International Journal Of Social And Business Sciences
VOL-3, ISSUE-2, 2025
https://www.ijsbs.com/index.php/home/about

Enhancing Hybrid Work Flexibility through Employee Performance: A moderated mediation model

Muhammad Nauman
Research Scholar, Quaid-i-Azam School of Management Sciences, Islamabad
Email: mnauman@qasms.qau.edu.pk

Received 5 July 2025 Accepted 2 September 2025 Published 9 September 2025

Abstract

This investigation explores the impact of hybrid work flexibility on employee performance, emphasizing the role of work engagement and the influence of digital leadership competency. Utilizing SET, the study implemented a cross-sectional design and gathered samples from employees, analyzing data via AMOS from 395 IT manufacturing employees operating in a hybrid work environment in Pakistan. The results indicate that the flexibility of hybrid work has a beneficial impact on employee performance, with work engagement serving as a partial mediator in this connection. Furthermore, the competency in digital leadership influences the extent to which hybrid work flexibility affects employee performance. The findings from this study offer both theoretical insights and practical applications for organizations operating in hybrid work environments.

Keywords: Hybrid Work Flexibility, Work Engagement, Employee Performance, Digital Leadership.

1. Introduction

Businesses around the world have been forced to adapt due to the COVID-19 pandemic, and this has accelerated digital transformation in countries like Pakistan. When it comes to dealing with competitive pressure, increasing innovation, streamlining processes, and responding effectively to market changes, digital technologies are crucial (Krajčík et al., 2023). Since small and medium-sized enterprises (SMEs) account for more than 90% of Pakistan's private sector, contribute 40% to GDP, and employ 78% of the country's workforce, digital transformation is now essential rather than elective(Alfalah et al., 2025).

With an eye toward its potential, the Pakistani government established the "Digital Pakistan Vision" and small and medium enterprise policies within the Ministry of Information Technology and Telecommunication to encourage the adoption of technology and the acquisition of digital knowledge by enterprises (Gill et al., 2021). Despite these efforts, SMEs are still falling behind in the adoption of digital technology due to factors like inadequate infrastructure, a lack of capital, and an absence of trained workers (Khan & Sarkar, 2024). Over half of Pakistan's SMEs are unable to implement digital solutions due to a lack of qualified leadership and management, according to a recent study (Alkhayyal & Bajaba, 2024).

Employees may be dissatisfied and digitally productive when firms undergo digital transformations due to factors such as resistance from employees, the stress that comes with new technology, and difficulty in achieving a good work-life balance (Ghosh et al., 2020). Pakistan is largely composed of young people, a large portion of whom are both internet users and productive members of society (Desty Febrian, 2025). As a result, the total performance of transitioning organizations is significantly impacted by how successfully workers utilize digital tools to fulfill activities. This highlights the importance of workers' digital abilities (Santillan et al., 2023).

When researching digital technology and businesses in Pakistan, researchers seldom take a look at how digitalization has affected workers. We still don't know nearly enough about what kinds of organizational features aid SMEs in succeeding in the digital sphere. The importance of digital leadership in fostering employee engagement and digital innovation has been highlighted by recent research (Gao & Gao, 2024). This type of leadership includes having a vision, advocating digital approaches, and being technically proficient.

The term "hybrid work flexibility" refers to a paradigm change in the planning, execution, and assessment of work, rather than just a change in logistics. It gives workers more control over when and where they get their jobs done, which could lead to a more motivated and effective staff. During this change, the ability of people to innovate is now crucial for organizations to stay alive and compete in a complicated, unpredictable, and ambiguous environment (Naqshbandi et al., 2024). According to

Toscano et al. (2025),Employees innovate at work; it means they come up with new ideas, spread them around, and put them into action. Recognizing the impact of flexible work structures on performance is becoming more important as organizations aim to adapt and innovate. Tröster & Brosi (2025) notes that there is a lack of study about the interaction of HWF, EIP, WE, and DLC in the Pakistani setting. For smaller businesses dealing with limited resources and high levels of unpredictability, understanding the interplay between these factors is crucial for improving digital performance. It aims to fill a need in the literature by investigating the impact of HWF and EIP through the mediation of WE and the moderating role of DLC. According to the research, which relies on the SET, HWF influences EIP and the mediating connection that moderates it. This study sheds light on the best practices for developing digital competence in Pakistan's workforce, which is essential for the country's burgeoning digital economy.

This article has also made several essential contributions to the understanding of digital transformation in SMEs, especially in Pakistan. It throws a light on the difficulties that these businesses encounter, including a poor infrastructure and trained leadership, which makes it hard to implement digital technologies even though they play an important role in the economy. The paper highlights how digital leadership can promote employee engagement and innovation, providing insight into how leadership can be used to initiate successful digital initiatives. It also presents the notion of hybrid work flexibility (HWF) and its effect on employee innovation performance (EIP), demonstrating that a flexible work organization can increase motivation and creativity at work. Moreover, the paper discusses how work engagement (WE) mediates the interaction between HWF and EIP, which continues the theory of social exchange theory in the digital transformation environment. Finally, it fills a literature gap, as its literature is limited to the Pakistani setting, and presents real-life suggestions on how to address the issue of digital competencies within the workforce, which is essential to the developing digital economy in Pakistan.

2. Literature Review and hypothesis development

2.1. Social Exchange Theory

Social Exchange Theory (SET) is a fundamental framework in social psychology and sociology that explains human interactions based on the exchange of rewards and costs. The theory suggests that individuals engage in social relationships with the expectation of gaining benefits, which they weigh against the costs involved in the interaction. People are viewed as rational actors who aim to maximize rewards and minimize costs, where rewards can be tangible, like money or status, or intangible, like emotional support or companions (Homans, 1958).

Conversely, costs can involve time, effort, or emotional strain. Relationships are more likely to be formed and sustained when the perceived rewards outweigh the costs, leading to satisfaction and commitment (Blau, 1964). A key component of SET is the comparison level (CL), which refers to the expectations individuals have based on past experiences or social norms. When the rewards and costs of a relationship align with or exceed these expectations, the relationship is seen positively. On the other hand, if these expectations are not met, dissatisfaction may arise, prompting individuals to seek alternative relationships (Olaus & Veronica, 2025). Another important concept in SET is the comparison level for alternatives, which reflects the perceived best available alternative if the current relationship were to end. If an individual believes that better alternatives exist, they may be motivated to leave the current relationship (Cropanzano & Mitchell, 2005). Power and dependence also play a central role in SET, with power being defined as the ability of one individual to influence another through the exchange of resources. An individual's dependence on the other for rewards increases their vulnerability, giving the other party more power within the relationship. Equity, the balance of rewards and costs, is another key principle of SET, with individuals being most satisfied when they perceive that both parties in a relationship are contributing and receiving equally. If one party feels they are giving more than receiving, dissatisfaction or resentment may arise. Reciprocity, the mutual exchange of benefits, is central to sustaining relationships, with individuals expecting that favors will be returned over time. SET has widespread applications, including in organizational

behavior, where it helps explain employee motivation, job satisfaction, and leadership dynamics. In interpersonal relationships, it provides insights into how exchanges of support and resources influence friendships, romantic partnerships, and family dynamics. By focusing on the balance of rewards and costs, SET offers a comprehensive understanding of how relationships are formed, maintained, and dissolved, making it a valuable framework for analyzing both personal and professional interactions (Cropanzano & Mitchell, 2005).

2.2 Hybrid Work Flexibility and EP

Hybrid Work Flexibility (HWF) refers to the arrangement that allows employees to split their time between working remotely and in the office, offering them greater control over where and when they work. Previous studies have suggested that such flexibility can significantly enhance Employee Performance (EP). For instance, Desty Febrian (2025) found that hybrid work models lead to increased productivity and job satisfaction by providing employees with the autonomy to manage their work-life balance. This increased autonomy is crucial, as it reduces the stress typically associated with rigid work schedules, allowing employees to optimize their work environment for maximum efficiency. Moreover, (Deng et al., 2023) demonstrated that employees in hybrid work setups experience lower levels of burnout and higher job satisfaction, factors that are positively linked to improved performance. Similarly, (Toscano et al., 2025) found that when employees have the flexibility to work remotely, they tend to show higher motivation and engagement, which directly translates into enhanced performance outcomes. Hybrid work models foster a sense of ownership and responsibility over work tasks, which can lead to greater innovation and creativity (Jaß et al., 2024). Employees, when given the freedom to work in environments that suit them best, often exhibit higher levels of commitment, reduced absenteeism, and increased creativity, all of which contribute to higher performance levels. Additionally, studies such as those by Apenbrink & Kuhlmann (2025) have highlighted the role of flexibility in improving employee engagement, as workers feel trusted and empowered to work in ways that best suit their personal and professional needs. This sense of empowerment drives greater contributions to organizational goals and performance.

Thus, the relationship between HWF and EP is supported by the argument that hybrid work arrangements enhance autonomy, job satisfaction, and engagement, which all foster a productive work environment and improved employee performance across various industries. Therefore, hypothesized that:

H1: Hybrid work flexibility positively affects EP.

2.3 Work Engagement's Mediating Role

Work engagement is best described as a positive mental state that includes vigour, determination, and complete engagement. It clarifies the part played by workers' willingness to go above and beyond in creative and innovative endeavors (Santillan et al., 2023). Social Exchange Theory (SET) suggests that Hybrid Work Flexibility (HWF) is seen as a reward that enhances job satisfaction, leading to greater engagement and performance. Employees reciprocate this flexibility by increasing innovation and productivity. Kumari et al. (2025) highlight that flexibility serves as a key resource, boosting engagement and performance. Research from Pakistan supports this, showing that hybrid work increases employee happiness and is viewed by managers as more productive than fully remote work. In SET terms, the exchange of flexibility for higher performance benefits employees and employers.

Due to the COVID-19 epidemic, people started to have more options about their schedules and locations of employment. Numerous studies attest to its various beneficial effects. A significant positive correlation between flexible work arrangements and characteristics of employee performance, such as efficiency, innovation, and well-being, was found by the meta-study (ƘIəU, 2023). Furthermore, by increasing their internal motivation and assisting them in aligning their energy and creativity with their work, knowledge workers with flexible schedules significantly increased their attempts to innovate (Gao & Gao, 2024). Employees who have hybrid work flexibility (HWF) are more motivated and psychologically healthy since they can choose when and where to work. Work engagement (WE), a state of vigor, effort, and focus, is encouraged by this independence and is positively correlated with innovative behavior. Flexible work arrangements as a job resource that increases engagement, which in turn boosts innovation. Studies support this mediation link (Alkhayyal & Bajaba, 2024; Toscano et al., 2025). In a similar (Van Gorp et al., 2023) demonstrated

that engagement acted as a mediator in the relationship between inventive outputs and job flexibility. H2 is therefore recommended:

H2: The association between employee performance and hybrid work flexibility is mediated by job engagement.

2.4 Employee Performance, Hybrid Work Flexibility, and Digital Leadership Competency

Within companies that use hybrid working, hybrid working flexibility, or HWF, has been a logical shift. The atmosphere is sufficiently active to support employee autonomy, work-life balance, and improved productivity. Despite earlier research showing a favorable relationship between work engagement (WE) and the flexibility of hybrid employment (Alfalah et al., 2025). There are some situations in which this relationship is not applicable. Digital leadership capability (DLC) is one of the most important moderating characteristics that could characterize this kind of connection. The ability of a leader to employ digital technologies, virtual teams, organization, and a digitally inviting organizational culture is defined as digital leadership competency (Khalid et al., 2020). Employees in hybrid workspaces often become frustrated because they are uncomfortable using digital tools to complete tasks, interact with coworkers, and connect with management. Leaders with a high degree of digital competency can help establish this kind of environment by implementing the seamless integration of technology, offering assistance when needed, and promoting digital upskilling. Employees become more psychologically invested in their work as a result, and they gain greater confidence in the organization's digital structure (Arafat et al., 2024; Bong et al., 2024). Leadership is regarded as a critical organizational resource that affects the motivation process that results in engagement in the SET model. Employees see fewer digital barriers, more pro-social communication, and a better orientation to organizational goals when hybrid work flexibility is combined with a high level of digital leadership ability. This kind of synergy increases job engagement and fosters the motivation potential of hybrid work (Charles et al., 2025). Conversely, in environments with low levels of digital proficiency, the adaptive aspects of flexibility may be overshadowed by inadequate communication, digital fatigue, and a lack of support, leading to low employee engagement. Thus, it is suggested that:

H3: The link between hybrid work flexibility and employee performance is moderated by digital leadership competency, with a greater correlation when digital competency is high.

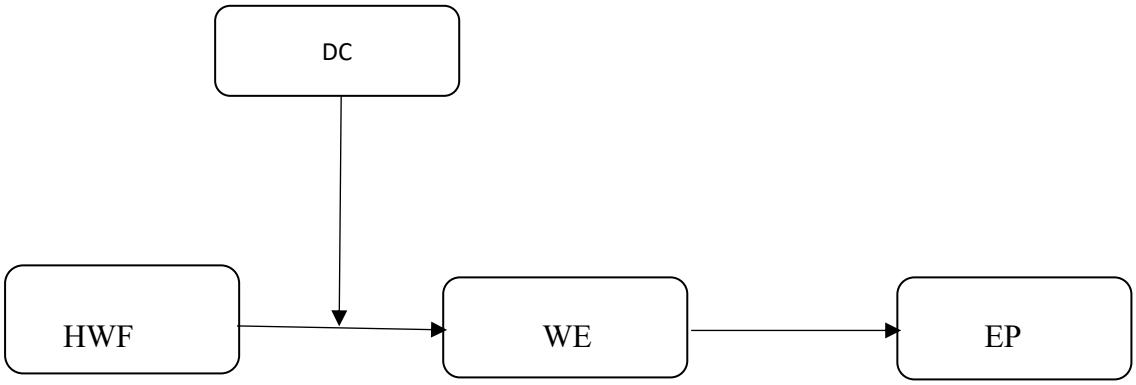

Figure 1: Conceptual Framework

3. Research methodology

3.1 Sample and Data

Data was gathered from small and medium-sized enterprises (SMEs) in Peshawar, Islamabad, and Lahore, Pakistan. A random sampling method was employed to ensure the sample's representativeness and reliability. Human resource managers from the selected IT companies were briefed on the objectives and confidentiality guidelines of the research. After receiving consent, HR departments provided access to lists of employees working in hybrid or flexible roles. To make the study applicable to a wide range of SME workers across Pakistan, the research team randomly selected participants from these lists. This approach aimed to include a diverse mix of job roles, organizational positions, and hybrid work setups across different companies. Before distributing the survey, the research team obtained approval from an ethical review board and ensured that all participants understood the survey and its implications. Participants were required to have at least six months of experience in their hybrid role to provide meaningful insights into hybrid work flexibility, digital leadership, and employee performance.

3.2. Measurement Scale

Hybrid work flexibility (HWF) refers to the degree of control employees have over when and where they perform their work, such as alternating between remote and office settings, while maintaining productivity. Research has shown that HWF can act as a catalyst for driving innovation, particularly in knowledge-intensive roles, as it provides employees with the autonomy to choose the work environment that best suits their needs. Studies have assessed HWF using various scales, including the 8-item measurement scale developed by (Gill et al., 2021), which includes items such as "I can decide which days to work from home" and "I can use my judgment to complete a task." These items reflect how hybrid work structures enable employees to make decisions that can positively impact their productivity and creativity. Employee performance (EP) refers to an individual's ability to generate, promote, and implement innovative ideas that contribute to improvements in products, services, or processes within an organization. Al Koliby et al. (2022) proposed a 10-item scale to measure employee innovation performance (EIP), with items like "I will provide new ideas to improve the current situation" and "I can transform innovative ideas into actual applications." These measures reflect the importance of innovation in enhancing individual performance and organizational growth, emphasizing the role of creative thinking and idea implementation in improving outcomes. Work engagement (WE) is a positive, fulfilling state of mind at work, characterized by vigor, dedication, and absorption. The concept of work engagement has been widely studied, and (Ghosh et al., 2020) developed a 6-item measurement scale to assess it. Items like "I feel full of energy at my work" and "I am enthusiastic about my job" capture the essence of work engagement, which is associated with higher motivation, job satisfaction, and overall performance. Engaged employees are more likely to contribute meaningfully to organizational success through their commitment and energy. Digital leadership competency (DLC) refers to the ability of leaders to effectively manage, inspire, and guide teams in a digital environment, using technology to achieve strategic goals. Bellis et al. (2024) introduced an 8-item scale to assess DLC, with items such as "I ensure the team adopts and integrates digital solutions effectively" and "I enable digital communication and knowledge sharing across virtual channels." These items reflect the leader's role in fostering a digitally competent workforce and supporting organizational adaptability through effective use

of technology. As organizations increasingly rely on digital tools, the ability of leaders to manage these transitions is crucial for maintaining team performance and engagement. HWF, EP, WE, and DLC interact to create a work environment where flexibility, innovation, engagement, and effective leadership drive enhanced employee performance and organizational success.

3.2.1. Pilot study

A pilot study was done with a sample of 50 professionals in a hybrid context to evaluate the reliability, clarity, and appropriateness of the research instrument. The questionnaire independently assessed well-validated assessment scales for Hybrid Work Flexibility, Work Engagement, Digital Leadership Competency, and Employee Performance using a 5-point Likert scale. Data were collected via an online survey, revealing a high internal consistency across all constructs as indicated by the Cronbach alpha coefficients: Hybrid Work Flexibility (alpha = 0.83), Work Engagement (alpha = 0.87), Digital Leadership Competency (alpha = 0.89), and Employee Performance (alpha = 0.91). Several modifications were implemented to enhance clarity in response to the participants' feedback. The results validated that the instrument was dependable and suitable for the primary inquiry.

3.2.2. Data Collection and Error Elimination

The majority of this study's data came from electronic surveys. We refined the data to guarantee the quality of the responses. Questionnaires that remained unanswered for a minimum of 5 minutes were omitted from the study. The average duration required to complete the questionnaire in the pilot study was utilized to set the benchmark for the entire investigation. We scrutinized surveys for missing information or contradictory responses to ascertain the data's credibility. Consequently, we eliminated 45 invalid surveys, yielding 395 valid responses.

4. Results

4.1 Demographic Information

Table 4.1 gives a professional and demographic representation of the sample population. As far as the gender is concerned, the sample consists of a majority of male participants (63.04 per cent of those who considered themselves male, 36.96 per cent of those who considered themselves female). The highest age groups are 26-30 years

with 25.06 percent and 31-35 years with 24.81 percent, but the lowest age groups are less than 25 years at 9.62 percent and older than 50 years at 10.88 percent. In terms of education, the majority of the respondents have either a college education (30.63%) or a bachelor's degree (35.94%). A smaller percentage are high school educated or less so (16.45%), and the few possess a master's or doctorate (9.62 and 7.34% respectively). Regarding work experience, most people have 1-5 years (30.63) and 6-10 years (27.34) of experience, with fewer people having over 10 years of work experience. The youngest group is 16-20 years of experience (13.16%). Finally, most of the sample is in the category of employee (41.77%), then junior managers (29.11%), middle managers (23.54%), and a very minor percentage in the senior management positions (5.57%). This distribution implies a workforce that is reasonably young and well educated; more of them were in the junior and middle management divisions.

Table 4.1 Demographics Variable

Category	Subcategory	(n)	(%)
Gender	Male	249	63.04
	Female	146	36.96
Age	Under 25 years	38	9.62
	26–30 years	99	25.06
	31–35 years	98	24.81
	36–40 years	63	15.94
	41–50 years	54	13.67
	Over 50 years	43	10.88
Education	High school or lower	65	16.45
	College	121	30.63
	Bachelor's degree	142	35.94
	Master's degree	38	9.62
	Doctoral degree or higher	29	7.34
Work Experience	1–5 years	121	30.63

	6–10 years	108	27.34
	11–15 years	66	16.71
	16–20 years	52	13.16
	More than 20 years	48	12.15
Designation	Employee	165	41.77
	Junior Manager	115	29.11
	Middle Manager	93	23.54
	Senior Manager	22	5.57

4.2 CFA

CFA is the method for confirming that the model's construct grouping is a good fit (Hair, Gabriel, & Patel, 2014). This study gave the following results. X2 (p) equals 606.247, with a value of 0.000; X2 /df has a value of 1.263, and RMSEA measures 0.022. Besides, both incremental fit indices, IFI and CFI, are 0.989. Next, parsimonious fit indices indicate that PGFI is 0.802 and PNFI is 0.863. The researchers considered Average Variance Extracted and Composite Reliability values during the study. The values that AVE recorded included Hybrid Work Flexibility of 0.653, Employee Innovation of 0.633, Work Engagement of 0.627, and Leadership Competency of 0.642; all of which surpassed 0.5. For CR to have value, the Hybrid Work Flexibility score should be 0.802, Employee Innovation 0.755, Work Engagement 0.811, and Leadership Competency 0.761. If the AVE is greater than 0.5 and the CR is greater than 0.7, then the factor analysis indicates significant validity. Also, all significance values were below 0.001. Also, the structure's reliability is reviewed. According to Cronbach's alpha, HWF had an alpha of 0.919, EP 0.896, WE 0.913, and LC 0.899. A Cronbach's alpha > 0.7 indicates that the reliability analysis results are valid. The findings are all listed in Table 4.2.

Table 4.2 CR, AVE, and Factor loading

Construct	F.L	AVE	CR	α
HWF	0.71 – 0.85	0.653	0.802	0.919
EP	0.68 – 0.82	0.633	0.755	0.896
WE	0.70 – 0.83	0.627	0.811	0.913
LC	0.69 – 0.84	0.642	0.761	0.899

Discriminant validity was measured by dividing the square root of each construct's Average Variance Extracted (AVE) by its correlations with other constructs (Fornell & Larcker, 1981). The results are in Table 4.3. The off-diagonal cells represent inter-construct correlations, while the diagonal cells represent AVE square roots. The square roots of AVE (bold diagonal entries) are larger than the inter-construct correlations within the same row and column in all four constructs. The square root of Hybrid Work Flexibility's AVE (0.808) is higher than its connection with Employee Innovation (0.542), Work Engagement (0.495), and DigitalLeadership Competency (0.518). Similar trends are observed in EP (0.796 > 0.542, 0.523, 0.501), Work Engagement (0.791 > 0.495, 0.523, 0.478), and Digital Leadership Competency (0.801 0.518, 0.501, 0.478). These data fit the Fornell-Larcker criterion and show that every latent variable correlates more with its indicators than with any other variable. The measuring paradigm has sufficient discriminant validity, and Hybrid Work Flexibility, EIP, Work Engagement, and Digital Leadership Competency are empirically diverse (Hair et al., 2017).

Table 4.3 Discriminant validity

Constructs	1	2	3	4
HWF	(0.808)			
EIP	0.542	(0.796)		
WE	0.495	0.523	(0.791)	
DLC	0.518	0.501	0.478	(0.801)

4.4 Hypothesis Testing

Results from hypothesis testing reveal several significant relationships within the research model. First, a substantial positive relationship was identified between high-performance work practices (HWF) and employee innovation (EI), with a standardized coefficient (β) of 0.522, a t-value of 5.628, and a p-value of less than 0.001, confirming research hypothesis 1. Next, the mediating effect of work engagement (WE) was assessed using structural equation modeling (SEM). The indirect path from WE to HWF to EIP proved to be significant, with an effect value of 0.398 and a significant p-value, along with a 95% bootstrap confidence interval that excludes zero. This indicates that a culture of WE significantly mediate the association between HWF and EIP, thereby verifying hypothesis 2. Furthermore, the moderating effect of digital leadership capabilities (DLC) was also examined using SEM. The indirect path from DLC to HWF to EIP showed significance, with an effect value of 0.172 and a p-value of less than 0.006, along with a 95% bootstrap confidence interval that excludes zero. This suggests that DLC plays a significant moderating role in the relationship between HWF and EIP, confirming hypothesis 3.

Table 4.4 Hypothesis Association

Path	β	t-value	p-value	Result
HWF → EIP	0.522	5.628	0.000	Supported

WE → HWF → EIP	0.398	4.851	0.000	Partial mediation
DLC→ HWF → EIP	0.184	2.863	0.000	Moderation Supported

5. Discussion

This study demonstrates that employees in organizations characterized by hybrid flexibility and digitally proficient senior leaders exhibit higher levels of engagement and creativity. This study illustrates that flexibility can enhance motivation and engagement among employees in the workplace. Previous findings, i.e., Krajčík et al. (2023), indicate that flexible planning in SMEs enhances employee engagement, thereby fostering innovation in Pakistani organizations (Naqshbandi et al., 2024; Olaus & Veronica, 2025). This study expands the field by demonstrating that DLC can influence the pathway. Charles et al. (2025) that digital fluency empowers leaders to manage hybrid teams. In addition, Olaus & Veronica (2025) demonstrate that digital leadership fosters flexibility and innovation within the public sector in Pakistan. Our results indicate that leaders with strong DLC enhance the positive impact of flexibility on engagement. These findings align with SET (Cropanzano & Mitchell, 2005), affirming that the qualities of leaders influence organizational functioning. Hybrid leadership yields similar positive outcomes in Pakistan's public sector, enhancing team members' commitment and fostering innovation (Wan & Du, 2022). The research indicates that digital leadership is significant in hybrid IT environments. Nonetheless, there remain critical areas requiring further

research. Consequently, the majority of previous research, including our own, relies on cross-sectional data, which limits the ability to draw definitive cause-and-effect conclusions. Given the ongoing evolution of hybrid work and digital transformations, it is essential to conduct experimental or longitudinal studies to determine the directionality of effects and to assess them similarities or differences. Similarly, examining healthcare, education, and manufacturing is beneficial, as recent research in Pakistan, such as (Wirth et al., 2025) indicates that WE and HWF significantly

contribute to motivating and engaging workers in remote operations. Additionally, we identified other factors, such as HWF and EIP culture, that have not been thoroughly analyzed. DLC quality should be examined in conjunction with HWF and EIP culture, as this is essential for elucidating the intricate interactions within the organization. Managers must cultivate competencies in leadership and technology, as identified by Zia et al. (2024) in their study on Pakistan.

5.1 Practical Implications

The findings indicate several critical actions to be undertaken by employees, policymakers, and HR managers within the evolving SME sector of Pakistan. The study indicates that hybrid work flexibility serves as a significant job resource, fostering employee engagement and encouraging the generation of innovative ideas. Post-pandemic, organizations should integrate hybrid work strategies into their future HR and operational plans, as there is a growing expectation for these to become standard (Kumari et al., 2025; Zhou et al., 2023). Allowing staff to determine their schedules and select their workspaces can significantly enhance their motivation, creativity, and dedication. Digital leadership competency significantly influences outcomes; therefore, organizations must provide flexibility while prioritizing the development of digital leaders. Individuals proficient in technology and capable of managing remote teams, utilizing online tools, and maintaining virtual communication are more likely to enhance employee engagement in hybrid work environments (Zia et al., 2024). Digital competency training must be integrated into leadership development plans within HR, prioritizing online teamwork, cybersecurity, and skills associated with digital emotions. Furthermore, leaders who exhibit adaptive behaviors and endorse innovative ideas can enhance the beneficial outcomes of hybrid work. In countries such as Pakistan, the importance of digital transformation is heightened, despite challenges related to infrastructure deficiencies and inadequate training (Naqshbandi et al., 2024; Olaus & Veronica, 2025).

5.2 Theoretical Implications

This study offers significant contributions to various theoretical domains through the application of diverse methodologies. This study supports a component of the SET, indicating that increased flexibility in hybrid work enhances worker focus and

commitment, ultimately resulting in more innovative outcomes (Amerstorfer & Freiin von Münster-Kistner, 2021). This study supports prior research by demonstrating that work engagement acts as a mediator in hybrid work environments in South Asia. The study introduces Digital Leadership Competency (DLC) as a significant factor influencing the SET framework. It illustrates the role of leadership skills in facilitating or hindering the connection between talent and business performance. The characteristics of leaders influence both organizational processes and outcomes. The study connects leadership theories with contemporary work design models applicable in digital environments. The results indicate that DLC facilitates firms' strategies, particularly within hybrid digitally-enabled structures. E-leadership evolves, facilitating the incorporation of technology-related leadership traits into organizational behavior theories .(Wirth et al., 2025).

5.3 Limitation

This study has certain limitations. The researchers employed a cross-sectional method, which limited the ability to establish relationships between variables. Reciprocal or third-variable effects may exert influence, and conducting longitudinal research can enhance the reliability of the results. The utilization of employees' self-reported data in the study may have introduced common method bias. Learning from the supervisor or colleagues in the workplace may mitigate this risk. The research primarily concentrates on Pakistan's SME sector within urban areas; thus, the results should be interpreted in this context. Workplace practices, technology utilization, and leadership approaches may vary across different industries and between rural and urban settings. The findings may not align with experiences in healthcare, education, or manufacturing. The study lacked controls for personality, digital skills, and mental flexibility, despite evidence indicating their potential impact on involvement and creativity (Toscano et al., 2025).

5.4 Directions for Future Research

Due to the aforementioned limitations, several promising avenues for further research are proposed. Initially, research must employ designs that examine the evolution of engagement and

innovative performance over time. Such designs enable researchers to observe the impact of changes in work models on the identified earnings disparities as they are implemented. Additionally, future research should collect data from diverse sources to mitigate common method bias and improve result accuracy. Reviewing information from supervisors, HR reports (such as performance appraisals), and digital monitoring tools (for example, records of collaboration platform usage) enhances understanding of individuals' responses. Investigating the functioning of policies across various regions of the country would significantly aid researchers in concluding. In Pakistan's SMEs sector, certain relationships have been identified. However, conducting similar studies in the health, banking, education, and manufacturing sectors, across both rural and urban settings, could provide insights into the applicability of these relationships in diverse contexts. Subsequent research should examine the integration of individuals' digital competencies, emotional states, mindsets, and learning methodologies into the analysis. Personal characteristics of employees may influence their responses to a hybrid work environment and their perceptions of leaders' digital competencies, which in turn impact their engagement and innovation at work (Trevino Garcia & Christensen, 2025). The subsequent step involves analyzing cultural moderators, particularly in regions such as Pakistan, where individuals often exhibit a stronger alignment with community values. The extent of power distance, the degree of uncertainty avoidance, and the emphasis on social harmony within a culture can influence leadership styles and team dynamics, fostering engagement and promoting innovation. Examining these connections enhances the applicability of Western theories, such as the SET model, in South Asian contexts.

References

Al Koliby, I. S., Mohd Suki, N., & Abdullah, H. H. (2022). Linking knowledge acquisition, knowledge dissemination, and manufacturing SMEs' sustainable performance: the mediating role of knowledge application. *Bottom Line*, *35*(4), 185–202. https://doi.org/10.1108/BL-12-2021-0123

Alfalah, A. A., Goaill, M. M., Abubakar, A. A., Al-Mamary, Y. H., Salisu, I., Al-Samhi, N. M., Alhaidan, H., Bamahros, H., & Alhamdi, F. M. (2025). Redefining work dynamics: How technology affordance and remote flexibility drive organizational

excellence? *Acta Psychologica*, *260*. https://doi.org/10.1016/j.actpsy.2025.105702

Alkhayyal, S., & Bajaba, S. (2024). Countering technostress in virtual work environments: The role of work-based learning and digital leadership in enhancing employee well-being. *Acta Psychologica*, *248*. https://doi.org/10.1016/j.actpsy.2024.104377

Amerstorfer, C. M., & Freiin von Münster-Kistner, C. (2021). Student Perceptions of Academic Engagement and Student-Teacher Relationships in Problem-Based Learning. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.713057

Apenbrink, K. S., & Kuhlmann, R. (2025). Daily Gain Cycles in Hybrid Work Environments: A Multilevel Study on the Reciprocal Interplay of Job Crafting, Psychological Capital, and Work Engagement. *Journal of Business and Psychology*. https://doi.org/10.1007/s10869-025-10070-3

Arafat, S. M. Y., Kar, S. K., Abhayanayake, C., Sharma, P., & Marthoenis, M. (2024). Prison mental health in South-East Asia: A narrative review. In *Brain and Behavior* (Vol. 14, Issue 8). John Wiley and Sons Ltd. https://doi.org/10.1002/brb3.70004

Bellis, P., Cunial, M., & Trabucchi, D. (2024). Mastering hybrid worlds through digital leadership: The role of agility in fostering innovation. *Business Horizons*, *67*(4), 369–380. https://doi.org/10.1016/j.bushor.2024.04.002

Bong, J. Y., Cho, K., Liu, Z., & He, D. (2024). A dual-process motivation mediation model to explain female high school students' cognitive engagement and disengagement in emergency remote teaching and online learning in South Korea. *British Journal of Educational Technology*, *55*(3), 1020–1040. https://doi.org/10.1111/bjet.13415

Charles, W., Mobara, A., Beretu, T., & Mhembere, L. (2025). How hybrid work and organisation support shape an IT company's employee engagement. *SA Journal of Human Resource Management*, *23*. https://doi.org/10.4102/SAJHRM.v23i0.3161

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An Interdisciplinary review. In *Journal of Management* (Vol. 31, Issue 6, pp. 874–900). https://doi.org/10.1177/0149206305279602

Deng, H., Duan, S. X., & Wibowo, S. (2023). Digital technology driven knowledge sharing for job performance. *Journal of Knowledge Management*, *27*(2), 404–425. https://doi.org/10.1108/JKM-08-2021-0637

Desty Febrian, W. (2025). The Influence of Physical Work Environment, Psychological Work Environment, Work-Life Balance, and Internal Communication on Employee Job Satisfaction during the Hybrid Working Era. *R2J*, *7*(6). https://doi.org/10.38035/rrj.v7i6

Gao, P., & Gao, Y. (2024). How Does Digital Leadership Foster Employee Innovative Behavior: A Cognitive–Affective Processing System Perspective. *Behavioral Sciences*, *14*(5). https://doi.org/10.3390/bs14050362

Ghosh, D., Sekiguchi, T., & Fujimoto, Y. (2020). Psychological detachment: A creativity perspective on the link between intrinsic motivation and employee engagement. *Personnel Review*, *49*(9), 1789–1804. https://doi.org/10.1108/PR-12-2018-0480

Gill, S. A., Bencheva, N., Karayel, S., & Usman, M. (2021). Does entrepreneurial self-efficacy moderate effects of cognitive flexibility and entrepreneurial alertness on entrepreneurial intentions? *Entrepreneurial Business and Economics Review*, *9*(3), 25–41. https://doi.org/10.15678/EBER.2021.090302

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, *45*(5), 616–632. https://doi.org/10.1007/s11747-017-0517-x

Homans, G. C. (1958). *SOCIAL BEHAVIOR AS EXCHANGE*.

Jaß, L., Klußmann, A., Harth, V., & Mache, S. (2024). Job demands and resources perceived by hybrid working employees in German public administration: a qualitative study. *Journal of Occupational Medicine and Toxicology*, *19*(1). https://doi.org/10.1186/s12995-024-00426-5

khalid, R., Nader, M., & Khanam, A. (2020). A Self-Determination Theory on Effect of Teacher Autonomy Support on Students Motivation in Public School of Pakistan. *Global Regional Review*, *V*(I), 108–118. https://doi.org/10.31703/grr.2020(v-i).14

Khan, M. R., & Sarkar, U. (2024). Business leadership in the digital age: IKEA's story in the retail and consumer sector. *Green Technologies and Sustainability*, *2*(2). https://doi.org/10.1016/j.grets.2024.100081

Krajčík, M., Schmidt, D. A., & Baráth, M. (2023). Hybrid Work Model: An Approach to Work–Life Flexibility in a Changing Environment. *Administrative Sciences*, *13*(6). https://doi.org/10.3390/admsci13060150

Kumari, S., Shukla, B., & Mishra, P. (2025). Hybrid workplace, work engagement, performance, and happiness: A model for optimizing productivity. *Multidisciplinary Reviews*, *8*(1). https://doi.org/10.31893/multirev.2025012

Naqshbandi, M. M., Kabir, I., Ishak, N. A., & Islam, M. Z. (2024). The future of work: work engagement and job performance in the hybrid workplace. *Learning Organization*, *31*(1), 5–26. https://doi.org/10.1108/TLO-08-2022-0097

Olaus, H., & Veronica, A. (2025). The Influence of Hybrid Work Patterns on Organizational Engagement and Work Stress. *Acta Psychology*, *4*(3), 143–153.

Santillan, E. G., Effel, ✉, Santillan, T., Doringo, J. B., Jamir, K., Pigao, F., & Mesina, F. C. (2023). *Journal of Business and Management Studies Assessing the Impact of a Hybrid Work Model on Job Execution, Work-Life Balance, and Employee Satisfaction in a Technology Company*. https://doi.org/10.32996/jbms

Toscano, F., González-Romá, V., & Zappalà, S. (2025). The Influence of Working from Home vs. Working at the Office on Job Performance in a Hybrid Work Arrangement: A Diary Study. *Journal of Business and Psychology*, *40*(2), 497–512. https://doi.org/10.1007/s10869-024-09970-7

Trevino Garcia, L. E., & Christensen, J. O. (2025). Hybrid work and mental distress: a cross-sectional study of 24,763 office workers in the Norwegian public sector. *International Archives of Occupational and Environmental Health*, *98*(4), 399–407. https://doi.org/10.1007/s00420-025-02136-9

Tröster, C., & Brosi, P. (2025). How Hybrid Work Shapes Communication Ties: The Role of Concern about Relationship Loss and Organizational Identification. *Journal of Management Studies*. https://doi.org/10.1111/joms.13277

Van Gorp, K., Capone, A., Hazim, B., Yunus, H. &, & Baran, E. (n.d.). *Course: Advanced Human Resource Management*.

Wan, Q., & Du, W. (2022). Social Capital, Environmental Knowledge, and Pro-Environmental Behavior. *International Journal of Environmental Research and Public Health*, *19*(3). https://doi.org/10.3390/ijerph19031443

Wirth, T., Rohwer, E., Jaß, L., Harth, V., & Mache, S. (2025). Hybrid Work in German Public Administration: Social Resources, Occupational Health Literacy and Work Design Competencies in Association with Work Engagement. *Behavioral Sciences*, *15*(8). https://doi.org/10.3390/bs15081123

Zhou, S. A., Hiver, P., & Al-Hoorie, A. H. (2023). Dynamic engagement: A longitudinal dual-process, reciprocal-effects model of teacher motivational practice and L2 student engagement. *Language Teaching Research*. https://doi.org/10.1177/13621688231158789