

IT Factors Influencing Organizational Excellence as Mediated by the Level of IT-Business Alignment: A Study of the Mining Sector in Jordan

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Abstract:

This study aims to investigate intentionally selection of Information Technology (IT) factors influencing the organizational excellence. Moreover, the study measures the level of IT-business strategic alignment and its impact on organizational excellence as perceived by employees of Jordanian mining sector working in managerial positions. It is a quantitative study based on the use of a questionnaire designed to fulfill the key purpose of this study. A comprehensive sampling strategy is used to select the participants due to the limited population size (managerial positions). 150 questionnaires were personally distributed out of which 117 were analyzed. SPSS.22 and AMOS.23 were used to analyze the data and to test the study hypotheses. The study revealed the levels of IT-business strategic alignment, as well as the level of organizational excellence within the context of JMS, are medium as perceived by employees.

Moreover, it is revealed that IT-business related factors (namely: IT capabilities, perceived value of IT, and senior executive support for IT) have a direct significant statistical impact on organizational excellence within the context of JMS

as perceived by employees. The study also found that the level of IT-Business strategic alignment has a direct significant statistical impact on the organizational excellence of JMS as perceived by employees. Nonetheless, only two IT factor. IT capabilities and perceived value of IT were found to have an indirect impact on the organizational excellence in JMS as mediated by the level of IT-business strategic alignment of JMS as perceived by employees. In addition, more concern should be directed toward IT capabilities and perceived value of IT as the most influential factors on both strategic alignment level as well as organizational excellence.

Keywords: Strategic alignment, Excellence, Information technology factors.

Introduction:

Information Technology (IT) is always present in order to enhance formulation and implementation of business strategies. Organizations of varying fields are paying wide attention and heavy investments to achieve this aim and to maximize the value of their IT investments and its potential role in enhancing organizational excellence. Achieving IT-business strategic alignment within any organization is a IS discipline that focuses on helping the organizations to reach this end. However, regardless of a large number of studies that have been conducted in the last few decades especially in developed countries, there is still a huge gap concerning the successful model for strategic IT-business alignment (Gutierrez, 2014). Most of the available studies are focused on measuring the levels of alignment.

Other studies investigated various factors which can affect the level of alignment. However, misalignment between IT strategy and business strategy is still a common problematic scenario (Almajali&Dahalin 2011). Accordingly, various

scholars have called for further research efforts examining the interrelationships between IT and business (Johnson &Lederer, 2010; Raymond &Croteau, 2009). This paper aims to attempts and shed light on this concern within the context of Jordanian Mining Sector (JMS). JMS is one of the most important strategic industries in Jordan with the total exports of 632.5 million Jordanian Dinars in 2014 (Jordan Chamber of Industry, 2014). In particular, the study will focus on defining, testing and validating some IT-business-oriented factors such as IT leadership, IT involvement in strategy development, senior executive support for IT, IT capacity, and Perceived value of IT etc. which might have a direct impact on the level of IT-Business alignment and its potential indirect impact on the overall organizational excellence. Additionally, the direct impact of IT-business strategic alignment level on organizational excellence will be explored.

The selection of IT business related factors is generated from the idea that real value of IT resources is, in fact, emerging from the ability of these resources to create and sustain strategic business advantage as well as enhancing the effectiveness of an organization. The ambitious aim is to propose and validate a model that can provide a guideline for decision makers and executives to improve the level of alignment between IT strategy and business strategy in a systematic way that can improve the organizational excellence.

Problem Statement:

Numerous research studies have tried to explore the complex interrelationships between IT and business (Gutierrez, 2014). This theme of research is referred to as IT-business strategic alignment. The real value of IT cannot be realized without strategic alignment. Since organizations in different sectors are widely investing on IT-related projects leading them

to expect an added-value. However, considering the large percentage of failed IT project the added value is still doubted (Gargeya& Brady, 2005; Brown & Jones, 1998; Myers, 1994; Olesen& Myers, 1990). In fact, the whole issue of IT-business strategic alignment is still a new issue in the context of Arab organizations. Moreover, moving from a typical focus on organizational performance which is the focus of most of the available studies into the more comprehensive concept of organizational excellence have become a driving concern for many organizations.

This study argues that the real values of both business strategies and IT strategies are best seen as an improvement in overall organizational excellence. Nonetheless, interrelationships among strategic IT-business alignment measured by its maturity level and organizational excellence will be subjected to some influential factors which are another concern for this study. Based on the above discussion, this research attempts to answer the following question:

What is the impact of IT business-related factors on organizational excellence within the context of JMS as mediated by the level of IT-business strategic alignment?

Aim and Objectives:

The main aim of this research is to explore the indirect impact of some intentionally selected IT-business factors on organizational excellence within the context of JMS as mediated by the level of IT-business strategic alignment. Moreover, this study attempts to achieve following objectives:

1. To identify the level of IT-business strategic alignment within the context of the JMS as perceived by employees.
2. To define the level of organizational excellence within the context of the JMS as perceived by employees.

3. To explore direct impact of IT-business related factors of the level of strategic alignment in the context of the JMS as perceived employees.
4. To explore the direct impact of the level of IT-Business strategic alignment on organizational excellence in the context of JMS as perceived by employees.
5. To identify the direct impact of IT-business factors on organizational excellence within the context of the JMS as perceived employee.
6. To suggest best recommendations for the decision-makers and academics based on the findings of this study.

Theoretical Background:

Strategic IT-Business Alignment:

Alignment between the IT and businesses simply represents the state of fit between IT investment, direction, strategy and the overall direction of business. It is an attempt to create and continuously maximize the value of IT in serving business processes and functions. Chebrolu in the year 2013, defined the concept of strategic IT-Business alignment as "the art and science of formulating, integrating, and implementing decisions between the business and IT, which enables an organization to achieve its objectives" (Chebrolu, 2013). IT-business alignment as defined by Almajali and Dahalin (2011), as "a degree of correspondence of an organization's IT strategy

and IT infrastructure with the organization's strategic business objectives and infrastructure "(Almajali&Dahalin 2011). This emphasizes the fact that value of IT is generated from the level of support it provides to business strategy.

In order to support this argument, Gutierrez (2014), illustrated that alignment at a strategic level is not sufficient and a continuous process of reconciliation between strategy formulation and strategy implementation is required (Gutierrez, 2014). Recognition regarding the importance of alignment should not only be at the top management level, understanding of IT role in performing business processes must be also shared on all levels of the organization in order to create and enhance successful fit between IT and business processes of all types. Luftman (2004), stated that IT applications can support all types of business processes including strategic, tactical, and operational processes (Luftman, 2004).

Furthermore, Almajali and Dahalin (2011) presented a causal model for quantitative testing of the impact of six antecedents that could lead to strategic alignment (Almajali&Dahalin, 2011). They argued that despite the growing body of research concerning this area, recent have continuously called for a further investigation in order to examine the factors affecting IT-business alignment; and coupling processes from alignment to enhance sustainable competitive advantage. Accordingly, they propose six variables-models to explain the interaction between IT strategy and business strategy. Their proposed antecedents highlighted leadership, structure and process, service quality, value and belief, IT managerial resource, and IT implementation success. The study finds general support for the hypotheses that leadership, values, and belief, IT managerial resources, service quality, and IT implementation success significantly impact IT-

business strategic alignment. However, no relationship is found between the structure, process and strategic alignment. Most common strategic alignment model is the Luftman's (2000), maturity assessment model which consists of six alignment areas with multiple attributes for each area. All areas should be given attention to mature the alignment between business and IT (figure 1).



Figure 1: Luftman's (2000) maturity assessment model

Any proposed IT-Business alignment strategy must consider serving all organizational processes. Furthermore, key organizational factors (IT and business factors) must be considered for the successful implementation of any proposed strategy.

Organizational Excellence Defined:

Organizational excellence can be defined as the overall organizational direction in its attempt to exploit all the critical

opportunities using effective strategic planning that is based on a shared organizational vision supported by the clarity of objectives and adequacy of the available resources (Burkhart, 1993). Excellent organizations are in continuous search for victory and excellence using the best global practices. They are connected to their customers and clients' relations support and interaction (Gilgeous&Gilgeous, 1999).

The European foundation of the quality management views excellent organizations as any organization that achieves and sustains superior levels of performance that meet or exceed the expectations of its stakeholders. Accordingly, an excellent organization will pay attention to all organizational aspects in order to help the managers reach a better position comparing with its rivals (Meyer &Herscovitch, 2001).

The idea of organizational excellence is built upon the organizational ability to develop the supporting forces for excellence in the organization which comes from the organizations' ability to achieve rapid change rates to help to achieve and maintain a competitive position. These forces may include human resources, organizational culture, organizational structure, the growing sense of quality, and the ability to employ technology in the organizational processes effectively (Zayed, 2003). Accordingly, this research views organizational excellence as the ability of an organization to outperform its competitors not only through enforcing outstanding organizational practices but also through successful integration among all organizational components including leadership, human resources, organizational culture, organizational structure and organizational processes.

Strategic Alignment and Organizational Excellence:

Rookhandeh and Ahmadi (2016) investigated the relationship between applying IT and achieving organizational excellence in the state banks of the city of Marivan. They revealed that there is a significant and positive relationship between applying IT and achieving organizational excellence. They also argued that industries which had greater access to IT were more successful in implementing organizational excellence models (Rookhandeh&Ahmadi, 2016). Accordingly, they recommended that the organizations must develop their use of IT in administrative processes in order to develop organizational excellence. Other studies argue that today's rapidly changing business environment is forcing organizations to re-think their organizational structures and processes to achieve organizational excellence and effectiveness (Rao, 2015). Bhatt et al. (2010) revealed that organization's IT infrastructure has strong relation with the availability of information that contributes to strategic decision toward achieving best performance (Bhatt et al., 2010).

Furthermore, Zegardy and Ismaili (2008) in their research concluded that Iranian organizations which had broader access to IT and were more successful in applying organizational excellence model and achieving higher rates in this model (Zegardy&Ismaili, 2008). Al-Faouri et al. (2009), emphasized that there is a significant relationship between IT-business related factors including senior executive support for IT, IT involvement in strategy development, IT understanding of the business, business/IT partnership, well prioritized IT projects, IT demonstrated leadership and IT-Business strategic alignment enablement. Moreover, Shamekh (2008), argued that bridging alignment gap between business strategy and IT

strategy helps organizations to achieve and sustain strategic alignment which, in turn, can enhance the overall organizational performance (Shamekh, 2008).

Based on the above study, any organization that is willing to differentiate its performance from the competitors must effectively and efficiently utilize IT. The role of IT in achieving high levels of performance can be justified based on its contribution in making constructive and informed decisions to support the vision and mission of the organization which affects the strategic goals of the organization. This contribution, however, requires a high level of alignment between IT applications and strategy from the one hand and the organizational corporate, business, and functional strategies which as one could argue is the basis for gaining and maintaining not a strategic competitive advantage. That is not easily imitated by rivals.

However, interrelationships between the three main incidents: IT- business related factors, IT-business strategic alignment, and organizational excellence have not been investigated comprehensively which calls for some in-depth analysis of such issue. It is argued that most of the available studies tend to focus on traditional concepts of organizational performance which are seen as part of excellence. This study, in consultation with available organizational excellence studies, has broken down the organizational excellence into a set of dimensions that best measures the construct as this research argues.

El-Masri (et al, 2015) investigated the impact of IS-business alignment practices on the organizational choice of IS-business alignment strategies. Their findings revealed three management practices that considerably contribute to the process of aligning IS and business strategies: formalization of a

program management process, improvement of support for hierarchies of authority, and the integration of collaboration values. Gutierrez (2014) assessed the level of alignment on five strategic IS projects in a large insurance organization. His study revealed that low levels of alignment can be overcome to produce a successful project when managers evolve their mindset approach to IS projects.

Kekwaletswe&Mathebula (2014) studied the Alignment between IS strategy and business strategy in a South African banking environment in order to improve it. They stated that business and IS strategies are mainly influenced by events which happen outside of the organization such as government regulations and market competition in addition to customer needs and technology trends.

Chebrolu (2013) attempted to understand how the alignment of business and IT strategies does impacts IT effectiveness? This research study provided new empirical evidence that strategic alignment has no or very small negative correlation with the different aspects of IT effectiveness. Moreover, Jorfi (et al., 2011) focused on exploring the relationships between IT flexibility, IT-business strategic alignment, and IT Capability. Their study revealed that IT capability is influenced by dimensions of IT flexibility (i.e., modularity, connectivity, and compatibility) and influences strategic alignment.

The above studies were useful to provide a better understanding of the research concerns. In addition, identification of the main constructs and sub-constructs was mainly guided by the previous studies. Nonetheless, the unique nature of this research context and its comprehensive nature might differentiate this particular research when considering the scarcity of similar studies in this context.

Research Hypotheses and Conceptual Model:

Hypothesis No. 1: The level of IT-business strategic alignment within the context of JMS is low as perceived by employees.

Hypothesis No. 2: The level of organizational excellence within the context of JMS is low as perceived by employees.

Hypothesis No. 3: IT-business related factors (namely: IT leadership, IT Involvement in strategy Development, Senior Executive Support for IT, IT capacity, Perceived Value of IT) have no direct significant statistical impact on the level of strategic alignment within the context of the JMS as perceived employees.

Hypothesis No. 4: The level of IT-Business strategic alignment has no direct significant statistical impact on organizational excellence within the context of JMS as perceived by employees.

Hypothesis No. 5: IT-business related factors (namely: IT leadership, IT Involvement in strategy Development, Senior Executive Support for IT, IT capacity, Perceived Value of IT) have no direct significant statistical impact on organizational excellence within the context of JMS as perceived by employees.

Hypothesis No. 6: There is no significant statistical effect at the level of significance ($\alpha \leq 0.05$) for IT-business related factors on organizational excellence in JMS as mediated by the level of IT-business strategic alignment within the context of JMS as perceived by employees.

In order To test the above hypotheses, below research model is proposed (figure 2)

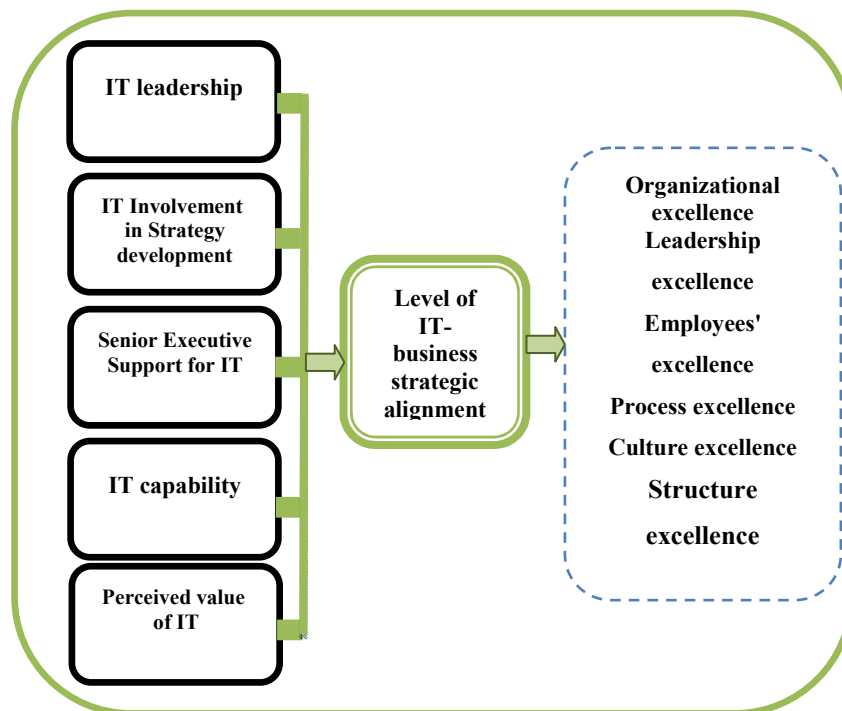


Figure 2: Proposed Research Model
Source: proposed by the researcher

Research Methodology:

This study adopted a descriptive and analytical approach. A quantitative survey was used to collect the necessary data to answer the research question and to test the proposed hypotheses. This enables collecting data from the largest possible percentage of the population of the study.

Quantitative analysis was conducted using aspects of Statistical Package for the Social Sciences (SPSS. 22) and AMOS.23. It included the use of descriptive statistics

frequencies, simple regression analysis, and structural equation modeling. A questionnaire was developed; face validity and contents validity were judged to achieve the objectives of the study. The answers were classified according to Likert scale and were ranged from (1) (strongly disagree) to (5) to (strongly agree).

The study population included all employees of the mining industry in Jordan working in managerial positions. The selection of this portion of the population was due to the nature of the research focus and variable which are related to some strategic issue that is highly relevant to managerial activities. A non-probability convenient sampling strategy was used to select the participants. A comprehensive sampling strategy is used to select the participants due to the limited population size (managerial positions). 150 questionnaires were personally distributed, 129 questionnaires were collected, 12 were excluded and accordingly and 117 were analyzed. Table 1 shows the sample characteristics.

Table (1): Sample Characteristics

Demographic Variables	Classification	Frequency	Percentage
Gender	Male	60	51.3
	Female	57	48.7
Education level	Secondary	34	29.1
	Bachelor	41	35.0
	Postgraduate	42	35.9
Experience	Less than 5 years	38	32.5
	5-9 years	46	39.3
	10 years or more	33	28.2

The internal consistency reliability was measured by applying Cronbach's alpha test to each individual variable as well as the overall measure. According to this test, overall reliability level was equal to (0.94) which is considered as an acceptable level of reliability (Sekaran, 2003). Table (2) outlines

the levels of reliability for all variables in the questionnaire. All individual values were accepted as they ranged from 0.60 to 0.87.

Table (2) Cronbach's Alpha for the scales

Variables	No. of item	Alpha
IT Leadership	3	.63
IT Involvement in Strategy development	3	.60
Senior Executive Support for IT	3	.77
Capability IT	4	.72
Perceived value of IT	3	.75
The level of strategic alignment	12	.81
Organizational excellence	29-52	.87
Leadership excellence	6	.80
Employees' excellence	5	.82
Process excellence	4	.83
Culture excellence	5	.79
Structure excellence	4	.81

Hypotheses Testing:

Hypothesis No. 1:

The level of IT-business strategic alignment within the context of JMS is low as perceived by employees.

In order to test this hypothesis, arithmetic means and standard deviations were extracted to determine the level of strategic fit between the organization's strategy and information technology strategy. Means values were classified according to the following criteria: from 1-2.49 (low), from 2.50-3.49 (medium), and from 3.50-5 (high) of Table 3 shows the results of this analysis.

Table (3) Means and Standard Deviations

Statement	Mean	Standard Deviation	Ranking	Level
There are a consensus and harmony between corporate strategy and IT strategy in the company	4.03	1.11	1	High
The use of IT is important to achieve the General objectives of the company	3.77	1.04	2	High
The company's management has a clear understanding of the role of IT in the company	3.49	0.99	3	medium
I believe that people working in the field of IT in the company have a clear understanding of the company's corporate strategy	3.49	0.99	3	medium
The management of the company plays an important role in supporting IT in the company	3.33	1.10	4	medium
Information technology projects are an important priority for the management of the company	3.29	1.10	5	medium
All necessary resources for IT projects in the company are provided	3.22	1.09	8	medium
All employees participate in the corporate strategies of the company	3.17	1.15	9	medium
The company's management is committed to the strategic investment in IT	3.28	1.17	6	medium
The company prepares a strategy for the use of IT that is consistent with corporate strategy	3.08	1.15	11	medium
IT investments aim to achieve the company's overall goals	3.15	1.14	10	medium
I am convinced with the level of coordination between different departments and senior management in the company	3.22	1.17	7	medium

Overall mean	3.37	1.10	-	medium
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The results showed that the level of strategic alignment between the organization's strategy and IT strategy was moderate, with an overall mean equal to (3.37) and standard deviation (1.10). The paragraph which states that "There are a consensus and harmony between corporate strategy and IT strategy in the company ranked first with a mean value equal to (4.03). Lastly, the paragraph which states that the company prepares a strategy for the use of IT that is consistent with corporate strategy with a mean value equal to (3.08).

Hypothesis No. 2:

The level of organizational excellence within the context of JMS is low as perceived by employees.

In order to test this hypothesis, arithmetic means and standard deviations were calculated to determine the overall level of organizational excellence as well as the levels of its dimensions (Leadership excellence, employees' excellence, process excellence, culture excellence, Structure excellence). Table (4) shows the results of this analysis.

Table (4) Means and Standard Deviations for the statements measuring the level of organizational excellence as perceived by the participants

Organizational excellence dimensions	Mean	Standard Deviation	Ranking	Level
Leadership excellence	3.40	1.09	4	medium
employees' excellence	3.35	1.20	5	medium
Process excellence	3.58	1.07	2	high
Culture excellence	3.48	1.08	3	medium
Structure excellence	3.60	1.03	1	high
Overall mean	3.48	1.09	-	medium

The results showed that the level of organizational excellence according to the participant's perceptions was moderate, with an overall mean equal to (3.48) and standard deviation (1.09). Structure excellence ranked first with high level and a mean value equal to (3.60) and standard deviation equals (1.03). Last came employees' excellence dimension with a medium level and a mean value equal to (3.35) and standard deviation equals (1.20).

Hypothesis No. 3:

IT-business related factors (namely: IT leadership, IT Involvement in strategy Development, Senior Executive Support for IT, IT capacity, Perceived Value of IT) have no direct significant statistical impact on the level of IT-business alignment within the context of JMS as perceived by employees.

To ensure the validity of the model for hypothesis testing, the analysis of variance was used.

Table (5) The results of the analysis of variance

Sig. Level	F	Mean squares	Sum of squares	R ²	DF	Source of variation
0.000	9.278	3.141	15.705	0.295	111.5	Regression
		0.339	37.575			Residual
			53.289			Total

Table (5) shows that the overall regression model is significant (F= 9.278, $\alpha < 0.000$) Where the dimensions of organizational factors explain (29.5%) of the variance in the level of IT-business alignment from the employees' perceptive and based on that we can test the hypothesis No.4.

Table 6 below shows the results the impact of IT-business the level of strategic alignment.

Table (6) The results of multiple regression analysis

IT-Business related factors	B	Std.	Beta	T	Sig.
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		Error			level
IT Leadership	0.095	0.059	0.140	1.601	0.111
IT Involvement in Strategy development	0.014	0.065	0.021	0.216	0.829
Senior Executive Support for IT	0.95	0.075	0.140	1.305	0.195
IT capability	0.177	0.078	.0261	2.264	0.026**
Perceived value of IT	0.107	0.068	0.157	1.579	0.117

Significant level of ($0.05 \leq \alpha$)

The statistical results presented in table (6) and the (T) values for the for the variables (IT leadership, the role of IT in development strategy, senior management support for IT, the perceived value of IT) that represent four IT-business related factors has no statistical impact on the level of IT-business alignment from the perspective of employees in JMS, the (T) values for these factors were (1.601, 0.216, 1.305, 1.579) respectively. These values were insignificant on the level of ($0.05 \leq \alpha$). This leads to partial acceptance of the null hypothesis which stated: IT-business related factors (namely: IT leadership, IT Involvement in strategy Development, Senior Executive Support for IT, Perceived Value of IT) have no direct significant statistical impact on organizational excellence within the context of JMS as perceived by employees.

In relation to the variable IT capabilities, results listed in the table (6)revealed that IT capabilities has a statistical significant impact ($0.05 \leq \alpha$) on the level of IT-business alignment with (T) value (2.264) which means accepting the alternative hypothesis relating to this variable only.

Hypothesis No. 4, 5 and 6:

In order to test hypotheses 4, 5, and 6, Structural Equation Modelling (SEM) was used as the main analysis method. SEM is a collection of statistical models that seeks to explain relationships among multiple variables. It enables researchers to examine interrelationships among multiple

dependent and independent variables simultaneously (Hair et al., 2006). The measurement was performed using the SEM approach based on AMOS v.23 software. Figure (3) shows that the research proposed model with path analysis.

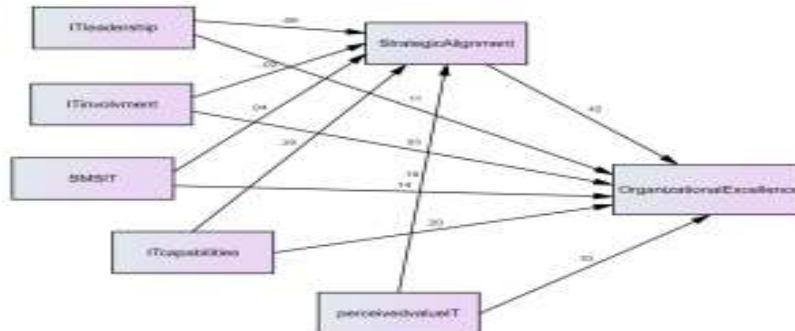


Figure (3) Path Analysis of the proposed model

Table (7) below outlines that the result for the hypothesis 4, 5 and 6. The constructs' CR is above 0.7 which demonstrated good composite reliability. In addition, table (8) shows the standardized path coefficient for research variables.

Table (7) The results result for the hypothesis 4, 5 and 6

Indirect effect (factors affecting Organizational Excellence through Strategic Alignment)		Estimate	S.E.	C.R.	P
Strategic Alignment	IT involvement (H.6)	.018	.072	1.251	.802
	SMSIT (H.6)	.031	.078	2.395	.693
	IT capabilities (H.6)	.309	.082	3.753	***
	Perceived value IT (H.6)	.268	.076	3.498	***
	IT leadership (H.6)	.087	.082	1.064	.287
Direct effect (factors affecting Organizational Excellence directly)		Estimate	S.E.	C.R.	P
Organizational Excellence	Strategic Alignment (H.4)	.356	.069	5.181	***
	IT leadership (H.5)	.090	.061	1.478	.140
	IT involvement (H.5)	.022	.053	2.415	.678
	IT capabilities (H.5)	.413	.069	5.967	***
	Perceived value IT (H.5)	.313	.067	4.681	***

Indirect effect (factors affecting Organizational Excellence through Strategic Alignment)	Estimate	S.E.	C.R.	P
SMSIT(H.5)	.350	.069	5.097	***

*** P-value ≤ 0.05

As shown in the table (7), this research concludes the following:

For hypothesis 4: Strategic alignment has a direct statistical impact on organizational excellence. It can explain 17% (R square= 0.17) of the variance of dependent variable organizational excellence.

For hypothesis 5: Three of the independent variables (IT capabilities, perceived value of IT, SMSIT) have a significant statistical direct impact on organizational excellence and **together** can explain 42% (R square=0.42) of a variance of dependent variable organizational excellence.

Moreover, the result of hypothesis 6: shows that two variables (IT capabilities, perceived value of IT) have a significant statistical indirect impact on organizational excellence through mediating variable strategic alignment. These two variables can together explain 28% (R square= 0.28) of the variance of a dependent variable. Whereas, IT involvement SMSIT and IT leadership have no statistical indirect impact on organizational excellence.

Discussion and Conclusion:

The level of IT-business strategic alignment within the context of JMS is medium as perceived by employees. This indicates the need to improve this level which, in its current state, might hinder the value of IT investments. It seems that alignment process of IT and business and managerial practices that are necessary to enable such an alignment is still limited. This finding agrees with most of the available studies concerning the limited level of alignment between IT and

business in general (e.g. Mazen et al., 2015; Gutierrez, 2014). This also might be seen as an important practical implication that can be generated for decision makers not only within the research particular context (JMS) but also within the larger context of Jordanian companies.

The level of organizational excellence in the context of JMS is medium as perceived by employees as reaching the highest possible level of organizational excellence seems a strategic logical desire for any organization; this evidence indicates the need for more managerial concern to improve all dimensions of excellence. The multi-facial nature of excellence must be considered.

IT capabilities have a statistically significant impact on the level of IT-business alignment within the context of JMS as perceived by employees. It seems that the hard concept of IT including the physical components and values is perceived by employees more than the soft concept relating to leadership, involvement, support and perceptions. The integrated nature of IT factors seems unrealized by participants. However, this might be justified as people look for tangible benefits. The finding agrees with Jorfi et al., (2011), who revealed that IT capabilities including IT flexibility, modularity, connectivity, and compatibility can influence the level of strategic alignment.

Nonetheless, with reference to some other IT business related factors that are investigated in this study (particularly IT leadership and SMSIT), this study does not agree with Almajali and Dahalin (2011) who concluded that leadership, values and belief, IT managerial resources, service quality, and IT implementation successes significantly impact IT-business strategic alignment (Almajali&Dahalin, 2011). It also disagrees with Al-Faouri et al (2009) who revealed that senior executive support for IT, IT involvement in strategy development, and IT

demonstrated leadership has a significant relationship with IT/Business strategic alignment (Al-Faouri et al., 2009).

The level of IT-Business strategic alignment has a direct significant statistical impact on organizational excellence within the context of JMS as perceived by employees. This agrees with most of the available studies that emphasized on significant impact of IT-business alignment on organizational overall performance (e.g. Gutierrez, 2014; Almajali and Dahalin 2011; Johnson and Lederer 2010) in general and its overall excellence (e.g. Rookhandeh and Ahmadi, 2016; Rao, 2015; Al-Faouri et al., 2009; Zegardy and Ismaili, 2008). Since the level of IT-business strategic alignment within the context of JMS is medium as perceived by employees, this calls for more concern to improve this level and accordingly improve the level of organizational excellence.

IT-business related factors (namely: IT capabilities, perceived value of IT, and senior executive support for IT) have a direct significant statistical impact on organizational excellence within the context of JMS as perceived by employees. This indicates the importance of IT capabilities including hardware, software, and networking capabilities to support organizational excellence. The recent trend to extensively introduce and effectively use these capabilities is not justified but also critical to achieving a strategic competitive advantage through maintaining a high level of organizational excellence. A fact that might be linked to a positive value perception and support by organizational management.

There is a significant statistical effect at the level of significance ($\alpha \leq 0.05$) for IT-business related factors (namely: IT capabilities, perceived value of IT) on organizational excellence in JMS as mediated by the level of IT-business strategic alignment within the context of JMS as perceived by employees.

It seems that mediating role of level of IT-business strategic alignment is limited. The only impact that was excluded is the impact of senior executive support for IT. Other factors impact (IT capabilities and perceived value of IT) remains significant.

The purpose of this research was to understand whether the IT-strategic business alignment can create organizational excellence successfully. This study argues that the real values of both business strategies and IT strategies are best seen as an improvement in overall organizational excellence. Nonetheless, interrelationships among strategic IT-business alignment measured by its maturity level and organizational excellence will be subjected to some influential factors which are another concern for this study. The role of IT in achieving high levels of performance can be justified based on its contribution in making constructive and informed decisions to support the vision and mission of the organization which affects the strategic goals of the organization. This contribution, however, requires a high level of alignment between IT applications and strategy from the one hand and the organizational corporate, business, and functional strategies which as one could argue is the basis for gaining and maintaining a strategic competitive advantage.

Recommendations:

The findings of this study provide a theoretical model that can enhance the level of strategic alignment and maximize its support for organizational excellence. The final validated model might be used by decision makers in organizations. Based on the findings of this study, the following recommendations are suggested:

- Management must make more efforts to enhance this level by directing all their IT investments towards serving organizational strategy. Any justification of these

investments must be based on their real added value to the overall strategic direction of the organization.

- More efforts must be made to improve this level. This involves addressing all the factors that can contribute towards better and improved excellence.
- More concern should be given to the elements of IT capabilities including software, hardware and networking capabilities in order to enhance the level of IT-business alignment.
- Coordination between IT departments and top management as well as higher level of participation in the strategy formulation process by IT specialists is crucial to improve the level of alignment and accordingly enhance organizational excellence.
- IT-business related factors including IT capabilities, perceived value of IT and SMSIT can explain 42% variance in organizational excellence. The result emphasizes on the important role of these factors in supporting organizational excellence and calls for more consideration of these factors.

References:

- Al-Faouri A, Alkasasbeh M, Alkhaldi F. (2009) Enabling IT/Business Strategic Alignment: (An Empirical Study on the Telecommunications Sector in Jordan), *Jordan Journal of Business Administration*, Vol 5 No.2, pp.273-292.
- Almajali D & Dahalin Z, 2011 *Factors influencing IT-Business Strategic Alignment and Sustainable Competitive Advantage: A Structural Equation Modelling Approach*, IBIMA Publishing, Communications of the IBIMA.
- Aversano L; Grasso C & Tortorella M, 2012 *A literature review of Business/IT Alignment Strategies*, Conference on ENTERprise Information Systems / HCIST 2012 –

International Conference on Health and Social Care Information Systems and Technologies.

- Bhatt, G., Emdad, A., Roberts, N., & Grover, V. (2010). Building and leveraging information in dynamic environments: The role of IT infrastructure flexibility as enabler of organizational responsiveness and competitive advantage. *Information and Management*, 47(7-8), 341-349.
- Brown, A. D., & Jones, M. R. (1998). Doomed to Failure: Narratives of Inevitability and Conspiracy in a Failed IS Project. *Organization Studies*, 19(1), 73-88.
- Burkhart, Patrick J. (1993). "Successful Strategic Planning in USA", Prentice Hall, New Jersey.
- Chebrolu S. (2013) How Does Alignment of Business and IT Strategies Impact Aspects of IT Effectiveness, *International Journal of Applied Management and Technology*, Vol 12, Issue 1, pp 1-15.
- El-Masri, Mazen; Orozco, Jorge; Tarhini, Ali; & Tarhini, Takwa, "The Impact of IS-Business Alignment Practices on Organizational Choice of IS -Business Alignment Strategies" (2015). PACIS 2015 Proceedings. Paper 215.
- Gargeya, V. B., and Brady, C. (2005). Success and failure factors of adopting SAP in ERP system implementation. *Business Process Management Journal*, 11(5), 501-516.
- Gerow J; Thatcher J; & Grover V. 2015 Six types of IT-business strategic alignment: an investigation of the constructs and their measurement, *European Journal of Information Systems* Vol 24, pp 465–491.
- Gilgeous, V., & Gilgeous, M. (1999). A framework for manufacturing excellence. *Integrated Manufacturing Systems*, 10(1), 33-44.

- Gutierrez A, (2014). Alignment of Information Systems' projects with business strategy: Evolution of thinking and practice, Regent's Working Papers in Business and Management 2014 Working Paper 1407: RWPBM1407.
- Gutierrez A; Orozco J; & Serrano A. (2009). Factors affecting IT and business alignment: a comparative study in SMEs and large Organizations, Journal of Enterprise Information Management, Vol. 22 No. 1/2, pp. 197-211.
- Henderson, J., Thomas, J. & Venkatraman, N. (1992). Making Sense of IT: Strategic Alignment and Organizational Context. Sloan School of Management, Massachusetts Institute of Technology. Working Paper 3475-92 BPS,
- Johnson A & Lederer A. (2010). CEO/CIO mutual understanding, strategic alignment, and the contribution of IS to the organization, Information and Management 47(3):138-149
- Jordan Chamber of Industry <http://jci.org.jo/DetailsPage/SectorsEN.aspx?ID=22>, visited on 21.03.2016.
- Jorfi S; Nor K; & Najjar L. (2011). The Relationships Between IT Flexibility, IT-Business Strategic Alignment, AND IT Capability, International Journal of Managing Information Technology (IJMIT) Vol.3, No.1, pp 16-31.
- Kekwaletswe R & Mathebula P. (2014). Aligning Information Systems strategy with the Business Strategy in a South African Banking Environment, Proceedings of the Conference for Information Systems Applied Research ISSN: 2167-1508 Baltimore, Maryland USA.
- Khaiata M & Zualkernan I. (2009). A Simple Instrument to Measure IT-Business Alignment Maturity, Information Systems Management, Vol 26, pp138-152.

- Luftman J. (2000). ASSESSING BUSINESS-IT ALIGNMENT MATURITY, Communications of AIS, Volume 4, Article 14.
- Luftman J.(2004). Managing the Information Technology Resource: Leadership in the Information Age, 1/e, Prentice Hall.
- Meyer J P &Herscovitch L (2001), “Commitment in the Workplace: Toward a General Model”, Human Resource Management Review, Vol. 11, pp. 299-326.
- Myers, M. D. (1994). A disaster for everyone to see: An interpretive analysis of a failed is project. Accounting, Management and Information Technologies, 4(4), 185-201.
- Olesen, K., & Myers, M. D. (1999). Trying to improve communication and collaboration with information technology. Information Technology and People Info Technology and People, 12(4), 317-332.
- Oon F. Yew &Hartini A. (2014). The Effect of Change Management on Operational Excellence moderated by Commitment to Change: Evidence from Malaysia, International Journal of Innovation and Applied Studies, Vol. 9 No. 2, pp. 615-631
- Papp, R. (1999). Business-IT alignment: Productivity paradox payoff?. Industrial Management and Data Systems, 99(8), 367-373.
- Rao, M. (2015). Embrace change effectively to achieve organizational excellence and effectiveness. Industrial and Commercial Training, 47(3), 145-150.
- Raymond, L., & A.-M.Croteau (2009) "Manufacturing Strategy and Business Strategy in Medium-Sized Enterprises: Performance Effects of Strategic Alignment", IEEE-Transactions on Engineering Management (56:2), 192-202.

- Rookhandeh, N &Ahmadi K. (2016) Exploring the Relationship between Applying InformationTechnology and Achieving Organizational Excellence in State Banks., International Journal of Management, Accounting and Economics. Vol. 3 Issue 2, p105-122.
- Salwe Q; Ahmed M;Aloufi K; &Kabir M, (2010). Strategic Information Systems Alignment:Alignment of IS/IT with Business Strategy, Journal of Information Processing Systems, Vol.6, No.1, March 2010.
- Sekaran U. (2003). Research method for business: A skill building approach, 4th edition, John Wiley and Sons.
- Shamekh F. (2008) Business-IT Strategic Alignment Concept in Theory and Practice, Master Thesis in Software Engineering and Management, IT University of GÖTEBORG.
- Van Assen, M. F. (2011). "Operational Excellence for Services," Center of Operational Excellence,"[Online]. [Retrieved February 29, 2012]. Available at: <http://www.vanassen.info/wpcontent/uploads/Position-paper-Operational-Excellence-for-Services.pdf>.
- Venkatraman, N., & Camillus, J. C. (1984).Exploring the Concept of "Fit" in Strategic Management.The Academy of Management Review, 9(3), 513.
- Zagrdy, H &Ismaili, M, (2008).The impact of information technology on excellence Iranian organizations, lecturer Journal of Human Sciences, Volume 13, Issue 2.
- Zayed, j .(2003), organizational performance excellence: The Road to the Future Organization, the Arab Organization for Administrative Development, Cairo, Egypt.