

# Impact of Knowledge Sharing Information System on Innovative Work Behavior: Exploring the Moderating Role of Transformational Leadership

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**Abstract-** Focusing on the moderating effect of transformational Leadership, this study examines the link between information sharing and creative approaches to the workplace. The results of an information system that includes both tacit and explicit Knowledge have been analyzed. The data was gathered through a survey of 300 individuals. Information was gathered from Rawalpindi and Islamabad-based software development firms. According to the study's findings, knowledge-sharing information systems and creative workplace behaviors are positively moderated by transformational Leadership. Furthermore, digital information sharing impacts organizational innovation capabilities and work behavior regarding sustainable development goals.

**Keywords-** Knowledge Sharing Information System, Explicit Knowledge Sharing Information System, Tacit Knowledge Sharing Information System, Innovative Work Behavior, Transformational Leadership, Digital Information Sharing.

## I. INTRODUCTION

In this era of knowledge-intensive organizations, knowledge sharing and management are the tools for sustainable competitive advantage [1]. Knowledge Management plays a crucial role in organizations, with the evolution of a knowledge-based economy from an industry-based economy [2]. Knowledge Sharing is a major component of knowledge management. It involves the transfer of Knowledge among organizational employees to improve problem-solving, generate new ideas and efficiently carry out organizational policies [3]. Globalization has resulted in a tremendous increase in competition. Innovation is essential for the

organization to survive and strive for a place in such a competitive market [4]. Innovation is a new and unique approach to business problems [5]. Innovative Work Behavior consists of actions and processes leading to unique idea generation and procedures, technology and ways to implement these ideas for organizational success and efficiency [6]. Innovation provides strategic advantage through cost reduction, product differentiation and quality enhancement [7]. Knowledge is an organizational asset that allows the generation of new ideas and innovation [8].

To individuals, their Knowledge is a unique resource; hence they feel reluctant to share it, so it is difficult to promote Knowledge sharing among organizational members [9]. Conservation of Resource (COR) Theory provides that people strive to retain individual resources and are threatened by their loss [10], henceforth making Knowledge sharing a more complicated process. Knowledge sharing is self-motivated; therefore, Leadership motivates employees [11]. The personality of the leader and leadership style help to reap the benefits of knowledge sharing. Knowledge sharing in an organization occurs among employees (horizontally) and through different levels of hierarchy (vertically). Leadership affects knowledge flow in all directions [12]. Certain leaders can promote knowledge-sharing culture. Transformational Leadership is pivotal in encouraging Knowledge sharing by increasing goal-directed behavior among employees and enhancing organizational performance [13]. Transformational Leadership is the most effective style to inspire and motivate organizational members to promote innovative work behavior and knowledge sharing. Transformational Leadership is a leadership style in which leaders or managers inspire, encourage and motivate their employees to exceed their expectations and create change. Transformational leaders are

capable of embracing change and new challenges as well as leading their employees to embrace change as well [14]. Transformational Leaders provide a supportive organizational climate to foster innovation and creativity [15].

Previous literature has shown transformational Leadership's impact on Knowledge sharing in specific locations and organizations [16]. The earlier studies concluded that employees' innovative work behavior largely depends on knowledge sharing [17-18] and the leader's attitude towards employees [19]. This study will discuss the relationship between tacit and Explicit Knowledge information systems with innovative work behavior via the moderating role of transformational Leadership. Consequently, this study will contribute to the existing literature discussing the relationship between knowledge sharing (KSIS), Innovative work behavior (IWB) and Transformational Leadership (TL).

## II. LITERATURE REVIEW

### 2.1. Knowledge-Sharing Information System

KSIS is defined as a knowledge-centered activity and the main method through which people exchange their expertise to improve organizational knowledge capital and give their company a competitive edge [79]. Task communication is the term used to share essential information, ideas, and proposals among coworkers in an organization. According to the definition, knowledge sharing is how employees exchange critical information [72]. Several individuals working at the individual, group, and organizational levels share Knowledge inside the organization. Employees engage in knowledge acquisition and donation, a technique or action, to boost one another's knowledge capital [20]. According to [21], from the epistemological dimension, Knowledge sharing can be divided into; Explicit Knowledge information systems (EKSIS) and Tacit Knowledge information systems (TKSIS).

*Tacit Knowledge* is inherent in someone and develops over time due to collaborative practices, observations, and experiences; therefore, it is difficult to explain to others since it is complex, subjective, and difficult to define [22]. It is said that the Tacit Knowledge information system is more personalized and generally necessitates face-to-face interactions, which is regarded as an altruistic behavior that motivates employees to exchange ideas spontaneously [23]. Individuals' willingness and capacity to share what they know and use what they learn are important factors in the Tacit Knowledge information system [24].

Explicit Knowledge is any sort of Knowledge that has been recorded and documented to make it easier to

disseminate and manage [25]. Explicit Knowledge comprises objectively teachable facts and know-how that can be verbalized [26]. Practices of Explicit Knowledge information systems appear more common in the workplace because explicit Knowledge can be easily captured, codified and transmitted through Management mechanisms, such as procedures, formal language, handbooks, and information technology systems will promote employees' willingness to share their explicit Knowledge [27-28].

### 2.2. Innovative Work Behavior

Significant organizational shifts have occurred due to the increased importance of creative work behavior in today's rapidly evolving economic, globalized, and competitive landscape [25]. For the sake of this discussion, "innovative work behavior" will be understood as "the purposeful invention, introduction, and implementation of novel ideas inside a work role, group, or organization, to enhance role performance, group performance, or organization performance" [36]. To ensure the continued success of any business, IWB is a must [30]. The involvement of workers in decision-making has been linked to improved business outcomes and the ability to adapt to a dynamic corporate setting [24]. Similarly, it is a multi-step process that begins when an individual recognizes a need, develops an idea for how to address that need, and then implements that solution with the help of the appropriate labor resources [2].

Previous research has shown that organizational and individual variables shape individuals' propensity for creative work practices. Perceived organizational support and person-organization fit, pro-innovation organizational leadership styles, and human resource practices are all aspects that have been investigated at the organizational level. Individually, innovative work behavior is influenced by psychological characteristics, including affective commitment and job engagement, altruism, harmonious work, and Knowledge [77].

### 2.3. Transformational Leadership

"a style of leadership that supports the common interest of employees while helping them to achieve communal goals" [23]. Transformational leader fosters a higher moral ground for themselves and their followers through value exchange, shared development, and shared goals. Altruistically, the goals of an organization and the lives of its employees may be improved by sharing visions and establishing standards by those who are "Givers" [28]. Transformational Leadership is one of the most discussed and often used forms of Leadership. Leaders who inspire others by sharing their expertise and fresh

perspectives foster an environment where everyone contributes to the team's success [16]

- Individual care (in which a leader helps employees in various ways, such as by reinforcing, supporting, and coaching), identification (in which a leader forms a strong identification sense and amplifies employees' emotions), inspiration (in which a leader inspires employees to help the firm meet deadlines and challenges), and intellectual stimulation (in which a leader aids enhancing the employees' underpinning Knowledge and skills) are the four dimensions of transformational Leadership [9].
- Organizational innovation has been boosted by what is known as "transformational leadership," or a leader's ability to inspire followers by their vision, charisma, and deeds [12]; [47].

According to the study, subordinates place a higher value on transformative leaders than transactional ones. Transformational leaders score significantly higher than those evaluating subordinates' performances under other types of leaders. The teams headed by transformative leaders also tend to do better overall [6]

#### 2.4. Knowledge Sharing and Innovative Work Behavior

When an organization fosters information sharing across its employees, groups, and the entire company, its workers become more creative and productive. This, in turn, creates new opportunities for the company. [76]

According to [59] efficient knowledge sharing motivates creative approaches to work. When people collaborate and share their insights, they learn from one another and develop novel approaches to their job, boosting the organization. Employees who participate in knowledge-sharing events can learn new information and apply it to existing problems, improving their capacity to turn new ideas into groundbreaking inventions. In the [82-83]. Employees are continually borrowing their coworkers' tacit Knowledge (skills or experience) or looking for the explicit Knowledge (institutionalized procedures or practices) already present in the organization to better fulfil new tasks. Since a company's creativity is so dependent on the expertise of its employees in their respective fields, tacit Knowledge is perhaps more important than explicit information [15]. Consequently, a company's ability to promote knowledge exchange between groups or organizations is associated with increased innovation activities [10], [26]. [7] and [44] cite previous studies that find a strong correlation between information sharing and creative problem solving on the job. That's why we made the following assumptions:

H1: Explicit Knowledge information system has a positive impact on Innovative work behavior

H2. Tacit Knowledge information system has a positive impact on innovative work behavior

#### 2.5. Knowledge Sharing Information System and Transformational Leadership

Knowledge, skills, and innovation (KSIS) process carried out by staff members are vital to the growth of a company's intellectual capital. However, this is not a random occurrence. Personal Knowledge (both tacit and implicit) is often seen as a source of power, advantage, and priority; hence, the individual may be hesitant to freely share this information with others for fear of losing it. Consequently, scholars have been thinking about how to best study the characteristics that promote the exchange of information. Among these factors, one of the most important is known [18]. By expanding a set of values and expectations related to Knowledge and KSIS, transformational leaders provide a supportive environment for fostering KSIS [13]. Concerned with creating an encouraging environment to promote KSIS among employees, transformational leaders focus on issuing a vision and a sense of mission or developing a culture of trust and organizational justice [45]. Knowledge is actively shared and acquired amongst workers in a TL environment, as stated by [18], to foster innovation. That TL "creates a supportive working atmosphere and offers appropriate resources that promote KSIS activities among workers" was noted by [62]. According to the aforementioned reasons, TL plays a vital role in KSIS operation. This leads us to the following hypothesis, which we build from the preceding debate.

H3.: transformational Leadership positively influence knowledge sharing.

#### 2.6. Transformational Leadership and Innovative Work Behavior

There are many unknowns when coming up with and executing new ideas. This is because the process from ideation to implementation may be lengthy and fraught with opposition from colleagues, superiors, and other interested parties [85]. The creator of the idea is also worried that his or her immediate supervisor, department head, or others involved in the execution would receive all the credit for its success instead of him or her [11]. Due to these factors, people lose their drive to create new things. Inspiring followers to engage in creative activities may be easier for transformational leaders who pay close attention to and provide for their followers' individual wants and needs. In order to get their followers involved in the creative process, these leaders regularly question and challenge their assumptions and ways of thinking.

Leaders with this skill may inspire their followers by connecting the organization's mission to their aspirations [73]. Therefore, it is presumed that transformational leaders will be able to inspire individual employees by relating their future to the organization's future and encourage them to engage in innovative work behaviors by cultivating a strong sense of shared vision and belonging with the organization. This leads us to propose a hypothesis:  
Hypothesis 4: Transformative leaders encourage creative problem-solving in the workplace.

### 2.7. The Moderating Role of Transformational Leadership

The term "knowledge sharing" describes an employee's predisposition to impart their expertise to others in the workplace [46]. Innovator's Workbench (IWB) focuses on innovation at all organizational levels by coordinating everyone's efforts [39]. Based on the reviewed literature, it is clear that fostering an environment that promotes open communication and information sharing among employees is a key aspect in enabling and inspiring people to engage in creative and original behavior in the workplace.

Although several studies have looked at the link between knowledge sharing and creative office practices, researchers have yet to fully tease out the impact of knowledge sharing's moderators and mediators.

Many studies have examined how transformational Leadership may affect many aspects of an individual's life. However, the extent to which transformative leadership moderates the connection between information sharing and inventiveness remains an unexplored field of study.

Transformative leaders inspire their teams to put aside narrow personal goals and work together collaboratively for a larger goal. In addition, when people open up and teach one another, the group gains the depth of understanding and perspective necessary to generate and implement novel ideas in transformative Leadership service. Similarly, [81] argued that when led by a transformative leader, people are more likely to take risks and open up about their areas of expertise. Innovation goals come across as exciting, interesting, and even achievable when the mind is stimulated, the emotions are stirred, and the Leadership is inspired [1].

Accordingly, our study is carried out to further explain the TL's consequence on the relationship between knowledge sharing and innovative work behavior. We, therefore, propose the following hypothesis:

H5: Transformational leadership moderates the relationship between knowledge sharing and innovative work behavior.

Figure 1 presents the model of interaction of KSIS and IWB with moderating role of TL. To

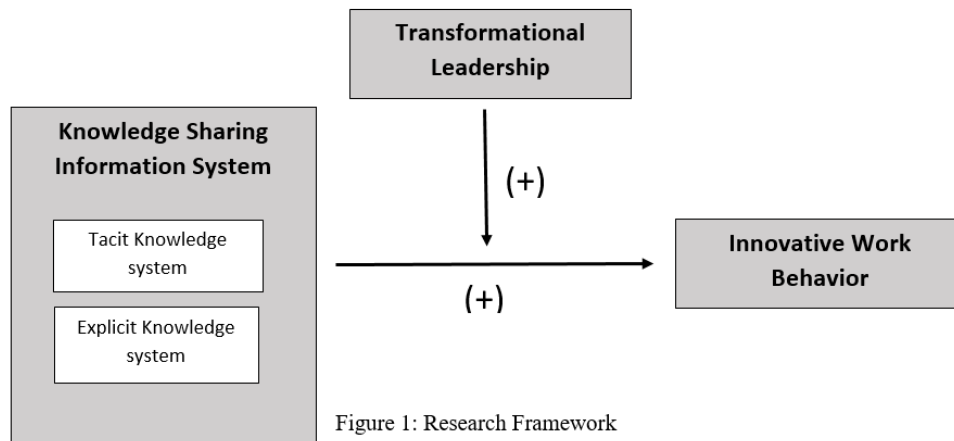


Figure 1: Research Framework

We use explicit and tacit knowledge to validate the hypotheses in the study.

## III. METHODOLOGY

### 3.1. Sample:

Questionnaires were distributed to 300 employees of various companies. Out of these, 240 were filled and used in the study, filled from the employees of the software houses which is situated in Rawalpindi and

Islamabad, yielded a response rate of 80.8%. The identities of participants were kept confidential.

### 3.2. Instrument Development:

The following three constructs are intended to be measured in this study: knowledge sharing, Innovative Work Behavior and Transformational Leadership. For

creating the questionnaires, highly reliable scales were examined from various articles and publications on KSIS, IWB and TL.

All scales adapted for this study are seven-point Likert scales. The *Knowledge Sharing Scale* [80] was adapted for this study. This scale comprises two dimensions; Explicit Knowledge (6-item scale) and Tacit Knowledge (7-item scale). 13 items are used to measure the Knowledge sharing tendencies among employees.

A 9-item *Innovative Work Behavior* scale was developed for this study based on the scale for *individual innovative behavior in the workplace* [64], which was later used and modified by [38]. Three scale items refer to idea generation, three to idea promotion and three to idea realization. Employees and supervisors completed this scale to measure the extent of IWB in the organization.

The Transformational leadership scale is a 7-item scale, retrieved from [14]. This scale is a short form of the Global TL scale. It measures the employees' perception of TL characteristics in their managers. The questionnaires are provided in Appendix 1.

## IV. RESULTS

### Results and Discussion

The findings support the first hypothesis (Table 1), which suggests that a KIS positively affects the organizational output. The significance of the positive association between these two variables was further supported by the correlation coefficient, which was  $R=0.62$  with a p-value of less than 0.05. When the significance level of a test is set at 0.05, the beta coefficient value (PI) of 0.41 indicates that a Knowledge Sharing Information system is regarded as a vital component for achieving organizational productivity. This demonstrates the importance of a knowledge-sharing information system in boosting productivity in businesses. Therefore, we accept H1. Like H1, TKSIS positively affects IWB (with a coefficient value of 0.36,  $p=0.00$ ). Contrarily, the coefficient value of 0.56 for the effect of EKSIF on organizational productivity supports the third hypothesis.

#### 4.1. Hypotheses Consequences

Firstly, the effect of the independent variable (KSIS) on the dependent variable (IWB) was analyzed. Then the effect of the independent variable (KSIS) on the mediator variable (TL) was analyzed. Finally, the independent and moderator variables' effect on the dependent variable was analyzed.

H<sub>1</sub> and H<sub>2</sub> predict that Explicit and Tacit KSIS positively impact IWB. The results are in line with the hypotheses. Hence, H<sub>1</sub> and H<sub>2</sub> are accepted.

H<sub>3</sub> and H<sub>4</sub> predict that TL positively impacts both KSIS and IWB. The results show that a TL affects KSIS and IWB positively. H<sub>3</sub> and H<sub>4</sub> are therefore accepted.

H<sub>5</sub> predicts the positive effect of TL as a moderator in the relationship between KSIS and IWB. The results have determined the positive impact of TL as a moderator; hence H<sub>5</sub> is accepted.

Table 1: Summary of Hypotheses results H1-H3

Connection Between Variables	Beta value	Critical Value	P value	Decision / Remarks
$\beta_1$ (IWB←TKS)	0.41	13.45	0.00	Supported
$\beta_2$ (IWB←EKS)	0.36	11.21	0.00	Supported
$\beta_3$ (IWB←KSIS)	0.56	16.84	0.00	Supported

Table 2 Model Coefficients for Conditional Indirect Effects of Knowledge Management information system on Innovative work behaviour through Transformational Leadership

Antecedent	Consequent						
	M (KSIS)			IWB (Rep. Int.)			
	Coeff	SE	P	Coeff	SE	P	
M (KSIS)	---	---	---	$b_1$	0.521	0.054	< 0.01
V (TL)	---	---	---	$b_2$	0.321	0.032	< 0.02
M X V	---	---	---	$b_3$	0.714	0.014	0.003
Constant	$i_1$	0.390	0.024	< .001	$i_2$	0.721	0.543

### Moderation Analysis

Similarly, Hypothesis H4 (Table 2) indicates that the Knowledge Management information system has significantly validated that the relationship between KMIS and Innovative Work Behavior is supported. It is shown that the Knowledge Management information system with transformational Leadership is demonstrated with a 0.321 beta coefficient value at a significance level of 0.05. Moreover, conditional indirect impact at each level is found substantial. The relationship of the Knowledge Management informational system with the Transformational Leadership (moderator) regressed considerably with Innovation work behaviour indicated by a beta coefficient of value= 0.714 at a 0.003 significance level. The findings validate the H4 hypothesis that TL moderates the linkage between KMIS and IWB, which verifies the H4 hypothesis.

## V. DISCUSSION

In this study, we determined the significant and positive effect of TL as a moderator in the relationship between KSIS and IWB. Theoretical and Practical implications are given below.

### 5.1. Theoretical Implications

The findings of this study show that both tacit and explicit KSIS have a positive and significant impact on IWB in organizations. This finding is supported by previous studies that suggest that KSIS increases IWB among employees [33], [35]. Tacit Knowledge, in particular, provides a competitive advantage because it cannot be altered or perfectly imitated [48].

According to the findings obtained in this research, transformational leaders ensure that the innovative talents of employees foster by encouraging KSIS among them. This outcome suggests that the tendency of KSIS among employees that work under transformational leaders widens, and consequently they will demonstrate IWB [3], [57]. Shared Knowledge helps TL and employees rapidly respond to new information and the external environment, fulfil the task efficiently, and solve existing problems, resulting in the enhanced innovative capacity of employees. The results of empirical studies carried out in various sectors also support this result.[16], [44]. Hence, this research contributes to existing literature proving that TL has a positive effect on both KSIS and IWB as moderators.

### 5.2. Practical Implications

The results of this study are beneficial for managers and practitioners. In order to improve innovation for organizational sustainability, managers must adapt the transformational leadership style. Especially if top management should show the characteristics of TL, the effects will be visible throughout the organization. Managers with creative and out-of-the-box thinking will influence their employees to do the same. Hence, creativity and team play should be essential while hiring employees, especially for managerial posts.

KSIS is a difficult process. Policies and infrastructure for KSIS should be developed. It is seen that in organizations where managers share Knowledge and experience with their employees, the employees also participate in KSIS. Managers should therefore involve their employees in decision-making and share Knowledge on their end, so they are encouraged to do the same.

In order to promote IWB, employees should be provided with training and development programs to be equipped with the tools to contribute to organizational performance in unique ways. Change is a slow and difficult process. It is often unwelcomed by organizational members. The management has to be efficient at TL to mould employees' minds for an innovative work environment. Organizations that employ these practices and encourage such behaviors sustain in this knowledge-based, competitive market.

### 5.3. Limitations and Future Research

This study is general and not limited to a particular section or industry. Therefore, future research can focus on a specific type of industry, and it may yield different results. Further dimensions of TL can be added as moderating factors. The effect of other Leadership styles such as transactional, autocratic, and democratic styles on the relationship between KSIS and IWB can be studied. Other variables, moderators or mediators, can be added to the model, such as; organizational support, communication, and Team Culture. International comparisons can further analyses the relationship between KSIS and IWB. Different data collection and analysis methods can be utilized.

## REFERENCES

- [1] Abdelrahman Zuraik, L. K. (2018). The role of CEO transformational leadership and innovation climate in exploration and exploitation". *European Journal of Innovation Management*.
- [2] Afsar, a. e. (2016). Transformational and transactional Leadership and employee entrepreneurial behaviour in knowledge-intensive industries. *The International Journal of Human Resource Management* 28(2): 1-26.
- [3] Afsar, B. M. (2019). The Role of Job Crafting and Knowledge Sharing on the Effect of Transformational Leadership on Innovative Work Behavior. *Personnel Review*. 48(5), 1186–1208.
- [4] Ahangar, R. (2009). "Building managers as transformational leaders in public sector banks". *International Review of Business Research Papers*, Vol. 5 No. 5, pp. 355-364.
- [5] Ahmad, F. &. (2019). Impacts of knowledge sharing: a review and directions for future research. *Journal of Workplace Learning*, 31(3), 207-230.
- [6] Alois L.J. Geyer, J. M. (1998). Transformational Leadership and Objective. *APPLIED PSYCHOLOGY: AN INTERNATIONAL REVIEW*, 47 (3), 397-420.
- [7] Asurakkody, T. A. (2020). Critical thinking disposition as a mediator in the relationship between self- Leadership and innovative behaviour: a cross-sectional study. *International Journal of Africa Nursing Sciences*.
- [8] Bass, B. &. (2006). *Transformational Leadership (2nd ed.)*. New Jersey: NJ: Lawrence Erlbaum Associates Inc.
- [9] Bass, B. M. (1990). Transformational leadership development: Manual for the

- Multifactor Leadership Questionnaire. . Palo Alto, CA: Consulting Psychologist Press.
- [10] Bengt-Åke Lundvall, P. N. (2007). Knowledge management and innovation performance. *International Journal of Manpower*, 28(3/4); 207-223.
- [11] Bilal Afsar, Y. B. (2014). Transformational Leadership and innovative work behaviour. *Industrial Management & Data Systems*, 114(8):1270-1300.
- [12] Bilal Afsar, Y. F. (2017). Transformational and transactional Leadership and employee entrepreneurial behaviour in knowledge-intensive industries. *The International Journal of Human Resource Management*, 28:2, 307-332.
- [13] Birasnav, M. R. (2011). , "Transformational leadership and human capital benefit the role of knowledge management". , *Leadership & Organization Development Journal*, 32 (2), 106-126.
- [14] Carless, S. A. (2000). A Short Measure of Transformational Leadership. *Journal of Business and Psychology*, 14(3), 389-405.
- [15] Charles Dhanaraj, M. A. (2004). Managing tacit and explicit knowledge transfer in IJVs: the role of relational embeddedness and the impact on performance. *Journal of International Business Studies*, 35 (5), 428-442.
- [16] Choi, S. B. (2016). How Transformational Leadership Facilitates Innovative Behavior of Korean Workers Examining Mediating and Moderating Processes. *Personnel Review*, 45(3), 459-479.
- [17] Choi, S. B.-W. (2016). How transformational Leadership facilitates innovative behaviour of Korean workers: Examining mediating and moderating processes. ., *Personnel Review*, 45(3), 459-479.
- [18] Choi, S. K. (2016). "How transformational leadership facilitates innovative behaviour of Korean workers: examining mediating and moderating processes", *Personnel Review*, 45 (3), 459-479.
- [19] Coakes, E. (2006). Storing and sharing Knowledge: Supporting the management of Knowledge made explicit in transnational organisations. *The learning organisation*, 579-593.
- [20] Elbeltagi, S. A.-h. (2016). Evaluating the effect of transformational Leadership on knowledge sharing using structural equation modelling: the case of Iraqi higher education. *International Journal of Leadership in Education*.
- [21] Eren, E. (1982). işletmelerde Yenilik Politikası, İstanbul Üniversitesi işletme Fakültesi Yayınları, Formül Matbaası, İstanbul.
- [22] Frost, N. a. (2010). Overcoming knowledge dilemmas: governing the creation, sharing and use of knowledge resources. *International Journal of Strategic Change Management*, Vol. 2 Nos 2/3, pp. 172-199.
- [23] García-Morales, V. J.-B. (2012). "Transformational leadership influence on organisational performance through organisational learning and innovation". . *Journal of Business Research*, 1040-1050.
- [24] Hakanen, J. J.-T. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior*, 78-91.
- [25] Hartog, D. J. (2010). Measuring Innovative Work Behavior. *Creativity and Innovation Management*.
- [26] Heffner, M., & Sharif. N. (2008). Knowledge fusion for technological innovation in organisations. *Journal of Knowledge Management; Kempston*, 12 (2), 79-93.
- [27] Hobfoll, S. E. (1985). Personal and social resources and the ecology of stress resistance. (P. Shaver, Ed.) *Review of personality and social psychology*, Vol. 6, pp. 265-290.
- [28] Hoch JE, B. W. (2018). Do ethical, authentic, and servant leadership explain variance above and beyond transformational Leadership? A meta-analysis. *Journal of Management*, 44(2): 501-529.
- [29] Holste & Fields. (2010). Trust and Tacit Knowledge information system and use. *JOURNAL OF KNOWLEDGE MANAGEMENT*, 1367-3270.
- [30] Hon, A. H. (2016). Employee creativity and innovation in organisations: Review, integration, and future directions for hospitality research. *International Journal of Contemporary Hospitality Management*, 28 (5), 862-885.
- [31] Hu, M. L. (2009). Knowledge Sharing and Innovative Service Behavior Relationship: Guanxi as Mediator. *Social Behavior and Personality: An International Journal*, 37(7), 977-992.
- [32] Huang, Q. D. (2010). The impact of trust, guanxi orientation and face on the intention of Chinese employees and managers to engage in peer-to-peer tacit and Explicit Knowledge information system . . *Information Systems Journal*.

- [33] Işık, C., Aydın, E., Dogru, T., Rehman, A., Alvarado, R., Ahmad, M., et al. (2021). The Nexus between Team Culture, Innovative Work Behaviour and Tacit Knowledge information system: Theory and Evidence. *Sustainability*, 13, 4333.
- [34] Ibragimova, B. (2007). The propensity for knowledge sharing: An organisational justice perspective, Pro-Quest Information & Learning. USA: University of North Texas.
- [35] Jamshed, S., & Majeed, N. (2019). Relationship between team culture and team performance through the lens of knowledge sharing and team emotional intelligence. *J. Knowl. Manag.*, 23, 90–109.
- [36] Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73 (3), 287–302.
- [37] Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287–302.
- [38] Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287–302.
- [39] Jong, J. R. (2003). Determinants of Coworkers' Innovative Behaviour: An Investigation into Knowledge-intensive Services.
- [40] Khan, A. N., Mehmood, K., & Khan, N. A. (2022). How STEM-based CI and Leadership Support can Turn Possibly Bad Situations Into Opportunities?. *Academy of Management Proceedings*, p. 12293.
- [41] Kim, S. L. (2016). "Abusive supervision, knowledge sharing, and individual factors: A conservation-of-resources perspective". *Journal of Managerial Psychology*, Vol. 31 No. 6, pp. 1106-1120.
- [42] Kim, T. T. (2013). Hospitality Employee Knowledge-Sharing Behaviors in the Relationship Between Goal Orientations and Service Innovative Behavior. *International Journal of Hospitality Management*, 34(1), 324–337.
- [43] Le, P. B. ((2017)). Transformational Leadership supports knowledge sharing: Evidence from Chinese manufacturing and service firms. *Chinese Management Studies*, 11 (3), 479–497.
- [44] Le, P. B. (2019). Determinants of Innovation Capability: The Roles of Transformational Leadership, Knowledge Sharing and Perceived Organizational Support. *Journal of Knowledge Management*, 23(3), 527–547.
- [45] Le, P. B. (2017). Transformational Leadership supports knowledge sharing: Evidence from Chinese manufacturing and service firms. *Chinese Management Studies*, 11 (3), 479–497.
- [46] Lin, H.-F. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower*.
- [47] Liu Haixin, L. G. (2018). Linking Transformational Leadership and Knowledge Sharing: The Mediating Roles of Perceived Team Goal Commitment and Perceived Team Identification. *Frontiers in Psychology*, 9.
- [48] López-Nicolás, C. &-C. (2011). Strategic knowledge management, innovation and performance. *Knowledge Management*, 15(5), 779–801.
- [49] Martins, M. &. (2019). Strategic knowledge management in a digital environment: Tacit and explicit Knowledge in Fab Labs. *Journal of Business Research*, 94, 353-359.
- [50] Martins, M. &. (2019). Strategic knowledge management in a digital environment: Tacit and explicit Knowledge in Fab Labs. *Journal of Business Research*, 94, 353-359.
- [51] Martins, M. (2019). Strategic knowledge management in a digital environment: Tacit and explicit Knowledge in Fab Labs. *Journal of Business Research*, 353-359.
- [52] Mehmood, K., Alkatheeri, B.H., Jabeen, F. and Iftikhar, Y. (2021), "The impact of IT capabilities on organizational performance: A Mediated Moderation Approach", *Academy of Management Proceedings*, p. 13737.
- [53] Mehmood, K., Jabeen, F., Al Hammadi, K. I. S., Al Hammadi, A., Iftikhar, Y., & AlNahyan, M. T. (2022). Disentangling employees' passion and work-related outcomes through the lens of cross-cultural examination: a two-wave empirical study. *International Journal of Manpower*, <https://doi.org/10.1108/IJM-11-2020-0532>.
- [54] Mehmood, K., Li, Y., Jabeen, F., Khan, A.N., Chen, S. and Khalid, G.K. (2020), "Influence of female managers' emotional display on frontline employees' job satisfaction: a cross-level investigation in an emerging economy", *International Journal of Bank Marketing*, Vol. 38 No. 7, pp. 1491–1509.
- [55] Mehmood, K., Jabeen, F., Iftikhar, Y., Yan, M., Khan, A.N., AlNahyan, M.T., Alkindi, H.A., et al. (2022), "Elucidating the effects of organisational practices on innovative work behavior in UAE public sector organisations: The mediating role of employees' wellbeing", *Applied Psychology: Health and Well-Being*, pp. 1–19.



- [56] Miron, E. E. (2004). Do personal characteristics and cultural values that promote innovation, quality, and efficiency compete or complement each other? *Journal of Organizational Behavior*, Vol. 25, pp. 175-99.
- [57] Mittal, S. &. (2015). Transformational Leadership and Employee Creativity: Mediating Role of Creative Self-Efficacy and Moderating Role of Knowledge Sharing. *Management Decisions*, 53(5), 894–910.
- [58] Muhammed S, Z. H. (2020). Peer knowledge sharing and organisational performance: the role of leadership support and knowledge management success. *Journal of Knowledge Management*, 24: 2455–2489.
- [59] NikoSudibjoRanggi, K. (2021). The effects of knowledge sharing and person-organisation fit the relationship between transformational Leadership on innovative work behaviour. *Heliyon*, 7 (6).
- [60] Nonaka and Takeuchi. (1995). The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation. *Oxford University Press*.
- [61] Oyku Basak Derin, K. T. (2021). The Relationship between Knowledge Sharing and Innovative Work Behaviour: the Mediating Role of Ethical Climate, Knowledge Management Research & Practice.
- [62] Phong Ba Le, H. L. (2019). Determinants of innovation capability: transformational leadership roles, Knowledge sharing and perceived organisational support. *Journal of Knowledge Management*.
- [63] Rogers, R. &. (2015). *Challenges in implicit learning research*. Implicit and Explicit Learning of Languages (pp.275-300).
- [64] Scott, S. G. (1994). Determinants of innovative behaviour: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37,580–607.
- [65] Shang, Y., Mehmood, K., Iftikhar, Y., Aziz, A., Tao, X. and Shi, L. (2021), “Energizing Intention to Visit Rural Destinations: How Social Media Disposition and Social Media Use Boost Tourism Through Information Publicity”, *Frontiers in Psychology*, Vol. 12, <https://doi.org/10.3389/fpsyg.2021.782461>.
- [66] Shang, Y., Rehman, H., Mehmood, K., Xu, A., Iftikhar, Y., Wang, Y. and Sharma, R. (2022), “The nexuses between social media marketing activities and consumers’ engagement behaviour: A two-wave time-lagged study”, *Frontiers in Psychology*, <https://doi.org/10.3389/fpsyg.2022.811282>.
- [67] Sharing (Srivastava, B. &. (2006). Empowering Leadership in Management Teams: Effects on Knowledge Sharing, Efficacy, And Performance. *Academy of Management Journal*, 49 (6), 1239-1251.
- [68] Slatten, T. &. (2015). The Effects of Transformational Leadership and Perceived Creativity on Innovation Behavior in the Hospitality Industry. *Journal of Human Resources in Hospitality & Tourism*, 14(2), 195-219.
- [69] Smith, E. A. (2001). The Role of Tacit and Explicit Knowledge in the Workplace. *Journal of Knowledge Management*, 5 (4), 311-321.
- [70] Smith, K. C. (2005). Existing Knowledge, knowledge creation, capability, and the rate of new product introduction in high-technology firms. *Academy of Management Journal*, Vol. 48 No. 2, pp. 346-57.
- [71] Sosik, J. A. (1997). “Effects of leadership style and anonymity on group potency and effectiveness in a group decision support system environment”. *Journal of Applied Psychology*, Vol. 82 No. 1, pp. 89-103.
- [72] Srivastava, B. &. (2006). Empowering Leadership in Management Teams: Effects on Knowledge Sharing, Efficacy, And Performance. *Academy of Management Journal*, 49 (6), 1239-1251.
- [73] Timothy C. Bednall, A. E. (2018). Innovative Behaviour: How Much Transformational Leadership Do You Need? *British Journal of Management*, Vol. 29, 796–816.
- [74] Tobing, P. L. (2007). Knowledge Management Konsep, Arsitektur, dan Implementasi. Graha Ilmu. Yogyakarta .
- [75] Toker, K. C. (2013). An investigation on a production company via the scope of Mintzberg's adhocratic organisation structure. *International Journal of Research in Business and Social Sciences*, 2(1), 22–30.
- [76] Tuan, L. T. (2017). Knowledge Sharing in Public Organizations: The Roles of Servant Leadership and Organizational Citizenship Behavior. 361-373.
- [77] UDIN, U. (2022). Knowledge Sharing and Innovative Work Behavior: Testing the Role of Entrepreneurial Passion in Distribution Channel. *Journal of Distribution Science*, 20 (2), 79-89.
- [78] Ullah, F., Wu, Y., Mehmood, K., Jabeen, F., Iftikhar, Y., Acevedo-Duque, Á. and Kwan, H.K. (2021), “Impact of Spectators’ Perceptions of Corporate Social Responsibility on Regional Attachment in Sports: Three-Wave Indirect Effects of Spectators’ Pride and Team

- Identification”, Sustainability, Vol. 13 No. 2, p. 597.
- [79] Wang, S. &. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 115–131.
- [80] Wang, Z. &. (2012). Knowledge sharing, innovation and firm performance. *Expert Systems with Applications*. 39(10), 8899–8908.
- [81] Xiao, Y. Z. (2017). How does individuals' exchange orientation moderate the relationship between transformational Leadership and knowledge sharing? *Journal of Knowledge Management*, 21(6), 1622–1639.
- [82] Yang, Z. N. (2018). Knowledge Sharing Serves as a Mediator between Collaborative Culture and Innovation Capability: An Empirical Research. *Journal of Business & Industrial Marketing*, 33, 958-969.
- [83] Yongbu Sun, J. L. (2020). Analysis of the relationship between open innovation, knowledge management capability and dual innovation. *Technology Analysis & Strategic Management*, 32 (1), 15-28.
- [84] Yuan, F. &. (2010). Innovative behaviour in the workplace: The role of performance and image outcome expectations. *Academy of Management Journal*, 53, 323–342.
- [85] Zhou, e. M. (2007). Dual Tuning in a Supportive Context: Joint Contributions of Positive Mood, Negative Mood, and Supervisory Behaviors to Employee Creativity. *Academy of Management Journal*, 50 (3).