

Impact of IT support system and Organizational Culture on Innovation and Job Performance: Mediating role of KM Attitude

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ABSTRACT

The purpose of this paper is to analyze the role of information support system and organizational culture on knowledge management (KM) attitude of the organization which in turn leads to innovativeness among the employees and improve their job performance. The study uses the sample of 200 employees of the IT organizations and performs Structural Equation Modeling to assess the links between IT support, Organizational Culture (OC), KM Attitude, Innovativeness and Job Performance. Mediation of KM attitude of employees is assessed using PROCESS Macro. The study finds a significant relationship between presence of information technology support system available in the organization along with culture of the organization and level of knowledge sharing attitude among the employees of organization. Secondly, knowledge management attitude is directly related with innovation and performance of the employees. The study also establishes the mediating role of knowledge management attitude between technological support, OC with innovative competence and job performance of the employees.

Keywords: Information Technology, Knowledge Management, Innovativeness, Job Performance, Mediation

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1. INTRODUCTION

In today's competitive and changing business practices, innovation is the only mainstay to survive. Organisations have to ensure innovative strategies for facing competition and gaining competitive advantage. For this, presence of knowledge management which recently has been emerged as a new discipline is essential. Knowledge management is an antecedent for innovation. Accordingly, to (*Adams and Lamont, 2003; Cardinal et al., 2001; Darroch and McNaughton, 2002; Pyka, 2002; Shani et al., 2003*), Innovation is largely dependent on the accessibility of knowledge and therefore the difficulty shaped by the burst of richness and spread of knowledge has to be identified and achieved to ensure fruitful innovation. *Cardinal et al. (2001)* state that for product development, innovation in the technical, physical, and knowledge-based activities are essential. *Herkema (2003)* defines innovation as a knowledge procedure meant at generating new information geared near the growth of commercial and viable solutions. Innovation is a process wherein knowledge is acquired, shared and assimilated with the aim to create new knowledge, which embodies products and services. Innovation contains the effective exploitation of new the ideas (*Amabile et al., 1996*) and is therefore allied with the formation and use of knowledge. *According to Stewart (1997)*, for running any business, the managing knowledge and human capital is important yet few individuals understand this challenging area; and, given the potential of knowledge management (KM) and intellectual capital as sources of innovation and renewal, business strategy should be focusing more on these issues.

To create value and meet systematic requirement of the organisation knowledge management play an important role into it. It enhances the knowledge creation capacity in the organisation which includes assessment, creation of knowledge, storage, sharing and refinement of knowledge. Knowledge management comprises of leveraging and recognizing the collective knowledge in an association to contribute to its performance (*Krogh, 1998*). KM consists of the formation and submission of knowledge as a resource (*Spender, 1996*) The three essential components required for the knowledge management process involves the retention creation, and distribution of information or data within a situation to create active capabilities. To enhance learning KM must provide people,

knowledge, right tools, (teams, etc.), structures, also it must recognize the value and applications of the novel knowledge created; it must hoard this knowledge and make it willingly obtainable by the true people at the right time; and it must continuously assess, apply, refine, and remove organizational knowledge in conjunction with concrete long and short term factors. As per *Petridis (2004)*, KM approach is the mindful mixing of the technology, processes and people, involved in scheming, capturing and applying the intellectual set-up of an organisation. *Alavi & Leidner, (2001)* highlighted that it is the lack of ability to turn knowledge into effective action rather than the lack of knowledge that hampers organizational performance.

Organizational culture primarily means principles, morals and the system based on semantic understandings which are used by the members of the organization in order to develop unique understanding of the organization. Goals set by the people both personal and professional is influenced by the culture of the organisation. It is the culture which affects the conscious and sub conscious thinking and decision making in the organisation. The task of restoring balance between distinguished values and formulation of common ideology and behaviour pattern is assigned as a major function of organisational culture. **Schein (2004)** in his study stated that there are two parts of organisational culture namely internal and external. External part deals with external clothing, language, building etc. while internal part is more concerned about morals, norms, faith, and beliefs etc. of the people in the organisation. It is made up of different values and beliefs which give organisation its value and meaning. **Ravasi and Schultz (2006)** stated that it is a set of shared assumptions that guide the generation of behaviors. It is reflected in the way people performs tasks allocated to them, set their objectives or goals and how they acquire and use resources. It is a major determinant of the organisational performance in the long run.

Job satisfaction is one's feelings or state-of-mind regarding the nature of their work. Job satisfaction can be influenced by a variety of factors e.g., the quality of one's relationship with their supervisor, the quality of the physical environment in which they work, degree of fulfilment in their work, the level of knowledge sharing etc. It is said that knowledge sharing improves quality of work, efficiency and effectiveness and learning of the employees regarding their jobs (*Lee and Chang 2007; Singh and Sharma's 2011;*

Almahamid et al. 2010). Every organization aims to achieve worker satisfaction for their individual jobs as human resources are the most significant and conclusive to achieve organization's goals. As per different researches conducted in the past, there exists a strong positive correlation between job satisfaction and knowledge management practices. It has been stated that knowledge sharing practices in the organisation significantly boost employee morale and satisfaction with their jobs (*Koseoglu et al., 2010; Almahamid et al., 2010; Lee and Chang, 2007; Singh and Sharma, 2010*).

Information support system refers to the presence of all technical setup, tools etc. required to acquire process, store, disseminate and use of information by all within a same organisation. It provides employees of an organization to have a quick real time access to right amount of information required for decision making or sharing. It provides a virtual space to the employees to interact with each other and a platform to discuss their queries or experiences on a real time basis. It can also be used to list the knowhow of organizational members, and so enable access to the correct people and improve knowledge sharing (*Al-Hawamdeh, 2002*) IT infrastructure facilitates the calibration and mechanization of certain tasks, supporting the transformation of implicit knowledge into explicit knowledge (*Alavi and Leidner, 2001*). IT knowledge raises a all-inclusive understanding of knowledge requirements across business units, eases identification of knowledge capitals that are appropriate across multiple units, and inspires business units to invest not only in their own IT infrastructures but also in boundary-spanning IT initiatives that are serious for KM processes (*Bhatt and Grover, 2005*). IT support is the major antecedent for attaining knowledge management practices.

Irrespective of organizations across different size, nature and culture, they wish to develop knowledge management pool. This knowledge which has been pooled is used for future opportunities. Knowledge management attitude among employees is a process where organizations develop their human potential to meet their future challenges. Though previous studies have found direct relationship between ITS, OC with KMA (*Mohamad, Ramayah and Lo, 2017; Alavi, Kayworth and Leidner, 2005*). It is also found in previous studies that organizational culture and ITS have significant impact on job performance and innovation. The current study

fills a significant gap in existing literature where role of KMA was explored. The researcher want to study that whether KMA has any significant mediating effect between ITS, OC with JP and INV.

Knowledge management has been practiced in every organization but hardly used as a process which is being practiced by organizations in current scenario. The management of every organization put much emphasis on organization culture and upgradation of IT support systems to improve innovation and job performances of employees. It is advised and suggested that along with OC and ITS, if they are going to utilize KMA, the practices of Innovation will improve along with JP of employees.

One of the previous studies has highlighted that human resource practices through capacities in knowledge management significantly affect firms and innovation performance (**Chen & Huang, 2009**).

2. LITERATURE REVIEW AND HYPOTHESIS

Information Support System and Attitude for Knowledge Management

Choi, Lee and Yoo (2010) stated in their research that IT support in the organisation have a positive impact on the knowledge-based sharing and innovation culture in the organisation. This will further improve the team performance within the organisation. **Mohamad, Ramayah and Lo (2017)**, concluded in their research that information technology capability has a mediating role between knowledge conversion and knowledge protection and stated that these two have a direct influence on the firm innovativeness. **Lopez and Alegre (2011)** in their study found that IT competency plays a critical role in knowledge management processes which in turn is directly related to market performance and firm performance. They stated that there is a need to strengthen the IT competency of the organisation in order to improve the performance. **Kin and Lee (2006)** stated that the level of usage of information technology system and their user friendliness have a significant positive impact on the knowledge management and abilities of the employees. **Lin and Lee (2005)** stated that organisation's learning and knowledge management processes have a direct relationship with the e-business models used by the organisation. **Allameh, Zare and davoodi (2010)** stated that technology and cultural variables are significantly impacting the knowledge management processes of the organisation. The

level of efficiency of knowledge management processes increases with these enablers. **Yang, Chen and Wang (2012)**, concluded in their research that level of IT application have a positive bearing on the knowledge management and this is again positively related with the level of the success of the project outcomes. Also, stated that KM fully mediates the relationship between the application of IT and outcomes of the project. **Andreeva and Kianto, (2012)** find in their study that ICT practices for managing knowledge has a positive impact on the level of firm performance and competitiveness of the firm.

H1: There exists a positive relationship between information support system and attitude for knowledge management.

Organisational Culture and KM Attitude

Standing & Benson (2000) said that organisational culture has a profound impact on the development of knowledge sharing attitude among the employees. They argued that to manage sharing of knowledge effectively, there is a need to change the culture of the organisation. **Abdullah & Saifi (2015)** in their paper concluded that there is a significant relationship between development of knowledge sharing attitude and the proposition of organisation culture. Impact of knowledge sharing on the organisational performance has also been found significant. **Sharma & Singh, 2017** in their study they have explored that organizational culture has direct relationship with commitment of employees. **Suppiah & Sandhu (2011)** concluded that knowledge sharing behaviour of the employees varies with the type of organisational culture prevailing in the organisation. It affects sharing behaviour both positively and negatively depending on the type of the culture. **Alavi, Kayworth and Leidner, (2005)** Stated that organisational culture influences the adoption of knowledge sharing technology and their outcomes. Values of the Organizational members influences the technology adoption for knowledge sharing. **Alawi, Marzooqi, Mohammed (2007)** Stated that certain organizational factors like information system, interpersonal trust, rewards, structure etc played a significant role in success of knowledge sharing among the employees. **Ruppel & Harrington (2001)** Stated that implementation of intranet is facilitated by the presence of good culture which in turn affects the level of knowledge sharing. For effective knowledge sharing, an atmosphere of trust, mutual understanding

can be created within the premises.

H2: There exists a positive relationship between Organizational culture and attitude for knowledge management.

Attitude for Knowledge Management and Job Performance

Tseng, Fan, (2011) in their study, stated that when employees of the organisation holds positive views with respect to knowledge management system of the organisation, their performance towards their job increases because of increase in their skills, decision making, effectiveness. *Kianto, Vanhala, & Heilmann, (2016)* stated that presence of KM practices in the working environment of the employees is positively linked with the level of job satisfaction. The more the intra knowledge sharing the more satisfied the employees working in a team. *Tong, Tak, & Wong, (2015)* in their study concluded that Knowledge management plays a mediating role in the relationship between the organisation culture and job satisfaction and performance. *Trivellas, Akrivouli, Tsifora, & Tsoutsas, (2015)* stated the to achieve high employee satisfaction and effectiveness, the organisation must focus on developing a knowledge sharing environment in the premises. *Palacios, Gil and Ga (2008)* stated that firm performance was indirectly improved by focusing on KM practices as it develops firm competitiveness by building distinctive competencies. In their research found that K – based resources have a positive relationship with firm performance. The More the K -based resources, the more will be the discovery and exploitation of opportunities that will lead to improved firm performance. *Sabherwal and Sabherwal (2005)*, in their research stated that Knowledge management process of organisation has a positive short-term effect on firm's performance in some conditions. *Rasula, Vuksic and Stemberge (2013)* concluded through empirical study that there exists a significant positive impact of knowledge sharing practises on the organisation performance.

H3: There exists a positive relationship between attitude for knowledge management and job satisfaction.

Knowledge Management and Innovation

Rehman and Ilyas (2015) in their research concluded that there is a need to focus on Km strategies in the organisation as KM initiatives help in better

sharing of the knowledge which leads to a more sustainable growth and development of the organization. Obeidat, Al-Suradi, " Masadeh *and* Tarhini (2016) through their study found that there exists a positive correlation between KM practices on innovation level. The study was conducted in consulting firms. *Chen and Huang (2007)* in their research stated that Knowledge management practices play a mediating role in the relationship of strategic human resource practices and innovation performance. *Noruzi et al., (2012)* in their research found that knowledge management and organisation learning indirectly affects the organisation performance with the help of organisation innovation. *Alegre, Sengupta and Lapidra (2011)* in their research stated that Knowledge management affects innovation performance. Also, stated that Knowledge Management dynamic capabilities played a mediating role in the relationship between KM practices and innovation performance. *Hertog, (2000)* analysed the role played by knowledge intensive business services on the innovation and found that there is a positive relationship between the two as KIBS acts a facilitator, a career or a source for innovation. *Nicolas and Cerdan (2011)* in their study found that KM strategies positively impact the innovation level and organisational performance both directly and indirectly. *Salem (2019)*, concluded that there exists a strong positive correlation between knowledge management practices and firm performance and innovation. The study was conducted with reference to the hotel industry

H4: There exists a positive relation between Knowledge management attitude and innovation.

There is some gap which has been observed in the existing literature in context of KM attitude; nowhere it has been explored that whether innovation has any impact on job performance or not. It is proposed in this model that innovation has significant impact on job performance of employees working in IT sectors.

The study further has explored the meditating role of KM attitude between IT support and innovation along with job performance. Which has also not been explored in any of the previous studies with regard to KM attitude and IT support.

H5: There exist a positive relationship between innovation and job performance.

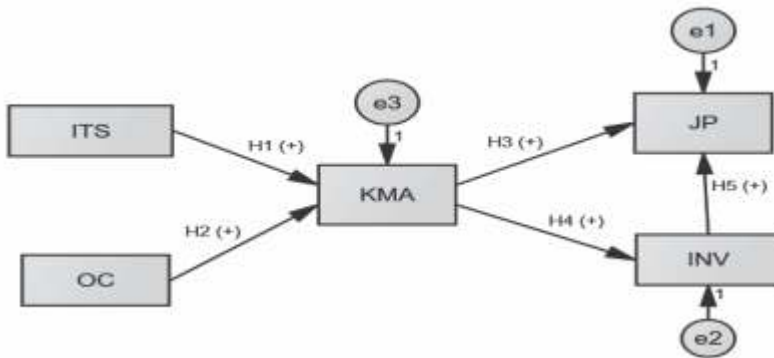
H6: There is mediating effect of KM attitude between IT support and Innovation.

H7: There is mediating effect of KM attitude between IT support and Job performance.

H8: There is mediating effect of KM attitude between Organizational culture and Innovation.

H9: There is mediating effect of KM attitude between organizational culture and Job performance.

Fig 1: Hypothesised model



Source: Author's own

3. RESEARCH MODEL AND DATA COLLECTION

Fig 1, shows the relationship between different variables used for the study and direction of relationship among the said variables. In the current study, four variables namely, information support system, attitude for knowledge management, innovation and job satisfaction. This empirical study has been conducted with the objective of determining the role of information technology support available in the organisation on the development of knowledge sharing attitude among the employees which in turn improves their job performance and innovativeness.

A well-structured adapted questionnaire consisting of four major constructs and 21 statements was used to collect the responses via online survey method.

Non probability convenience sampling method was used for the study. Initially 215 responses were collected but due to insufficient information provided by few respondents, only 180 responses were used for final study.

Table 1: Descriptive statistics of respondents

Demographic variable	Groups	Frequency	Percentage
Age	18-30	24	12
	31-40	109	54.5
	41-50	65	32.5
	Above 50	2	1
Gender	Male	141	70.5
	Female	59	29.5
Education	UG	31	15.5
	PG	123	61.5
	Any Other	46	23
Exp.	0-5	56	28
	6-10	83	41.5
	11-15	39	19.5
	More than 15	22	11
Profile	Lower	49	24.5
	Middle	134	67
	Higher	17	8.5

(Source: Authors own result)

The above table depicts that the age groups of respondents are categorised into four categories 18-30, 31-40, 41-50 and above 50 years. Percentage of these groups are 11.6, 51.1, 36.1, 1.1 respectively. The composition of gender is 74.4% is male and rest belong to other categories i.e. female. As of educational background UG comprise of 20.5%, PG; 60.5% and any other is 18.8%. The experience of respondents is 33.3% (0-5), 40.5% (6-10), 20.0% (11-15) and 61% for more than 15 years. The profile of respondents is categorised into three lower level managers 26.1%, middle level 66.1% and higher level are 7.7%.

Reliability and Validity Results

Reliability analysis of the instrument is the most important part of the study. To test the reliability, Cronbach Alpha, was used. In the study, reliability of the proposed model was coming out to be 0.916, which is above the

standard value of 0.7 (Henseler, Ringle & Sinkovics, 2009; Nunnally, 1978). The reliability of each construct was also coming out to be significant. In order to test for convergent reliability, AVE and CR of each construct was calculated and it was found to be significant as $AVE > .05$ and $CR > 0.7$ for all Constructs. Nomological validity of the instrument was also significant as correlation estimates of all constructs are positive and p-value of co-variances between all constructs is significant. Results of discriminant validity were also good as AVE of all constructs is larger than the squared inter construct correlation value. Therefore, the proposed model was reliable and valid for the study.

Construct Measurement

Base on the previous literature available for information technology support system, Knowledge management and its related aspects, a survey questionnaire was developed to test the hypothesis framed for the study. A five-point Likert Scale with 1 as strongly disagree and 5 as strongly agreed was circulated to collect the responses. Although the instrument use was adapted, face validity of the instrument was verified by four experts of the field. Then, instrument was pre tested with a sample size of 35 respondents. After ensuring validity and reliability of the instrument, data was collected.

Information support system (ISS) was measured on a five-point likert scale, developed by Lee and Choi (2003), items for measuring information support system holds Cronbach Alpha value of $0.84 > .07$, whereas $AVE = 0.531$

Attitude for Knowledge Management (KM Attitude) was also measured on five-point likert scale, developed by Ajzen (1988, Beijerse, 1999; Li, 2001; Chen & Ching, 2004; Lin and Lee, 2005; Sin et al., 2005), items for measuring the construct holds Cronbach alpha value of 0.878 i.e. > 0.7 , whereas $AVE = 0.594$

Innovation construct was measured using three statements given by Gold et al. (2001), holding a Cronbach value of 0.578 and $AVE = 0.330$. According to Malhotra and Dash (2011) note that "AVE is a more conservative measure than CR. On the basis of CR alone, the researcher may conclude that the convergent validity of the construct is adequate, even though more than 50% of the variance is due to error." (Malhotra and Dash, 2011, p.702).

Job performance was measured by using a scale given by karni et al. (2006-2007), Bontis and and Serenko (2007), having Cronbach alpha value of $0.728 > 0.7$ and $AVE = 0.410$ (Malhotra & Das, 2011).

Organizational Culture was measured by using the scale given by Owlia and Aspinwall (1996) and Waugh (2001), having Cronbach alpha value of $0.931 > 0.7$ and $AVE = 0.609$ (Malhotra & Das, 2011).

Table 2: Reliability Statistics of measurement items

Const ruct	Measurement Items	Cro nbach Alpha	Source	SRW	Mean	SD	Factor Loadings
IT Support, Lee and Choi (2003) Cronbach Alpha = 0.84, AVE = .531, CR = .848							
IT Support	We in our organisation, IT tools are used to store data on implemented projects, task and activities.	0.84	Lee and Choi (2003)	.771	3.36	1.002	.599
	Our team is provided with IT support for collaborative work regardless of time and place.			.803	3.60	.845	.709
	Our team is provided with IT support for communicating among team members.			.591	3.86	.764	.511
	Our team is provided with IT support for searching and accessing necessary information			.697	3.54	.850	.788
	Our team is provided with IT support for systematic storinng			.761	3.74	.760	.788
KM Attitude, Ajzen (1988, Bejerse, 1999; Li, 2001; Chen & Ching, 2004; Lin and Lee, 2005; Sin et al., 2005) Cronbach Alpha = 0.878, AVE = .594, CR = .879							
KM Attitude	I voluntarily share my know -how, information, and knowledge with other employees.	0.878	Ajzen (1988, Bejerse, 1999; Li, 2001; Chen & Ching, 2004; Lin and Lee, 2005; Sin et al., 2005	0.750	3.65	.808	0.655
	I cooperate or communicate with other employees in teams or groups for sharing information and knowledge			0.673	3.63	.798	0.684
	I think participation in organizational knowledge management is beneficial			0.818	3.56	.883	0.797
	I think participation in organizational knowledge management is valuable			0.805	3.54	.856	.786
	I think participation in organizational knowledge management			0.799	3.56	.843	0.767
Innovation, Gold et al (2001) . Cronbach Alpha = 0.578, AVE = .330, CR = .567							
Innovation	I apply knowledge learned from experience	0.578	Gold et al. (2001)	0.339	4.35	.639	0.813
	I use knowledge to solve new problems			0.488	4.22	.688	0.617
	I apply knowledge to solve new problems.			0.797	3.60	.796	0.798

Job Performance, karni et al. (2006 -2007), Bontis and and Serenko (2007), Cronbach Alpha = 0.578, AVE = .410, CR = .728							
Job Performance	The amount of work I finish exceeds the expectations of my boss	0.717	karni et al. (2006 -2007), Bontis and and Serenko (2007)	0.762	3.68	.901	0.664
	My work performance always exceeds the objective that my boss sets			0.730	3.68	.929	0.751
	I am able to finish the work that my boss requires of me before the deadline			0.467	4.03	.795	0.652
	I can reduce the time needed to complete a routine task			0.556	3.71	.907	0.468
Organizational Culture , Cronbach Alpha = .913, AVE = .609, CR = .915							
Organizational Culture	In my organization there is freedom for employees to implement decisions according to their own views	.913	Owlia and Aspinwall (1996) and Waugh (2001)	.825	1.95	1.151	.826
	In my organization there is opportunity for employees to bring forward ideas before decisions are made.			.854	2.05	1.088	.860
	My organization investigates the wishes and needs of customers			.800	2.085	1.0552	.817
	In my organization employees obtain useful information about their own functioning			.814	1.85	1.102	.838
	In my organization employees closely monitor their own way of working			.678	2.30	1.261	.753
	There are opportunities to grow, learn and develop in my organization			.795	1.905	1.1235	.830
	In my organization there is clearly established career path for each employee			.677	2.19	1.260	.754

Source: Authors own output

Table 3: Correlation

	Mean	SD	Age	Gender	ITS	KMA	JP	INV	OC
Age	2.6750	1.25589	1						
Gender	1.5850	.49396	-.300**	1					
ITS	4.2205	.72617	.000	-.030	1				
KMA	3.2286	.57671	-.054	-.088	.849**	1			
JP	3.8894	.62571	.018	-.060	.792**	.820**	1		
INV	1.3012	.19879	-.007	-.054	.848**	.910**	.954**	1	
OC	1.7074	.81993	.000	.155*	-.092	-.187**	-.140*	-.160*	1

Source: Authors own output

Table 3 contains correlation values of variables. It also presents of value of r (coefficient of correlation) of the variables. The results confirm the

relationship between age and gender (-.300), job performance and km attitude (.820), innovation and km attitude (.910), job performance and innovation (.954), IT support and km attitude (.849), IT support and job performance (.792), IT support and innovation (.848) oc and km attitude (.187) oc and ITS (.092)

Structural Model Assessment (Model Fit Indices)

Fit Index	Goodness of Fit Index (GFI)	Comparative Fit Index (CFI)	Tucker-Lewis Index (TLI)	Chi-square/degrees of freedom (CMIN/DF)	Root Mean Square Error of Approximation (RMSEA)
Achieved Value	.837	.910	.897	1.923	.068
Accepted Threshold	>0.80	>0.90	>0.90	As high as 5.0	< 0.07
Levels	(Mac Callum & Hing, 1997)	(Hu and Bentler, 1999)	(Hooper et al., 2008)	(Kline, 1998)	(Stinger, 1990) And between 0.08 to 0.10 (MacCallum <i>et al.</i> , 1996)

Source: Authors own output

The structural model was found to be a good fit having CMIN/DF = 1.923 (As high as 5.0, Kline, 1998), GFI = .837 (>.80, Mac Callum & Hing, 1997) CFI=.910 (>.90, Hu and Bentler, 1999), TLI = .897 (>.90, Hooper et al., 2008) RMSEA = 0.068 (<0.07, Stinger, 1990 and between 0.08 to .10, Mac Callum et al., 1996). The proposed structured model of the study indicates that all paths are significant statistically as p-value of all are less than .05.

Table 4: Model Summary of the Regression Analysis

		β	Se	t	P	Hypothesis
Model 1						
R ² = .721	Constant	.383	.128	2.998	.003	(H1)
Dependent variables: KM Attitude	IT Support	.674	0.030	22.61	0.000	Supported
Model 2						
R ² = .187	Constant	3.45	.093	37.13	.000	(H2)
Dependent Variables: KM Attitude	Organizational Culture	-.13	.049	-2.67	.008	Supported
Model 3						
R ² = .672	Constant	1.01	0.145	7.03	.000	(H3)
Dependent variables: Job Performance	KM Attitude	0.889	0.044	20.128	0.000	Supported
Model 4						
R ² = .828	Constant	.289	0.033	8.65	.000	(H4)
Dependent variables: Innovation	KM Attitude	0.314	0.010	30.86	0.000	Supported
Model 5						
R ² = .910	Constant	-.018	0.088	-.200	.842	(H5)
Dependent variables: Job Performance	Innovation	3.003	0.067	44.76	0.000	Supported
Model 6						
R ² = .020	Constant	4.07	.102	40.05	0.000	(H6)
Dependent variables: Job Performance	Organizational culture	-.107	.054	-1.990	.048	Supported

Source: Authors own output

First, from the table 4 it is evident that IT support has significant impact on KM attitude. Where b (0.674), se (0.030), t (22.61) and $p < 0.05$. Hence the hypothesis (H1) is supported.

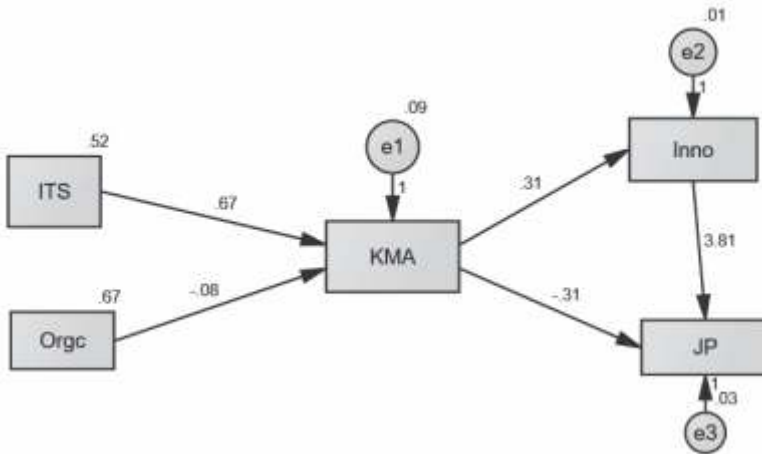
It is evident from the table 4 it is evident that OC has significant impact on KM attitude. Where b (-0.13), se (0.049), t (-2.67) and $p < 0.05$. Hence the hypothesis (H2) is supported.

It is clear that KM attitude has significant impact on job performance. Where b (0.889), se (0.044), t (20.128) and $p < 0.05$. Hence the hypothesis (H3) is supported.

The KM attitude has significant impact on innovation which means innovative behaviours of individuals. Where b (0.314), se (0.010), t (30.86) and $p < 0.05$. Hence the hypothesis (H4) is supported.

The innovative behaviour of employees has significant impact on job performance. Where $b(3.003)$, $se(0.067)$, $t(44.76)$ and $p < 0.05$. Hence the hypothesis (H5) is supported.

Figure 2: Structural Equation modelling



Source: Research Output

Table 5: Mediation Analysis predicting Innovation and Job Performance

Bootstrapping	Total effect	Direct effect	Indirect	BootSE	95% confidence interval	
					LLCI	ULCI
IT Support → KM Attitude → v Innovation	0.2321	0.0739	0.1582	0.0135	0.1323	0.1849
IT Support → KM Attitude → Job Performance	0.6823	0.2963	0.3860	0.0569	0.2766	0.5000
Organizational culture → KM Attitude → Innovation	-.4105	.0025	-.0413	.0140	-.0673	-.0123
Organizational culture → KM Attitude → Job Performance	-0.1068	.0103	-.1171	.0401	-.1912	-.0339

Source: Research Output

Note:

i) N=180

ii) LLCI = lower level confidence interval; ULCI = upper level confidence interval,

iii) *significant at the 0.05 level; $P < 0.05$.

The mediation analysis revealed that KM attitude mediates the relationship between IT support and Innovation in the study. The path from ITS to INV; and to KMA were significant (as shown in Table 4). Besides the path from INV to Job performance was also found to be significant (as shown in Table 4). Furthermore, the interval between lower confidence interval CI and upper level CI for indirect effect did not include zero (as shown in Table 5), which suggests a significant indirect effect (Zhao, Lynch & Chen, 2010). The indirect effect was found to be quite large in comparison to the direct effect as seen in Table 5. Since we found a significant indirect effect and also a direct effect in the study, we can conclude that a partial mediation (Jaccard & Jacoby, 2010) occurred in the study. Thus, hypothesis 5 was supported.

The mediation analysis revealed that KM Attitude mediates the relationship between IT support and Job performance in the study. The path from ITS to JP; and to KMA were significant (as shown in Table 4). Besides the path from KMA to Job performance was also found to be significant (as shown in Table 4). Furthermore, the interval between lower confidence interval CI and upper level CI for indirect effect did not include zero (as shown in Table 5), which suggests a significant indirect effect (Zhao, Lynch & Chen, 2010). The indirect effect was found to be quite large in comparison to the direct effect as seen in Table 5. Since we found a significant indirect effect and also a direct effect in the study, we can conclude that a partial mediation (Jaccard & Jacoby, 2010) occurred in the study. Thus, hypothesis 6 was supported.

The mediation analysis revealed that KM Attitude mediates the relationship between OC and Job performance in the study. The path from OC to JP; and to KMA were significant (as shown in Table 4). Besides the path from KMA to Job performance was also found to be significant (as shown in Table 4). Furthermore, the interval between lower confidence interval CI and upper level CI for indirect effect did not include zero (as shown in Table 5), which suggests a significant indirect effect (Zhao, Lynch & Chen, 2010). The indirect effect was found to be quite large but negative in comparison to the

direct effect as seen in Table 5. Since we found a significant indirect effect and also a direct effect in the study, we can conclude that a partial mediation (Jaccard & Jacoby, 2010) occurred in the study. Thus, hypothesis 7 was supported.

The mediation analysis revealed that KM Attitude mediates the relationship between OC and Innovation in the study. The paths from OC to Innovation; and to KMA were significant (as shown in Table 4). Besides the path, from KMA to Innovation was also found to be significant (as shown in Table 4). Furthermore, the interval between lower confidence interval CI and upper level CI for indirect effect did not include zero (as shown in Table 5), which suggests a significant indirect effect (Zhao, Lynch & Chen, 2010). The indirect effect was found to be large but negative in comparison to the direct effect as seen in Table 5. Since we found a significant indirect effect and also a direct effect in the study, we can conclude that a partial mediation (Jaccard & Jacoby, 2010) occurred in the study. Thus, hypothesis 8 was supported.

4. DISCUSSION

IT infrastructure facilitates the standardization and automation of certain tasks, supporting the transformation of tacit knowledge into explicit knowledge (Alavi and Leidner, 2001; Bhatt and Grover, 2005). The result of the study reveals that IT support system of a company has a significant impact on building the KM attitude among the employees.

First, it is found a direct and significant positive link between IT support system and KM attitude among employees in IT organisation. This relationship was also verified in previous studies (Andreeva and Kianto, 2012).

Second, the previous researches highlight that organisational culture have a profound impact on the development of knowledge sharing attitude among the employees (Standing, Benson, 2000; Abdullah & Saifi, 2015; Suppiah & Sandhu, 2011). The finding of the study is aligned with the previous studies.

Third, the findings confirmed that KM attitude has significant positive impact on innovative behaviours of employees in IT organisations. Obeidat, Al-Suradi, Masadeh and Tarhini (2016) in their study has also explored similar results. KM attitude among employees motivate them to

create something new which is cost and time saver. which the result of the study signifies the same.

Fourth, the knowledge management attitude has significant impact on job performances of employees in IT organisations. Kianto, Vanhala, & Heilmann, (2016) in their study has found similar results. Employees job performances are depending on various factors. Developing KM attitude shows that they have been given abundant opportunities to learn and explore new things. Which could support them to have sophisticated technology that has enhances the performances of employees in the organisations.

Fifth, it is found in the study that innovation has significant impact in improving the performance of employee in the IT organisations. Innovation always led to the significant improvement in the process of anything. The result of the study justified it.

Sixth, the result of the study reveals that KM attitude has significant mediating effect between IT support and innovation. IT support has significant impact on innovation while it enhances in the presence of KM attitude.

Seventh, it is also found that KM attitude has significant mediating effect between IT support and job performance. IT support has significant impact on job performance while it enhances in the presence of KM attitude.

Eighth, the result of the study reveal that organizational culture has significant impact on innovation in organization. The result of the study indicates OC has limited impact in innovative practices at organization. Furthermore, if the relationship between OC and INV get mediated by KM Attitude it enhances the strength of relationship between OC and INV. Hence, it is concluded on the basis of results of the study that KM Attitude has mediating effect between OC and INV.

Nine, the result of the study highlights that KM attitude has mediating role between OC and JP. Though the result of the study also suggest that JP get poorly affected by OC, but when it gets mediated by KM Attitude, relationship gets strengthen between OC and JP.

Implication for IT professionals

The study has provided a significant implication for IT professionals. The current study adds few aspects to the existing body of knowledge by proving KM attitude as a fundamental mediating variable between IT support and innovation as well as job performance. The current study also suggests to the IT firms that KM attitude is an important dimension which needs to be developed for the innovation and enhancing job performances in the organisations. IT support system is the need of hour. The result of the study has highlighted significant effect of KMA as mediation between OC and JP, OC and INV, ITS and INV and ITS and JP. It will be beneficial for IT managers to put sufficient emphasis on developing KMA that will help in improving innovation and Job performance of employees. Managers are suggested along with OC and IT support, knowledge management attitude also be considered which play crucial role in enhancing the capability along with performance of employees.

Specifically, the findings suggest that IT support system helps in developing KM attitude along with innovative work behaviour among employees. Innovation play a crucial role in positioning organisations in today's competitive world.

Moreover, the study suggests that IT firms should develop extensive atmosphere of learning and growing culture in the companies. Learning opportunities in the organisations attracts good manpower which later will turn into human capital of the organisation. That will maximise profit as well as wealth in down the line.

5. CONCLUSIONS AND LIMITATIONS

In conclusion, the current study establishes a relationship between IT support system to KM Attitude, Innovation and job performance. The data of the study has been analysed statistically to validate the relationship. The results of the study confirm that IT support has significant impact on KM attitude and KM attitude has significant impact on innovation and job performance. The conceptual model used in this study extends the literature of boundary of human resource after incorporating KM attitude as mediator role between IT support and innovation as well as job performance.

The study has some limitations. The data has been collected from the IT professionals in Delhi & NCR only. The study does not explore the gender dimensions regarding KM attitude, innovation and job performances. The result of the study can be varied in case of different sector and organisations. The sample size of the study was only 180 which cannot be said very appropriate. The results of the study can be generalised in IT sectors only. The media role of KM attitude was tested with the help of PROCESS Macro.

REFERENCES

Al Saifi, S. A. (2015). Positioning organisational culture in knowledge management research. *Journal of Knowledge Management*, 19(2), 164-189.

Alavi, M., Kayworth, T. R., & Leidner, D. E. (2005). An empirical examination of the influence of organizational culture on knowledge management practices. *Journal of management information systems*, 22(3), 191-224.

Alegre, J., Sengupta, K., & Lapiedra, R. (2013). Knowledge management and innovation performance in a high-tech SMEs industry. *International Small Business Journal*, 31(4), 454-470.

Allameh, S. M., & Zare, S. M. (2011). Examining the impact of KM enablers on knowledge management processes. *Procedia Computer Science*, 3, 1211-1223.

Almahamid, S., McAdams, A. and Kalaldeh, T. (2010), "The relationships among organizational knowledge sharing practices, employees' learning commitments, employees' adaptability and employees' job satisfaction: an empirical investigation of the listed manufacturing companies in Jordan", *Interdisciplinary Journal of Information, Knowledge, and Management*, Vol. 5, pp. 327-356.

Chen, C. J., & Huang, J. W. (2009). Strategic human resource practices and innovation performance—The mediating role of knowledge management capacity. *Journal of business research*, 62(1), 104-114.

Chen, C. J., & Huang, J. W. (2009). Strategic human resource practices and innovation performance—The mediating role of knowledge management

capacity. *Journal of business research*, 62(1), 104-114.

Choi, S. Y., Lee, H., & Yoo, Y. (2010). The impact of information technology and transactive memory systems on knowledge sharing, application, and team performance: a field study. *MIS quarterly*, 855-870.

Du Plessis, M. (2007). The role of knowledge management in innovation. *Journal of knowledge management*, 11(4), 20-29.

Hertog, P. D. (2000). Knowledge-intensive business services as co-producers of innovation. *International journal of innovation management*, 4(04), 491-528.

<https://www.iskme.org/file?n=Knowledge-Management-Information-Systems-and-Organizations&id=934>

Ismail Al-Alawi, A., Yousif Al-Marzooqi, N., & Fraidoon Mohammed, Y. (2007). Organizational culture and knowledge sharing: critical success factors. *Journal of knowledge management*, 11(2), 22-42.

Jaccard, J., & Jacoby, J. (2010). Theory construction and modelbuilding skills. A practical guide for social scientists. New York, NY: The Guilford Press.

Kianto, A., Vanhala, M., & Heilmann, P. (2016). The impact of knowledge management on job satisfaction. *Journal of Knowledge Management*, 20(4), 621-636.

Kim, S., & Lee, H. (2006). The impact of organizational context and information technology on employee knowledge-sharing capabilities. *Public administration review*, 66(3), 370-385.

Koseoglu, M., Bektas, C., Parnell, J. and Carraher, S. (2010), "Knowledge management, organizational communication and job satisfaction: an empirical test of a five-star hotel in Turkey", *International Journal of Leisure and Tourism Marketing*, Vol. 1 No. 4, pp. 323-343.

Lee, H. and Choi, B. (2003), "Knowledge management enablers, processes, and organizational performance: an integrative view and empirical examination", *Journal of Management Information Systems*, Vol. 20 No. 1, pp. 179-228.

Lee, J. N. (2001). The impact of knowledge sharing, organizational

capability and partnership quality on IS outsourcing success. *Information & management*, 38(5), 323-335.

Lee, Y.-D. and Chang, H.-M. (2007), "Job satisfaction and knowledge management : an empirical study of Taiwanese public listed electric wire and cable group", *The Business Review*, Cambridge, Vol. 7 No. 2, pp. 56-60

Lin, H. F., & Lee, G. G. (2005). Impact of organizational learning and knowledge management factors on e-business adoption. *Management Decision*, 43(2), 171-188.

López-Nicolás, C., & Meroño-Cerdán, Á. L. (2011). Strategic knowledge management, innovation and performance. *International journal of information management*, 31(6), 502-509.

Malhotra, N., Dash, S., & Gupta, S. (2013). Marketing innovation: a resource-based view of international and local firms. *Marketing Intelligence & Planning*. 44(1), 37-52.

Noruzy, A., Dalfard, V. M., 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. *The International Journal of Advanced Manufacturing Technology*, 64(5-8), 1073-1085.

Obeidat, B. Y., Al-Suradi, M. M., Masa'deh, R. E., & Tarhini, A. (2016). The impact of knowledge management on innovation: An empirical study on Jordanian consultancy firms. *Management Research Review*, 39(10), 1214-1238.

Rasula, J., Vuksic, V. B., & Stemberger, M. I. (2012). The impact of knowledge management on organisational performance. *Economic and Business Review for Central and South-Eastern Europe*, 14(2), 147.

Ruppel, C. P., & Harrington, S. J. (2001). Sharing knowledge through intranets: A study of organizational culture and intranet implementation. *IEEE transactions on professional communication*, 44(1), 37-52.

Sabherwal, R., & Sabherwal, S. (2005). Knowledge management using information technology: Determinants of short-term impact on firm value. *Decision Sciences*, 36(4), 531-567.

Schiama, G., Andreeva, T., & Kianto, A. (2012). Does knowledge management really matter? Linking knowledge management practices, competitiveness and economic performance. *Journal of knowledge management*.

Sharma N. & Singh R. K, (2017), Impact of Organizational Culture on Employee Commitment: A Review, *Ramanujan international journal of business and research*, 2, 85-103

Singh, A.K. and Sharma, V. (2011), “Knowledge management antecedents and its impact on employee satisfaction : a study on Indian telecommunication industries”, *The Learning Organization*, Vol.18No.2, pp. 115-130

Stewart, T. (1997), *Intellectual Capital: The New Wealth of Organizations*, Nicholas Brealey, London.

Suppiah, V., & AMP; Singh Sandhu, M. (2011). Organisational culture’s influence on tacit knowledge- sharing behaviour. *Journal of knowledge management*, 15(3), 462-477.

Tong, C., Tak, W. I. W., & Wong, A. (2015). The impact of knowledge sharing on the relationship between organizational culture and job satisfaction: The perception of information communication and technology (ICT) practitioners in Hong Kong. *International Journal of Human Resource Studies*, 5(1), 19.

Trivellas, P., Akrivouli, Z., Tsifora, E., & Tsoutsas, P. (2015). The impact of knowledge sharing culture on job satisfaction in accounting firms. The mediating effect of general competencies. *Procedia Economics and Finance*, 19, 238-247.

Yang, L. R., Chen, J. H., & Wang, H. W. (2012). Assessing impacts of information technology on project success through knowledge management practice. *Automation in construction*, 22, 182-191.

Zhao, X., Lynch, J.G., Jr., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206