig. 1:

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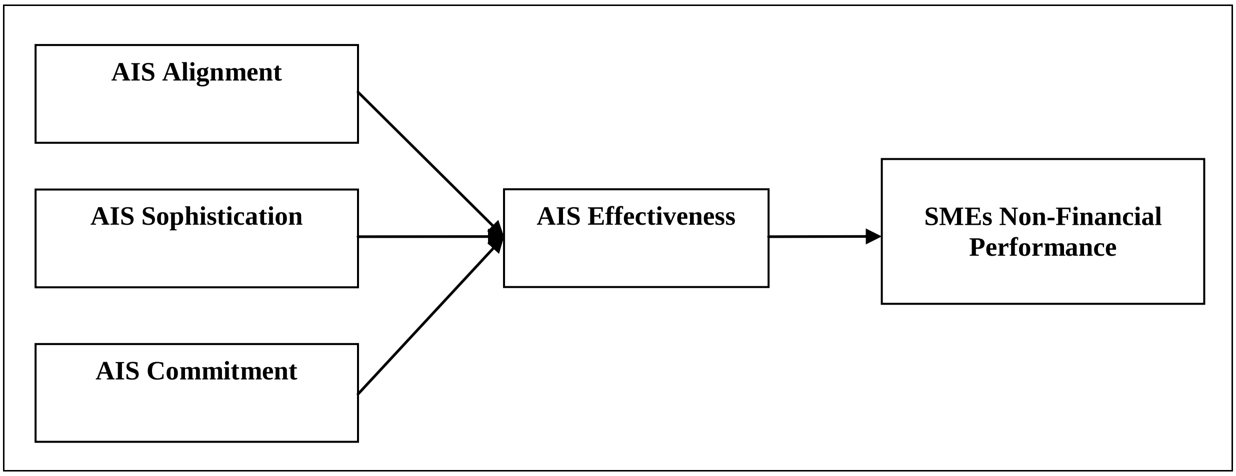

Fig. 1: Conceptual Framework of the Study

The conceptual framework proposed in Fig. 1 could be a unique, and its uniqueness could be supported with three main reasons. First, most of the studies in relation to AIS utilized AIS effectiveness as dependent variable based on the premise that AIS effective is the most common dependent variable within the extent literature (Ismail & Zin, 2009; Lufiet al., 2017), therefore, with support from DeLone and McLean's (1992) model this study extends the earlier studies through the integration of performance as dependent variable while AIS effectiveness as intervening variable in relations to AIS alignment, AIS sophistication and AIS commitment. Secondly, most of the studies that link AIS and firms' performance often relate to larger firms mainly banks not SMEs (Ali, et al., 2016; Raed, 2017;Borhan& Bader, 2018), also mostly focus on financial performance (Grande, Estébanez, &Colomina, 2011; Harash, 2015; Nizar, Ahmad, & Mohamad, 2016) with only few focusing on non-financial performance (Budiarto, et al., 2018). Lastly, the model could be among the few that integrate two theories; IP Theory of Galbraith (1973) and DeLone and McLean's (1992), most of the earlier studies use the theories separately because they do not employ a two-step model such as the one proposed in this study.Therefore, based on these justifications, the following hypotheses are developed.

3.1 AIS ALIGNMENT AND AIS EFFECTIVENESS

Lutfi et al (2017) operationalized AIS alignment as compatibility and examined its influence on AIS usage among SMEs in Jordan, the result was found to positive and significant, however, the relationship between compatibility and firms' performance was not examined in the study. Earlier studies also operationalized AIS alignment as compatibility and found that it has strong influence on the motivation to use technology compared to other factors (Grandon, and Pearson, 2004;Zhu, Dong, Xu, & Kraemer, 2006). In fact, incompatibility was seen to have hindered usage of technology and reduce the acceleration of innovation (Cho & Kim, 2002; Chung & Snyder, 2000). It is important to note that the current trend in AIS literature is

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operationalization of compatibility as AIS alignment (Ismail & King, 2007; Budiarto, et al., 2018), however, its link with AIS effectiveness is yet to be established but rather with firm performance (Budiarto, et al., 2018). Since earlier studies established the link between compatibility and AIS effectiveness, it is important to follow the current trend in the literature to operationalize compatibility as AIS alignment and examine its influence on AIS effectiveness. Therefore, based on this argument, the following hypothesis is developed:

H1: AIS alignment will have a significant and positive influence on AIS effectiveness among SMEs in Jordan

3.2 AIS SOPHISTICATION AND AIS EFFECTIVENESS

Within the extant literature, the effect of AIS sophistication has been examined but mostly on AIS alignment or firm's performance. For instance, Budiarto, et al., (2018) examined the influence of AIS sophistication on both AIS alignment and firms' non-financial performance and found that AIS sophistication has a significant and positive influence on both constructs. Differently, alongside other factors, Ismail (2009) examined the influence of AIS sophistication on AIS effectiveness among SMEs in manufacturing sector in Malaysia, however, the finding revealed insignificant positive effect of AIS sophistication on AIS effectiveness. In line with these studies, it can be seen that there is paucity of evidence on influence of AIS sophistication on AIS effectiveness, which implies the need for additional evidence. Importantly, the existing empirical evidences are not from Jordanian SMEs despite that SMEs has significant contribution to the economy of Jordan accounting for about 40% of GDP, 70% of employment creation and 45% of export (Ministry of Planning and International Cooperation-MPIC, 2012), hence, the need for evidence on the influence of AIS sophistication on AIS effectiveness among SMEs in Jordan. The expectation is that improving the effectiveness of AIS among SMEs would likely enhance their competitiveness and eventually boost their performance. Therefore, based on this argument, the hypothesis below is presented:

H2: AIS sophistication will have a significant and positive influence on AIS effectiveness among SMEs in Jordan

3.3 AIS COMMITMENT AND AIS EFFECTIVENESS

Literature established that the success of IS/IT heavilydepends on commitment of owner/manager of SMEs (Lutfi, Idris & Mohamad, 2016). Moreover, number of studies established a positive relationship between on the success of IS/IT and owner/manager commitment in SMEs' context, in fact such commitment has been seen as important factor in relation to usage of AIS (Al-Alawi &Al-Ali, 2015; Lutfi, Idris, & Mohamad, 2016). In a more recent study, the link between owner/manager commitments with respect to AIS from the perspective of SMEs has been studied on the AIS usage by Lutfi et al. (2017), and the result revealed significant and positive relationship between owner/manager commitments towards the AIS and

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the AIS usage, however, such has not been linked to AIS effectiveness. Thus, it is argued here that the commitment of owner manager towards AIS would be likely enhance the effectiveness in AIS implementation and operation among SMEs since the decision and implementation of AIS rest with the owner/manager, this can be supported with view of Delone (1988) who opined that owners/managers of enterprises are the key to the successful implementation of IT. Based on this argument, the following hypothesis is developed:

H3: AIS sophistication will have a significant and positive influence on AIS effectiveness among SMEs in Jordan

3.4 AIS EFFECTIVENESS AND SMEs PERFORMANCE

The relationship between AIS implementation (Grande, et al, 2011), AIS alignment (Ismail & King, 2005;Budiarto, et al., (2018) and AIS sophistication (Ismail, 2009; Budiarto, et al., 2018) and firms' performance has been studied within the extant literature. However, the influence of AIS effectiveness and firms' performance is lacking within the extant literature, most of the studies in relation to AIS effectiveness used it as a dependent variable without linking it to performance (Ismail & Zin, 2009; Lufi et al., 2017). Moreover, even in such instances where the link between AIS implementation, AIS alignment, AIS sophistication and firm performance were established the studies were not among Jordanian SMEs. One of the studies in relation to SMEs was that of Lutfi et al., (2017) which investigate the factors influencing AIS usage and its influence on AIS effectiveness with moderating effect of environmental uncertainty, however, the study did not link AIS effectiveness with the performance of SMEs. This implied the need to examine the extent to which AIS effectiveness influence SME's performance in Jordan, hence, the following hypotheses is proposed:

H4: AIS effectiveness will have significant and positive influence on SMEs performance in Jordan

The above hypotheses are developed in line with the conceptual framework presented in Fig. 1, thus, testing this hypotheses will result in the validation of the framework through which insights would be obtained that can be of relevance to body of knowledge, SMEs owner/managers and likely the authorities responsible for boosting the performance of SMEs around the world and more specifically in the Jordanian context.

4.0 CONCLUSION AND IMPLICATIONS

The paper identifies gap in the literature on the lack of comprehensive AIS effectiveness framework that examines not only its determinants but also its impacts on SMEs performance. Earlier studies within the extant literature mostly use AIS effectiveness as a dependent variable based on the claim that it has been the most widely applicable dependent variable within the AIS literature (Ismail, 2009; Lutfi, et al, 2017; Shagari, et al., 2017). However, insights from DeLone and McLean's (1992) model indicate that AIS effectiveness will influence firms' performance. Following this

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discovery, the study integrates Information Processing Theory and DeLone and McLean's Model to produce a conceptual framework on the influence of AIS alignment, AIS sophistication and AIS Commitment on AIS effectiveness, as well as the eventual impact of AIS effectiveness of SMEs performance in Jordan. The study is expected not only to bridge the identified gap in the extant literature but also expands the existing body of knowledge in relation to understanding of AIS effectiveness. To the researcher's understanding, this study could be a pioneer in integrating the antecedents and consequence of AIS effectiveness in a single framework.

In essence, the study could have some theoretical and practical implications. First, majority of the current models within the literature examined only the antecedents or determinants of AIS effectiveness without linking same to firms' performance in a single framework. Consequently, the framework proposed in this study through the necessary theoretical support highlights how effective AIS would lead to better SMEs performance. Secondly, most of the insights from the literature provide SMEs owner/managers with information on how to improve the effectiveness of AIS, with little insights on how effective AIS will influence SMEs performance, accordingly, the proposed framework provides insights to owner/managers on not only how to improve the AIS effectiveness but also the eventual implication of such efforts on the performance of their SMEs through the appropriate theoretical supports. Lastly, the validation of the study would provide additional evidence with respect to impact of AIS effectiveness on performance from the perspectives of SMEs because most of the existing evidences are from banking industry (Ali, et al., 2016; Raed, 2017;Borhan& Bader, 2018), and real estate industry (Al-Dalaien& Khan (2018; Borhan& Nafees, 2018), with few from the perspective of SMEs (Lutfi, et al., 2017), which however, did not link AIS effectiveness and SMEs performance. Hence, the validation of this framework is being undertaken in Jordan and recommmended researchers in other countries should expand and validate the framework in their contexts not only in relation to SMEs but also with respect to larger firms.

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