

Adnan M.  
Rawashdeh<sup>1</sup>  
Mohammad Salameh  
Almasarweh  
Eiad Basher  
Alhyasat  
Osama Mohammad  
Rawashdeh

**Article info:**

Received 13.10.2020  
Accepted 20.01.2021

UDC – 005.6  
DOI – 10.24874/IJQR15.02-01



## THE RELATIONSHIP BETWEEN THE QUALITY KNOWLEDGE MANAGEMENT AND ORGANIZATIONAL PERFORMANCE VIA THE MEDIATING ROLE OF ORGANIZATIONAL LEARNING

**Abstract:** *The purpose of this study is to explore the relationship between the quality knowledge management and organizational performance as mediated by organizational learning. A questionnaire survey was used to collect data from a sample of 300 employees working at Royal Jordanian Airlines Company. The questionnaire was developed based on past research, i.e., knowledge management was measured using 12 items, organizational learning was evaluated by 12 items while organizational performance was assessed via 8 items. Structural equation modeling (SEM) via The Analysis of Moment Structures, i.e., IBM AMOS 22 was used in hypotheses testing. The results showed that knowledge management has a positive direct impact on both organizational learning and organizational performance. Organizational learning has a positive direct effect on organizational performance. Furthermore, the results pointed out a significant indirect impact of knowledge management on organizational performance via organizational learning. To the best of the authors' knowledge, the relations included in this study have not, up to date, been investigated in aviation industry. Finally, leaders should motivate their followers to acquire more knowledge from different sources, which if practiced successfully, will support the organizational learning environment. Future research may examine these variables in another industry, context.*

**Keywords:** *Knowledge management; Organizational learning; Organizational performance; Aviation industry; Jordan.*

### 1. Introduction

In the present days of information society, the quality knowledge management and organizational learning area have called the attention of professionals and scholars and may grow continuously in the forthcoming decade (Nawab et al., 2015). The major cause behind the growth of this area is the support of knowledge employees in the

growth of knowledge economy (Jain and Moreno, 2015). According to Drucker (1999) the productivity of employee knowledge is the main challenge of this century and determining it as the real competitive advantage of a global economy. Thus, firms are invited to concentrate on the concept of knowledge management to reinforce organizational learning in the current century whether it is public or

<sup>1</sup> Corresponding author: : Adnan M. Rawashdeh  
Email: [adnanrawa@yahoo.com](mailto:adnanrawa@yahoo.com)

private sector, small or large firms. Prior research confirmed the positive association between knowledge management and organizational performance (Jyoti & Rani, 2017; Chien et al., 2015; Rehman and Abdul Rehman, 2015; Sarkindaji et al., 2014; Pension et al. 2013; Liao and Wu, 2009).

Furthermore, organizational learning is generally known as a continuous approach through which the firms exploit the capabilities of employees, their knowledge and attitudes, which enables them to meet the future by building a useful workplace of learning (Noruzi et al., 2013). King (2009) stress that organizational learning is a significant complementary to knowledge management. Previous findings have proven organizational learning effectiveness in different fields and industries, for instance, the governmental organizations (Jain & Moreno, 2015), automotive industry (Abdi et al., 2018), petroleum companies (Ranjbarfard et al., 2014), small & medium enterprises (Tseng, 2010), hotel industry (Subramaniam, 2005) education industry (Obeid & Rabay'a., 2016), technical organizations (Otieno, 2015), and bioethanol industry (Vieira, 2013). Most of these results show the direct interaction of organizational learning practices with different variables; however, there are limited empirical studies, which explore the mediating role of organizational learning especially in a large airline public sector organization in a developing country context such as Jordan. Accordingly, the present work emerged as an attempt to examine the impact of quality knowledge management on organizational performance via organizational learning in an airline company.

## 2. Literature Review and Hypotheses

### 2.1. Knowledge management

Most modern organizations consider information as one of the main assets that can create knowledge which lead to positive

performance. Drucker (1999) states that the firms are already having knowledge in their operations, whose thoughts are that raw materials, data, and products, and the workers brain became its device. Knowledge becomes a true fortune for both employees and firms (Wang et al., 2014). It is the strong and valuable device that firms can use to achieve their operations and accomplish their practices to meet their objectives effectively. Additional, knowledge creates and transforms innovations into products and processes (Maruf & Zhou, 2015). There is no agreement among researchers on a definite definition for KM (Al-Busaidi et al., 2010). (Obeid, 2016) suggested that knowledge definition must include an agent, who applies knowledge to do the required works to arrive an objective. After searching prior studies, several definitions can be found for knowledge management, although these definitions are not easy to be understood since there are several expressions regarding the connotation (Loria, 2008). But in general, Knowledge management is a vital tool for firms to make a strategic decision about bringing and implementing new acknowledges in their operations (Alnawaiseh et al, 2014).

Prior works have investigated knowledge management from different perspectives. Most of these studies assure that there are no definite facets of knowledge management. Accordingly, based on extensive review of prior studies, knowledge management work emphasized generally four facets: knowledge application, knowledge acquisition, knowledge transfer, knowledge storage. Hence, this study proposes four dimensions of knowledge management in accordance with most past studies.

KM acquisition, the most effective way to get knowledge is to buy it. A firm can buy from another firm or recruit employees that have knowledge (Ranjbarfard et al., 2014). Knowledge acquisition is known as a way of extracting, organizing, and structuring knowledge from a single source such as talents (Pacharapha & Vathanophas, 2012).

KM storage is known as storing the generated and acquired knowledge in suitable framed and inter-connected knowledge repositories (Ranjbarfard et al., 2014). KM storage is a constantly mechanism that preserving and handling information in knowledge bases and firm recollection archive. This needs continuously refreshing firm recollection archive and enhancing interaction ways to be available for individuals (Al-Ali, 2013). Knowledge transfer aims to ensure the availability of knowledge for future users. Knowledge transfer emphasize the transferring of technology, experiences, expertise, and intellectual capital that can provide positive organizational performance (Valaei et al., 2017; Zwain et al., 2012). It is vital for firms to provide their individuals with context about the knowledge transfer and keep them feeling involved in the process (Soraya & Moustaghfir, 2019; Sarkindaji et al., 2014) Finally, Knowledge application is a way of providing knowledge into a company operations. The application of knowledge properly ensures that the firm's objectives are attained successfully (Bouraghda & Dris, 2015).

## 2.2. KM and organizational learning

Knowledge management may serve as a transformation tool that can help organizations in a learning design (Ranjbarfard et al., 2014). It is confirmed as a major vital source of OL (Obeid & Rabay'a, 2016). OL viewed as a vibrant tool regarding knowledge, which requires transferring across the different levels within the organization (Huber, 1991). Most scientific literature confirmed the positive effect of KM to OL. Abdi et al., (2018) conduct a study on 279 automobiles parts companies in Lithuania and found a significant relationship between KM and OL. In their study, Liao & Wu (2009) reported a significant association between KM and OL. Jain and Moreno (2015) conduct a research in India and confirm a

significant effect of KM on OL. Noruzy et al. (2012) proposed a significant and direct effect of KM to OL. Otieno (2015) assure significant linkage of KM with OL. Contrariwise, Gorelick and Tantawy-Monsou (2005) found KM has no relation with OL. Based on the aforementioned work the present research proposes this hypothesis:

H1. KM has a significant influence on OL.

## 2.3. Organizational learning and organizational performance

Different studies have showed the significance of OL to business performance. A good OL that firms have is serving as a processor of KM not basically gatherer or repository of it. Clients, individuals, rivals' complaints should be taken into consideration to improve business capabilities (Jiménez-Jiménez & Sanz-Valle, 2011). Scientific research proposes that adopting of excellent policies may lead organizations to gain long-run supernormal profits (Liao & Wu, 2009). Prior studies show a significant influence of organizational learning on organizational performance (Luxmi, 2014; Wu and Chen, 2014). Besides, Power and Waddell (2004) concluded that OL demonstrate a moderate effect to different measures of performance. Tseng (2010) has conducted study in Taiwan and showed that organizational effectiveness is related to organizational learning culture. Jain & Moreno (2015) conducted a study in India on large engineering company and found a significant correlation between OP and OL. Based on the aforementioned work the present research proposes this hypothesis:

H2. OL has a significant influence on OP.

## 2.4. KM and organizational performance

When organizations evolve better knowledge management competencies, they can more successfully improve organization effectiveness (Chien et al., 2015). With

proper knowledge management competencies, organizations may gain and apply knowledge more intellectually and successfully, which results in high level of organizational performance (Jain and Moreno, 2015). Meso and Smith (2000) recognized KM as the generation of sustainable business performance through constant organizational learning. Various studies have found a significant relationship between KM and OP (Pension et al., 2013; Sarkindaji et al, 2014; Rehman and Abdul Rehman, 2015 Jyoti & Rani, 2017). Additionally, in his study Tseng (2014) concluded that corporate performance is related to KM capability and supplier-relationship management. Jain and Moreno (2015) carried study in India and found a positive correlation between knowledge management practices and organizational performance. Liao and Wu (2009) found that organizational learning mediate the indirect influence of knowledge management on organizational performance. In his work, Ho (2008) maintained that KM and OL show a positive influences on OP. Based on the aforementioned work the current research proposes this hypothesis:

H3: KM has a significant influence on OP.

**2.5. Mediator between KM and performance**

The available studies demonstrate OL as a mediating factor between various variables. For instance, Abdi et al. (2018) studied KM, corporate culture, and Innovation through

OL. Nouri et al (2017) examines the effect of KM on firm innovation via OL. Nouri et al. (2017) examines the effect of KM on firm innovation via OL. Kalmuk and Acar (2015) examine the intervening effect of organizational learning on the relationship between Innovation and organizational performance. Karasneh (2019) employed organizational learning as a mediator between knowledge management and innovation. In fact, few researches have employed OL to mediate the impact of knowledge management on organizational performance. Noruzy et al. (2013) studied the relationship between transformational leadership, knowledge management and organizational performance through organizational learning and found indirect effect in the relation. Liao and Wu (2009) found that KM affects OP indirectly through organizational learning. Jain and Moreno (2015) found that organizational learning influence indirectly the relationship between KM practices and organizational performance. Imran et al. (2017) found significant effect of OL on the interaction of KM with business performance. King (2009) consider OL as a driver of KM. Consequently, KM is an important input, and OL is a leading mechanism. Finally, firm performance is a critical output. Based on the aforementioned work the present research proposes this hypothesis:

H4: organizational learning has a mediating effect on the relationship between knowledge management and organizational performance.

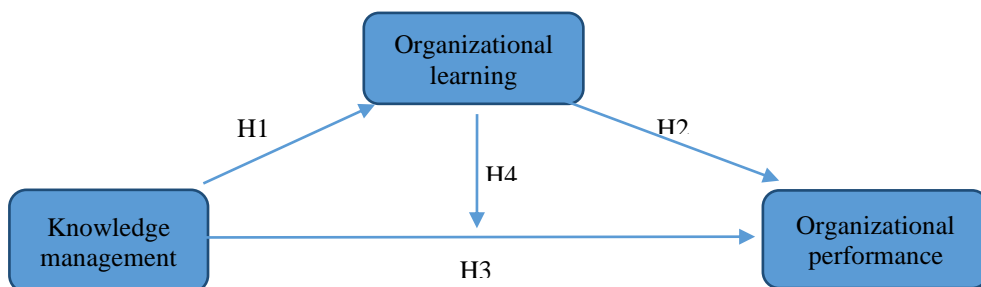


Figure 1. Conceptual Model

### 3. Research methodology

#### 3.1. Operational measures

This study has adopted a questionnaire survey method. It has been developed on the ground of past empirical studies, which consist of KM, OL, and OP. The instrument comprises a two-part questionnaire, the first part shows the demographic profile of the respondents and the other part shows the research variables items based on 5-point Likert scale ranging from “1” for “strongly disagree” to “5” for “strongly agree”. Quality Knowledge management was assessed by 12 items, adapted from Sweis et al. (2011), Valaei et al. (2017), and Wang et al. (2014). Organizational learning was assessed by 12 items, taken from the work of Subramaniam (2005), Ho (2008), Abdi et al. (2018) and Jain and Moreno (2013). Organizational performance was assessed by 8 items taken from the studies by Delaney and Huselid (1996), Tippins and Sohi (2003), Ho (2008), and Sarkindaji et al. (2014).

Moreover, before starting the data gathering a pilot study was conducted. A total number of 20 questionnaires were sent by E mail to the study population; to make sure that participants from the population understand the paragraphs of the questionnaire and the way to respond and answer its paragraphs without any misunderstandings. A total of 15 questionnaires were collected that gives 75 %, which means a good response rate. Additionally, the participants in the pilot study were asked to give suggestions to enhance the quality of the questionnaire; however, based on their comments, minor modifications were made on these items to fit the aviation industry, our research context

#### 3.2. Population and sampling

The population of this study is all permanent employees of royal Jordanian airlines company. A 300 middle management employees consist of Head of Department,

manager, and supervisor were included in this study. The size of sample plays a very significant role in the assessment and explication of SEM findings. Indeed, a sample size between 200 and 400 is suitable for research study according to (Hair et al., 2010). A Census Method is the sampling technique that was adopted in this research, this means that all of the 300 respondents included in this research are considered as a study sample. The demographic data of the sample are reported in Table 1.

**Table 1.** Sample profile

Cat.	Freq.	Perce.
<b>Sex</b>		
Male	164	55%
Female	136	45%
<b>Age</b>		
Less than 30 years	8	3%
30 – less than 40 years	174	58%
40 years and above	118	39%
<b>Experience</b>		
Less than 10 years	5	2%
10 -20 years	168	56%
20 years and above	127	42%
<b>Position</b>		
Head of department	37	12%
Manager	75	25%
Supervisor	188	63%

Table 1 showed that the respondents for the present research are more males, 98% of them are more than 10 years’ experience, 63% of them are in supervisor position, and 97% of the respondents’ are above 30 years.

## 4. Research results

### 4.1. Test of normality and multicollinearity

Data should be normally distributed to run regression analysis. Kolmogorov-Smirnov (K-S) statistics were used to explore the extent to which the current data have no significant differences in comparison with the normal distribution. The results in Table 2 show that the present data are normally distributed, since all K-S statistics are non-significant (Lin et al., 2020). Multicollinearity was tested based on tolerance and variance inflation variance (VIF). The results indicated that the current predictors are free of multicollinearity since all values of VIF is less than 5 and tolerance values are greater than 0.20 (Chan et al., 2020).

**Table 2.** Tests of data normality and multicollinearity

Constructs	Kolmogorov-Smirnov		Collinearity Statistics	
	Statistic	Sig.	Tolerance	VIF
KM	0.243	0.200*	0.591	1.692
OL	0.187	0.200*	0.546	1.833
OP	0.239	0.200*	0.675	1.482

\* This is a lower bound of the true significance.

### 4.2. Correlation matrix

Correlation coefficients as depicted in Table 3 reveal that KM has a significant correlation with both OL ( $r = 0.366$ ,  $P < 0.010$ ) and OP ( $r = 0.481$ ,  $P < 0.01$ ). As well, OL has a significant correlation with organizational performance ( $r = 0.298$ ,  $P < 0.010$ ).

### 4.3. Descriptive statistics

Means and Std. dev. (SD) of research variables as illustrated in Table 4 show that

organizational performance has the biggest value of mean (mean = 3.86, Std. Dev. = 0.86), followed by knowledge management (mean = 3.81, Std. Dev. = .77) and organizational learning (mean = 3.77, Std. Dev. = .91).

**Table 3.** Correlation coefficients

Constructs and correlations		KM	OL	OP
KM	Pearson correlation	1		
OL		0.366**	1	
OP		0.481**	0.298**	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Table 4.** Means and standard deviations of research variables

Constructs	No.	Min.	Max.	Mean	Std. Dev.
KM	300	1.00	5.00	3.81	0.77
OL	300	1.00	5.00	3.77	0.91
OP	300	1.00	5.00	3.86	0.86

### 4.4. Exploratory factor analysis

Factor reduction is an investigation of the distribution of research variables on their related items. Tables 5 indicates the results of (EFA) which used to achieve this objective. The results indicate that knowledge management has 12 items with factor loadings values between .694 and .864, organizational learning has 12 items with factor loadings values between .633 and .884 and finally organizational performance has 8 items with factor loadings values between .654 and .784. Values of factor loadings are acceptable because all of them are above .50 (Raza et al., 2020).

In terms of validity and reliability, the results indicate that AVE results are above .50 while CR results are above .70 and alpha coefficients are no less than 0.7 (Hair et al., 2019; Albayrak et al., 2020).

**Table 5.** Results of EFA, validity and reliability

Variables	Factor loadings		Validity and reliability		
	Items	Value	AVE	CR	$\alpha$
Knowledge management	KM1	0.784	0.599	0.947	0.935
	KM2	0.721			
	KM3	0.838			
	KM4	0.821			
	KM5	0.694			
	KM6	0.764			
	KM7	0.788			
	KM8	0.711			
	KM9	0.864			
	KM10	0.753			
	KM11	0.742			
	KM12	0.786			
Organizational learning	OL1	0.884	0.531	0.931	0.922
	OL2	0.863			
	OL3	0.721			
	OL4	0.668			
	OL5	0.694			
	OL6	0.635			
	OL7	0.687			
	OL8	0.711			
	OL9	0.633			
	OL10	0.723			
	OL11	0.745			
	OL12	0.736			
Organizational performance	OP1	0.784	0.534	0.901	0.918
	OP2	0.741			
	OP3	0.753			
	OP4	0.786			
	OP5	0.751			
	OP6	0.668			
	OP7	0.698			
	OP8	0.654			

AVE: average variance extracted, CR: composite reliability,  $\alpha$ : Cronbach's alpha coefficient.

**4.5. Measurement model fit**

Chi-square ratio ( $\chi^2/df$ ) = 2.76 (less than 5.00), Goodness of Fit Index (GFI) = 0.911 (more than 0.90), Comparative Fit Index (CFI) = 0.928 (more than 0.90) and Root Mean Square Error of Approximation (RMSEA) = 0.059 (less than 0.080) indicate that the measurement model fits the data (Hair et al., 2010).

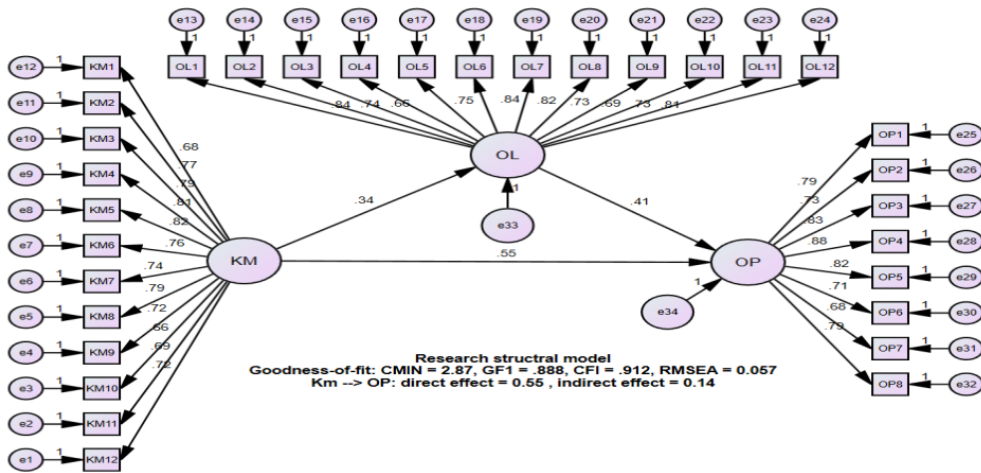
**Table 6.** Measurement model fit summary

Index	Value	Criterion
Chi-square ratio	2.76	Less than 5.00
Goodness of Fit Index	0.911	Greater than 0.90
Comparative Fit Index	0.928	Greater than 0.90
Root Mean Square Error of Approximation	0.059	Less than 0.080

**4.6. Structural model**

Fig. 2 indicates the structural model for present study. The model illustrates four hypotheses: KM shows a positive impact on OL as well as OP (H1 & H2) while OL shows a significant impact on OP (H3). OL mediates the interaction between KM and OP (H4). The results in Figure 2 demonstrate that the structural model meets the required goodness-of-fit thresholds:  $\chi^2/df$

= 2.87, GFI = 0.888. CFI = 0.912, RMSEA = 0.057 (Hair et al., 2010). The values of hypotheses testing in Table 7 signify that KM shows direct impact on OL ( $\beta = 0.34$ ,  $P < 0.05$ ) and OP ( $\beta = 0.34$ ,  $P < 0.05$ ). OL shows a direct impact on OP ( $\beta = 0.41$ ,  $P < 0.05$ ). Further, KM has a positive direct impact on OP ( $\beta = 0.55$ ,  $P < 0.05$ ) and a positive indirect impact on OP ( $\beta = 0.14$ ,  $P < 0.05$ ). Based on these results, all research hypotheses are supported.



**Figure 2.** Research structural model

**Table 7.** Results of hypotheses testing

Default Paths			Total effects		Direct effects		Indirect effects	
			$\beta$ *	P **	$\beta$ *	P **	$\beta$ *	P **
KM	→	OL	0.34	0.000	0.34	0.000	-	-
OL	→	OP	0.41	0.000	0.41	0.000	-	-
KM	→	OP	0.69	0.000	0.55	0.001	0.14	0.002

\* standardized effects. \*\* significant at ( $\alpha$ ) = 0.05

**5. Discussion**

The motivation behind this present study is to examine the influence of OL on the effect of KM to OP. little is recognized concerning the interrelationships among these variables in developing countries particularly in aviation industry. The majority of research conducted up to this day investigating these variables in west countries context. The current study examines the relations between

KM, OL, and OP in Royal Jordanian Airlines Company.

The findings of current work reveal, first, result concluded that KM have positive and significant relationship with OL, in which the stronger KM, the greater is the OL. This finding in harmony with past results reached by Obeid & Rabay'a (2016), Abdi et al. (2018), Otieno (2015), Noruzy et al. (2012). The hypotheses formulated in this research demonstrated result which is agree also with



study carried by Ranjbarfard et al. (2014) which maintains that there is a significant direct relation of KM with OL. Liao & Wu (2009) argue that the adoption of KM may deliver more influence on firm innovation when firm mentioned learning in their strategic plan. Jerez-Gómez et al. (2005) refer that KM is considered as a valuable engine to OL. OL is viewed as an active way related to KM, which means exchanging across all levels within the organizations (Huber, 1991). Dimitriadis (2005) maintained that successful learning needs evolving a leading learning strength through connecting knowledge management and organizational learning within and across the firm levels. Finally, the findings concluded that there is also the opportunity to learn from the employees of Jordanian Airlines Company as they are capable to recognize what is going on around them on issues related to the administrative work and the willing and interest to learn and this assures the fact that addresses the significant association of KM with OL.

The second result reveal that there is a significant impact of OL on OP. This conclusion is concurring with Jain & Moreno (2015), Noruzy et al. (2013) and Luxmi (2014) conclusions. The premise behind that is attributed to the fact that organizations that have a strong organizational learning can create positive performance levels. This also means that the factors that facilitate learning are sufficient for providing positive organizational performance. Garcia-Morales et al (2012) argue it may be supposed that learning can stimulate organizational performance. Positive performance relies on superior learning. Thus, organizational learning is recognized as the key to the organization growth; likewise, the ability to learn better than the rivals can create positive and sustainable organizational performance (Liao and Wu, 2009).

The result is agreed with Imran et al. (2017) who assured a positive correlation between OL and OP. Improvement in activities of

learning organizations among individuals increase knowledge, abilities, and skills to support company performance. According to Kalmuk and Acar (2015), OL may influence OP positively. Most employees agree that learning organizations become an asset for increasing performance. All in all, this result demonstrates that OL indicates a leading path to effectiveness and performance of aviation companies.

Third, the result confirms a significant influence of KM on OP. This result consistent with Jyoti & Rani, (2017), Sarkindaji et al. (2014), Liao and Wu (2009) results. KM also focuses on managing firm knowledge capabilities and supporting different dimensions of performance. This finding concurs with the result of Chien et al. (2015) that stated KM is a tool which participates in enhancing competitiveness and enables firms to establish a successful operation atmosphere. Knowledge remains as a significant part in increasing performance and supporting the firm's daily routine practices. Companies' systems require valuable knowledge from reliable sources such as IT intelligent system to improve operation and stay competitive in the market. Furthermore, knowledge management may also provide organizations with a new information, creative solutions for challenges, and enhance and renovate the products or services as well. Scientific literature by Pension et al. (2013), Rehman and Abdul Rehman (2015), Tseng (2014) also found a significant effect of KM practices on the OP. in fact, Knowledge is a significant capability to create positive performance and as a valuable tool to the growth and prosperity of firms within a turbulent changing business climate (Sarkindaji et al, 2014). The acquiring, generating, and sharing of fresh knowledge may turn out to a positive performance for firms that highly really on their products, services, and knowledge. Consequentially, knowledge management helps firms to compete successfully and outperform rivals (Jain & Moreno, 2015).

Fourth, findings also show that KM has indirect relationship with OP via OL. This result is agreed with (Liao & Wu, 2009; Imran et al, 2017; Jain & Moreno, 2015) results. Organizational learning is always relied on knowledge management. Indeed, it is essential part of knowledge management. King (2009) assured that organizational learning is a significant integral part to knowledge management. Thus, if an organization needs to enhance its performance, it should concentrate on establishing a suitable knowledge workplace that stimulates continual learning. This research indicated this interaction and assure the positive effect of KM to OL. Consequentially, a knowledge management that emphasizes on supporting OL eventually provide increase in OP. Knowledge adoption by firm may point out to increase in performance in Jordanian Airlines Company. Hence, we conclude that organizational learning in organizations can be recognized as a knowledge facilitator that leads the firms' individuals towards a shared vision of performance. Thus, Jordanian Airlines Company may enjoy learning by acquiring new knowledge which leads to performance improvement.

Furthermore, this research delivers various benefits to literature. It assures organizational learning helps in increasing performance in Airlines Company of eastern context. It shows some advantages of adopting knowledge management and organizational learning in Jordanian Airlines Company. It supports the association between knowledge management and performance literature by confirming OL as essential as KM to support OP. Finally, the present work is carried in aviation sector that has not received much attention by most of past research.

## 6. Implications

The current research provides theoretical and practical implications. The theoretical implication is contributing to the literature

by indicating OL as a mediator between KM and OP. To the best of the authors' knowledge, there is limited empirical research concerning these variables on aviation organizations in a developing country context. This paper findings can be considered as essential device for future studies as it may serve as an engine for upcoming research concerning KM, OL, and OP in developing country context.

In the same vein, the managerial implications of this research, leaders should consider organizational learning the same essential as knowledge management within their company. The existence of OL helps improve OP. This implies that organizational learning should be applied within firms to provide organizational performance and thus a competitive edge in the long run. Also, leaders should motivate their followers to acquire more knowledge from different sources, which, if practiced successfully, will support the organizational learning atmosphere. Involvement of all individuals of the organization beginning from the bottom to up is required to enhance the effectiveness of learning organization. Leaders must keep in mind the fact that the capacity to learn quicker than rival is simply the key driver of sustainable performance in the future. Senge's (1990) fifth discipline of organizational learning "*where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together*".

## 7. Limitations and future research

The present work has some limitations that serve as a ground for future work. First, regarding context, the present work is conducted in a developing country, Jordan, and it was carried in aviation sector, Jordanian Airlines Company. Accordingly, the results cannot be generalized around the world because of differences in cultures,

sectors or industries (Hofstede, Hofstede and Minkov, 2010). Second, this work emphasizes and restricting the examination on four knowledge management variables (i.e., acquisition, transfer, storage, and application) indeed, knowledge management disciplines include some other facets (e.g., creation, conversion, adaptation, donating, adoption, embodiment, etc.). So, studying all knowledge management variables will expand the findings domain. Third, the research's sample has only examined middle management level in surveyed company leaving out other levels. Thus, investigating the same variables that include all management levels may improve the study results. Fourth, the measures adopted in this work were taken from various past researches within the current literature. These items validity and reliability were examined by prior scholars and the present

research as well. So, adopting some of these measures in the future research may help in acquiring better findings.

## 8. Conclusion

The present research demonstrates the importance of KM with OL and OP. 300 middle management respondents were the sample of this work. To investigate the study hypotheses, structural equation modeling was applied. Research findings show a significant positive association between both KM and OL, KM and OP. Consequently, the results underlined a significant mediation of learning in the relationship between KM and OP. Thus, effective adoption of organizational learning by anyways shows the need to utilize knowledge management creating an organizational performance.

## References:

- Abdi, K., Mardani, A., Senin, A., Tupenaite, L., Naimaviciene, J., Kanapeckiene, L., & Kutut, V. (2018). The effect of knowledge management, organizational culture and organizational learning on innovation in automotive industry. *Journal of Business Economics and Management*, 19(1), 1-19.
- Al-Ali, R. M. (2013). *The relationship between knowledge management processes, organizational innovation and its effect on organizational performance: An applied study at the ICT (information and communication technology) sector in Jordan*. (Unpublished master's thesis). Middle East University, Amman, Jordan.
- Albayrak, T., Karasakal, S., Kocabulut, Ö., & Dursun, A. (2020). Customer loyalty towards travel agency websites: The role of trust and hedonic value. *Journal of Quality Assurance in Hospitality & Tourism*, 21(1), 50-77.
- Al-Busaidi, K. A., Olfman, L., Ryan, T., & Leroy, G. (2010). Sharing knowledge to a knowledge management system: Examining the motivators and the benefits in an Omani organization. *Journal of Organizational Knowledge Management*, 201(25835), 1-12.
- Alnawaiseh, M., Al-Omari, B. M., & Al-Rawashdeh, A. (2014). Ways to take advantage of knowledge management in Jordanian educational institutions. *International Journal of Business and Management*, 9(7), 162-172.
- Bouraghda, H. T., & Dris, N. B. (2015). The impact of knowledge sharing on the human resources performance: A case study of TV and NR's production unit of CONDOR Company in Algeria. *The Jordan Journal of Business Administration*, 11(4), 841-868.
- Chan, K. H., Chong, L. L., & Ng, T. H. (2020). Are Malaysian companies ready for environmental practices? An extension of theory of planned behavior. *International Journal of Energy Economics and Policy*, 10(1), 495-507.

- Chien, Y. C., Yuan, K., & Hsiung, K. (2015). The influences of knowledge management on organizational performance of Taiwan-listed IC design houses: Using intellectual capital as the mediator. *The Journal of International Management Studies*, 54(10), 50-67.
- Delaney, J.T., & Huselid, M.A. (1996). The impact of human resource management practices on perceptions of performance in for-profit and nonprofit organizations. *Academy of Management Journal*, 39, 949-969.
- Dimitriades, Z. S. (2005). Creating strategic capabilities: Organizational learning and knowledge management in the new economy. *European Business Review*, 17(4), 314-324.
- Drucker, P.F. (1999). *Management Challenges for the 21st Century*. Butterworth-Heinemann, Oxford.
- Garcia-Morales, V., Barrionuevo, M., & Gutierrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research*, 65, 1040-1050.
- Gorelick, C., & Tantawy-Monsou, B. (2005). For performance through learning, knowledge management is the critical practice. *The Learning Organization*, 12(2), 125-139.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2010). *Multivariate data analysis*. New Jersey: Prentice-Hall.
- Hair, J.F., Risher, J.J., Sarstedt, M., & Ringle, C.M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- Ho, L. (2008). What affects organizational performance? The linking of learning and knowledge management. *Industrial Management & Data Systems*, 108(9), 1234-1254.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the Mind* (3rd Ed.). New York, NY, USA: McGraw-Hill Education.
- Huber, G.P. (1991). Organizational learning: the contributing processes and the literatures. *Organization Science*, 2(1), 88-115.
- Imran, M. K. (2014). Impact of knowledge management infrastructure on organizational performance with moderating role of KM performance: An empirical study on banking sector of Pakistan. *Information and Knowledge Management*, 4(8), 85-98.
- Jain, A., & Moreno, A. (2015). Organizational learning, knowledge management practices and firm's performance: An empirical study of a heavy engineering firm in India. *The Learning Organization*, 22(1), 14-39.
- Jerez-Gomez, P., Céspedes-Lorente, J., & Valle-Cabrera, R. (2005). Organizational learning capability: A proposal of measurement. *Journal of Business Research*, 58(6), 715-725.
- Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research*, 64(4), 408-417.
- Jyoti, J., & Rani, A. (2017). High performance work system and organizational performance: Role of knowledge management. *Personnel Review*, 46(8), 1770-1795.
- Kalmuk, G., & Acar, A. Z. (2015). The mediating role of organizational learning capability on the relationship between innovation and firm's performance: A conceptual framework. *Procedia – Social and Behavioral Sciences*, 210, 164-169.
- Karasneh, A. (2019). Reinforcing innovation through knowledge management: Mediating role of organizational learning. *Interdisciplinary Journal of Information, Knowledge and Management*, 14, 235-252.

- King, W. R. (2009). *Knowledge management and organizational learning*. Springer, US.
- Liao, S., & Wu, C. (2009). The relationship among knowledge management, organizational learning, and organizational performance. *International Journal of Business and Management*, 4(4), 64–76.
- Lin, H. H., Tseng, T. H., Yeh, C. H., Liao, Y. W., & Wang, Y. S. (2020). What drives customers' post-purchase price search intention in the context of online price matching guarantees. *Journal of Retailing and Consumer Services*, 54, 1-10.
- Lloria, M. B. (2008). A review of the main approaches to knowledge management. *Knowledge Management Research & Practice*, 6(1), 77-89.
- Luxmi, M. (2014). Organizational learning act as a mediator between the relationship of knowledge management and organizational performance. *Management and Labour Studies*, 39(1), 31-41.
- Maruf, H., & Zhou, S. (2015). Knowledge management in global organization. *International Business Research*, 8(6), 165-173.
- Meso, P., & Smith, R. (2000). A resource-based view of organizational knowledge management systems. *Journal of Knowledge Management*, 4(3), 224-234.
- Nawab, S., Nazir, T., Zahid, M., & Fawad, S. (2015). Knowledge management, innovation and organizational performance. *International Journal of Knowledge Engineering*, 1(1), 43-48.
- Noruzi, A., Dalfard, V., Azhdari, B., Nazari-Shirkouhi, S., & Rezazadeh, A. (2013). Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: an empirical investigation of manufacturing firms. *International Journal of Advanced Manufacturing Technology*, 64, 1073-1085.
- Nouri, B. A., Ghorbani, R., & Soltani, M. (2017). The effect of knowledge management on organizational innovation with the mediating role of organizational learning (case study: Agricultural Bank in Iran). *Journal of Applied Economics and Business Research (JAEBR)*, 7(3), 194-211.
- Obeid, S. M., & Rabay'a, S. (2016). The impact of knowledge management dimensions in the learning organization from the perspective of the Arab American University's (AAU) faculty–Palestine. *Jordan Journal of Business Administration*, 12(4), 813-840.
- Obeidat, B.Y., Al-Suradi, M., Masa'deh, R., & Tarhini, A. (2016). The impact of knowledge management on innovation: An empirical study on Jordanian consultancy firms. *Management Research Review*, 39(10), 1214-1238.
- Otieno, D. (2015). *Improving learning and knowledge sharing in a technical support team*. (Master's Degree, Helsinki Metropolia University of Applied Sciences).
- Pacharapha, T., & Vathanophas, R. (2012). Knowledge acquisition: The roles of perceived value of knowledge content and source. *Journal of Knowledge Management*, 16(5), 724-739.
- Pension, K., Nyasha, M., Sheiller, M., & Vhuramai, C. (2013). Impact of knowledge management on organizational performance: A case study of grain marketing board (GMB). *Greener Journal of Business and Management Studies*, 3(6), 270-278.
- Power, J., & Waddell, D. (2004). The link between self-managed work teams and learning organizations using performance indicators. *The Learning Organization*, 11(3), 244-259.
- Ranjbarfard, M., Aghdasi, M., López-Sáez, P., & López, J. E. N. (2014). The barriers of knowledge generation, storage, distribution and application that impede learning in gas and petroleum companies. *Journal of Knowledge Management*, 18(3), 494-522.

- Raza, M., Salleh, S., Tariq, B., Altayyar, R., & Shaari, H. (2020). Investigating the effects of customer-based brand equity on turnover intentions with mediating effect of customer citizenship behavior. *Management Science Letters*, 10(2), 279-286.
- Rehman, W. U., & Abdul Rehman, C. (2015). Linking intellectual capital and knowledge management with organizational performance: A meta-review analysis. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 5(2), 63-73.
- Sarkindaji, B., Hashim, N., & Abdullateef, A. (2014). Knowledge management and organizational performance of mobile service firms in Nigeria: A proposed framework. *Information and Knowledge Management*, 4(11), 88-95.
- Soraya, D., & Moustaghfir, K. (2019). International faculty, knowledge transfer, and innovation in higher education: A human resource development perspective. *Human Systems Management*, 38(4), 423-431.
- Subramaniam, R. (2005). *A multivariate study of the relationship between organizational learning, organizational innovation and organizational climate in the Australian hotel industry*. (Unpublished doctoral dissertation). Swinburne University of Technology, Melbourne.
- Sweis, R., Fallaq, M., Buqjati, J., & Abu-Hammad, A. (2011). Knowledge management processes and effect on achieving competitive advantages: A case study of Jordan telecom group "Orange". *Dirasat: Administrative Sciences, Jordan University*, 7(4), 511-526.
- Tippins, M. J., & Sohi, R. S. (2003). It competency and firm performance: Is organizational learning a missing link. *Strategic Management Journal*, 24, 745-761.
- Valaei, N., Nikhashemi, S. R., & Javan, N. (2017). Organizational factors and process capabilities in a KM strategy: Toward a unified theory. *Journal of Management Development*, 36(4), 560-580.
- Vieira, D. (2013). *Interorganizational learning in the Brazilian bioethanol industry*. Paper presented in Management Knowledge and Learning International Conference, Zadar, Croatia.
- Wang, Z., Wang, N., & Liang, H. (2014). Knowledge sharing, intellectual capital and firm performance. *Management Decision*, 52(2), 230-258.
- Wu, L., & Chen, J. (2014). Knowledge management driven firm performance: The roles of business process capabilities and organizational learning. *Journal of Knowledge Management*, 18(6), 1141-1164.
- Zwain, A. A., Teong, L. K., & Othman, S. N. (2012). Knowledge management processes and academic performance in Iraqi HEIs: An empirical investigation. *International Journal of Academic Research in Business and Social Sciences*, 2, 273-293.

---

**Adnan M. Rawashdeh**

The University of Jordan,  
Amman,  
Jordan  
[adnanrawa@yahoo.com](mailto:adnanrawa@yahoo.com)

**Mohammad Salameh  
Almasarweh**

The University of Jordan,  
Amman,  
Jordan  
[m.almasarweh@ju.edu.jo](mailto:m.almasarweh@ju.edu.jo)

**Eiad Basher Alhyasat-  
Al-Balqa**

Applied University,  
Amman,  
Jordan  
[Eyad.hyasat@Bau.edu.jo](mailto:Eyad.hyasat@Bau.edu.jo)

**Osama Mohammad  
Rawashdeh**

[osamahmoham@yahoo.com](mailto:osamahmoham@yahoo.com)

---