

## **ACCOUNTING INFORMATION SYSTEM (AIS) AND ORGANIZATIONAL PERFORMANCE: MODERATING EFFECT OF ORGANIZATIONAL CULTURE**

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### **Abstract**

*This study aims at investigating the effect of Accounting Information System (AIS) on organizational performance and the moderating effect of organizational culture in the relationship between AIS success factors and organizational performance. Four types of AIS success factors namely service quality; information quality, data quality and system quality have been used in this study as the determinants performance. Data were collected with a structured questionnaire survey from 273 respondents in Jordanian banking sector. The collected data were analysed with PLS SEM technique. The findings revealed that service quality, information quality and system quality are the significant AIS success factors for increasing organizational performance. This study also evidenced that organizational culture helps increase performance by interacting with information quality, data quality and system quality. It can be inferred from this study that organizations involved in banking sectors can increase their performance by adopting and implementing AIS success factors along with practicing favourable organizational culture. Therefore, firms should cultivate a favourable environment so that employees feel happy which motivates them to work more devotedly with the organizations.*

**Keywords:** AIS, Organization Culture, Service Quality, Information Quality, Data Quality, System Quality, Organizational Performance

## INTRODUCTION

The utilization of accounting information system (AIS) effectiveness is extensive spread of information required by various users of the organisation. It has an effect on the decision making and assists organisation administrative co-ordination in the organisation. It is thus founded that effective decision making is important to organisational performance. This basically describes the link in between the utilization of Accounting information system and organisational performance. Taking into consideration the Situation in Jordanian banking sector, current issue are the adaptable investment trend as well as the adopting of electronic technologies in the banking sector (Al-Majali, 2011).according to(El-Qirem, 2013)reported that the modern trend of electronic banking application advancement has called for research related to the antecedent factors to the utilization of the IS and its upcoming effect on the organisational performance. The critical success factors that impact the utilization have become a modern research issue. It is consequently proposed that Jordanian banking industry is now taking the issue on electronic technologies adoption more very seriously. The issue of Accounting information system adoption and its influence on the organisational performance of the Jordanian banking industry commonly can be safely classified as components of the contemporary issues to Jordanian banking industry. This research is also motivated to consist of these critical factors, as earlier stated as antecedents to the achievement of organisational performance by the organizations that are implementing the said technology. In this case in point, service quality, system quality, information quality, and data quality are pointed out. The vast majority of the Jordanian banks depend on accounting systems. They employ Accounting information system in the process of connecting the services of the banks industry on its departmental basis because of connection that will create it reliable, time saving and also customers' satisfactory (Wedyan, Gharaibeh, Abu-dawleh, & Hamatta, 2012). From this effort, it is documented that commercial banks that have implemented AIS in Jordan have been obtaining competitive benefit among the others. The utilization of AIS has been indicated as the recipe for financial performance, most specifically by its capability of showing accurate financial position to the customers, and a real time update of clients' banking activities like transfer, withdrawal and deposit (Hamdan, 2013; Wedyan et al., 2012). This basically points to the need of an in-depth research of the influence of the utilization of AIS on non financial measures (operation) of the organisational performance.

Organisational performance is described as the effectiveness and efficiency of quantifying approach that raises the organisational productivity (Hyvönen, 2007). In the business management perspective, performance measurement shows the process of quantifying the effectiveness and efficiency of specific business actions which are viewed as to contribute to the accomplishment of business desired goals (Chan, Chan, & Qi, 2006).

Accomplishing organisational performance by means of the utilization of AIS, and with due concern of the organisational culture is the major thrust of this research. From this point, the present research aims to examine the effect of information quality, system quality, service quality and data quality on organizational performance in the banking industry in Jordan.

## LITERATURE REVIEW

### Information Quality and Organisational Performance

Throughout the earlier time of IS research Emery (1971) stated that information does not have intrinsic value; rather, its value is only related with the influence it may exert on the physical events. This however instigated the research carried out by Lucas Jr & Nielsen (1980). The research employed learning (in terms of performance improvement), as a dependent variable to understand the inventory using IS because issues of Information Quality (IQ) have become extremely significant for firms which projects superior performance, getting competitive advantages, or survival in contemporary business environment. This is at a time where data was believed to be inherently not accurate and not complete, and could adversely affect organization competitive success (Redman, 1992). There are several past and modern research that have researched the information systems effect and employed measures of organisational performance as their dependent variable (Bernroider, 2008; J. Chang & King, 2005; Chervany & Dickson, 1974; Gorla, Somers, & Wong, 2010). At past, Emery (1971) reported information quality as a cause for the decrease of the operating cost activities that are external to the system of information processing.

In one more large company's research, Rivard & Huff (1984) requested managers to evaluate the cost decreases and company profits as a outcome of application programs developed by specific user. Hamilton & Chervany (1981) findings show that improvement of income of company could also be by computer-based information systems while Bender (1986) examined the information processing financial impact. Using their respective measures, all of them found information quality to have a positive significant influence on organisational performance. The review showed significant relationship between information quality and performance among ERP systems users (Kositanurit, Ngwenyama, & Osei-Bryson, 2006) , and considering the knowledge management system context, (Kulkarni, Ravindran, & Freeze, 2007) found perceived content quality does not have a direct relationship with perceived usefulness. A study carried out by Hong, Thong, & Wai-Man Wong (2002) on digital libraries discovered that relevance of information retrieved had a significant effect on perceived usefulness.

At the level of organization, the relationship among information quality and benefits has found mixed results, depending on the way by which net benefits are measured. Nonetheless,

to reach a conclusion on this relationship, more research is needed. However, high information quality in information content context (accuracy, completeness, relevance to decision making) can cause high organizational impact in terms of market information support (i.e., anticipating customer needs) and internal organizational efficiency (high-quality decision making)(Bharati & Chaudhury, 2015). AIS information quality, which is mostly in terms of accounting report and analysis, is reported by Al-Hiyari, AL-Mashre, Mat, & others (2013);Al-Zwyalif (2012) to be significantly related to management commitment. It is also observed that it influences user performance and organisational performance directly Bukenya (2014);Radlovavcki, Beker, Kamberovi'c, Pevcujlija, & Deli'c (2011);Sami, Abdullah, Othman, & Warokka (2011);Soudani (2012), through perceived usefulness and perceived ease of use indirectly Ali, Younes et al. (2013); Boonmak (2008) . These studies investigated big companies. From another end, Kharuddin, Ashhari, & Nassir (2010) investigated the impact of AIS on SME performance also reported a significant improvement in performance when compared with non-adopters. Therefore it is hypothesized that;

**Hypothesis 1:** Information quality positively influences organizational performance.

### **Service Quality and Organisational Performance**

The comprehension of IS service quality influence can be gotten from the firm's service quality influence on the firm performance. Delivering service quality is a factor for business success that leads to loyalty of customer, larger profitability, lessen cost. Rahaman, Abdullah, & Rahman (2011);Kumar, Batista, & Maull (2011), increased customer satisfaction, long-term economic returns for the firm (Angelova & Zekiri, 2011)and increased intensions of repurchase (Ferrand, Robinson, & Valette-Florence, 2010). There are two kinds of users in the perspective of IS to whom IS services are delivered. These consist of internal users as well as external users such as suppliers and customers. The IS specialists who provide prompt and reliable services to users and by knowing specific requires of users, can better anticipate and serve customer requires via the enhancement of proper product/service. This will at some point enable the successful business operations and ongoing profitability (internal organizational efficiency). Just before, business disruptions, as a outcome of inefficient IS operations have been reported by many sectors, including the brokerage, ATM and credit card. (Ravichandran, Lertwongsatien, & Lertwongsatien, 2005). Consequently, IS service quality is positively relevant to market information support, service/product enhancement, and internal organizational efficiency. While Ashill, Rod, & Carruthers (2008)argued that service quality has a essential role in the sales of the company, business performance and profit. Furthermore, successful service quality prospects to costs decrease and productivity increment. This finding as with Kesuma,

Hadiwidjojo, Wiagustini, & Rohman (2013) and Nazeer, Zahid, & Azeem (2014). Kesuma et al. (2013) present that outstanding service quality assists in generating better revenue which gradually yields greater profitability and Nazeer et al. (2014) indicated that service quality has a strong positive influence on the loyalty of respondents to the company. Also, Chi & Gursoy (2009) in his research of the relationship in between customer retention and perceived quality documented that technical quality, functional quality, and also general product characteristics as service quality dimensions, were significantly influenced.

Duncan & Elliott (2002) reported there is a positive relationship among service quality and financial performance in financial service institutions. Similarly, T. Chang & Chen (1998) identified a positive relationship among service quality and business profitability. This posited that service businesses give a higher strategic priority to service quality with constant improvements, premium prices, much better customer value, and customer orientation as net benefits of implementing IT. Other research that have also found strong positive and significant relationship among service quality and organisational performance, using respective measurements, consist of Weerakoon & Wijavanayake (2013); Khan & Fasih (2014) which examined organisational performance as customer loyalty all of them identified that its dimensions are positively and significantly relevant to service quality. Wei (2012) reported that a positive relationship is available among service qualities and IS organisation impact. Literatures noticed that some research have examined the direct positive link among service quality and organisational performance throughout the perspective of traditional service delivery. Thus it is hypothesized in this study that;

**Hypothesis2:** Service quality positively influences organizational performance.

### **Data Quality and Organisational Performance**

Data usually relate to the Accounting information system input, as data are processed in the AIS for producing information that needed in making decisions (Emeka-Nwokeji, 2012). The quality and effectiveness of AIS rely on the input quality, output quality and process. This proposes the essence of data quality to AIS success. Hubley (2011): (Wongsim & Gao, 2010), because information quality becomes vague when there are many errors and inconsistencies (Thuma, 2009). In similar study, Rahayu & others (2012) mentioned that AIS require quality data for effective work. Consequently, AIS adoption need to be done with thing to consider of the quality of the system and the quality of data utilized for the decision making process of the organisation (Wongsim & Gao, 2010). according to Xu (2009) reported that information system improvement project requires quality data, and the base of the information system is good data (Rahayu & others, 2012). In a similar study, Ahmad, Ayasra, & Zaideh (2013) described the significance of

the data quality in any AIS and came to the conclusion that it should be seen as key priority in several organizations. Moreover, the study by (Emeka-Nwokeji, 2012) mentioned that the data quality in AIS should conform to data quality dimension of organizations making contributions to the AIS effectiveness.

Several researches focus on success factors and critical process factors which commonly influence the information systems as well as AIS specially. Data quality (DQ) has been viewed as one of the critical factor, Wixom & Watson (2001), and it is relevant directly to perceived decrease in time and effort for decision making. Enhanced reliance of the organization on (AIS) to achieve their mission in this information era needs proactive approach to DQ management (Al-Hakim, 2007). More else data and information are described as critical components for all the activities of every human endeavour (Emeka-Nwokeji, 2012). Xu (2003) noticed that literature have been made for determining and handling critical success factors at data quality management level. Nevertheless, there have been few attempts for identifying the critical data quality measures in the context of AIS. This has caused data quality in AIS to remain largely unspecified and unexplored. Emeka-Nwokeji (2012) confirmed that for the success of AIS, data quality is significant for the reason that it provides the quality assurance of the supplied data for enhancing firm's performance. Data quality management policies aid companies in proactively responding and supplying services and products required by the customers, and appropriate processes of decision and operation. Few studies have duly investigated the effect of the AIS' data quality, as its critical success factor, on organisational performance. Data quality was noted to be strongly related to and positively impacts company internal auditors' perception (Al\_Qudah & Shukeri, 2014). More Other scientific studies on data quality examined its impact on AIS performance and adoption (Emeka-Nwokeji, 2012), and found that they are strongly related. Hence it is hypothesized that;

**Hypothesis 3:** Data quality positively influences organizational performance.

### **System Quality and Organisational Performance**

The system quality can influence use, user satisfaction and individual performance, and consequently effect organizational performance (DeLone & McLean, 1992). The essential prerequisites for generating organization benefits are a well-designed, developed, and implemented system. All those benefits that could be derived consist of cost reduction, increased revenues, and improved process efficiency (Bakos & Treacy, 1986). On the other side, a non-well designed and constructed system will likely run into occasional system crashes, which are detrimental to business operations consequently causing in increased firm product cost (Swanson, 1997). The situation of data warehousing has found system quality to be



positively associated with perceived net benefits in terms of individual productivity and ease of decision making(Wixom & Watson, 2001), and at operational level, system quality is positively linked to organizational influence within entrepreneurial firms (Bradley, Pridmore, & Byrd, 2006).In order to produce firm's business value via its information systems, the system must ensure IS efficient delivery by way of the attributes of system such as documentation availableness and ease of use(Salmela, 1997). Firm competitive benefits are directly relevant with software high quality (Slaughter, Harter, & Krishnan, 1998).

Commonly, the association among system quality and net benefits has been documented slightly by literature. Although the relationship among perceived ease of use as a system quality measure and perceived usefulness has varying results. Most research reported that system quality is positively related with organisation's benefits as Wixom & Todd (2005)Hsieh & Wang (2007) Gorla et al. (2010).Other studies like: Kulkarni et al. (2007)Wu & Wang (2006)discovered no significant association . Seddon & Kiew (1996)described that system quality is related to perceived usefulness significantly. Nevertheless, Goodhue & Thompson (1995)and Gefen (2000)documented systems reliability and also perceived ease of use does not have influence on productivity and effectiveness, and McGill & Klobas (2005) suggested that no relationship is available among system quality and individual impact, as measured via decision-making quality and productivity. In other research, Kositanurit et al. (2006)identified a significant relationship among perceived ease of use along with performance, but no relationship between reliability and performance for individual ERP systems users. Therefore it is hypothesized in this study that;

**Hypothesis 4:** System quality positively influences organizational performance.

### **Organizational Culture as Moderator**

Organisational culture is a powerful force seen for mechanism of progress-engineering in consideration of organisation (Akinnusi, 1991). The organisational actions and decision making processes are instructed by organizational culture, consequently it supports organizational well-being. On another side, organisational culture can be considered as human resources management practices, or the managerial practices which frequently influence the company's board, shareholders or other stakeholders' preferences ,as Buller & McEvoy (2012) Oya Özçelik & Aydinli (2006).Babulak (2006)recorded that system performance has an effect on organization commitment and work performance. This finding is in agreement with several past results on the system quality influence, as reported previously. This research nevertheless makes use of organisational commitment to examine organisational culture. In study of Babulak (2006) work performance is referred to as the created by individual employees at work. The personal factors

which influence work performance are knowledge, capabilities, skills, motivation and attitudes. The transitional mechanism which aid in yielding better performance results at work are performance management system, interactions with colleagues and superiors, definite performance goals, encouragement of a company, and reward measures or plans in recognising the outstanding performance. All these detailed factors encompass organisational culture, and the determinants are individual organisation in conformity with the goals of the organisation.

Employees' motivation through various means like compensations and rewards systems are also significant as organisational culture (Katou & Budhwar, 2010). While Y. Hsieh & Chen (2011) suggested and developed three several human resource strategies: cost leadership, differentiation and concentrate, to designate three reward systems. Ferguson & Reio Jr (2010) documented that human resource input (such as employee skill and motivation), and human resource practices (like as training and development), and profit sharing make contributions positively to organizational outputs (such as job performance and firm performance). Katou & Budhwar (2010) examined HRM performance causal relationship in Greek utilizing the contingency theory, resource based view and also the Abilities, Motivation and Opportunity (AMO) theory. The research examine confirmed that the ability to carry out such as resource and development, motivation to perform, as well as opportunity to perform are moderated by business strategies. These results thus suggest that knowledge management, employee motivation and innovation can have a positive effect on firm performance by applying and supporting organizational policies that motivate workers positively and learning and developing the activities that stimulate optimal task and contextual job performance. Prior studies also had recommended that the role of organizational culture as the moderator (Ahmad, et al., 2013) might be explored. The present research aims to exam the moderating effect of organizational culture in the relationship among AIS success factors and organizational performance in Jordanian commercial banks. Hence, the following hypotheses have been proposed;

**H5:** Organizational culture moderates the relationship between Information quality and organizational performance.

**H6:** Organizational culture moderates the relationship between Service quality and organizational performance.

**H7:** Organizational culture moderates the relationship between Data quality and organizational performance.

**H8:** Organizational culture moderates the relationship between System quality and organizational performance.



## METHODOLOGY

The aim of this research is examine the influence of the AIS success factors namely information quality, system quality, service quality and data quality on organisational performance. In addition to that this research tries to examine the moderating influence of organizational culture in the relationship among the four AIS success factors and organizational performance. The population of this research is the assistant branch managers of commercial banks in Jordan. This is because this research is interested in capturing the views of all the managers irrespective of their role, since the banks are all utilizing AIS. In this research, proportionate stratified random sampling method is used as a method of sampling so as to effectively cover all the thirteen conventional commercial banks in Jordan. Data were collected with a structured questionnaire survey. A total of 500 surveys were distributed among the 13 conventional commercial banks and finally 273 were found in usable condition. Approximately 169 questionnaires were not usable because the questionnaires were not returned back while 58 questionnaires were incomplete. The gathered data have been analysed with Partial Least Square Structural Equation Modelling (PLS SEM). In the measurement model, quality criteria of the model have been assessed and then the structural model tested the hypotheses of this study. The findings of PLS SEM analysis have been presented in this research to examine the relationship among four exogenous variables and one endogenous variable while the moderating effect of organizational culture is also examined.

## ANALYSIS AND FINDINGS

First the PLS measurement is analysed to assess the reliability and validity of data and the criteria include Cronbach alpha values, item loading, Average Variance Extracted (AVE) values, Composite reliability and discriminant validity. Table 1 shows the values of all these criteria. As mentioned earlier that this study has four independent variable namely Information quality (IQ), System quality (SYQ), Service quality (SQ) and Data quality (DQ); and one dependent variable which is organizational performance (OP).

Table 1: PLS Measurement Model Output

Variable	Items	Loadings	Cronbach alpha	Composite Reliability	Average Variance Extracted(AVE)
Information Quality (IQ)	IQ1	0.800	0.944	0.951	0.622
	IQ2	0.750			
	IQ3	0.796			
	IQ4	0.820			
	IQ5	0.789			
	IQ6	0.759			

	IQ7	0.768			
	IQ8	0.815			
	IQ9	0.859			
	IQ10	0.835			
	IQ11	0.753			
	IQ12	0.702			
Service Quality (SQ)	SQ1	0.747	0.907	0.925	0.608
	SQ2	0.796			
	SQ3	0.786			
	SQ4	0.840			
	SQ5	0.807			
	SQ6	0.825			
	SQ7	0.745			
	SQ8	0.676			
Data Quality (DQ)	DQ1	0.867	0.928	0.944	0.739
	DQ2	0.886			
	DQ3	0.852			
	DQ4	0.886			
	DQ5	0.822			
	DQ6	0.842			
System Quality (SYQ)	SYQ1	0.756	0.924	0.935	0.631
	SYQ2	0.742			
	SYQ3	0.764			
	SYQ4	0.741			
	SYQ5	0.786			
	SYQ6	0.775			
	SYQ7	0.813			
	SYQ8	0.858			
	SYQ9	0.849			
	SYQ10	0.799			
	SYQ11	0.824			
	SYQ12	0.815			
Organizational Culture	OC1	0.716	0.922	0.933	0.521
	OC2	0.739			
	OC3	0.711			
	OC4	0.698			
	OC5	0.703			
	OC6	0.768			
	OC7	0.762			
	OC8	0.777			
	OC9	0.763			
	OC10	0.739			
	OC11	0.723			
	OC12	0.611			
	OC13	0.649			
Organizational Performance (OP)	OP1	0.749	0.946	0.953	0.568
	OP2	0.757			
	OP3	0.720			

OP4	0.745
OP5	0.738
OP6	0.775
OP7	0.778
OP8	0.766
OP9	0.776
OP10	0.737
OP11	0.747

In this study reliability test is done and evaluated using Cronbach alpha values. The table 1 depicted the Cronbach alpha values for the constructs are; 0.944 for information quality; 0.907 for service quality; 0.928 for data quality; 0.924 for system quality; 0.922 for organizational culture and 0.946 for organizational performance. So all the Cronbach alpha values are above 0.7 which is considered the acceptable reliability values (Nunnally & Bernstein, 1994). In addition to the Cronbach alpha values, Composite Reliability (CR) was also tested and the acceptable value of CR is 0.7 (Hair et al, 2010). In this study all the constructs had composite reliability more than 0.70. So the data of this study showed good internal consistence. Convergent validity is tested to see whether the items represent the constructs or not. In this study convergent validity was tested by evaluating the values of items loadings and average variance extracted (AVE). Usually the acceptable values of item loading are 0.60 (Joseph Hair et al., 2006).

Table 1 shows that all the items loading are above 0.60 which gives convergent validity at indicators levels as suggested by (Bagozzi & Yi, 1988). On the other hand all the AVE values for the constructs are above the minimum threshold level which is 0.5. So it can be concluded on the basis of the findings that the values of AVE and item loadings are good enough for the validity of the data.

### **Discriminant Validity**

Discriminant validity was also tested using smart PLS M2.0 software. Table 2 shows the discriminant validity output of the study. According to Compeau, Higgins, & Huff (1999), the average variance shared between each construct and its indicators should be greater than the variance shared between the construct and other construct. When the AVE is higher than the estimated correlations among each pair of constructs, discriminant validity is established. The measurement model also demonstrates good discriminant validity since the square root of the AVE for each construct was higher than its correlation with other factors.

Table 2: Discriminant Validity

	DQ	IQ	OP	SQ	SYQ	OC
DQ	<b>0.859</b>					
IQ	0.752	<b>0.788</b>				
OP	0.533	0.652	<b>0.753</b>			
SQ	0.663	0.723	0.648	<b>0.779</b>		
SYQ	0.738	0.785	0.608	0.702	<b>0.794</b>	
OC	0.623	0.525	0.711	0.569	0.693	<b>0.721</b>

Table 2 showed that the values of square root of AVE for each construct are higher in that particular diagonal and it indicates good discriminant validity.

### Predictive Relevance ( $Q^2$ )

The predictive sample relevance technique ( $Q^2$ ) can effectively be used as a criterion for predictive relevance (Fornell & Cha, 1994). Based on blindfolding procedure,  $Q^2$  evaluates the predictive validity of a large complex model using PLS. While estimating parameters for a model under blindfolding procedure, this technique omits data for a given block of indicators and then predicts the omitted part based on the calculated parameters. Thus,  $Q^2$  shows how well the data collected empirically can be reconstructed with the help of model and the PLS parameters (Fornell & Cha 1994). According to Chin (1998), the  $Q^2$  values of 0.02, 0.15 and 0.35 stand for small, medium and large predictive relevance. The  $Q^2$  value of this study is 0.568 which is an indication of a good predictive relevance capability of the model

### Coefficient of Determination ( $R^2$ )

The coefficient of determination ( $R^2$ ) value indicates how much variation in endogenous variable is caused by the exogenous variables. The present study got a  $R^2$  value of 0.480 which indicates that the dependent variable is influenced by the independent variables by 48%. So the four independent variables considered in this study are responsible for 48% variation in the organizational performance. The remaining 52% variation is caused by the other factors that have not been considered in this study.

### Goodness of Fit (GoF)

GoF (Goodness of Fit) index is crucial to assess the global validity of a PLS based complex model (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). It is the geometric mean of the average communality and average  $R^2$  for all endogenous constructs. The GoF index is bounded between 0 and 1. Wetzels, Odekerken-Schröder, & Van Oppen (2009) suggest using 0.50 as the cutoff value for communality. Fornell & Larcker (1981) and different effect sizes of  $R^2$  (Cohen 1988) to

determine GoFsmall (0.10), Go Fmedium (0.25) and Go Flarge(0.36). These may serve as baselines for validating the PLS based complex models globally. The model depicted in this study obtains a GoF value of 0.565, which exceeds the cut-off value of 0.36 for large effect sizes of  $R^2$  (Cohen, 1988).

### PLS structural model

In the structural model of PLS analysis, hypotheses testing can be done. Here the path coefficient, t statistics, average estimate and error are considered. Table 3 showed the structural model for hypothesis testing.

Table 3: Structural model output

Relationship	Hypotheses	Path Coefficient	T-Value	P-Value	Level of Significance
IQ -> OP	H1	0.237	2.323	0.010	**
SQ -> OP	H2	0.310	3.030	0.001	***
DQ -> OP	H3	-0.005	0.063	0.474	-
SYQ -> OP	H4	0.209	2.333	0.010	**

The above table 3 showed the results of hypotheses testing for this study. The explanation for the hypotheses testing is given below.

### Hypothesis 1

There is a positive and also significant relationship among the information quality and organizational performance. This hypothesis got strong support as the table 3 depicted that the path coefficient value is 0.237 with a positive sign and the corresponding t statistics is 2.323 ( $P < 0.05$ ) that indicates 5% significance level. So it is accepted that information quality positively influences organizational performance. This finding is consistent with the results of Bharati & Chaudhury (2015); Ali et al. (2013) which found positive relationship between information quality and organisational performance.

### Hypothesis 2

There is a positive relationship among service quality and organizational performance. The present research proves this hypothesis. The path coefficient here is 0.310 with a positive sign and this value is significant at 1% (t value; 3.030;  $P, < .01$ ) level. So it is accepted that service quality is positively and significantly correlated with organizational performance. This finding is consistent with the results of some related research Weerakoon & Wijavanayake (2013) Wei

(2012) which found positive relationship between service quality and organisational performance.

### Hypothesis 3

There is a positive relationship among data quality and organizational performance. This hypothesis is not supported as the path coefficient got a negative value of -0.005 and this value is not significant. So the data quality is negatively and insignificantly correlated with organizational performance. This finding is inconsistent with the results of previous related research Saleh (2013) which found that data quality and organisational performance are positively correlated. So it requires further attention to investigate the issue.

### Hypothesis 4

There is a positive relationship among system quality and organizational performance. This hypothesis is supported as the path coefficient got a positive value of 0.209 and the corresponding t statistics is 2.333 ( $P < 0.01$ ); this value is significant at 5% level. So the system quality is positively correlated with organizational performance. This finding is consistent with the results of research done by Hsieh & Wang, (2007); Klein, (2007) which found positive relationship between system quality and organisational performance.

### Moderating effect of Organizational culture

In this study moderating effect of organizational culture was tested in the relationship between information quality, data quality, service quality, system quality and organizational performance. The following table 4 shows the findings of moderating effect test.

Table 4: Results of Moderating Effect Test

Relationship	Path Coefficient	T statistics	P value	Comments
IQ* OC-> OP	0.182	2.460	0.014	Significant
SQ*OC -> OP	0.072	1.468	0.143	Insignificant
DQ*OC -> OP	0.147	2.528	0.012	Significant
SYQ*OC -> OP	0.202	2.702	0.007	Significant

The above table shows the hypotheses testing results of moderating effects of organizational culture in the relationship between information quality, data quality, service quality, system quality and organizational performance. In PLS SEM analysis, moderating effect exists if the interaction path is significant which means that the t statistics of interaction effect must be 1.96 ( $p < 0.05$ ) and above to a significant (JF Hair et al., 2010)(JF Hair et al., 2010). Firstly the table 4



shows that the interaction path of information quality and organizational culture (IQ\*OC) towards organizational performance is 0.182 and the corresponding t statistics is 2.460 and p value is 0.014. According to Hair et al (2010), both the t statistics and p value are significant at 5% level. Therefore hypothesis 5 which posits that organizational culture moderates the relationship between information quality and organizational performance is accepted.

It is clear from the table 4 that the path coefficient of moderating effect of organizational culture in the relationship between service quality and organizational performance is 0.072. The corresponding t statistics is 1.468 and p value is 0.143 which are not significant at 5% level. So hypothesis 6 which proposed that organizational culture moderates the relationship between service quality and organizational performance is not accepted. Again the table 4 shows that the path coefficient of interaction effect of organizational culture and data quality on the organizational performance is 0.147. The corresponding t statistics is 2.528 ( $p < 0.05$ ). So it is significant at 5% level. On the basis of this finding, it can be said that organizational culture moderates the relationship between data quality and organizational performance. Therefore hypothesis 7 is accepted. Finally, the moderating effect of organizational culture was tested in the relationship between system quality and organizational performance. The table 4 shows that the path coefficient of interaction effect of organizational culture and system quality on the organizational performance is 0.202. The corresponding t statistics is 2.702 ( $p < 0.007$ ). So it is significant at 1% level. This finding suggests that organizational culture moderates the relationship between service quality and organizational performance. Therefore hypothesis 8 is accepted.

## DISCUSSION AND CONCLUSION

Information age has changed the way in which traditional accounting systems work. AIS have tended to historically mirror the development trend from the years of the manual accounting processes. AIS can generate several types of information including accounting and non-accounting information to help management in managing short-term problems and integrates operational considerations within long-term strategic plans (Hussein, 2011). And the AIS success factors namely information quality, service quality, data quality and system quality are affecting organizational performance a lot. This study also evidenced that information quality is vital factor for enhancing organizational performance. The findings from empirical data showed that organizations can increase their overall performance by quality information. It happens because information quality causes for the reduction of the operating cost activities that are external to the system of information processing. High information quality in information content context (accuracy, completeness, relevance to decision making) can cause high organizational

impact in terms of market information support (i.e., anticipating customer needs) and internal organizational efficiency (high-quality decision making) (Bharati & Chaudhury, 2015) which consequently leads to higher organizational performance. Then this study revealed that service quality is an important AIS success factor for organizational performance. The findings showed that service quality is positively and significantly related to organizational performance. A number of information service companies which had started to analyze by using SERVQUAL in order to evaluate identified performance and they found that SERVQUAL model can explain the performance to some extent. Measuring service quality might help management provide dependable information that can be used to observe and keep enhanced service quality. Service quality assessment allows management to better understand various dimensions and how they influence service quality and customer satisfaction. This may assist them to determine their advantages and disadvantages in addition to help make essential enhancement. So in fine it can be concluded that organizational performance can best be influenced by both services quality.

Data quality which is often thought of an important factor for increasing organizational performance has also been considered in this study. But the empirical data from the banking sector of Jordan didn't provide enough evidence that data quality might bring forth substantial increase in organizational performance. Though it is found in extant literature that data quality helps organizations to improve their performance, it requires further studies to investigate matter. Finally system quality which is a pivotal factor for the survival of organizations in the present global world has been found here as a critical AIS success factors in the Jordanian banking sector. The empirical data showed that system quality is positively and significantly related to organizational performance. And this finding is in line with the assertion of DeLone and McLean (1992) who posited that system quality can affect use, user satisfaction and individual performance, and therefore influence organizational performance. The necessary prerequisites for driving organization benefits are well-designed, developed, and implemented systems which play the important roles to run the organization properly and increase performance. The benefits derived from system quality include cost reduction, increased revenues, and improved process efficiency (Bakos & Treacy, 1986). On the other hand, a non-well designed and constructed system will likely run into occasional system crashes, which are detrimental to business operations consequently resulting in increased firm product cost (Swanson, 1997) (Swanson, 1997). Therefore, it is a must for the organization to develop system quality for enhancing performance.

Organizational culture which is believed to be an important factor for increasing organizational performance has also been proved in this study. The empirical data collected

from the Jordanian banking sector revealed that organizations can improve their performance by practicing good culture. This study evidenced that organizational culture helps increase performance by interacting with information quality, data quality and system quality. If organizations practice good culture which motivates employees, it surely influences performance positively and it is proved in this study. Therefore, firms should cultivate a favourable environment so that employees feel happy which motivates them to work more devotedly with the organizations. It can be inferred from this study that organizations involved in banking sectors can increase their performance by adopting and implementing AIS success factors along with practicing favourable organizational culture.

There are number of limitations that need to be addressed. The sample is only from the commercial banks in Jordan and thus may not represent all of the sectors working in Jordan. Another limitation is participation in getting feedback on the questionnaire from respondents and few researches that had been implemented Jordan.

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