# The Impact of IT Sophistications on the Perceived Usefulness of Accounting Information Characteristics among Jordanian Listed Companies

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#### **Abstract**

This study aimed to examines the effects of Information Technology (IT) sophistication on perceived usefulness of accounting information characteristics within a research framework in Middle East context specifically in Jordan. This study firstly examines the relationships between the most dominant contingency factor found in the literature namely IT sophistication with accounting information characteristics. Secondly, this paper focuses on four dimensions of IT sophistication, i.e. technological, informational, functional, and managerial to measure the impact of IT on sophistication of accounting information characteristics. To achieve the objectives of this study, data were collected from 174 companies listed in Jordanian Stock Exchange, which represents about 66% response rate. Initial tests show that the assumptions of reliability, multicollinearity, normality, linearity, and homoscedasticity were met. The results reveal significant and positive relationships between four dimensions of IT sophistication and accounting information characteristics, also findings from this study suggest managerial, informational, and functional IT sophistication are more important than the technological aspect in influencing the perceived usefulness of accounting information characteristics.

### 1. Introduction

Recently, International Federation of Accountants (IFAC) stated that competence in IT is one of the most crucial factor in the knowledge economy, whereby newly emerging professional accountant must posses sufficient IT knowledge and skills due to the pervasive use and indispensability of IT in the business world (IFAC, 2010).

Reviewing of both accounting and IS literature show that, the relationship between accounting and IT has been discussed since a half century ago (McMickle, 1989). The developments in the areas of accounting, information technology (IT) and IS over the last three decades have widened the scope and roles of AIS (Ismail & King, 2005). However, these developments in new accounting model have made it possible for modern AIS to capture not only historical and financial-related data but also non-financial and future-oriented data (Mauldin & Ruchala, 1999). Business people including accountants now view accounting in a much broader perspective (Abernethy & Guthrie, 1994) with added emphasis on the economies of business operations and strategic management (Brecht & Martin, 1996).

Traditional AIS tended to mirror historically developed manual accounting processes (Mauldin & Ruchala, 1999). Therefore, it was unable to adapt to change, to support critical business processes and models, and to satisfy users' information requirements, which are constantly changing over time (Paul, 1994). Modern AIS, however, can generate various types of information including accounting and non-accounting information to assist management manages short-term problems and integrates operational considerations within long-term strategic plans (Mitchell, Reid, & Smith, 2000).

Furthermore, IT-related issues have long received the attention of accounting professionals and ARE researchers. Some of these issues attributed to the difficulty in comparing the results of previous studies due to many reasons. For instance, different researchers seemed to define IT sophistication differently, Most IT-related studies focused on the technological dimension IT sophistication (Cline & Guynes, 2001; Mahmood & Mann, 2000; Tam, 1998; Weill, 1992) while neglecting other IT dimensions such as informational, functional and managerial sophistication (Ismail & King, 2007; Raymond & Pare, 1992).

Furthermore, most of AIS studies have incorporated contingency factors such as organizational structure, business strategy, and environmental condition in their research model (Chenhall & Langfield-Smith, 1998; Chong & Chong, 1997; Mia & Clarke, 1999) but have neglected the influence of IT on AIS design. Furthermore, among the few studies that have examined the relationship between AIS and IT have defined IT in a narrow perspective (Ismail, 2004). Similar to IT researches, these studies viewed IT from the technological perspective only but failed to incorporate other perspectives of IT sophistication such as informational, functional and managerial. Finally, most of previous IT/AIS studies were conducted in developed countries (Raman & Yap, 1996; Tan, 1997; Thong, 1999). Very few of such studies have been carried out in developing countries especially in the Middle East.

Due to the continuous flow of considerable amount of empirical studies which investigate the contingency factors and accounting and/or information system and indicates the importance and vitality of this theory, this study is theoretically and empirically constituted upon contingency theory which has long been applied in both accounting and information system disciplines (Chapman 1997; & Chenhall 2003).

The above discussions relating to the evolution of IT and its subsequent impact on accounting profession have raised several interesting issues that need to be carefully addressed, particularly among developing countries like Jordan. Jordan, unlike other Middle East countries, it is a small country with very limited natural resources. IT development in Jordan is also under-developed compared to developed countries and even some developing countries (Murrar, 2003). Despite this, the Jordanian government with the strong support from the King of Jordan has recently invested quite heavily in IT development with the hope to be a leader among the Arab countries (Nasereddin, 2006). Therefore, a comprehensive AIS study which incorporates both IT and accounting issues could contribute to further understanding of the IT-related issues such as the effect of IT sophistication on perceived usefulness of Accounting Information characteristics, not only in Jordan but also other developing countries.

In summary, the above discussions highlight several important issues relating to accounting and IT from the perspective of contingency theory. The first issue relates to the lack of a specified empirical study that examines the relationship between IT sophistication including its four dimensions and the perceived usefulness of accounting information characteristics in the Middle East countries especially in Jordan. The second issue relates to the inconsistency in the measurement of IT sophistication. Therefore, this study represents the first attempt to fill in the gap in the specific context of Jordanian companies.

#### 2. Literature review

As previously discussed, the relationship between accounting and IT has existed since five decades ago (McMickle, 1989). Xiao, Dyson, and Powell (1996) stated that, accounting has always been seen as a front-runner in IT usage. Accounting in most cases is the first area to be computerized in organizations (Macintosh, 1985). Nowadays, the application of IT in accounting has become all pervasive even to the smallest businesses (Ismail & King, 2005).

Both of accounting and IT are considered as integral parts in modern business. There are many reasons to believe that IT has greatly affected the accounting profession. The evolution of IT has fundamentally changed the way accountants perform their jobs. In the simplest form, the automation of AIS has enabled accountants to generate annual reports in a more timely and accurate basis. Furthermore, the automation of AIS provides the opportunity for accountant to deviate from the traditional number crunching role to a business advisor. However, despite facilitating the work of an accountant, the sophistication of IT poses also greater challenges to an auditor. Therefore, modern accountant needs to acquire sufficient IT skills and knowledge to be effective (IFAC, 2003). The following paragraphs discuss general studies relating to accounting and IT.

IT-related issues have received the attention of accounting professionals and researchers since the 1970s when accountants started to realize that they were losing control over information and IS (McMickle, 1989). Accountants were forced to revise the way they used IT to provide information and support their tasks, including the technique of developing applications (Arnold & Sutton, 2001). Therefore, Janie (2005) argued new generation accountants should have sufficient capability for evaluating IT issues such as strategic IT alignment, IT value delivery, and IT resources measurement.

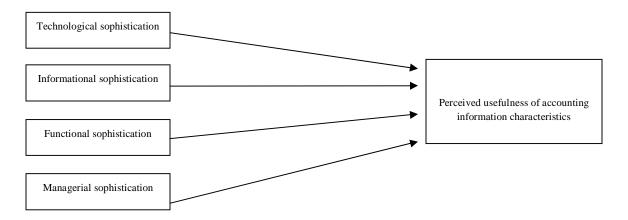
One of the earliest studies relating to accounting and IT was conducted by Clark and Cooper (1985). They found that the use of computer-based AIS has become widespread in all the organizations including SMEs. However, the use of IT at that time was limited to transactional system. King, Lee, Piper, and Whittaker (1991) found limited evidence that IT is used to support decision-making. In the early days, IT usage in accounting mainly focuses on the automation aspect, whereby routine manual accounting procedures are changed to automated processes (Williams, 1991). The automation of accounting processes has greatly saved the processing times and made book-keeping more comprehensive, accurate, timely and frequent (King, Lee, Piper, & Whittaker, 1991). Wichmann, Robinson, and Gifford (1987) suggested that organizations should use IT to provide more timely and detailed information to assist in interpreting the organizational financial position, thus IT should be viewed on the basis that it provides many opportunities for accountants. Despite this, IT usage does not help produce more focused and tailored information such as management accounting information (McCosh, 1986). These results were to be expected in the era of accountants that emphasized the 'number-crunching' role (Mitchell, et. al, 2000). More recently, Gelinas et al. (2005) revealed an interesting finding. Using an expert panel opinion survey and assigned a relative degree of sophistication to each of the twelve types of software used by accountants and six types of hardware that are used to support the applications, their study found a positive impact of IT sophistication and cultural innovative, on IT sophistication and in IS success, particularly system quality, information quality and companies impact which is beyond the expectations of the study. In addition, they found a negative relationship between IT sophistication and companies' size.

Other than general IT, the ERP system has received great attention from AIS researchers quite recently (Fotiadis & Hatzithomas, 2007; Ifinedo & Nahar, 2006). Over two decades ago, Clark and Cooper (1985) suggested that IT knowledge and skills are important for accountants, together with their financial and business skills, to contribute to successful implementation of computerization projects. King et. al., (1991) argued that the IT revolution has changed the fundamental duties of management accountants from accumulation, analysis and preparation toward interpretation, and evaluation to control and involvement in decision-making. Since then many studies have investigated the impact of IT or more specifically of system such as ERP on management accounting and the management accountant itself (see for example Booth, Matolcsy, & Wieder, 2000; Caglio, 2003; Doran & Walsh, 2004; Granlund & Malmi, 2002; Hyvonen, 2003; Rom & Rohde, 2006; Scapens & Jazayeri, 2003; Spraakman, 2005).

The previous discussions suggested that many accounting researchers have attempted to incorporate IT into their studies over the last two/three decades. However, it is also important to note that most AIS studies are very descriptive in nature, as the majority of these studies take a simple approach to data analysis and lack rigorous statistical tests or sufficient data (Xiao et. al., 1996). Their exploratory nature, in many instances, fails to reveal other important areas such as the determinants of the AIS and IT sophistication. Therefore, a more comprehensive study is still needed to further explain the phenomena (Hunton & Flowers 1997).

### 3. Research Framework

Figure 1 outline research model for the relationship between the most important contingency dominate factors namely IT sophistication and perceived usefulness of accounting information characteristics. In other words, the research model identified the independents factors illustrated in the impact of IT sophistication dimensions and the perceived usefulness of accounting information systems characteristics:



## 4. Methodology

### 4.1 Hypotheses Development

Research framework shows the proposed relationship between contingency factors and Perceived usefulness of accounting information characteristics. The research propositions are presented in the following sections.

## 4.1.1 IT Sophistication and Accounting Information characteristics

From the information processing perspective, IT is one of the mechanisms that can be used to increase organizational information processing capabilities (El Louadi, 1998, Ismail & King, 2006). Huber (1990), for example states that "use of advanced IT leads to more available and more quickly retrieved information, including external information, internal information, and previously encountered information, and thus leads to increased information accessibility." (p.65). Daft and Lengel (1986) also placed particular emphasis on IT as a means by which organizations reduce uncertainty. El Louadi (1998) confirmed that organizational IT sophistication has a direct effect on the amount of external and internal information provided. Ismail and King (2007) found a significant relationship between IT sophistication and AIS alignment. More recently, Aleqab and Ismail (2011) found a significant and positive relationship between contingency factors and AIS design. Therefore, it is expected that firms with more sophisticated IT are more likely to have great perceived usefulness of accounting information than those that are not.

Since IT sophistication is a multidimensional variable as suggested by Raymond and Pare (1992), the general hypothesis above is divided into four sub-hypotheses relating to each of four dimensions of IT sophistication to accounting information characteristics, as follows.

#### 4.1.1.1 Technological Sophistication and Accounting Information characteristics

The technological dimension of IT sophistication has been used in the literature in various ways such as variety of IT used, hardware characteristics, development tools, man-machine interface, processing mode, and type of operation (Lehman, 1985; Raymond & Pare, 1992). As mentioned before, very few studies investigated the specific relationship between technological sophistication and AIS, whilst these studies found significant and positive relationships between technological sophistication and better design of AIS. Recently, Ismail and King (2005) stated that many studies have been conducted to understand how IT has been used to support information requirements. Because it is a core assumption in accounting research that sophisticated technologies will provide a sufficient quantity of information for accountants, it follows that such information can be used when designing AIS so that more relevant information can be supplied to managers (Boulianne, 2007). For example, when companies have different types of technologies such as Office Support System (OSS), Decision Support System (DSS), Database System (DS), Enterprise Resources Planning (ERP), Supply Chain Management (SCM), Customer Relationship Management (CRM), Local Area Network (LAN), AIS will be designed by taking into consideration these various technologies at hand to achieve enhanced information that will be relevant to end users which will lead to better organizational effectiveness (Devaraj & Kohli, 2000; Doms, Jarmin, & Klimek, 2004; Gartner Group, 2002). As mentioned earlier, using of sophisticated IT leads to relevant information being reported upon request which in turn leads to increase in information accessibility and reliability.

Therefore, it is expected that companies with more sophisticated technologies will have a great perceived usefulness of accounting information characteristics. Thus, the hypothesis can be stated as follows.

Hypothesis1: There is a positive relationship between technological sophistication and the perceived usefulness of accounting information characteristics among Jordanian listed companies.

## 4.1.1.2 Informational Sophistication and AIS Design

Informational dimension of IT sophistication refers to the type of applications portfolio and integration of these applications (Raymond & Pare, 1992). Targowski and Tarn (2007) concluded that the benefits of the IS implementation has something to do with a concept of the application portfolio. Use of advanced applications such as order entry, budget variances, production variances, budgeting, production planning and control, and activity-based accounting leads to more available and more quickly retrieved information. Hence, it is expected that firms with more sophisticated informational applications will have a higher degree of AIS design. ERP system for example consists of multiple and integrated modules, whereby information produced by the system would assist management make informed and better decisions. In the case of AIS design, it can be postulated that the more sophisticated the applications adopted by organization, the more useful accounting information will be. Therefore, the hypothesis can be stated as follows:

Hypothesis 2: There is a positive relationship between informational sophistication and the perceived usefulness of accounting information characteristics among Jordanian listed companies.

### 4.1.1.3 Functional Sophistication and Accounting Information characteristics

Researchers have used various dimensions such as decisional level and user participation to represent functional sophistication (see for example, Conarth & Mignen, 1990; Kim & Lee, 1986; Montazemi, 1988; Olson & Ives, 1981; Tait & Vessey, 1988). Choe (1996) found a significant positive relationship between user participation and AIS design. User participation in IS development such as participation in programming, participation in system maintenance and problem solving, elaboration of development schedule, elaboration of development budget, and training of new users on available system can help in the design of AIS by providing ways on how to improve and produce accounting systems that can avoid incorrect administration transactions. At the end, user participation can improve the performance of system design quality by aligning the system to fit the various needs of the organization (Tait & Vessey, 1988). Zeffane, Cheek, & Meredith (1998) also stated that the degree of user participation was found to have a significant effect upon the quality of data such as accuracy, timeliness, and completeness of data. With the advent of modern technologies, the role of accountant has shifted from number crunching to business advisor. Due to the nature of their work, Elliot (1992) argues that accountants understand the business process better than others (Elliot, 1992). Therefore, accountants' active participation in the IS implementation would contribute to greater perceived usefulness of accounting information because they will be able to provide significant inputs and suggestions to the AIS design to the advantage of the organizational performance. Hence, the hypothesis can be stated as follows:

Hypothesis 3: There is a positive relationship between functional sophistication and the perceived usefulness of accounting information characteristics among Jordanian listed companies.

## 4.1.1.4 Managerial Sophistication and Accounting Information characteristics

The term managerial sophistication has been employed in the literature in various ways such as top management support, IT investment, IT adoption process, control of IT, and evaluation of IT (Raymond & Pare, 1992). The most dominant managerial dimension found to have implication on IT implementation was top management commitment. Considering the amount of resources such as financial and human effort invested in IT project among large businesses, commitment from top management is crucial to ensure successful IT implementation such as AIS. In addition, nowadays, top management can determine the success or failure of computerization projects because they play a dominant role in IS planning such as financial resource planning, human resource planning, information requirement planning, implementation planning, and post implementation planning (Kanungo & Chouthoy, 1998; Lin, Huang, Cheng, & Lin, 2007). In the context of AIS, top management with IT knowledge are in a better position than those without this knowledge, because they can understand the company's AIS design and then use their knowledge in IS development planning that will match the company's information needs.

In other words, the extent of planning by top management in IS development is very important because they can decide which kind of IS is able to provide the required information. Therefore, it is expected that in companies where the top management highly participate in IS development and planning more sophistication in accounting information will be accomplished. Hence, the hypothesis can be stated as follows.

Hypothesis 4: There is a positive relationship between managerial sophistication and the perceived usefulness of accounting information characteristics among Jordanian listed companies.

### 4.2 The sample

Due to smallest size of Jordanian listed companies of 265, the companies were drawn totally from the Amman stock exchange listing. The questionnaires were distributed to 265 accountants: financial Sector, 42.8 per cent; services sector, 23.9 per cent; and industrial sector 33.3 per cent. The response rate was about 66% out of distributed companies. The measurements of the constructs were adopted from previous studies of Raymond and Pare's (1992) and Chenhall and Morris's (1986).

## 4.2.1 IT sophistication measures

The measurement of IT sophistication constructs are based mainly on Raymond and Pare (1992), who have developed and validated an instrument designed to measure the level of sophistication in the use and management of IT. The instrument was tested with a sample of small manufacturing firms in Canada, and was then adapted by other researchers like Hussin, King, & Cragg (2002) and Raymond, Pare, and Bergeron (1995). Even though the instrument was originally developed for SMEs, it is also relevant for large companies because it is reasonable to speculate that technologies and computer applications are already employed by large size companies. In addition, Raymond and Pare (1992) recommended using these instruments in the context of large business.

### 4.2.2 Accounting Information characteristics measures

Chenhall and Morris (1986) developed and tested an instrument designed to measure MAS design in large organizational context. They classified management accounting practices into four dimensions, namely, scope, aggregation, integration, and timeliness. As it has been tested and validated, in large organizational context, the same instrument is adapted in this study to measure Accounting Information characteristics in Jordanian companies. Each dimension of Accounting Information is used to examine the extent to which the Jordanian companies' computer-based system provides each of the information characteristics identified.

### 5. Analysis

Multiple regression analysis was conducted to examine the relationships between the IT sophistication four dimensions and accounting information characteristics in order to test the research hypotheses. Additionally, validity tests; such as content validity, construct validity, and criterion validity for all variables and reliability were conducted in order to examine the goodness of data. Finally, the assumptions of linearity, normality, and homogeneity of data were tested and the obtained results show that the assumptions of linearity, normality, and homoscadasity of data were met.

#### 6. Results

The results in the following table reveal significant and positive relationships between four dimensions of IT sophistication and perceived usefulness of accounting information characteristics, while most organizations focus on the technical aspect in information systems project, findings from this study suggest informational, managerial, and functional IT sophistication are more important than the technological aspect in influencing accounting information characteristics. Furthermore, findings of this study imply that sophistication of accounting information characteristics can be achieved by investing not only in the technological IT sophistication but more importantly the informational, managerial, functional sophistication. In summary, this study has deepened current understanding of accounting information characteristics and its most important influence factor, and has provided useful insights into the sophistication of IT development in Jordan. More importantly, it opens up possibilities for further studies of AIS in Jordan and other Middle East countries, and on a global basis.

### Model Summary (b)

			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	
1	.790(a)	.624	.615	.70706	

- a. Predictors: (Constant), Technological sophistication, Informational sophistication, functional sophistication, managerial sophistication
- b. Dependent Variable: perceived usefulness of accounting information characteristics

## ANOVA (b)

Model		F	Sig.
1	Regression Residual	72.596	.000(a)
	Total		

a. Predictors: (Constant), Technological sophistication, Informational sophistication, functional sophistication, managerial sophistication, cost leadership strategy, innovative differentiation strategy, Environmental conditions b. Dependent Variable: perceived usefulness of accounting information characteristics.

### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	234	.258		909	.365
	Technological Sophistication	.930	.214	.228	4.343	.000
	Informational Sophistication	1.625	.233	.395	6.989	.000
	Functional Sophistication	.168	.058	.145	2.911	.004
	Managerial Sophistication	.345	.067	.293	5.125	.000

a. Dependent Variable: Perceived usefulness of accounting information characteristics.

#### 7. Discussion

This study aimed to examine, within the Jordanian listed companies, the relationship between the most dominate contingency factor namely IT sophistication and accounting information characteristics. By examining the first hypothesis related to the relationship between technological sophistication and perceived usefulness of accounting information characteristics (H1). The results demonstrated that there is a significant and positive relationship between technological sophistication level and perceived usefulness of accounting information characteristics. Furthermore, results demonstrate that the Jordanian listed companies have reached maturity in technological sophistication. For example, 93.3% of the Jordanian listed companies use office support systems and 86.1% of the Jordanian listed companies use DSS. Furthermore, 82.8% of these companies are connected to LAN. In general, about two-third of the Jordanian listed companies have adopted five or more IT technologies (66.7%), indicating that there is relatively high level of technological sophistication among the Jordanian listed companies.

In addition, results implies that companies that invested in sophisticated technologies such as office support systems, DSS, and ERP would have more sophisticated AIS design and thus are more capable in generating sophisticated and contemporary accounting information.

<sup>\*</sup>p<0.01, p<0.05

F = 72.596 (sig .000)

The result is consistent with previous studies such as Chang, Lin, & Wu (2002) who found that IT plays a vital role in organizational successes. Also, Doms, Jarmin, & Klimek, (2004), also found a strong relationship between investment in IT and productivity growth. They found that a high level of technological sophistication will help the organization to generate capable information.

The study also revealed a positive a positive and significant relationship between informational sophistication and perceived usefulness of accounting information characteristics (H2). Results show that, Jordanian companies have reached maturity in informational sophistication. For example, more than 90 per cent of the companies are using basic accounting applications such as accounts payable (94.4%), accounts receivable (93.9%), and general ledger (92.8%) and about two-third of them are using more advanced applications. The result implies that companies with more sophisticated computer applications would have more sophisticated accounting information characteristics since usage of advanced applications such as modelling would help the companies to generate useful information for making business decisions. This result is consistent with those demonstrated by previous studies (e.g. Hatzithomas, Stamelos, Fotiadis, & Mylonakis, 2007; Spraakman, 2005; Targowski & Tarn, 2007; Wo-Chung, Man-Shin, Yu-An, & Chad, 2007).

As regards the hypothesis related to the relationship between functional sophistication and perceived usefulness of accounting information characteristics (H3), the study found a significant and positive relationship between functional sophistication level and perceived usefulness of accounting information characteristics. Results show that, Jordanian companies have moderately reached the functional sophistication. For example, many companies have involved users to participate in most of IS developments activities such as training them about the available systems (mean = 3.83), in planning (mean = 3.74) and system maintenance and problem solving (mean = 3.48), indicating that many companies in Jordan have moderate level of informational sophistication. The result implies that companies that encourage users' participation, in which users refer to accountants in the context of this study, in IS implementation would have more sophisticated AIS design. This result is in line with previous studies' findings (i.e. Raymond & Pare, 1992; Jarvenpaa, and Ives 1991; Wo-Chung et al., 2007). For example, Wo-Chung et al. (2007) found that companies with higher participation in IS activities are more likely to adopt a formal IT benefits realization methodology.

Eventually, by examining the relationship between managerial sophistication and perceived usefulness of accounting information characteristics (H4), the result revealed a positive and significant relationship between managerial sophistication and Accounting Information characteristics. The results demonstrate that the Jordanian listed companies have moderate managerial sophistication in IS planning. For example, the level of planning in post implementation is observed at the mean value of 3.95. Other levels of IS planning record mean values ranging from 3.5 to 4.0. Furthermore, the result implies that companies that encourage users' participation in IS development planning would have a great perceived usefulness of accounting information characteristics because they can help IS designers to design a system that is able to meet the requirement of the user's need for information. The result is consistent with the findings reported by previous studies such as Wo-Chung et al. (2007) found that firms with high sophistication in managerial perspective are more likely to obtain better organizational performance.

## 8. Implications of the Study

Companies need to give priority to the informational and managerial aspects of IT implementation as they influence Accounting Information characteristics more than functional and technological aspects. AIS is considered an important factor in the accomplishment of greater performance especially in facilitating decision making process. Accordingly, these results may consider as a suggestion for Jordanian companies to take into account the greater effect of IT sophistication on sophistication of Accounting Information characteristics.

#### 8.1 Methodological contributions of this study:

#### • Validation of the Measurement of IT Sophistication

In this study, Raymond and Pare (1992) instruments of IT sophistication are used and validated in Jordanian large size companies which consider a methodological contribution for this study for validation of the IT sophistication instrument in developing countries and large size context with Cronbach's alpha statistic for overall scale of functional sophistication variable was (0.792), and (0.833) for managerial sophistication variable.

### • Validation of the Measurement of AIS Design

In this study, Chenhall and Morris (1986) instruments of Accounting Information characteristics are used and validated in Jordanian large size companies which consider a methodological contribution for this study for validation of the AIS design instrument in developing countries and large size context with Cronbach's alpha statistic for overall scale of accounting information variable was (0.774).

### 8.2 Theoretical Contribution of this study

According to information processing theory which originated from contingency theory, IT can be treated as a one of the contingency factors that can influence AIS design. The reason is that information requirements (represented by Accounting Information characteristics) must be aligned with information processing capacity (represented by IT) to have an impact on performance. Previous studies have treated IT as an undimensional variable. This study fills in this gap by investigating simultaneously the impact of IT as most dominate contingency factor on Accounting Information characteristics. Furthermore, informational and managerial IT sophistication appear to be more important than functional and technological IT sophistication in influencing Accounting Information characteristics

#### 9. Conclusion

The above discussions highlight several important issues relating to accounting and IS from the perspective of contingency theory. The first issue relates to the lack of a comprehensive empirical study that examines the relationship between IT and accounting information characteristics especially in the developing countries context. The second issue relates to the inconsistency in the measurement of IT sophistication. Therefore, a comprehensive AIS study which incorporates both IT and accounting issues could contribute to further understanding of the IT-related issues such as the combined effect of IT sophistication on perceived usefulness of accounting information characteristics. Eventually, this study represents the first attempt to fill in the gap.

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