

# Mediating Role of Competitive Advantage on the Relationship between AIS Implementation and SMEs Performance in Jordan: A Proposed Framework

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**ABSTRACT**--The study undertakes an extensive review of Accounting Information System (AIS) literature through which it identified a gap on lack of comprehensive framework that integrate AIS, competitive advantage and SMEs performance in a single model. Therefore, through the support of Resource-based View (RBV) Theory, the study proposed a conceptual framework on the influence of AIS dimensions (AIS alignment and AIS sophistication) on the SMEs performance through the mediation effect of competitive advantage. The framework highlights that SME that implemented a well aligned and highly sophisticated AIS would likely gain more competitive advantage and will eventually outperformed SMEs which do not possess such technological attributes. The study not only highlights the need on the validation of the proposed framework for more reliable insights but also highlights the need for future studies to expand on this effort through the identification of other potential mediators within the continuum of AIS-Performance relationship from SMEs perspectives. This is possible considering consistent results in such as a relationship.

**Keywords**-- AIS Alignment, AIS sophistication, competitive advantage, SMEs performance

## I. INTRODUCTION

For over a decade, the relationship between Accounting Information System (AIS) and firms' performance has been extensively investigated, and most of the existing empirical evidences reported consistent findings (Ismail & King, 2005; Grande, Estébanez & Colomina, 2011; Daoud & Triki, 2013; Saeidi, 2014; Mehdi, Mahmoud, Mostafa & Ebadollah, 2015; Ali, Bakar & Omar, 2016; Taiwo, 2016; Nizar, Ahmad & Mohamad, 2016; Akesinro & Adetoso, 2016; Raed, 2017; Abdullah, 2017; Alnajjar, 2017; Ironkwe & Nwaiwu, 2018; Kashif, 2018; Rehab, 2018; Borhan & Bader, 2018; Akanbi & Adewoye, 2018; Susanto & Meiryani, 2019; Van Dung, 2020). While this relationship has been well and consistently established within the extant literature, the mechanism that explains such consistent results is yet to be explored by the AIS researchers. To address this challenge, this study refers to the methodological literature, specifically, the seminal work of Baron and Kenny (1986) which offers significant insight in understanding why this relationship has been consistent across various contexts and settings. Specifically, Baron and Kenny (1986) suggest that when relationship between independent and dependent variables have been consistent, such consistency can be explained by a potential intervening variable called a mediator. They further highlight that a mediation model proposes that an independent variable influences mediator

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and the mediator variable in turn influence the dependent variable; in essence, the mediator variable explains the nature of the relationship between the predictor and explained variables. Thus, in this context, the mediation analyses explore the underlying mechanism or process through which AIS influences firm's performance through the mediator, the essence is to have better understanding of the relationship between AIS and firms' performance.

In an attempt to identify the possible mediator in the relationship between AIS and performance, reference was made to Resource-Based View Theory of Barney (1991). The theory posits that for firms to outperform its competitors, it should design a unique and firm-specific core competency. Thus, it implied that SMEs that implement AIS that is highly sophisticated and well aligned to their activities, they will have more competitive advantage and eventually they will outperform its competitors. Simply, implementation of sophisticated and well aligned AIS serves as an important resource for SMEs, which will offer competitive advantage them, and ultimately influence its performance. However, despite this theoretical insight on the possible mediation effect of competitive advantage on the relationship between AIS and SMEs performance, a conceptual framework to that effect is lacking in the literature.

Therefore, based on this background, the motivation of the study is threefold. First, most of the earlier empirical studies on the relationship between AIS and performance are from large firms. For instance, the study of Ironkwe and Nwaiwu (2018) was among the large companies listed on Nigerian Stock Exchange (NSE); likewise, that of Kashif (2018) was among large Fast Moving Consumer Goods (FMCG) companies in India, so also the studies of Raed (2017) and Borhan and Bader (2018) in Jordan and Akanbi and Adewoye (2018) in Nigeria focus on banks in which are mainly large enterprises. However, recent empirical studies concentrate on SMEs (Susanto & Meiryani, 2019; Van Dung, 2020), hence the need to sustain the trend and provide more evidence from SMEs perspectives. Secondly, most of the empirical evidences from Jordan are mainly from Banks (Raed, 2017; Borhan & Bader, 2018) and real-estate (Borhan & Nafees, 2018), with few such as Lutfi, Idris and Mohamad (2017) that concentrate on SMEs, hence, the need for more evidence from the perspectives of SMEs from the Jordanian context. Lastly, while the relationship between AIS and performance has been established (Ismail & King, 2005; Grande, Estébanez & Colomina, 2011; Saeidi, 2014; Mehdi, Mahmoud, Mostafa & Ebadollah, 2015; Akesinro & Adetoso, 2016; Raed, 2017; Ironkwe & Nwaiwu, 2018; Kashif, 2018; Rehab, 2018; Susanto & Meiryani, 2019; Van Dung, 2020), the owner/manager would like to know why the implementation of AIS leads to firms performance, hence, the need to highlight the possible mediation role of competitive advantage through theoretical insights. In essence, this will inform the SMEs that are yet to implement AIS to understand the implication of AIS to their competitive advantage. The fact is that SMEs have slim competitive advantage compared to larger firms (Rosli, 2012), hence, the need for them to explore necessary technology that will give them more competitive advantage and eventually enhance their performance.

In line with the above motivations, the main question which this research seeks to answer is, would competitive advantage serve as a potential mediator on the relationship between AIS and performance of SMEs through theoretical support? Towards answering this question, the objective of the study is to explore the mediation role of competitive advantage on the relationship between AIS and the performance of SMEs. To achieve this objective, the paper is divided into four parts; this first part is introduction. The second part is literature review, which discussed the concept of SMEs performance, the link between AIS and SMEs' performance as well as the potential mediation role of competitive advantage. The third part is theoretical framework and hypotheses development

through which hypotheses were proposed for both the direct effect of AIS and performance as well as the mediation effect of competitive advantage on the relationship between AIS and performance. The last part is conclusion and implications.

## II. LITERATURE REVIEW

### *2.1 SMEs Performance*

In many countries, SMEs have been the most dynamic and strong drivers for economic growth. SMEs sector has been broadly described as the key signal and important hall marks in terms of evaluation of health and growth of an economy (Alshir'ah, Abdul-Jabbar, & Samsudin, 2016). Like many other countries, in Jordan, SMEs significantly contributes to employment, Gross Domestic Product and exports. Specifically, it contributes to 40% of total GDP, 45% of the overall export and 70% of employment (Ministry of Planning and International Cooperation-MPIC, 2012). Despite these contributions, SMEs are still experiencing bottleneck which affects their performance (Wan Ismail & Mokhtar, 2016). Literature reports that, around the world, more than 50% of SMEs mostly failed after few years of existence (Harash, 2015; Lussier & Halabi, 2010). In specifics, there has also been a decline in the number of registered SMEs in Jordan, this falls from 166,000 in 2016 to 154,800, which signifies failure in SMEs due to poor performance (Association of Banks in Jordan, 2016). Therefore, considering the role of SMEs in an economy, investigation into the factors affecting SMEs performance or nonperformance is desirable (Lussier & Halabi, 2010).

Performance has been defined as the degree to which a firm being social system uses it means for the achievement of its ends (Robbins, 1987), this definition is consistent with the one given by Georgopoulos and Tannenbaum (1957). A clearer definition of performance was offered by Cherrington (1989) who considered organizational performance measurement as a process for evaluation of success or effectiveness of an organization which serves as an indication that organization operates in a manner that will ensure effective achievement of its objectives by performing successfully. Performance can be measured through financial and non-financial measures. Financial performance has been considered as the extent to which an organization performs financial activity successfully as well as the extent to which it financial goals has been accomplished (Ganyam&Ivungu, 2013). It is also seen as the approach use to measure results of a firm in terms of operations and policies in monetary terms; thus, in broader terms it has been considered as the firm's ability to attain its financial objectives through two important indicators; investor's return and accounting returns (Ganyam&Ivungu, 2013). Two financial performance measures are of the interest to investors (Glautier&Underdoon, 2009). Firstly, the profitability, which is measured through the ability of firm to generate profit; this can be through efficient allocation of resources that can lead to profit maximization under competitive market conditions (Pandey, 2004). Under this, financial efficiency ratios such as ratio of profit to sales or ratio of profit to assets are utilized. The second is the financial performance measured in terms of value of company shares to its investors; it can be assessed through ratios such as earning per share, dividend yield and price-to-earnings ratio. In the other hand, none financial measures can be in form of number of car engine parts assemble in a factory, number of personal computers sold by a distributor, teaching basic reading skills to elementary schools' children, or performing heart surgery by medical personnel (Sonnentag&Frese, 2002). In the literature, SMEs performance has been measured using both financial

performance (Grande, et al., 2011; Ironkwe&Nwaiwu, 2018) and non-financial performance (Budiarto, et al, 2018; Ironkwe&Nwaiwu, 2018).

## ***2.2 AIS Implementation and SMEs Performance***

SMEs are battling to succeed in today's competitive environment, interestingly AIS offers huge opportunity for firms to achieve sustainable competitiveness and to survive in such turbulent environment (Lutfi, et al., 2017). Considering the ample benefit from AIS adoption, several firms have adopted the system, and many are in the process of harnessing its advantages, and in this development SMEs sector are not in exceptions (Lutfi, Idris, & Mohamad, 2016). AIS refers to a system use in collecting, storing, recording and processing data for the production of information for managers and other forms decision makers (Esmeray, 2016). It was further asserted that this information is beneficial to managers in planning, controlling and decision making. Literaturerecognized how SMEs can benefit from AIS; Esmeray (2016) suggests that AIS can aid the growth of SMEs in terms of sale, revenue and customer services. Ismail and Zin (2009) found that AIS offers information for both external and internal users, thus, it has a positive impact on the efficiency of the business management. Lutfi et al (2017) reported that in a broader context several studies document how AIS usage influences firm performance. This implies that firms with effective AIS utilization are more likely to report positive impacts on the firm performance compared to those with limited use of AIS (Ali, Rahman & Ismail, 2012).

Evidence for the above has been provided from different settings. In the banking sector, several empirical evidences established the influence of AIS on firms' performance from many contexts. In Jordan, Raed (2017) studied that influence of AIS on banks success in Jordan. Through data collected from 112 respondents from Jordanian banks it was established that AIS significantly effect on banks success. In another study, the impact of AIS on banks performance in terms of profitability was investigated by Borhan and Bader (2018). Through the sample of 206 employees in Jordanian commercial banks it was found that AIS has significant impact on performance measured through the profitability of Jordanian commercial banks. In another study, Ali, et al (2016) also examined the influence of AIS in terms of service quality, information quality, data quality and system quality on the indicators of performance. Through sample of 273 employees in Jordanian banking sector, it was found that service quality, information quality and system quality which serve as significant AIS success factors have significant influence onbanks performance. It implied that banks performance can further be enhanced through the adoption andimplementation of AIS success factors. In Nigeria, the study of Akanbi and Adewoye (2018) also provide empirical evidence on the influence of AIS on banks performance through 80 randomly selected employees from 16 commercial banks in Nigeria. Through the secondary data of about 10 years, the study of Akanbi and Adewoye (2018) further confirmed the performance of the sampled banks measured through on return on total asset (ROTA), return on capital equity (ROCE), gross profit margin (GPM) and net operating profit (NOP) significantly improved in the post adoption of AIS. In another study, Akesinro and Adetos (2016) analyzed the effects of AIS adoption on bank performance in Nigerian banking sector. Through a sample of 50 employees from 3 deposit money banks (DMBs), it was found that AIS adoption has a significant positive influence on profitability of banks.

The influence of AIS on firms' performance has also been established in real estate sector. In their Jordanian study, Al-Dalaïen and Khan (2018) examine the influence of AIS on the selected real estate firms' financial

performance in Jordan. Through the data collected from 175 respondents from Jordanian real estate sector it was found that even through the companies benefited from AIS adoption, however, no significant influence of AIS was revealed on performance. In another study, Borhan and Nafees (2018) investigate the relationship between AIS and financial performance of selected real estate firms in Jordan. Through sample of about 175 employees from 5 companies in Jordan, it was found that AIS has significant influence on the real estate firms' financial performance in Jordan.

In industrial sector, the influence of AIS on performance was also investigated. In Jordan, Samer (2016) conducted an examination of the effectiveness of AIS and its influence on the operational performance of the industrial firms listed in Jordan. Through sample of 42 companies from Jordanian industrial sector listed in Amman Stock Exchange (ASE) at the end of 2012, it was found that effectiveness exist in the AISs employed in industrial companies which influences the decision taken by the board of directors, which may eventually affect the performance of the companies. In India, an evaluation of impact of AIS on financial performance was undertaken by Kashif (2018). Using a sample of 177 FMCG companies in India, it was found that AIS has significant influence on the financial performance of selected FMCG companies in India

The influence of AIS on performance was also examined in education sector. In a Nigerian study conducted by Taiwo (2016) an investigation of the impact of AIS on organizational performance was carried-out in accounting departments in Covenant University Nigeria. Through sample of 20 staff in financial services and other related accounting departments, it was found that significant positive influence exists between ICT system and accounting system, and eventually ICT significantly and positively influence organizational performance. In his Jordanian study, Abdullah (2017) investigate the extent to which AISs in Jordanian private and public universities would likely influence financial performance via its quantitative indicators. Through a survey of 20 chief finance officers (CFOs) in the aforesaid universities which have been accredited by the Higher Education and Scientific Research Ministry of Jordan, it was found that AIS offers the assessment of financial performance through its quantitative indicators among sampled universities in Jordan.

In services sectors studies were also undertaken on the relationship between AIS and performance, Saeidi (2014) investigated the influence of AIS on financial performance in Tata consultancy services (TCS) companies in India. Through a survey of 40 top managers using questionnaire it was found that AIS significantly influences knowledge and understanding accountants and managers and eventually influences the decision making, financial performance and organizational resources of TCS. Specifically, a positive relationship was established between knowledge of accountants and managers, financial performance and organizational resources. In United Arab Emirates (UAE) Nizar, Ahmad and Mohamad (2016) investigate the influence of AIS financial and managerial performance requirements. Through the sample of 38 employees in various private hospitals in UAE it was found AIS practice in private hospitals in UAE offers information that met the financial performance function requirements.

In SMEs setting, which is the main focus of this study, the influence of AIS on performance was also investigated. In Iran, Mehdi, Mahmoud, Mostafa and Ebadollah (2015) investigated the influence of AIS implementation on efficiency, profitability and productivity of SMEs listed in Tehran Stock Exchange from 2007-2013. Through the sample of 118 SMEs it was found that effectiveness in AIS implementation in SMEs listed on the Tehran Stock Exchange significantly and positively associate with SMEs' performance, productivity, and

profitability which was measured using P/E ratio and Tobin's Q. In a literature survey by Dekeng and Prabowo (2015) which compile several findings relating to influence of AIS alignment on SMEs performance, it was concluded that individual characteristics, organizational characteristics, and situational factors are the antecedents of AIS alignment, and AIS alignment eventually influence SMEs performance. In another study relating to the SMEs, Alnajjar (2017) examines the influence of AIS on performance management and organizational performance in UAE. Through the sample of 74 SMEs it was found that knowledge of accounting managers and top management support have a significant influence on AIS, and AIS also significantly affect the performance management and organizational performance in the sampled SMEs. In Saudi Arabia, Rehab (2018) examined the influence of AIS on the organizational performance. Through a sample of 137 SMEs, it was found that AIS significantly and positively influence organizational performance in general and specifics it also affects also the dimensions of performance considered in the study including cost reduction, improving quality and effective decision making.

## ***2.2 Competitive Advantage as a Mediator between AIS and SMEs Performance***

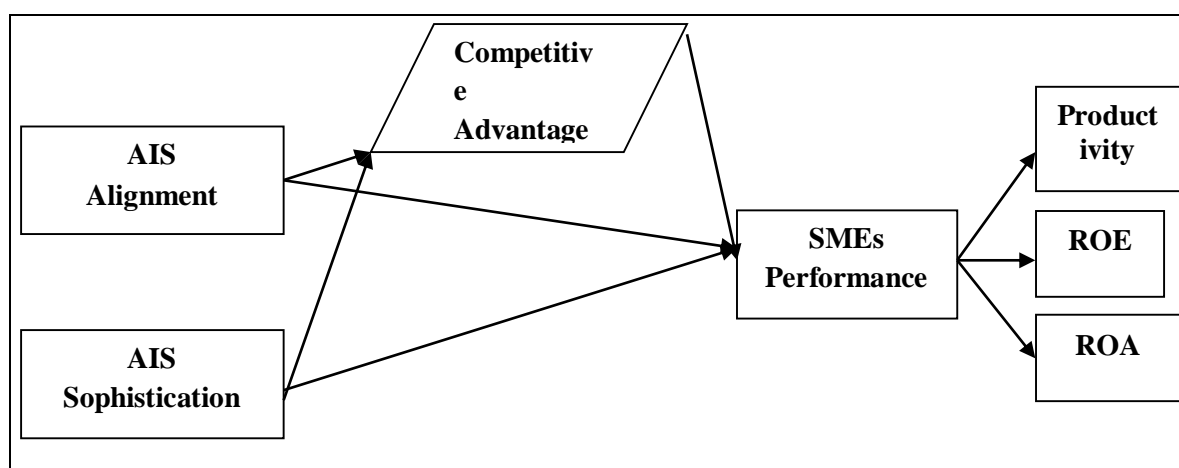
Competitive advantage has been defined by Barner (1991) as the ability of the firm to outperform its competitors in the long run. In relation to AIS, competitive advantage has been seen as the rate of change of management processes of accounting information for the transformation of input into output in such a way to outperform competitors (Evans, 2005; Ditkaew and Ussahavanitchakit, 2010). This implied that the application of AIS can give firms competitive advantage and will eventually influence its performance. In the Jordanian context it was reported that only 14% of SMEs in Jordan makes internal preparation of accounting information through accounting software application (Smirat, 2013), implying that these SMEs will likely have competitive advantage over other SMEs that do not deploy the use of AIS and will eventually have better performance. Because low level of AIS usage leads to poor data quality and eventually has adverse effect on decision making and restricts the capability of Jordanian firms to improve its business productivity and ensure sustainable competitiveness (Khassawneh, 2014). In essence, this highlights the possibility for competitive advantage to intervene as a mediator between AIS and SMEs performance. Thus, in support of this, empirical evidence confirmed the link between AIS and competitive advantage of firms (Al-Shbiel & Al-Olimat, 2016; Bunnoon & Keawlaied, 2018), and also a link between competitive advantage and performance (Grahovac & Miller, 2009; Majeed, 2011; Potjanajaruwit, 2018). However, extant literature did not reveal that such possible mediation effect of competitive advantage has been tested through empirical analysis despite consistent finding between AIS and firm performance (Ismail & King, 2005; Grande, Estébanez & Colomina, 2011; Daoud & Triki, 2013; Saeidi, 2014; Mehdi, Mahmoud, Mostafa & Ebadollah, 2015; Ali, Bakar & Omar, 2016; Akesinro & Adetoso, 2016; Alnajjar, 2017; Ironkwe & Nwaiwu, 2018; Kashif, 2018; Rehab, 2018; Susanto & Meiryani, 2019; Van Dung, 2020). Therefore, competitive advantage has been proposed as the potential mediating variable between AIS alignment, AIS sophistication and SMEs performance.

### III. THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

#### 3.1 Theoretical Framework

The conceptual framework proposed in this study on the mediating effect of competitive advantage on the relationship between AIS and SMEs performance is underpinned by RBV Theory (Barner, 1991) and supported and developed between on the methodological guideline offered by Baron and Kenny (1986). Firstly, RBV Theory of Barner (1991) postulates that firms with unique and firm-specific core resources will possess competitive advantage and such competitive advantage will assist those firms to outperform their competitors. Therefore, it can be deduced from the theory that SMEs that implement AIS which highly sophisticated and well aligned to their activities, will possess competitive advantage above other SMEs without those unique competencies and eventually they will outperform its competitors. In essence, the theory highlights not only the direct effect of AIS on firms' performance but the possible mediation effect of competitive advantage. It means that implementation of sophisticated and well aligned AIS serves as an important resource for SMEs, which will offer competitive advantage them, and ultimately influence its performance.

Moreover, methodological literature on the integration of mediating variable into a research model as provided in the seminal work of Baron and Kenny (1986) highlights that for a mediator variable to be integrated there should be consistent relationship between independent and dependent variable. Interestingly, such consistency has been established between AIS and firms' performance in many studies (Ismail & King, 2005, Grande, Estébanez&Colomina, 2011; Daoud &Triki, 2013; Saeidi, 2014; Mehdi, Mahmoud, Mostafa &Ebadollah, 2015; Ali, Bakar & Omar, 2016; Taiwo, 2016; Nizar, Ahmad & Mohamad, 2016; Akesinro&Adetoso, 2016; Raed, 2017; Abdullah, 2017; Alnajjar, 2017; Ironkwe&Nwaiwu, 2018; Kashif,2018; Rehab, 2018; Borhan& Bader, 2018; Akanbi&Adewoye, 2018; Susanto &Meiryani, 2019; Van Dung, 2020). Hence, these evidences theoretical and methodological inferences justify the integration of competitive advantage on AIS-performance relationship, thus, giving birth the conceptual framework of this study presented in Fig. 1 below.



**Figure 1:** Conceptual Framework

The conceptual framework presented in Fig. 1 depicts that AIS implementation in form of both alignment and sophistication will directly affect SMEs performance and also the influence of both AIS alignment and AIS sophistication is mediated by competitive advantage. This means that SMEs that implemented a well aligned AIS

and high sophisticated AIS would be more likely to get competitive advantage over their competing SMEs that do not implement such AIS, and this eventually will result in better performance in terms of productivity, ROE and ROA. In line with this framework, the following hypotheses are developed.

## IV. HYPOTHESES DEVELOPMENT

### *3.2.1 AIS and SMEs Performance*

The literature review conducted 2.2 above implied that the relationship between AIS and performance of firms globally. Specifically, such relationship has also been studied in Jordan in various sectors; for instance in 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). However, little emphasis has been paid to SMEs in Jordan. Some of the studies on the relationship between AIS and performance of SMEs are from other countries such as Iran (Mehdi, et al., 2015), UAE (Alnajjar, 2017) and Saudi Arabia (Rehab, 2018). Though some studies were carried-out in Jordan in relation to SMEs, however, they are not on relationship between AIS and SMEs performance. For instance, the study of Lutfi et al., (2017) on the factors influencing AIS usage and its influence on AIS effectiveness with moderating effect of environmental uncertainty.

Moreover, even the available studies the available studies within the extant literature only few decomposed the AIS implementation into two important components of AIS alignment and AIS sophistication such as Ismail and King (2005) who studied AIS alignment and firm's performance and Malaysia and Ismail (2009) that focused on impact of AIS sophistication of AIS effectiveness. Thus, for SMEs to take advantage of AIS it most align to the needs of their operations and equally need to be highly sophisticated. Therefore, due to paucity of evidence globally and Jordan specifically on the influence of AIS alignment and AIS effectiveness on SMEs performance these hypotheses are developed:

**H1:** There is positive and significant relationship between AIS alignment and the performance of SMEs in Jordan

**H2** There is positive and significant relationship between AIS sophistication and the performance of SMEs in Jordan

### *3.2.2 Mediating Role of Competitive Advantage on the Effect of AIS on SMEs Performance*

The mediating role of competitive advantage on the effect of AIS alignment and AIS sophistication on SMEs performance was proposed based on the consistent relationship between AIS implementation and firms performance (Ismail & King, 2005, Grande, Estébanez&Colomina, 2011; Daoud &Triki, 2013; Saeidi, 2014; Mehdi, Mahmoud, Mostafa &Ebadollah, 2015; Ali, Bakar & Omar, 2016; Taiwo, 2016; Nizar, Ahmad & Mohamad, 2016; Akesinro&Adetoso, 2016; Raed, 2017; Abdullah, 2017; Alnajjar, 2017; Ironkwe&Nwaiwu, 2018; Kashif,2018; Rehab, 2018; Borhan& Bader, 2018; Akanbi&Adewoye, 2018; Susanto &Meiryani, 2019; Van Dung, 2020), which was support by the guideline provided by Baron and kenny (1986) that existence of such consistent relationship implied the need for a mediator variable. Equally, such mediation was also highlighted by the RBV Theory of Barner (1991). The theory highlights that SMEs firms with unique and specific core resources



such as AIS alignment and AIS sophistication will possess competitive advantage, which will eventually enhance their competitiveness and ultimately their performance. Though, extant literature reported the influence AIS and competitive advantage of firms (Al-Shbiel& Al-Olimat, 2016; Bunnoon&Keawlaied, 2018), and also the influence of competitive advantage and firms'performance (Grahovac& Miller, 2009; Majeed, 2011; Potjanajaruwit, 2018). However, the researchers are yet to come across an existing which integrates AIS alignment and AIS sophistication as independent variables that influence SMEs performance through the mediation effect of competitive advantage. Based on these paucities of evidences, the following hypotheses are proposed:

**H3:** Competitive advantage mediate the effect of AIS alignment on SMEs performance

**H4** Competitive advantage mediate the effect of AIS sophistication on SMEs performance

The above evidence implied the need for test the proposed hypotheses for the validation of the above conceptual framework in order to provide empirical evidence that would highlight the relevance of AIS in enhancing competitive advantage of SMEs and eventually influence their performance.

## V. CONCLUSION AND IMPLICATIONS

The study carried-out an extensive literature review on AIS-performance relationship and found that consistent relationship does exist in that regard. Eventually, reference was made to the seminal work of Baron and Kenny (1986) which suggests that when a consistent relationship exist between independent and dependent variable has been established there is the need to understand the mechanism that explain such consistent results. The fact is that understanding such mechanism will offer important insights in understanding such relationship, which will ultimately be important for practical application of research findings and policy making. Therefore, further reference as made to RBV theory which highlights that firms which unique attributes would likely have competitive advantage and will eventually outperform those without such attributes. Considering that not all SMEs in Jordan adopted AIS, this theory implied that SMEs which implemented a well aligned and highly sophisticated AIS would likely gain more competitive advantage and would eventually outperform other SMEs who are yet to implement AIS which such attributes. Impliedly, it shows that AIS which lead to competitiveness and eventually lead to better performance, hence, the possible mediation effect of competitive advantage on the relationship between AIS implementation (AIS alignment and AIS sophistication) on SMEs performance.

The framework proposed here is expected to have four important implications. First, practically, its highlights on the need for SMEs in Jordan to implement AIS which they really need to get competitive advantage whether locally or internationally, which will eventually boost their performance. Second, policymakers in Jordan need to ensure formulation of policies that will mandate SMEs to implement not only just an AIS but also well aligned and well sophisticated, this will go a long way to give competitive advantage to SMEs in the country and ultimately boost their performance. Thirdly, the current framework expands the application of RBV Theory of Barner (1991) within the continuum of AIS through the identification of possible mediation effect of competitive advantage on AIS-Performance relationship, which to the best of the researcher's knowledge has not been availed by the extant literature. Lastly, the study also highlights the need for future studies to expand on this effort through the identification of other potential mediators within the continuum of AIS-Performance relationship from SMEs perspectives. This is possible considering consistent results in such as a relationship.

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