

Fostering Innovation: HR Practices and Knowledge Sharing with the Mediating Effect of Knowledge Management Success and the Moderating Role of Innovation Culture

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Abstract

This study examines the relationship between human resource (HR) practices, knowledge sharing, and organizational innovation, with a focus on the mediating role of knowledge management (KM) success and the moderating effect of innovation culture. A quantitative approach was utilized, surveying professionals from diverse sectors in Karachi, Pakistan. The data were analyzed using Structural Equation Modeling (SEM) to test direct, mediating, and moderating effects. Results indicate that HR practices significantly enhance KM success, which in turn facilitates knowledge sharing, innovation's key driver. Innovation culture strengthens the relationship between KM success and knowledge sharing, highlighting the importance of an organizational culture that promotes creativity and collaboration. This study contributes to existing literature by confirming the critical roles of HR practices and KM success in fostering knowledge sharing and innovation across various industries. Practical implications suggest that organizations aiming for sustainable innovation should invest in HR practices that support KM and cultivate a culture of innovation.

Keywords: Innovation, Peers Knowledge, Leadership Support, Knowledge Sharing, Innovation Culture.

Introduction

In today's business world, innovation is hard to define because it covers more than just new products or services. It includes changes in business models, operations, customer experiences, company culture, and digital transformation, all driven by technological advancements and evolving consumer expectations (Quinn et al., 2014). Innovation has become essential for companies to stay competitive and agile in a rapidly changing market, with its role extending beyond profitability to adapting to a complex global economy (Sheng & Hartono, 2015). Business model innovation is particularly important as it allows companies to create new revenue streams, reduce costs, and extract more value from existing assets. A prime example is Netflix, which shifted from DVD rentals to streaming services, setting itself apart from traditional media companies (Maruta, 2014). As consumer behavior and technology evolve, adapting business models is now a crucial aspect of modern innovation.

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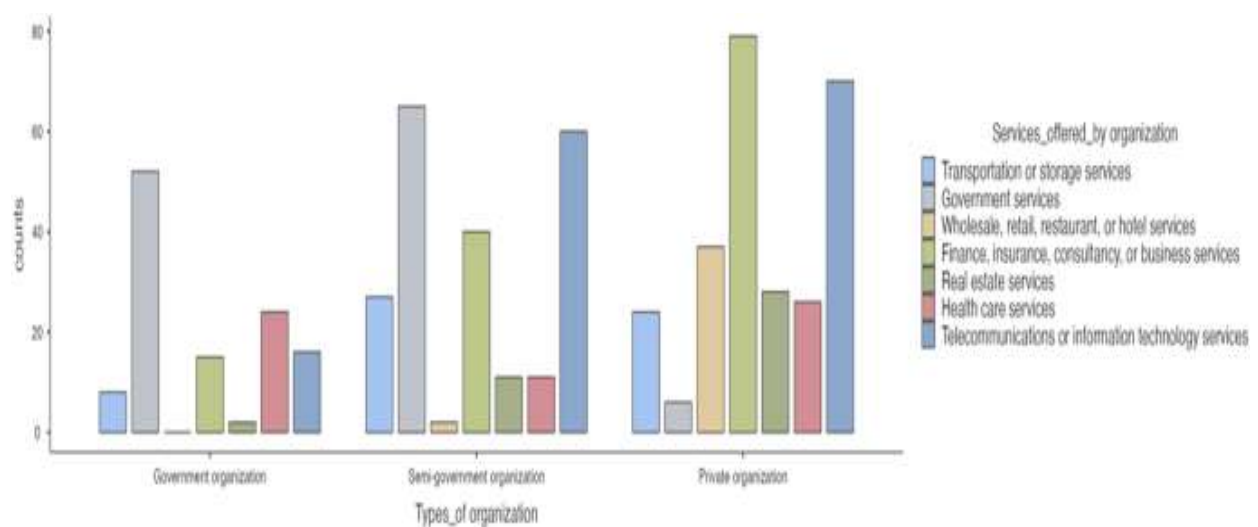
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Figure 1: The Effects of Knowledge Management Processes on Service Sector

This study focuses on examining knowledge management from the perspective of information utilization and usability in operational management. The thesis therefore explains and takes a position on what measures should be taken in the organization so that the knowledge management environment develops to better support the everyday management activities of superiors. In management, this means actions that motivate employees to share and utilize knowledge and to utilize hard data produced by technology in decision-making processes (Suppiah & Sandhu, 2011). In addition, the role of organizational culture in enabling knowledge sharing is considered. An organization cannot be led solely by gut feeling: by utilizing information to support decision-making, the organization creates added value that helps it stand out from its competitors.

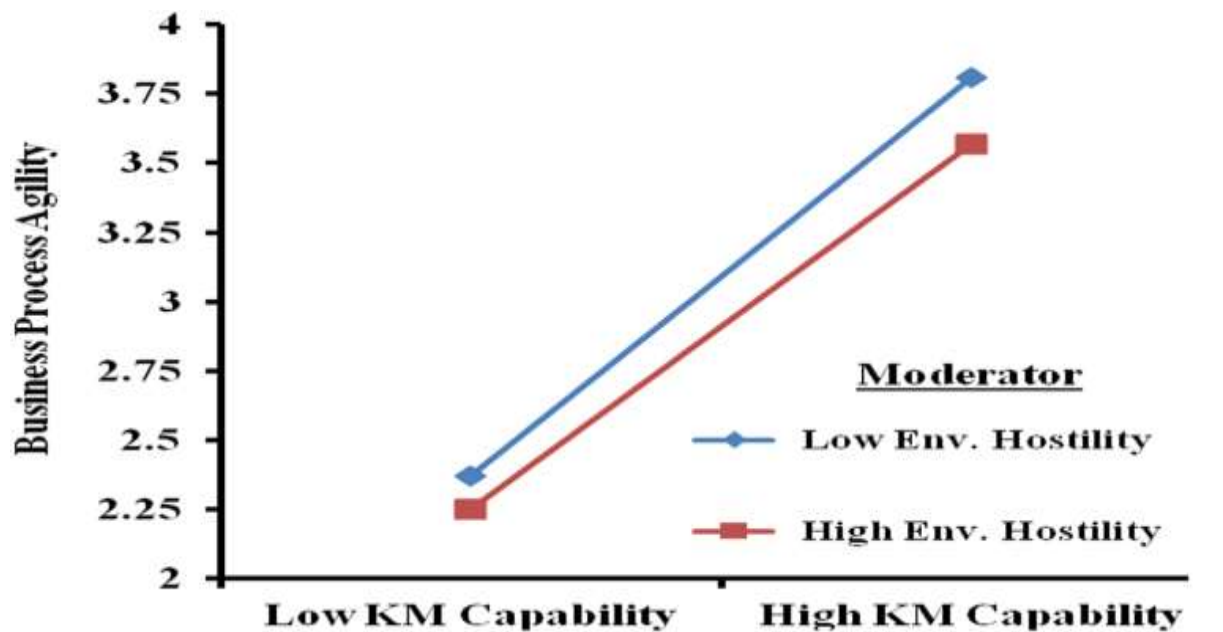
Literature Review

Knowledge Sharing Behaviors

As early humans shared information and skills to survive and prosper, the idea of knowledge sharing has a long history. With an emphasis on how inventions are embraced by society, the formal study of knowledge transfer was underway in the early 20th century. For instance, how hybrid corn seed spread among farmers highlights the significance of interpersonal communication in the spread of expertise. Dabbous & Tarhini, (2021) indicated that people's intentions to proportion understanding are greatly influenced by way of each extrinsic (like rewards) and intrinsic (like private fulfilment) factors. For example, a study of participants of a Korean National R&D center revealed that these incentives are crucial in determining their cause to share understanding. Knowledge sharing intentions are positively impacted by way of self-efficacy and activity stability. According to Yang et al., (2014) comparing employees in Malaysia and Mainland China. Workers are more inclined to share understanding when they feel snug of their positions and assured of their abilities. Also, it's been discovered that a superb crew environment and a supportive company lifestyle promote knowledge sharing amongst team of worker's individuals. According to Shao et al., (2012), examining the functions of organizational gaining knowledge of subculture, crew surroundings, and statistics sharing behavior, those elements are expecting innovative work practices. Furthermore, Knowledge sharing's outcomes on employee behavior and innovation have been the situation of numerous studies. For example, examined the mediating effect of thriving in the relationship between

employees' innovative activities and their sharing of innovative knowledge (Namdev Dhamdhare, 2015).

Figure 2: Information Technology Capability, Knowledge Management Capability



Theoretical Review and Hypothesis Formulation

The theoretical review explores how HR practices, knowledge sharing, and knowledge management (KM) contribute to fostering innovation within organizations. It emphasizes the role of HR in promoting knowledge sharing, the mediating effect of KM in transforming knowledge into innovation, and the moderating influence of innovation culture on successful innovation outcomes (Costa & Monteiro, 2016). HR practices, such as recruitment, training, and performance management, shape employees' behaviors and attitudes, fostering collaboration and creativity essential for innovation. Knowledge sharing, including both tacit and explicit knowledge, is critical for generating new ideas and solutions. Knowledge management has long focused on producing and sharing information - there has been talk of information management, which can be compared to other areas of responsibility of the organization, for example, financial and human resources management (Henttonen et al., 2016). Today, the focus should be more on utilizing information rather than storing and reporting. It is important for organizations to understand how value is created from information, i.e. how information is comprehensively utilized in both the organization's operational work and development. Knowledge management should be one of the core functions.

H1: HR Practices have a positive impact on knowledge sharing.

A knowledge management strategy identifies and creates a shared understanding of which knowledge resources are essential, how they can be utilized, and how they support the implementation of the strategy. A knowledge management strategy should include the processes, methods, and metrics that ensure the transfer of tacit and explicit knowledge, for example. Chung et al., (2016) emphasizes the usefulness of knowledge not only to the organization but also to the individual employee and the team. This view further emphasizes the importance of knowledge management. It helps in work performance by, among other things, saving time through better decision-making and problem-solving, and by enabling people to stay up-to-date and thus develop their professional skills. Improving information

management creates community and inclusion, and encourages networking and the creation of shared practices and culture. HR is important in supporting knowledge management because it can encourage employees to create, utilize and share their knowledge.

In addition to the competence and learning ability of the personnel, HR activities support the organization in pursuing a culture of knowledge management. Leonardi, (2014) research shows that if an organization wants to develop into a competent organization, it must guarantee high-quality training for its personnel and create a uniform quality culture through uniform processes and standards. Ghobadi & Mathiassen, (2016) study emphasized HR's involvement, especially as an enabler of ICT capabilities and practices, because technical expertise also directly affects performance. Utilizing the employee performance appraisal process when an organization creates new knowledge management operating models and culture is one management practice as a motivator for knowledge sharing. Knowledge sharing appraisal and reward together have a stronger positive effect than knowledge sharing appraisal alone. The effect of appraisal and reward on knowledge sharing varies depending on the personality traits of employees.

H2: Knowledge sharing practices have a positive impact on peer's knowledge.

Qureshi and Evans (2015) provides a framework for organizational knowledge management by highlighting the reasons why an organization needs information. As previously stated, information is needed to support decision-making. The difficulty of decision-making emphasizes the importance of information and the organization must strive to resolve conflicts and deficiencies related to information. This can be challenging because the interests of different stakeholders, such as partners and personnel, may conflict with each other. In order to understand external changes and developments, an organization needs information about, among other things, market conditions and legislation. With information, an organization can adapt to changes effectively and maintain its competitiveness. As a third perspective, Battisti et al., (2015) proposes that organizations create new knowledge from information through learning. When information or expertise is dispersed or closely held by individuals or units, management becomes challenging. Learning modifies existing knowledge structures. Old concepts can either be scrapped or transformed into completely new ones. What seemed right may turn out to be a mistake in the light of new knowledge. Cultural knowledge is manifested in the assumptions, beliefs and norms that are used to interpret and evaluate new information and knowledge. Organizational culture defines what kind of information is sought and nurtured in organizations, and what kind of knowledge sharing culture is encouraged.

H3: Knowledge sharing practices have a positive impact on leadership support.

According to Olaisen and Revang (2017), knowledge expansion can be supported by modifying management practices, enabling knowledge sharing through organizational culture, and encouraging action through various incentive systems. Christensen, (2011) see the training provided by organizations as a good support function for knowledge expansion. An organization's ability to utilize knowledge sharing essentially depends on the people who actually share, create, and use knowledge. According to the results presented in the article, knowledge sharing and the tendency to share also have an impact on individual performance. Of particular interest is the observation that the connection between the tendency to actively share knowledge, behavior, and better work performance is emphasized among highly educated personnel. Therefore, the organization should have mechanisms and systems that support the sharing of different types of information for different employee groups.

According to Dewah and Mutula (2016), the so-called ready-made interpretation of information does not encourage thinking that emphasizes questioning and self-evaluation when creating new, innovative perspectives. This would be necessary for organizations to be able to respond to the challenges posed by the global environment. According to the article by Jiang & Chen, (2018), many researchers criticize the process of knowledge assimilation presented by Choo because it does not necessarily support the knowledge refinement of modern organizations

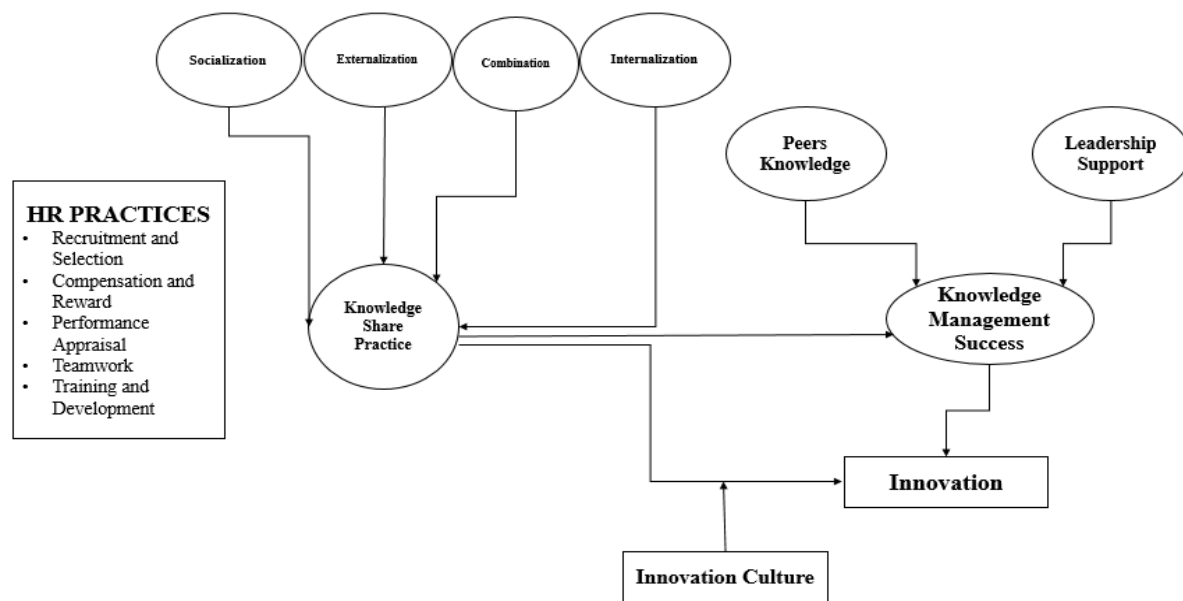
operating in networks. Razak et al. (2016) further develop the model into the so-called hole bread model, which also pays attention to the community's ability to create the knowledge needed in the future through shared interpretation and questioning.

H4: Innovation culture have a positive impact on KM success.

The organization's senior staff sees knowledge management as playing a more central role in the future. Strengthening the strategic role does not only mean recognizing knowledge management as a management model, but also the cross-cutting nature of the entire organization and, among other things, assessing the effectiveness of operations using a consistent set of indicators. When managing an organization and its functions with knowledge, the added value it produces is reflected in more efficient decisions, controlled operations, proactive management and the achievement of goals (Serenko & Bontis, 2016). Knowledge management also encourages continuous improvement, development, ideation and innovation. Strategy-driven indicators form the basis of management, and visible information is presented using predefined reporting practices, such as business intelligence management tools. The entire organization's personnel act as users of information. In addition, data is a very subjective experience, meaning that everyone gives their own meaning to data. The quality of data can be defined using countless different criteria. In addition to justification, quality can be defined based on, among other things, credibility, values, timeliness or presentation. However, justification allows us to explain our choices; why some data is more valid than another in this context. A CIO must also be able to admit if decisions have been made on the wrong grounds. According to Park & Lee, (2014), the value generated by data-based decision-making is reflected, for example, in financial savings, innovations, or a better work environment.

H5: Innovation culture have a positive impact on knowledge sharing.

Knowledge hidden in organizational culture alongside the tacit and explicit knowledge in individuals and organizations. Cultural knowledge is manifested in the assumptions, beliefs and norms that are used to interpret and evaluate new information and knowledge. Organizational culture defines what kind of information is sought and nurtured in organizations, and what kind of knowledge sharing culture is encouraged. Organizational knowledge is as if in the walls, it does not disappear with personnel turnover (Gangi et al., 2019). The common understanding included in organizational culture helps organizational members to see, among other things, through their own values or pursuit of their own interests, what is most important to the organization at the moment of decision-making. Leadership and organizational culture cannot be separated from each other. If the process of knowledge assimilation is not fully implemented, it can cause a lack of commitment, because the process can feel like it is dictated by management. One of the most important tasks of a knowledge leader is to create a trusting and inclusive culture that enables the formation of a common understanding and vision (Fazey et al., 2013).

Figure 3: Proposed Conceptual Model

Methodology

Research Design

The research used a quantitative design to systematically collect and analyze numerical data, ensuring objectivity and reliability in the results. This approach aimed to explore how HR practices influence knowledge sharing and innovation outcomes, with a focus on how knowledge management (KM) success moderates the relationship between these variables. It additionally tested the role of innovation tradition in shaping those relationships. A cross-sectional survey was used to acquire statistics at a single point in time, providing a green image of organizational behaviors. The questionnaire key variables such as HR practices, expertise sharing, KM achievement, and innovation subculture, and covered manage variables like demographics to ensure accurate findings (Kwahk & Park, 2016). By adopting this approach, the examine aimed to offer insights into the complicated relationships between HR practices, knowledge sharing, and innovation, with a specific awareness on mediation and moderation effects.

Study Sample

The study focused on employees and their immediate supervisors from the IT corporations in Karachi, Pakistan. This sector was chosen exactly because it's miles dynamic and understanding in depth, relying closely on effective understanding and management to generate innovation and preserve a competitive edge. As an essential component in Pakistan's economy, Karachi's IT quarter acts as a hub for technological breakthroughs and innovation, with numerous small and medium-sized corporations (SMEs) and worldwide corporations. Karachi, as the country's economic core, presents a unique blend of different talent and opportunity, making it a super venue for reading the relationship among management patterns, understanding management techniques, and employee creativity (Chen et al., 2014). Our target population is 200. The information is likewise amassed from employees of agencies who've records associated with Knowledge-Oriented Leadership. We pre-tested our survey with IT professionals and incorporated their feedback. Data was collected though primary sources (Individuals and teams.

Instruments

The close ended Questionnaire is used in our research. Moreover, a multi-item structure was used to assess each variable, which was measured by a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Total 200 respondents filled the questionnaire.

Table 1: Variables

Variable	Number of Items	Description	Reliability	Source
HR Practices	16	Measures HR practices such as recruitment, training, performance appraisal, and rewards to understand their role in fostering innovation.	0.75	Chee-Yang Fong, Keng-Boon Ooi, Boon-In Tan and Voon-Hsien Lee(2011)
Knowledge Sharing	11	Assesses how employees share knowledge, insights, and expertise with colleagues to foster a collaborative environment.	0.77	Soonhee Hyangsoo (2006) Kim Lee
Knowledge Management Success	3	Evaluates the effectiveness of KM practices in storing, retrieving, and utilizing organizational knowledge to enhance decision-making and innovation.	0.78	Shahnawaz muhammed Halil Zaim (2020)
Innovation Culture	8	Measures organizational support for innovation, including factors like risktaking, collaboration, and openness to new ideas.	0.79	Marina Jasminka Lažnjak, David Smallbone, Jadranka Švarc (2018) Dabić,

Results and Discussion

Correlation

Table I presents the Pearson correlation coefficients between various variables in the study, ranging from -1 to 1. Knowledge Sharing Practices (KSP) exhibits a moderate positive correlation with Recruitment Selection (RS) ($r = .684$, $p < .01$) and Compensation and reward (CR) ($r = .686$, $p < .01$). Similarly, Performance appraisal (PA) correlates strongly with Compensation and reward (CR) ($r = .769$, $p < .01$). Teamwork (TW) shows a moderate correlation with Knowledge Sharing Practices (KSP) ($r = .624$, $p < .01$) and Leadership Support (LDS) ($r = .635$, $p < .01$), emphasizing the importance of collaboration in leadership and knowledge-sharing activities. Innovation Culture (INC) is significantly associated with Innovation (IN) ($r = .722$, $p < .01$), indicating that higher intelligence is linked to greater innovation. Peers Knowledge Sharing (PKS) is strongly correlated with Knowledge Management Systems (KMS) ($r = .643$, $p < .01$).

Social skills also play a crucial role, as Internalization (INT) demonstrate strong positive relationships with Socialization (SOC) ($r = .781$, $p < .01$) and Externalization (EXT) ($r = .724$, $p < .01$). Furthermore, Combination (COM) is most strongly linked with Externalization (EXT) ($r = .791$, $p < .01$). On the other hand, weak or negligible correlations were found between Training and development (TD) and Knowledge Sharing (KS) ($r = -0.094$, $p > .05$) as well as Innovation Culture (INC) and Knowledge Sharing (KS) ($r = -0.013$, $p > .05$), indicating that these factors are relatively independent.

Table 2: Means, standard deviations and Pearson correlation

	Mean	S.D.	KS	KSP	RS	CR	PA	TW	TD	INC	LDS	PKS	KMS	IN	SOC	EXT	COM	INT
KS	11.0388	2.41508	1															
KSP	25.5922	4.50785	.391**	1														
RS	17.0097	3.73120	.271**	.684*	1													
CR	13.3883	3.54135	.310**	.686*	.582*	1												
PA	10.5437	2.39013	.286**	.681*	.491*	.769*	1											
TW	7.1165	1.55736	.193**	.624*	.427*	.599*	.571*	1										
TD	7.0340	1.99360	-0.094	.529*	.355*	.479*	.39*	.384*	1									
INC	28.4682	5.98111	-0.013	.541*	.455*	.458*	.55*	.523*	.572*	1								
LDS	10.5794	2.63172	.216**	.581*	.308*	.596*	.48*	.520*	.434*	.595*	1							
PKS	11.4126	2.19303	.201**	.589*	.388*	.627*	.63*	.550*	.434*	.595*	.616*	1						
KMS	10.4223	2.48925	.299**	.746*	.554*	.714*	.63*	.546*	.617*	.613*	.639*	.643*	1					
IN	28.4806	5.32157	.183**	.604*	.445*	.353*	.66*	.529*	.493*	.722*	.476*	.450*	.681**	1				
SOC	19.6699	4.24813	.349**	.500*	.365*	.415*	.44*	.506*	.264*	.536*	.232*	.288*	.474**	.586**	1			
EXT	17.3350	3.22482	0.107	.478*	.376*	.398*	.340*	.507*	.427*	.402*	.720*	.404*	.477**	.544**	.717*	1		
COM	21.9612	3.73101	0.063	.367*	.372*	.343*	.32*	.384*	.378*	.306*	.199*	.465*	.479**	.481**	.578*	.791**	1	
INT	17.4140	3.33258	.269**	.415*	.342*	.487*	.46*	.422*	.348*	.319*	.314*	.505*	.602**	.585**	.781**	.724**	.714**	1

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

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Self Estimated

Discriminate validity was tested following the guidelines of Hair et al. (2014) and Fornell and Larcker (1981). Fornell and Larcker's (1981) criterion states that discriminant validity is established when a construct's square root of AVE exceeds its correlation with other constructs. Table III displays that the square root of the AVE (bold and italic) of a construct was higher than its correlation with other constructs.

Table 3: Discriminant Validity – Fornell and Larcker criterion

Variable	IN	INC	INT	KMS	KS	KSP	LDS	PA	PKS	RS	TD	TW
IN	0.711											
INC	0.321	0.756										
INT	0.176		0.766									
KMS	0.735	0.437		0.759								
KS	0.166	0.098		0.225	0.744							
KSP	0.641	0.455		0.872	0.196	0.531						
LDS	0.1		0.465				0.867					
PA	0.466	0.013		0.634	0.143	0.453		0.728				
PKS	-0.017		0.661				0.308		0.783			
RS	0.323	0.161		0.44	0.099	0.742				0.665		
TD	0.22	0.597		0.299	0.067	0.214					0.842	
TW	0.066	0.349		0.09	0.02	0.277						1.001

Source: Self Estimated

Table 4: Heterotrait-Monotrait Ratio (HTMT)

Variable	IN	INC	INT	KMS	KS	KSP	LDS	PA	PKS	RS	TD	TW
IN												
INC	0.761											
INT	0.627	0.356										
KMS	0.774	0.64	0.73									
KS	0.251	0.226	0.483	0.427								
KSP	0.683	0.598	0.464	0.862	0.573							
LDS	0.53	0.675	0.383	0.71	0.265	0.646						
PA	0.619	0.475	0.551	0.787	0.461	0.878	0.652					
PKS	0.553	0.472	0.668	0.805	0.306	0.698	0.735	0.649				
RS	0.517	0.486	0.376	0.63	0.447	0.833	0.299	0.605	0.515			
TD	0.536	0.719	0.421	0.721	0.291	0.603	0.609	0.487	0.55	0.368		
TW	0.636	0.662	0.557	0.726	0.266	0.794	0.858	0.801	0.963	0.538	0.49	

Table 5: Hypotheses Testing Results – SEM 1

	Parameter estimates	Standard errors	T values	P values	Remarks
IN2 <- IN	0.9	0.126	7.152	0	Supported
IN3 <- IN	1.348	0.173	7.775	0	Supported
IN4 <- IN	1.285	0.147	8.765	0	Supported
IN5 <- IN	0.882	0.137	6.431	0	Supported
IN6 <- IN	0.937	0.143	6.536	0	Supported
IN7 <- IN	1.297	0.16	8.122	0	Supported
IN8 <- IN	0.934	0.148	6.32	0	Supported
INC2 <- INC	0.882	0.094	9.404	0	Supported
INC3 <- INC	1.001	0.101	9.875	0	Supported
INC4 <- INC	1.091	0.095	11.471	0	Supported
INC5 <- INC	0.835	0.14	5.95	0	Supported
INC6 <- INC	1.033	0.106	9.724	0	Supported
INC7 <- INC	0.935	0.103	9.09	0	Supported
INC8 <- INC	0.976	0.113	8.669	0	Supported
INT2 <- INT	0.88	0.144	6.115	0	Supported
INT3 <- INT	1.039	0.134	7.746	0	Supported
INT4 <- INT	1.117	0.138	8.116	0	Supported
INT5 <- INT	1.005	0.15	6.705	0	Supported
KMS2 <- KMS	1.14	0.113	10.134	0	Supported
KMS3 <- KMS	0.996	0.113	8.783	0	Supported
KS2 <- KS	1.41	0.323	4.359	0	Supported
KS3 <- KS	0.489	0.15	3.25	0.002	Supported
KSP2 <- KSP	0.967	0.172	5.611	0	Supported
KSP3 <- KSP	0.902	0.175	5.162	0	Supported
KSP4 <- KSP	0.821	0.162	5.06	0	Supported
KSP5 <- KSP	1.18	0.184	6.42	0	Supported
KSP6 <- KSP	0.993	0.18	5.516	0	Supported

KSP7 <- KSP	0.865	0.178	4.862	0	Supported
LDS2 <- LDS	1.074	0.093	11.519	0	Supported
LDS3 <- LDS	0.775	0.079	9.797	0	Supported
PA2 <- PA	1.575	0.364	4.331	0	Supported
PA3 <- PA	1.049	0.222	4.714	0	Supported
PKS2 <- PKS	1.362	0.194	7.005	0	Supported
PKS3 <- PKS	1.15	0.148	7.797	0	Supported
RS2 <- RS	1.971	0.387	5.091	0	Supported
RS3 <- RS	1.283	0.287	4.465	0	Supported
RS4 <- RS	1.279	0.338	3.781	0	Supported
RS5 <- RS	2.287	0.474	4.821	0	Supported
TD2 <- TD	1.62	0.339	4.775	0	Supported
TW2 <- TW	0.29	0.144	2.014	0.047	Supported

Source: Self Estimated

Discussion

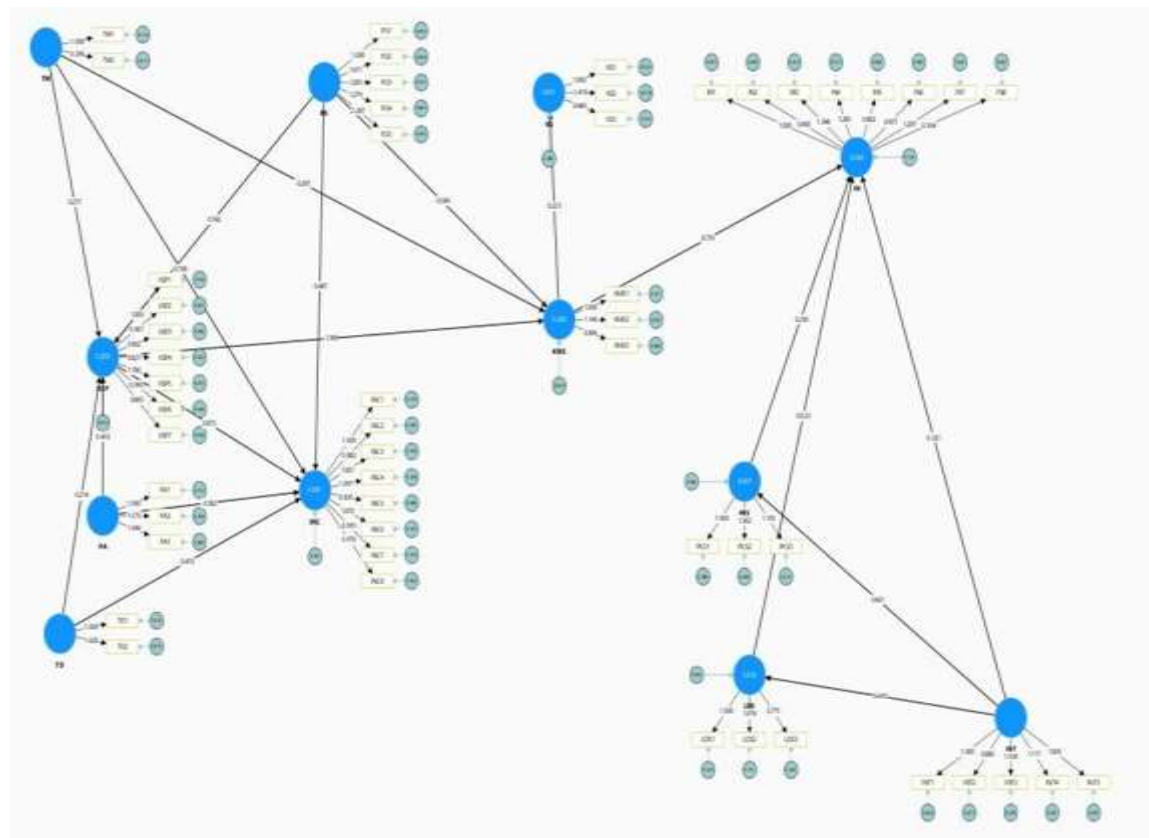
The effects of this study emphasize the crucial interplay among HR practices, KM achievement, and innovation tradition in using expertise sharing and organizational innovation. The analysis reveals that once HR practices are aligned with expertise-primarily based dreams, which include fostering continuous learning, collaboration, and the development of capabilities applicable to knowledge management, they play an important role in the achievement of KM structures (Minbaeva, 2013). Specifically, HR practices that prioritize employee development, education, and empowerment are foundational in ensuring that employees are prepared with the necessary abilities to both make use of KM structures effectively and contribute to expertise sharing within the business enterprise. The study also reveals that KM success is critical in mediating the effect of HR practices on understanding sharing. This method, which even as HR practices can create the conditions for personnel to share knowledge, it's the KM structures that act as a bridge, facilitating the real sharing of expertise. For instance, nicely-designed KM systems together with centralized understanding repositories, collaboration systems, and user-friendly technology tools permit personnel to effortlessly get right of entry to, store, and share data (Igbinoia & Ikenwe, 2018). The fulfilment of KM structures is immediately tied to the effectiveness of HR practices. If HR has invested in constructing a workforce that is knowledgeable about how to use KM tool and encourages participation, the knowledge sharing procedure is likely to be more successful.

Additionally, the study highlights the moderating role of an innovation subculture. Organizations with an innovation-oriented tradition are better capable of extending the benefits of KM systems, encouraging employees to actively interact in know-how sharing. In a tradition that values experimentation, risk-taking, and creativity, personnel are much more likely to look for and share new thoughts and insights, which in turn fuels innovation. This environment helps not handiest the transfer of existing knowledge but also the creation of new information, using each incremental and radical innovations (Khan & Bhatti, 2012). Essentially, a revolutionary lifestyle serves as a catalyst, helping to liberate the entire capacity of KM systems by motivating employees to make contributions more actively to the expertise sharing manner. The study's findings align with preceding studies, reinforcing the perception that strategic HR and KM practices are vital for fostering a modern workforce. The paintings of scholars in this area have already shown that properly designed HR practices and KM systems are foundational to supporting expertise sharing and driving innovation. What this examination adds to the

literature is a deeper exploration of ways these factors work collectively in synergy (Mohamad Radzi et al., 2017). By illustrating how HR practices, KM fulfilment, and an innovation subculture aren't simply separate additives, but interdependent drivers of innovation, the examine underscores the significance of a holistic approach to fostering innovation.

The study also expands on the idea that innovation culture is more than just an abstract concept it actively shapes how KM systems are used to facilitate knowledge sharing. This culture can significantly enhance the knowledge flow across the organization, ensuring that the right information gets to the right people, at the right time. Without this culture in place, even the most well designed KM systems may struggle to promote the kind of open and ongoing knowledge exchange required for sustained innovation. For organizations, the key take away from this study is the importance of developing HR practices that emphasize employee development particularly in ways that enhance the organization's knowledge management capabilities (McAdam et al., 2014). These HR practices should focus on skills development that directly supports KM processes, such as training employees to use KM systems effectively and encouraging knowledge sharing behaviors. Furthermore, organizations need to implement KM processes designed to optimize the flow of knowledge and foster knowledge creation, particularly through collaborative projects that encourage employees to work together and innovate. This should be done within an organizational environment that actively supports both KM and innovation culture. Without an environment that encourages knowledge sharing, continuous learning, and risk-taking, even the best KM systems and HR practices will not reach their full potential (Cooke et al., 2017).

The study provides a comprehensive picture of our partner's employees' experiences of self-management. The study examines supervisors' methods for promoting IT Professionals' self-management, as well as supervisors' and IT Professionals' experiences of their usefulness. The study will help examine the current situation in the workplace and promote workplace self-management in the future. The results of our study emphasized factors related to the organization of the employee's own work and factors created by the workplace that enable self-management (Liu & Bakici, 2019). According to the study results, self-management was possible at work, but the rush and large numbers of clients created challenges for self-management. The role of supervisors in the number of clients of IT Professionals was felt to be crucial. Further research could be conducted on the impact of the number of clients of IT Professionals on the development of self-management (Iqbal et al., 2011). At a practical level, research could also be continued on what concrete actions in practice have the greatest impact on the progress of an employee's self-management or how the introduction of a tool has affected the development of employees' self-management.

Figure 4: Structural Model

Conclusion

In conclusion, this study makes a significant contribution to the understanding of how HR practices, KM success, and innovation culture work together to support knowledge sharing and drive organizational innovation. It stresses the significance of aligning HR practices with information-based dreams, creating sturdy KM structures, and fostering an innovation lifestyle. For agencies seeking to construct a sustainable aggressive area, investing in those areas is crucial. Future studies should, in addition, explore how technological improvements and external factors have an impact on those dynamics, supplying a more complete understanding of the way corporations can hold innovation in an increasingly fast-paced global business.

Managerial Implications

The study emphasizes that fostering an innovation subculture is fundamental to maximizing the capability of Knowledge Management (KM). HR departments should raise awareness on skill development and lifetime learning, imparting training applications and developing a study-oriented environment. Effective KM systems have to be user-friendly to make sure know-how is without difficulty on hand, helping information sharing and innovation. Given the importance of management in driving innovation, IT corporations in Pakistan must integrate knowledge-oriented leadership standards into their managerial improvement frameworks. Training applications ought to be designed to equip leaders with the abilities to foster know-how-sharing, collaboration, and creativity within their teams. Policymakers need to introduce incentives for businesses that correctly implement KOL-based techniques, along with financial grants for studies and improvement, subsidies for innovation-pushed management training, and tax advantages for organizations investing in knowledge-sharing infrastructure (Bachman et al., 2017). Additionally, corporations have to put in place mentorship packages to enhance

personnel's innovative self-efficacy and problem-solving capabilities. Creating a work environment that values various views and fosters open communication is likewise important for using long-term innovation.

Furthermore, regulatory bodies must develop guidelines that promote leadership responsibility in expertise control and innovation. Collaboration among government corporations, academia, and enterprise leaders must be encouraged to construct an extra understanding-driven economy. Public-private partnerships can play a crucial role in establishing training centers, leadership incubators, and research hubs dedicated to enhancing KM practices in the Pakistani IT sector (Linderman & Chandrasekaran, 2010). If employees are not doing well in the work community, the lack of well-being at work can cost the company a considerable amount. The employer's deductible period is formed by adding the nine weekdays that the employee is absent from work due to illness to the above-mentioned day of the employee's illness. Long-term sick leave, in turn, increases the number of sick visits to occupational health care and thus causes additional costs for the employer. Direct costs for the employer also arise from accidents, early retirement of the employee, part-time pensions, personnel turnover and the loss of expertise from the company.

Future Recommendation

This study highlights significant implications for future research, particularly in the role of technology in enhancing Knowledge Management (KM) and fostering an innovation culture. The integration of digital tools like AI, machine learning, and collaboration platforms can streamline knowledge sharing and promote real-time collaboration, leading to greater innovation. Future research may want to discover how that technology reshapes conventional KM practices and accelerates innovation across one-of-a-kind industries. Another critical region is longitudinal research to tune how the relationship between HR practices, KM, and innovation evolves. Understanding how these elements adapt as organizations develop or face disruptions can provide insights into keeping sustainable innovation and aligning HR, KM, and innovation techniques. Spoor & Chu, (2018) studies into external factors, which include technological advancements, economic shifts, and market dynamics, are essential to understanding how they affect HR, KM, and innovation. A cross-cultural assessment can also discover enterprise-specific quality practices, whilst cross-cultural studies may want to explore how cultural contexts affect those practices. This study emphasizes the significance of aligning HR, KM, and innovation culture for sustainable achievement, and destiny research is prime to supporting corporations adapt and innovate in a rapidly changing environment.

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