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REVUE EUROPEENNE D ETUDES EUROPEAN JOURNAL OF MILITARY STUDIES
Social Science Journal

KM Process and Organisational Performance in the Jordanian ICT sector: The Mediating Role of IT Capability

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Abstract

Purpose: This study's goal was to investigate how Jordan's information and communication technology (ICT) sector knowledge management (KM) process affects organisational performance (OP). Additionally, the potential of information technology (IT) to act as a mediator between the KM process and improving the OP.

Design/methodology/approach: This study was quantitative, using a survey. Data were collected from the managers of 143 Jordanian Information and Communications Technology (ICT) companies. Partial least squares structural equation modelling (PLS-SEM) and bootstrap approaches were used to evaluate the hypothesised paths. The data gathered were screened using SPSS (version 26), and these hypothesised relationships were tested with that data.

Findings: The findings showed that KM and IT capability significantly impacted organisational performance. Also, IT capability mediated the association between knowledge management process and Organisational Performance.

Practical implications: Developing nations look to the ICT sector to create new jobs and accelerate their economic progress. The findings improve the understanding of the associations and impacts of KM and IT capability on organisational performance among owners/managers, practitioners, and academics in the ICT sector. Owners and managers can use the findings as a guide to making better and more effective decisions for applying KM with IT capability standards to achieve superior performance and engage in ongoing market competition. Owners/managers should develop improved and effective decisions for implementing KM with IT capability.

Originality/value: This is the first empirical study to look at the links among knowledge management, IT Capability and organisational performance in an ICT sector within an developing country context such as Jordan.

Keywords: IT Capability , knowledge management, organisational performance, ICT sector, Jordan

1. Introduction

Continuous performance improvement is the goal of organisations, as only performance improvement can make progress in the growth of organisations (Jenatabadi, 2015). So, organisations are working hard to find new strategies to improve performance (Alrubaiee,

Alzubi & Hanandeh, 2015). The measure of an organisation's performance has always caught the attention of management teams and researchers (Jenatabadi, 2015). The most important area of study in management research is organisational performance (OP), which is also likely the most important organisational indicator at the performance level (Gavrea, Ilies, & Stegerean, 2011).

Notably, the industry with the quickest growth and development is the information and communication technology (ICT) sector. In many countries, ICT organisations are one of the most significant sectors in the business scope. There are ongoing strains on this industry. Consequently, it constantly works to strengthen its capabilities and plans to increase its performance. (Mustafa & Badarin, 2016). To survive in a rapidly evolving environment, Jordanian ICT enterprises must overcome major obstacles (Al-Weshah, Al-Manasrah, and Al-Qatawneh, 2018). Other challenges this sector faces include sluggish growth driven on by fierce competition, globalisation, increased client demands, government regulations, and replacement services. ICT organisations, therefore, strive to develop innovative methods that guarantee the expansion and enhancement of the organisation's performance (Asha'al, Obeidat, & Alhmoud, 2019). Essential elements must be studied to improve organisational performance (Willis & Ameen, 2016). The fundamental issue is strengthening the OP for the Jordanian ICT sector. It was stated that a lack of knowledge management procedures and poor business practices were to blame for the poor performance of the Jordanian ICT sector (Qasrawi, Almahamid, and Qasrawi, 2017; Hajir et al., 2015).

If the ICT sector in Jordan wants to elevate its performance and gain competitiveness, it should develop its technological capabilities and invest more in information technology (Hajir et al., 2015). However, research on knowledge management is still weak in Jordan, despite the interest displayed by the commercial and academic communities (Boussenna, 2021; Kamal & Abu-Zaid, 2019). Because the empirical evidence is inconclusive, it was necessary to conduct additional research to determine how knowledge management impacts innovation technology and performance. Therefore, more research is needed on how knowledge management is implemented and how that relates to Organization Performance (OP) in Jordanian ICT firms (Alrubaiee et al., 2015).

IT plays a critical function in business and can help organisations operate better to improve performance (see Siagian & Tarigan, 2021; Erkmen et al., 2020; Liu Zhao, Wang, & Xiao, 2013). Additionally, IT has been found to be a foundation for gaining a competitive advantage (Feng et al., 2019; Wei & Wei, 2017; Ong & Chen, 2013; Mazidi et al., 2014). Additionally, it is claimed that there are complicated relationships among organisational capabilities, performance, and resources and that capabilities can mediate those relationships (Homaid, Minai, & Rahman, 2015). In the existing body of literature, IT organisational capacities are most likely to mediate the relationship between performance and resources (Homaid et al., 2015; Liang, You, & Liu, 2010).

The aforementioned debates give rise to the question of how ICT sector IT capability impacts enhancing organisational performance as determined by the KM process. This study examined the association among the KM process and the OP of the ICT sector in Jordan and the findings centre on the mediating of IT capability.

2. Literature Review

According to Galbreath (2005) and Almarri & Gardiner (2014) the Resource-Based View (RBV) is significant in strategic management. Also, OP depends on unique and scarce

resources and is valuable in achieving better performance and a competitive advantage (Barney, 1991; Fahy, 2000). Consequently, mixing these resources and capabilities can improve OP and obtain a competitive advantage in the market (Barney & Arikan, 2001; Barney, 1991). RBV theory links resources and capabilities that help improve the other resources (Homaid et al., 2015; Ahn & York, 2011).

Moreover, this paper has likewise drawn on the Knowledge-Based View (KBV) theory and addressed the RBV. KBV seeks to achieve the organisation's success by consistently creating new knowledge and disseminating it broadly throughout the organisation to produce a positive outcome (Nonaka & Toyama, 2003). Organisations that seek to continue their work in the knowledge environment will be able to enhance innovation technology such as IT capability and improve OP (Kiessling et al., 2009; Mehta, 2008). In this theory, KM processes are valuable resources helping organisational capabilities such as IT capability achieve better performance.

2.1 Organisational Performance

The management literature shows that an organisation's performance is a primary construct of strategic management (Richard et al., 2009; Combs, Crook, & Shook, 2005). Top management constantly gives attention to the practical significance of organisational performance because it is associated with an organisation, which drives many scholars to concentrate on this subject (Finkelstein & Hambrick, 1996).

To maintain support for the national economy, ICT companies' performance must be measured (Valinejad & Rahmani, 2018). Nevertheless, no agreement exists about the instruments to measure telecommunication companies' performance, and many models measure telecommunication companies' performance. For instance, results in human resources, financial performance, and non-financial performance were used to gauge performance in the telecommunications industry (Nekoueizadeh & Esmaeili, 2013). Operational and financial performance were used to gauge performance in telecommunications enterprises, according to Qasrawi et al. (2017) and Mashal (2018).

They generalised the findings after looking at these several OP indicators into two dimensions: Performance on financial and non-financial performance. Although the performance indicators tend to remain “financial or non-financial”, more recent studies have taken a more holistic approach and adopted the BSC approach in measuring OP (Kaplan & Norton, 2001). The performance of organisations in the services industry is the main subject of this study. Financial and non-financial performance measures, which were adopted from Sadikoglu and Olcay (2014), were used to measure organisational performance. Sadikoglu and Olcay (2014) used numerous performance variables to cover all aspects of organisational performance, including customer results, employee performance, innovation performance, market and financial performance, operational performance, and social responsibility.

2.3 Knowledge Management (KM) process

Knowledge management gained popularity in learning and management aspects as it contributes to the organisation's productivity (Brewer & Brewer, 2010). Hajir et al. (2015) characterise KM as the correct information transferred to individuals at the ideal time to assist people with sharing data and improve their organisation and viability while utilising current strategies that advance people's development and limit. Information Management is a principle and capacity where information is made, obtained, shared, arranged, and applied in a domain that advances innovation and OP (Andreeva & Kianto, 2011). Knowledge management consists of two primary parts: the KM and the KM processes. The KM process, which produces

the information and endures regardless of formal organisational support for knowledge management, is the most crucial element (Andreeva & Kianto, 2011). Therefore, it is the subject of this study.

KM can be determined in various ways. Under extreme dangers, the KM process includes knowledge. Knowledge generation or acquisition, knowledge transmission or sharing, knowledge storage, and knowledge application or utilisation are all parts of the KM process (Inkinen, 2016). The processes of knowledge acquisition, application, and sharing are the operational definitions of knowledge management procedures (Ahmad et al., 2017; Shujahat et al., 2017). The explanation behind what matters is that the accumulation stage is diverse; however, it was identified with pessimism (Andreeva & Kianto, 2011). The KM process measurement that Qasrawi et al. (2017) developed includes three dimensions: knowledge acquisition, knowledge application, and knowledge sharing. Many studies have used this measurement (Abualoush et al., 2018; Aboyassin, Alnsour, & Alkloub, 2011; Ooi, 2009).

Numerous researchers have presented various viewpoints on KM processes in the literature. Some academics have divided knowledge management (KM) into five processes (Chang & Chuang, 2011), however other researchers have used four processes (Anderson, 2009). Knowledge application, sharing, and acquisition are the three key activities that comprise another body of knowledge management research (Fathi Al-Sa'di et al., 2017; Qasrawi et al., 2017). This study's final strategy was chosen because it includes the literature's most essential and frequently discussed procedures (Ayoub et al., 2017).

Because knowledge acquisition increases the breadth and depth of knowledge businesses have access to, it is regarded as a crucial KM process that helps organisations perform better and be more effective (Masa'deh et al., 2015). According to Andreeva and Kianto (2011), firms that are successful at collecting knowledge have a more extensive and diverse knowledge base than their competitors, leading to them being more inventive. At the organisational level, knowledge acquisition is gathering information from the outside world and modifying it so the organisation can utilise it (Liao et al., 2009).

Knowledge sharing is the exchange of knowledge among the various knowledge units in an organisation (Nonaka, 1994). The practice of employees is to share their ideas (Hooff & Ridder, 2004). A successful knowledge management process depends largely on sharing knowledge, which is essential for effective management and application of knowledge assets. Knowledge production and integration are two other processes that knowledge sharing impacts directly (Obeidat et al., 2016).

Applying knowledge toward achieving organisational goals is known as knowledge utilisation. (Asoh et al., 2007). Per Lee et al. (2013), knowledge usage is also known as knowledge application or implementation. This concerns responding to various kinds of knowledge a particular entity inside an organisation possesses (Gold et al., 2001). Knowledge utilisation is applying previously acquired information (Song et al., 2005), which is newly developed information incorporated into organisational behaviour and problem-solving procedures through assimilation (Chen, Tao, & He, 2012).

2.4 IT Capability

According to Bharadwaj (2000), IT capability refers to firms' capacity to utilise, apply, and utilise IT resources while combining them with other resources, competencies, or both. Tippins and Sohi (2003) stressed that the concept of the IT capacity that a firm utilises refers to all IT elements in managing information. The significant role of IT capability in developing

the IT investment impacts productivity substantially. Because IT capabilities can be replicated by others, they are ineffective at generating a long-term competitive advantage and increasing productivity (Bharadwaj, 2000; Li, Chen, & Huang, 2006).

Practitioners and researchers have examined several IT-related issues. For instance, IT operation, IT objects, and IT knowledge were the three categories Tippins and Sohi (2003) and Li et al. (2006) used to classify IT capability. A highly skilled project team should manage a knowledge management project considerably more effectively. Technical IT expertise is included in human resources for IT. IT knowledge is the extent to which an organisation enjoys a body of technical knowledge about objects, like computer-based systems (Tippins & Sohi, 2003). IT knowledge requires professional training, knowledge, and abilities like programming, system analysis, design, and proficiency with emerging technologies. IT operations cover user interaction and IT tasks. As a result, IT operations are the degree to which a firm manages market and customer information using IT. The items are the computer-based hardware and software and support personnel.

Because knowledge enables practitioners to develop information after processing data to create more valuable information, knowledge is generally regarded as the most valuable asset (Makambe, 2015). Mata, Fuerst, and Barney (1995) defined IT knowledge as involving language, operating systems, and communications, while knowledge combines concept, definition, learning, and reflection. It includes professional competence, experience, and technical ability such as analytical skills, coding, design, databases, and network security (Ringim et al., 2012).

Per Sarker, and McCullough (2008) and Bharadwaj (2000) and Zhang, , IT operations primarily require managerial, core problem-solving and technical skills. IT capability involves IT objects such as hardware and software and support personnel, and IT operations cannot achieve the stated tasks without these objects (Tippins & Sohi, 2003). IT operations are considered a core IT capability that helps managers manage organisations effectively and maintain client data correctly and efficiently across business units (Pérez-López and Alegre, 2012). IT operations demand IT applications in business processes depending on IT functions, interaction, and user coordination (Ringim et al., 2012). IT operations reflect the process, methods, and skills required to achieve organisational objectives (Hasan, 2010).

Also known as infrastructure, IT objects are the main elements of IT for improving strategic organisation (Lim & Trimi, 2014). Per Tippins and Sohi (2003), IT objects encompass computer devices with hardware, software, and human capability, which this study research utilised (Melville, Kraemer, & Gurbaxani, 2016; Karim, Somers, & Bhattacherjee, 2007). Glazer (1999), cited in Hasan (2010), stated that an IT object has a major role in improving information creation and dissemination. IT objects can be used as a tool. A technical object refers to acquiring, disseminating, storing, and using information.

2.5 Hypothesis Development

This paper's primary goal was to examine how the KM process and OP are related. Many studies have tested the significant role of the KM process on OP (for example, Boussenna (2021), Kamal & Abu-Zaid (2019), Payal et al. (2019), Al-Sa'di et al. (2017), Alrubaiee et al. (2015), Zack et al. (2009). In an attempt to generalise the findings, other research, like this one, has been conducted to reinvestigate these linkages in various contexts and with various variables. Therefore, the first hypothesis posited is the following.

H1: "KM will have a positive and significant effect on the OP".

One goal of the current research was to examine IT capabilities' role in mediating the connection between the KM process and the OP. Implementing the KM process in a company creates various skills that may garner a competitive advantage and boost performance (Jiménez-Jiménez et al., (2020). Theoretically, the KM process has been found to positively and significantly impact the capabilities of organisations, like innovation capability and technological capability (Jiménez-Jiménez et al., 2020; Jantunen, 2005); Huang et al., 2011; Huang & Li, 2009; Hajir et al. 2015; Areed et al., 2021). Similar to this, numerous studies in the literature demonstrate that IT capabilities directly affect the OP. Interesting reports on the direct and significant influence have been made (Siagian & Tarigan, 2021; Erkmen et al., 2020; Feng et al., 2019; Wei & Wei, 2017; Ong & Chen, 2013; Mazidi et al., 2014). Some have questioned this connection, claiming that IT capabilities can indirectly impact OP through various mediating factors (Tippins & Sohi, 2003; Zhu & Nakata, 2007; Pérez-López & Alegre, 2012). The contradictory findings highlight the necessity to investigate how IT competence will affect the mediating factor. Thus, the following hypotheses are posited.

H2: "KM will have a significant and positive effect on IT capability".
H3: "IT capability will have a significant and positive effect on the OP".

IT ability is a crucial institutional capability by which information can be managed, and strategies and innovation are integrated for higher performance (Pebrianto & Kertahadi, 2013). Brah and Lim (2006) pointed out that IT capability enables the KM process as it enhances business operations effectiveness, and it is indicated that implementing IT capability boosts the operational tasks of the KM process (Khanam, Siddiqui, & Talib, 2013). Following this rationale, the following hypothesis is posited.

H4: "IT capability will mediate the association between TQM and organisation performance".

2.6 Theoretical Framework

The theoretical framework demonstrates the direct relationship among KM processes (acquisition, sharing, and application) and OP and the mediating effect of IT capability on the relationship among KM Processes and OP in ICT companies. Figure 1 presents the study's theoretical framework.

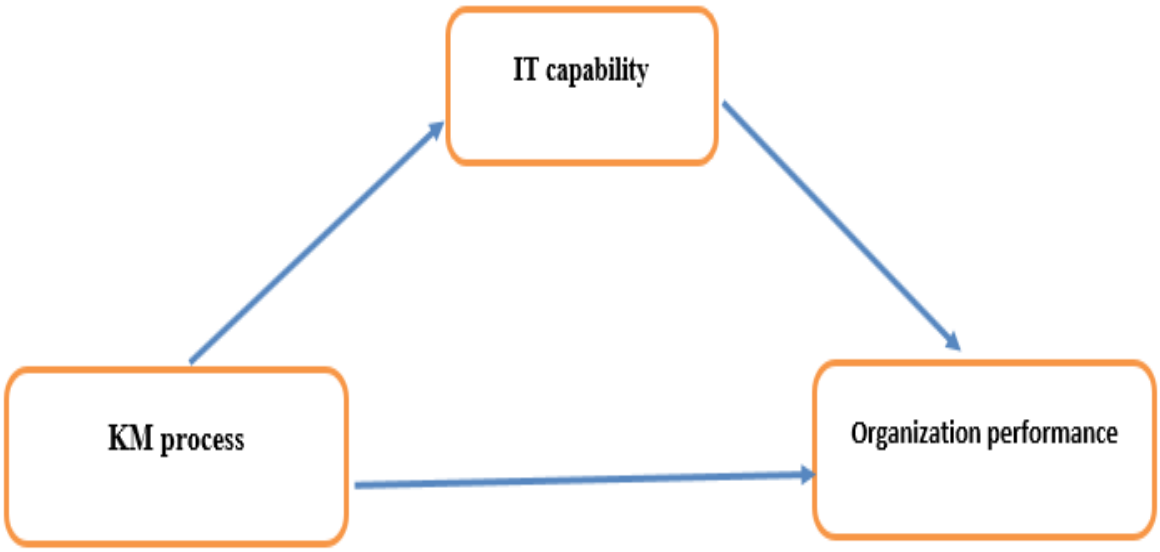

Figure 1. *Theoretical framework*

3.0 Methodology

3,1 Population and sample

This research's population consisted of managers of 143 Jordanian telecommunications companies (Int@j, 2021). Due to the small size of the population, all managers were polled. Because of their executive positions and capacity to provide information on implementing strategies in firms, managers are trustworthy sources (Al-swidi & Mahmood, 2012). The research sample accurately reflects the whole population.

3.2 Survey Instrument

This study used a survey considering the six dimensions—employee performance, customer results, financial performance, innovation, and social responsibility, innovation — that Sadikoglu and Olcay (2014) proposed while measuring the OP as a unified construct. The study drew its measurements for the KM process measure from Qasrawi et al. (2017). In the context of service sectors, these metrics have been verified. It comprised the following three processes: knowledge application (KAP), knowledge sharing (KS), and knowledge acquisition (KA). Its mediating influence is investigated using the IT capability measurement that Tippins and Sohi (2003) and Pérez-López and Alegre (2012) created has three aspects: IT knowledge (ITK), IT objects (ITO), and IT operations (ITP). The questionnaire items used a 5-point Likert scale: "1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree". The survey was administered by visiting Jordanian ICT companies, and the data were collected from May 2021 to August 2021

4.0 Data Analysis

Data analysis was conducted using partial least squares (PLS), a structural equation modelling technique that employs a principal-component-based estimation strategy (Chin, 1998). PLS is a suitable technique for examining predictive research models containing formatively modelled constructs (Ringle, Sarstedt, & Straub, 2012; Hair, Ringle, & Sarstedt, 2011).

4.2 Response Rate

Of the 143 disseminated questionnaires, 109 usable surveys were returned and utilised as the data for the research, representing a 76% response rate.

4.3 Descriptive Statistics

Standard deviations (Std.) and means were calculated.. The overall mean for the KM construct ranged from 2.70 to 2.36, suggesting that all the dimensions were moderate, and standard deviation values ranged from 1.80 to 1.13. The overall mean for a dimension of the OP construct ranged from 2.65 to 2.34, suggesting that all the dimensions were moderate, and standard deviation values ranged from 1.14 to 1.33. The results are summarised in Table 1, which reveals that the standard deviation ranged from 1.41 to 1.19 and that the overall mean for IT Capability ranged from 3.10 to 2.23.

4.4 Normality Tests

Data normality was assessed using kurtosis and skewness. According to Hair et al. (2006), the critical kurtosis and skewness values must not exceed ± 2.58. Table 2 shows that skewness ranged between .160 and .870 and kurtosis ranged between - .120 and -1.315. Thus, the data were normal. See Table 1.

Table 1: *Descriptive Statistics and Skewness and Kurtosis*

Variables	Mean	Std. Deviation	Label	Skewness	Kurtosis
Knowledge management (KM)	2.47	1.10	Moderate		
"Knowledge acquisition (KA)"	2.70	1.13	Moderate	.160	-1.315
"Knowledge sharing (KS)"	2.60	1.80	Moderate	.410	-.690
"Knowledge application (KAP)"	2.36	1.15	Moderate	.330	-.850
IT capability	2.48	1.54	Moderate		
"IT Knowledge (ITK)"	2.45	1.41	Low	.870	-.120
"IT Objects (ITO)"	2.23	1.19	Low	.710	-.401
"IT Operation (ITP)"	3.10	1.23	Moderate	.501	-1.130
Organization performance (OP)	2.88	1.05	Moderate		
"Operational performance (OPP)"	2.56	1.20	Moderate	.420	-1.120
"Employee performance (EP)"	2.43	1.27	Moderate	.422	-1.155
"Innovation performance (IP)"	2.34	1.27	Moderate	.610	-.706
"Customer results (CR)"	3.50	1.33	Moderate	.300	-1.450
"Social responsibility (SR)"	2.65	1.26	Moderate	.130	-1.332
"Market and financial performance (MP)"	3.60	1.14	Moderate	.380	-1.321

4.5 Test of Multicollinearity

This research utilised the "Tolerance Value and Variance Inflation Factor" (VIF) to identify any issues among the variables. Furthermore, Hair et al. (2014) emphasized that the tolerance value should be "more than 0.10", and the (VIF) value should be "less than 5". See Table 2. According to this standard, no issue with multicollinearity existed.

Table 2: *Tolerance Value and VIF*

Model		Collinearity Statistics	
		Tolerance	VIF
KM	Organization	0.713	1.320
IT capability	performance	0.805	1.145
KM	IT capability	0.830	1.213

4.2 Assessment of the Measurement Model

The relationship among items and their corresponding constructs was checked by evaluating construct validity, comprising convergent and discriminant validity in the measurement model assessment phase.

4.2.1 Convergent Validity

Convergent validity, which evaluates related and connected similar constructs, was assessed. Convergent validity is substantiated if items load at more than .50, when the Average Variance Extracted (AVE) is at least 5 (Hair et al. 2014), and the Composite Reliability Coefficient (CR) is more than 0.60. According to these criteria, convergent validity was confirmed. See Table 3.

Table 3: *Convergent Validity*

Construct	Cronbach's alpha	CR	AVE
KA	0.883	0.945	0.985
KS	0.850	0.910	0.771
KAP	0.847	0.897	0.687
ITK	0.851	0.930	0.870
ITO	0.816	0.891	0.670
ITP	0.836	0.890	0.732
OPP	0.873	0.918	0.790
EP	0.902	0.927	0.718
IP	0.791	0.903	0.823
SOR	0.886	0.946	0.897
CR	0.873	0.940	0.887
MP	0.860	0.914	0.781

4.2.2 Internal Consistency

Cronbach's alpha was utilised to evaluate the scale's internal consistency. Table 4 presents the statements and their internal consistency with the various scales. All loadings were more than .50, confirming internal consistency (Hair et al., 2013)

Table 4: *Cronbach's alpha*

	Items	Loading
IT capability	**IT Knowledge (ITK)**	
	ITK1: "Our company IT department staff is knowledgeable about IT operations."	0.917
	ITK 2: "Our company IT department staff is able to solve IT-related problems in the company."	0.927
	ITK 3: "Our company IT department staff is knowledgeable about new computer-based innovations."	0.684
	IT Objects (ITO)	
	ITO1: "Our company has an independent Management Information System (MIS) department."	0.809
	ITO2: "In the MIS department, a manager is employed whose main duties include the management of our information technology."	0.827
	ITO3: "Our companies are linked by a computer network through Wide Area Network (WAN)."	0.860
	ITO4: "Our company is able to customise software applications if necessary."	0.777
	IT Operation (ITP)	
	ITP 1: "We routinely utilise computer-based systems to access information concerning our company operations."	0.895
	ITP 2: "We employ computer-based systems to analyse customer and market information."	0.806
	ITP3: "We frequently utilise a decision-support system when managing customer information."	0.863
	ITP4: "We have set procedures for collecting customer information from online sources before disbursing a loan. (.g. from SFD database)."	0.777
KM	**Knowledge acquisition (KA)**	
	KA 1: "We generate a lot of information related to market trends (e.g., regulations, technology, politics and economy)."	0.561
	KA 2: "We are fast to detect fundamental changes in our target market environment (e.g., regulations and economy)."	0.938
	KA 3: "We periodically review the likely effect of changes in our business environment (e.g., regulation and economy)."	0.909
	Knowledge sharing (KS)	
	KS 1: "The company disseminates the lessons learned from past failures among its employees."	0.942
	KS 2: "The company invests in IT systems that facilitate knowledge sharing among its workers."	0.878
	KS 3: "The company offers incentives to encourage knowledge sharing."	0.810
	Knowledge application (KAP)	
	KAP 1: "The company has processes for applying knowledge learned from mistakes or bad experiences."	0.739
	KAP 2: "The company uses knowledge to develop new products/services."	0.901
	KAP 3: "The company has processes for using knowledge to solve new problems."	0.825
	KAP 4: "The company facilitates communication among team members to generate good ideas about potential changes and solutions to problems."	0.842
OP	**Operational performance (OPP)**	
	OPP1: "Quality of the company's products/ services is high."	0.776
	OPP2: "The reliability of Our company products/ services is high."	0.941
	OPP3: "The company our products/ services delivery on time to customers."	0.938
	Employee performance (EP)	
	EP1: "Our company employees' commitment is high."	0.870
	EP2: "Our company employees' job performance is high."	0.866
	EP3: "Our company employees' absenteeism is low."	0.850
	EP4: "Our company employees' morale is high."	0.821
	EP5: "Our company employees' turnover rate is low."	0.830
	Innovation performance (IP)	
	IP1: "The technological competitiveness of the company is high."	0.886
	IP2: "The speed of new products/ services development is high."	0.928
	IP3: "The number of the company's new products that are first-to-market is high."	0.440
	Customer results (CR)	
	CR1: "Customer satisfaction has improved."	0.934
	CR2: "Customer retention has improved."	0.900
	CR3: "Customer complaints have decreased."	0.610
	Social responsibility (SR)	
	SOR1: "Protection of the environment in the company has developed."	0.940
	SOR2: "The company is actively involved in the community."	0.954
	Market and financial performance (MP)	
	MP1: "Return on assets of the company has increased."	0.674
	MP2: "Market share of the company has improved."	0.853
	MP3: "Profits of the company have grown."	0.860
	MP4: "Sales of our company have grown."	0.862

Figure 1 presents the measurement model.

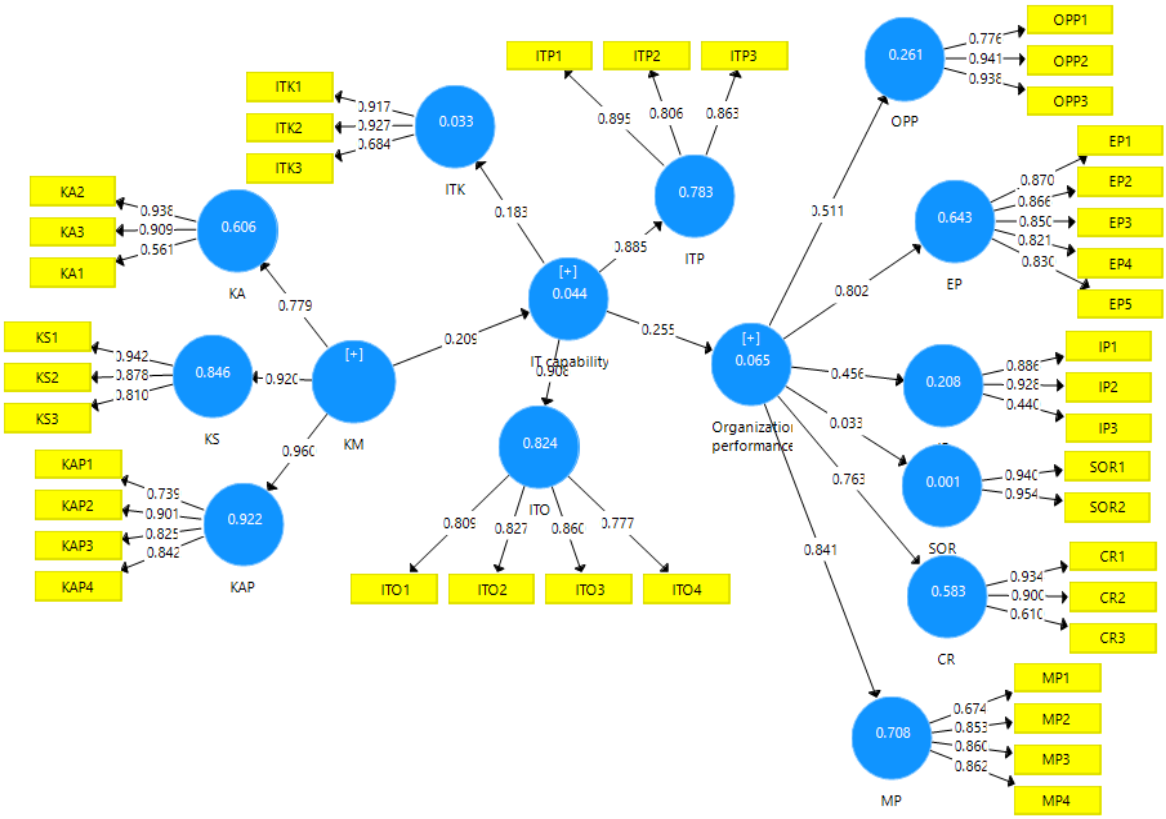

Figure 1: *Measurement Model*

Assessment of the Structural Model

Four criteria were used to examine the inner model of the structural model: R2 values, effect size (f2), predictive relevance of the model, and significance of the path coefficients (Hair et al., 2011). The endogenous latent variables' variance in the R^2 score indicates that the value for IT capability was 0.159, suggesting that KM accounts for about 16% of the variation in IT capability. The organisation's performance had an R-value of 0.257, meaning that both KM and IT capacity account for 26% of the variation in an organisation's performance. Cohen's (1988) recommended criterion R^2 evaluation qualifies as considerable. See Table 5.

Table 5: *Coefficient of Determination (R2)*

Latent Variables	*R^2*	*R^2 Percentage*
Organization performance	0.257	26%
IT capability	0.159	16%

The effect sizes for the IT capability and knowledge management were 0.108 and 0.247, respectively, as shown in Table 6. According to Cohen's (1988) guidelines, the F^2 of the three exogenous latent variables on OP can be classified as small to medium.

Table 6: *The Effect Size of the OP*

Construct	**Effect Size**	**Result**
Knowledge management	0.108	Small
IT capability	0.247	Medium

The cross-validated redundancy of IT competence was 0.049 and OP was 0.031,

indicating the predictive relevance of the model, according to the Smart PLS 3.0 results displayed in Table 7. Due to the fact that they were more than zero, these show that the model has a suitable level of prediction accuracy (Hair et al., 2011; Hair et al., 2014).

Table 7: *Predictive Quality Indicators of the Model*

Constructs	SSO	SSE	Q^2 (=1-SSE/SSO)
OP	327,000	316,719	0.031
IT Capability	6545,000	621,703	0.049

The global GoF measure, which is unique to PLS compared to other structural equation modelling (Tenenhaus et al., 2005), is determined by calculating the geometric mean of the AVE and the average R2 for endogenous variables. The threshold values of GoF can be 0.1, 0.25, and 0.36, which signify small, medium, and large, respectively (Wetzels, Odekerken-Schröder, and Oppen, 2009). This research's model GoF measure was significant, with a GoF value of 0.651, indicating a suitable and reliable global PLS model.

4.4 Hypothesis Testing

The hypotheses were examined once the measurement model's suitability was determined, and the PLS algorithm's path coefficient and bootstrapping results were produced. Table 8 presents the results of the hypothesis testing

Table 8: *Results of Hypothesis Testing*

No.	Hypothesis Path	Path Coefficient	Standard Error	T Value	P Value	Decision
H1	KM -> OP	0.139	0.050	2.751**	0.006	Supported
H2	KM -> IT capability	0.312	0.073	4.269***	0.000	Supported
H3	IT capability -> OP	0.445	0.109	4.085***	0.000	Supported

Significant level: ***: p<0.001; **: p<0.05; *: p<0.1

The outcomes of this research demonstrated that KM process positively and significantly affected the OP (β = 0. 139, t = 2.751, p<0.05). They also show the significant contribution of KM to OP. Additionally, the results demonstrates that KM significantly impacted IT capacity (= 0.3112, t = 4.269, p = 0.001). This outcome shows how important organisational resources like knowledge management are to organisational capabilities (IT capability). Moreover, IT capability positively and significantly impacted OP, albeit at a level slightly above (= 0.445, t = 4.085, p = 0.001). The Smart PLS calculates the indirect effect between these variables to investigate the mediating effects of IT capability in the relationship among KM and OP. The bootstrapping method was employed with the Baron and Kenny approach and the Variance Accounted For (VAF) method. According to the bootstrapping outcomes in Table 9 below, IT capability indirectly influenced the OP (= 0. 0.139, t = 2.751, p = 0.05). This confirms the role of IT capability in mediating the relationship among KM and OP.

Table 9: *Mediating Effect Results*

Hypo	Relationships	Std. Beta	Std. Error	t-value	P-values	Confidence Intervals CIs		Decision
						LLCI	ULCI	
H4	KM->IT->OP	0.139	0.050	2.751	0.006	0.074	0.246	Supported

The mediating role of IT capability in the relationship between KM and OP was confirmed by the Baron and Kenny method: 1. KM as the predictor variable significantly affected IT capability. 2. IT capability as a mediating factor significantly affected the OP. 3. KM as the predictor factor and significantly affected the OP when the IT variable was excluded from the model..

5. Discussion and Conclusion

This study investigated into how IT capability mediated the relationship among KM and the oOP of ICT companies in Jordan. The results show that KM positively and significantly affected OP, indicating that KM process implementation can improve Jordanian ICT companies' performance. These outcomes align with previous scholars such as Boussenna (2021), Kamal & Abu-Zaid (2019), Payal et al. (2019), Al-Sa'di et al. (2017), Alrubaiee et al. (2015), and Zack et al. (2009). Moreover, this outcome testifies to the mediating effects of IT capability on the association between the KM process and OP. It is certain that the KM process strongly and positively impacts IT capability, which indicates that implementing the KM process significantly affects outcomes in building IT capability. which shows that using the KM approach has a big impact on how IT capability is built. IT capabilities are necessary for KM process deployment to have a meaningful impact on the performance of an ICT organisation.. The first finding aligns with Hajir et al. (2015) and Areed et al. (2021). They argue that KM processes can be implemented to elevate organisational capabilities and the technological capability that result in superior performance and competitive advantage. The second finding is consistent with earlier research that demonstrated how important IT capabilities is to OP. (Siagian & Tarigan, 2021; Erkmen et al., 2020; Feng et al., 2019; Wei & Wei, 2017; Ong & Chen, 2013; Mazidi et al., 2014). It is considered mediation when IT capability has such a mediating impact on how the KM process and OP are related. .

ICT organisations are a significant sector in the business. This sector operates under continuous pressure. So, it continually seeks to develop its capabilities and strategies to boost performance, and performance sustainability has been an important issue. Unfortunately, limited knowledge regarding the factors that successfully help ICT company performance is available, and the KM process and the OP are linked in this research, and the mediating impact of IT capabilities is extremely important.. This outcome, indicating the mediating impact of IT on the significant association between the KM process and the OP, aligns with RBV and KBV theory concerning the function of organisational resources in building and boosting capabilities, as assured by the important and robust impact of the KM process on IT capability and the OP. This study makes a theoretical contribution by testing the integration among the KM process and OP with IT capability as the mediator. Moreover, the current research adds to the RBV and KBV theory by offering a better theoretical perspective on the role of capabilities and organisational resources and how they can improve organisational performance.

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