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IMPACT OF DIGITAL TRANSFORMATIONAL LEADERSHIP AND KNOWLEDGE MANAGEMENT ON ORGANIZATIONAL PERFORMANCE

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Article Information	Abstract
Article Information Article history: Submitted: 13 th May, 2024 Accepted: 19 th June, 2024 Published: 28 th June. 2024 Volume No. 04 Issue No. 01 ISSN: 2790-7899 Keywords: Digital Transformational Leadership; Knowledge Management; Organizational Performance	The objective of this research is to understand the role of digital transformational leadership and knowledge management in organizational performance. In order to determining whether organization has effective leadership and knowledge management or not, 700 participant's data were collected for the analysis purpose. In addition, the research employs descriptive statistics, reliability analysis and one-sample t tests to measure about the degree of effectiveness of leadership and knowledge management in an organization. The results reveal moderate effectiveness in both areas, suggesting that while foundational elements are in place, there's significant room for improvement. In terms of digital transformational leadership, leaders' communication of vision, encouragement of innovation, and participation in digital initiatives are moderately perceived. Similarly, knowledge management practices—including systems for knowledge sharing,
	decision making, and building a learning culture—are also moderately effective. The analysis demonstrates that these aspects are fundamental to the performance of organizations and suggests a number of areas that may be enhanced. These are the effectiveness of leadership communication; the support for innovation; the growth of the digital skills and competencies of the workforce; the effectiveness of knowledge management systems; and the existence of a learning culture. The findings show that performance can be significantly enhanced by attending to these key areas.

Introduction

The rise of the digital era has caused seismic shifts in the structure and activities of firms, leading to a thorough revisiting of leadership behaviors and tactics. This makes the need for digital transformational leadership more prominent to help an organization during this turbulent time. This approach synthesises the elementary premises of traditional transformational leadership set

in the context of an understanding of digital technology. Transformational leadership has been recognized for its unique attributes of being able to encourage, motivate, articulate a shared vision and culture for their followers. (Smith & Taylor, 2021; Yao et al., 2023). They provide an atmosphere of trust and creativity. Joiner also stated that digital leaders are more flexible, IT skills and based more on digital tools and applications to improve organization effectiveness, you also can improve your skills to increase your organization effectiveness.

The perception of organisational effectiveness is how individual staff ascertain their organisation's overall function and make judgments about the quality of operations. This is a critical determinant of an organisation's overall effectiveness (Rohman et al. , 2023). Transformational leadership is a distinct type of leadership. A key feature is how leaders inspire, stimulate, and have an individualised consideration for their followers, articulate a vision, and encourage passion and trust in each other to be creative (Bass & Riggio, 2016; Greimel et al., 2023). Joiner (2019) found what leaders predominantly demonstrated in a digital workplace were: agility; mastery of technology; and charted path to give digital resources an advantage of the perceived organizational performance.

The extant literature increasingly suggests that transformational leadership has a positive relationship with organisational success (AlNuaimi, Smith, et al., 2022; He et al., 2023; Shin et al., 2023). However, there is scant research about how digital transformational leadership impacts perceived organisational performance. There should be more empirical studies to find the cues about this connection. In order to bridge to identify the gap, the current present the mediated model, which specifically tests the effect of how digital transformational leadership can influence perceived organisational performance, emphasising the mediator in the process. The mediated model that formulated by Hayes 2013 suggests that the relationship between digital transformational leadership and perceived organisational performance is not direct. The relationship is characterized by many other features at organisational and individual levels that work as mediators for this relationship while mediating and vice versa.

Employing such approach will lead to a better understanding of the multiplex processes taking place, subsequently providing crucial insights for both practice and research. The construction perceived organisational performance refers to the subjective judgement made by employees of the effectiveness and efficiency of their organisation. It plays a pivotal role in dictating the overall triumph of the firm, pointed out by various scholars (Kaplan, (2022); Rohman et al., 2023). An increasing body of literature has indicated that there is a salutary linkage between transformative leadership and organisational effectiveness (Chatterjee et al., 2023; Wang, 2021). However, there is a paucity of research on the correlation between digital transformative leadership and perceived organisational effectiveness which implies that more empirical work is required to scrutinize this matter.

In an effort to address this discrepancy, the researchers propose a mediated model to examine the relationship between digital transformational leadership and perceived organizational performance. Specifically, this study explores the underlying mediating processes that account for the association. According to Hayes (2013), the mediated model posits that the connection between digital transformational leadership and perceived organizational performance is not direct. Rather, this relationship is mediated by several individual and organizational-level factors. The adoption of this multi-dimensional approach contributes to a more nuanced understanding of the intricate and contingent processes at play, offering valuable implications for practitioners and scholars alike. This research focused on the problem that is, what impact digital transformational leadership has on organizational performance through knowledge management? Studies are available in

literature that shows the relationship of organizational performance and leadership but here we will see the specifically digital transformational leadership and its impact on organizational performance.

Research Objective's:

- To analyze the influence of Digital Transformational Leadership on Organizational Performance.
- To examine the effect of Knowledge Management on Organizational Performance.

Literature Review:

According to Chesbrough (2020) and Westerman (2021), digital technology has pervaded today's corporate world to an extent and with an intensity that it has transformed the ways in which organizations operate and compete. Accordingly, organizations have entered upon a new era in the world of commerce. Typically referred to as "digital transformation," this is the process of embedding digital technologies into all aspects of an organization's operation, offerings, and services in order to enhance efficiency, encourage innovation, and improve overall performance (Aral, 2022; Berman, 2017).

When it comes to organizational behavior and dynamics, leadership is an integral and crucial factor in an organization's capacity to exploit and capitalize on the opportunities presented by digitalization. In recent years, there has been a rising interest in the notion of digital transformational leadership, as organizations look for leaders who can skillfully guide through the intricacies of the digital era (Avolio & Yammarino, 2013; Bass & Riggio, 2016).

From Kane et al. (2016) and Klapperich et al. (2020)'s research, Kane Klapperich suggests that leaders in digital transformation should have a visionary approach to a compelling digital future and a strong ability to articulate it to others. More importantly, these leaders should be able to allure the change while maintaining a supporting learning and innovation environment (Wang et al., 2019; Zhang et al., 2019). Wright Scott & Davis (2020) further reinforce this viewpoint, propose that, leader is instrumental in leading internal processes of organizational change, allowing the assimilation of digital technologies and the development of adaptive cultures.

Although growing recognition of the significance of digital transformational leadership, more rigorous empirical research is needed to specify the precise active ingredients through which it influences organizational outcomes. Organizational performance is generally an employee's behavior-based variable and commonly referred to as the "productive qualities that mark the difference". It is "an employee judgement and comparison process, about the activities and results of his organization and his reference point". This result is specifically promoted in the field of the organisation as demonstrated by prior research (Agarwal et al., 2020; Hernandez et al., 2015). The judgements and assessments are done by employees. There has been considerable research conducted on the influence of leadership on organizational performance within the traditional leadership paradigm. However, digital transformation necessitates a thorough examination due to the complex interrelations between leadership behaviors, digital technologies, and performance results (Eisenbeiss et al., 2010; Wang et al., 2019). The complexity of this relationship explains the findings. Furthermore, various mediating and moderating variables that may potentially impact the connection between digital transformative leadership and t organizational performance assessment result must be analyzed. The result of organization performance assessment may be affected by several factors: Leadership behavior might be transferred to performance through several mediating variables, for example, employee engagement and innovation. Meanwhile, some moderating variables—for example, organization size, industry and technological readiness—might affect the direction to some extent.

Moreover, it is important to analyze the various mediating elements that can potentially affect the association between digital transformational leadership and the perception of organizational performance. These factors might have an effect on the perceived performance of an organization. The transfer of leadership behaviors into performance consequences could be better apprehended by delving into mediating elements such as employee engagement and innovation as reported in past research by B. J. Avolio and F. J. Yammarino (2013) and Wang et al. (2019).

Additionally, it is relevant to consider that some mediating and moderating variables, such as the size of the firm, the type of industry, and level of technological readiness, that may possibly impact the magnitude and direction of the link (Hofmann & Jones, 2005; Zhang et al., 2019; Zhang et al., 2022). The above-mentioned findings were revealed in the bodies of work of Hofmann and Jones (2005) and (Zhang et al., 2022).

Digital Transformational Leadership:

The leadership strategy defined as transformational leadership implies influencing the problem-solving approaches of both individuals and organizations. Moreover, achieving the goals and objectives will accompany advantageous and positive transformations amid the followers. According to the specific context, numerous enterprises experience the transitions in the hierarchical organization form, alteration of the span of control model, transformations in communication, development of the workplace culture, decision-making processes, marketing management, improvements in supply chain management regarding logistics pressures, adjustments to the inbound and outbound operations and refined ones. It has been identified that the behavior of the transformational leader is constantly perceived by the followers and is positively correlated with both the following individual, and the team behavior. The behavior of the individual contributes to the behavior of the whole team, which results in the team behavior primarily being the integration of the individual ones. The leaders will systematically circle the followers, classifying them into several groups. Thus, the core followers experience more accessibilities, and they are the primary team, which is constantly perceived, as the basic representatives of the institution (Almuslamani, 2022). According to the research conducted by Ardi et al. (2020), leadership can be perceived as the primary concept consistently explaining the relation between a leader and the followers with the aim of turning the behavior of the latter in correspondence to the provided instructions. It is also conditioned that leadership implies the dynamic contact between leading individuals possessing power and the subordinated individuals. Of course, the digital revolution is relatively correlated with several other aspects being equally crucial for the given revolutionary process. Regarding this, it constantly reshapes both the cognition and the framework. Lindawati and Parwoto (2021) hold the assumption that any considerable transformation heavily affects the employee performance and the emotional balance along with a psychological state of the working individuals. Winasis et al. (2020) expansive research conducted, it is vitally imperative to efficiently manage the provision of positive energy and the usage of it, whereas constantly controlling the psychology of all workers and supporting and urging them during the process. AlNuaimi, Khalid, et al. (2022), claim that transformative leaders possess the maximum amount of power and motivation while sharing the higher effective leadership method. Being intrinsically massively innovative in the process, the individuals are skillful at connecting through networks.

Organizational Performance:

The performance of a company's personnel, comprising both proficiency of procedures and quality of resources has great effects on the ultimate success of the whole firm. That is why the constant optimisation of procedures and resources is vital for company to be able to achieve its goals successfully.

In their 2022 study, Setyoko and Kurniasih asserted that an organization's performance evaluation has a critical impact on employees' assessments of the company's efficiency. The way an organization structures its operations directly effects employee performance, and human resources leadership is expected to actively encourage the expansion and growth of employees.

The principles of green HRM shed light on the relationship between employee performance and their loyalty to the organisation. From the findings of the study by Audu et al. (2020), it can be deduced that good management is fundamental in enhancing a firm's performance, but also providing employees a sense of direction and guidance.

Evaluating an employee's performance is a critical component in determining their effectiveness in meeting their job duties and responsibilities. Assessments are made on an employee's behaviour and actions, more so than on their skills and competencies themselves. Organisations see organisational performance as a perception and face both organisational communicational challenges that affects both the organisational performance and morale (Oh, 2019).

The idea involves the actions of executives, the way they communicate, the internal corporate culture, how external clients are captivated, and the overall goal of the company.

Knowledge Management:

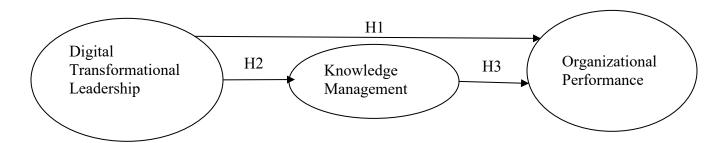
Managing information and other resources that are essential to an organization and the judgments that it makes about its structure are the main concern of Knowledge management. Learning environment is the auspicious variables in knowledge management at all organisational level (Martins et al., 2019; Tiwari, 2022).

As per the investigation Marsh et al., (2019) conducted that this methodology stresses the significance of the acquiring process and depends on actual analyzing and improving new methods within the organization in order to develop the overall framework of the organization. There are many ways to sorted the breadth of knowledge, which explicit, implicit, and tacit knowledge are the most widely recognized type of knowledge. The information has to be explicitly coded in explicit of knowledge, and implicit of knowledge can provide a construct for the best practice to implement with explicit information, finally, tacit knowledge has to be acquiring by experience.

According to Almuslamani (2022), knowledge management is a discipline that can contribute to the overall growth of small and medium-sized enterprises, improve the efficiency and effectiveness of their core activities. Failure to effectively share knowledge in an organisation can negatively impact the performance of the organisation resulting in sub-optimal outcomes. Conversely, Ohemeng and Kamga (2020) assert that the creation and sharing of meaningful information does not only improve the working atmosphere, but it can also inspire employees to achieve common targets through cooperation.

Without both potential absorptive capacity and realized absorptive capacity, firms cannot achieve competitive advantage because both forms of absorptive capacity uniquely contribute to enhancing realized performance.

Empirical Research Model:



Hypothesis:

Here this research emphasis to answer our question of study i.e. "Should digital transformational leadership influence Organizational Performance and how knowledge management mediate this relationship?"

- H1: Digital Transformational Leadership has positive impact on Organizational performance.
- H2: Digital Transformational Leadership has positive impact on Knowledge Management.
- H3: Knowledge management mediates the relationship between Digital Transformational Leadership and organizational performance.

Methodology:

Research Design:

In the current study, a research design called cross-sectional correlation was used. It was used to explore the connections among different variables; a cross-sectional design could examine all variables of this study at one time, which made clear what relationships among variables there were. The data were collected by a structured survey questionnaire which asked participants' opinions about each item of the measure. The participants were employees tapped from the specialized organizations of IT firms in Pakistan that includes also call centers. The purpose of this study was to examine whether or not these independent variables could be linked together to the dependent variable through the mediating variables.

To collect data, we followed some sequential steps very carefully. We started with the identification of an appropriate population or sample. In this study, an appropriate population or sample was employees working in Pakistan's IT industry who were already exposed to digital transformational leadership. Our respondents were selected using purposive sampling because we wanted to ensure that only those respondents should participate in this study who fulfill our predetermined inclusion criteria.

The gathering data procedure enforced the need to provide a standardized survey questionnaire targeted to grasp what information of importance need to be collected. Safeguard the data from contamination with any corruptive factors enforcing the established measuring scale to be incorporated to the project area, proven to have substantial effective to the estimation with reliability and valid.

The technique used to collect data was an internet survey. Participants were notified by email and directed to a website to participate. Before the internet survey was complete, each of the participants consented to participate. Throughout the study most throrugh steps of ensuring confidentiality and anonymity were taken by replacing any information that would provide the participants identity.

Organizational performance was measured with already build questioner (Martínez-Caro et al., 2020). Digital transformational leadership questioner were also adopted after pilot study on it (Denison et al., 1995). Knowledge management was also measured through questioner that is available in previous research (Darroch, 2005).

A T Test analysis was performed to examine the direct relationship between digital transformative leadership and perceived corporate success. Furthermore, in the research, it was investigated whether Digital Transformational Leadership and Knowledge Management has a mediated effect on Organisational Performance.

Results:

Descriptive Statistics:

Our study, which included 700 participants, revealed a nearly balanced gender distribution with 41% female representation and 59% male. An analysis of digital transformational leadership in the organization showed moderate ratings across various aspects.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Digital Transformational Leadership					
Comes up with inventive ideas	700	1	5	2.42	1.230
Experiments with new concepts and idea	700	1	5	3.37	1.141
Exerts upward influence in the organization	700	1	5	3.81	1.196
Influences decisions made at higher levels	700	1	5	3.85	.932
Sees that the unit delivers on stated goals	700	1	5	3.81	.942
Gets the unit to meet expected goals	700	1	5	3.80	.928
Makes the unit's role very clear	700	2	5	3.95	.882
Clarifies unit's priorities and directions	700	2	5	3.88	.964
Anticipates workflow problems, avoids crises	700	2	5	3.88	.903
Brings a sense of order to the unit	700	2	5	3.89	.849
Maintains tight logistical control	700	2	5	3.94	.934
Compares records, reports and so on to deter	ect700	2	5	3.92	.911
discrepancies					
Surfaces key differences among group membe	rs,700	2	5	4.11	.904
then works anticipatively to resolve them					
Encourages participative decision-making in t	he700	2	5	4.08	.863
group					

Shows empathy and concern in dealing with?	700	2	5	4.13	.876
subordinates Tracts each individual in a consitive coring way. 7	700	2	5	4.08	.829
Treats each individual in a sensitive, caring way 7	/00	2	5	4.08	.829
Organizational Performance	700	1	5	3.67	060
6 6					.969
1	700	1	5	3.52	.996
	700	1	5	3.62	.988
Knowledge Management	•00	•	_	201	0.1.5
Organization values employees' attitudes and?	/00	2	5	3.91	.916
opinions					
Organization has well developed financial?	700	2	5	4.15	.734
reporting systems					
Organization is sensitive to information about?	700	2	5	4.07	.777
changes in the market place					
Science and technology human capital profile 7	700	1	5	4.08	.892
Organization works in partnership with?	700	2	5	4.01	.826
international customers					
Organization gets information from market7	700	2	5	4.11	.739
surveys					
Market information is freely disseminated 7	700	3	5	4.15	.659
Knowledge is disseminated on-the-job 7	700	3	5	4.14	.703
Use of specific techniques to disseminate?	700	3	5	4.19	.690
knowledge					
Organization uses technology to disseminate?	700	3	5	4.17	.734
knowledge					
Organization prefers written communication 7	700	3	5	4.21	.652
Responds to customers 7	700	3	5	4.18	.705
Well-developed marketing function 7	700	3	5	4.11	.668
•	700	3	5	4.11	.729
Responds to competitors 7	700	3	5	4.09	.644
	700	3	5	4.23	.698
•	700				

Participants rated the effectiveness of leaders in communicating a clear Encourages participative decision-making in the group, indicating a moderate level of effectiveness. Innovation and risk-taking in the context of digital transformation were perceived neutrally to moderately. This was mirrored in the provision of necessary resources and support for digital transformation. Furthermore, leaders' digital skills and competencies were perceived as moderately strong.

In the domain of knowledge management, various aspects were evaluated. The effectiveness of systems in place for capturing and sharing knowledge was rated between 3 and, suggesting a moderate level of efficacy. The encouragement for employees to share their knowledge and expertise within the organization indicating a neutral to moderate level of encouragement. The utilization of knowledge management to improve decision-making was perceived moderately effective. Participants believed that knowledge management practices contribute moderately to improved organizational performance. The presence of a culture of continuous learning and knowledge development within the organization, again indicating a moderate level of presence. Organizational performance rated moderated in this data analysis. Goals, profitability and productivity of organization enhances as per the mean calculated. The skewness and kurtosis values for these variables suggested that the distributions were normal.

Reliability Analysis:

Reliability	Statistics
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Cronbach's Alpha ^a	N of Items
0.7	35

The reliability of our 35-item scale, which assessed digital transformational leadership and knowledge management practices, was deemed acceptable, evidenced by a Cronbach's alpha of 0.7. This indicates a consistent internal structure in the responses.

T-Test:

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Comes up with inventive ideas	700	2.42	1.230	.046
Experiments with new concepts and idea	700	3.37	1.141	.043
Exerts upward influence in the organization	700	3.81	1.196	.045
Influences decisions made at higher levels	700	3.85	.932	.035
Sees that the unit delivers on stated goals	700	3.81	.942	.036
Gets the unit to meet expected goals	700	3.80	.928	.035
Makes the unit's role very clear	700	3.95	.882	.033
Clarifies unit's priorities and directions	700	3.88	.964	.036
Anticipates workflow problems, avoids crises	700	3.88	.903	.034
Brings a sense of order to the unit	700	3.89	.849	.032

Maintains tight logistical control 700 Compares records, reports and so on to detect700	3.94 3.92	.934 .911	.035 .034
discrepancies			
Surfaces key differences among group members,700 then works anticipatively to resolve them	4.11	.904	.034
Encourages participative decision-making in the 700 group	4.08	.863	.033
Shows empathy and concern in dealing with 700 subordinates	4.13	.876	.033
Treats each individual in a sensitive, caring way 700	4.08	.829	.031
It is growing more 700	3.67	.969	.037
It is more profitable 700	3.52	.996	.038
It has higher productivity 700	3.62	.988	.037
Organization values employees' attitudes and 700	3.91	.916	.035
opinions			
Organization has well developed financial reporting 700	4.15	.734	.028
systems	4.07	777	.029
Organization is sensitive to information about 700 changes in the market place	4.07	.777	.029
Science and technology human capital profile 700	4.08	.892	.034
Organization works in partnership with 700	4.01	.826	.031
international customers			
Organization gets information from market surveys 700	4.11	.739	.028
Market information is freely disseminated 700	4.15	.659	.025
Knowledge is disseminated on-the-job 700	4.14	.703	.027
Use of specific techniques to disseminate 700	4.19	.690	.026
knowledge			
Organization uses technology to disseminate 700	4.17	.734	.028
knowledge			
Organization prefers written communication 700	4.21	.652	.025
Responds to customers 700	4.18	.705	.027
Well-developed marketing function 700	4.11	.668	.025
Responds to technology 700	4.11	.729	.028
Responds to competitors 700	4.09	.644	.024
Organization is flexible and opportunistic 700	4.23	.698	.026

To understand the significance of these perceptions, one-sample t-tests were conducted. These tests compared the mean ratings against a neutral midpoint (test value = 0). All items showed significant results (p < .000), with mean differences ranging from 2.42 to 4.23. This finding suggests that perceptions of digital transformational leadership and knowledge management practices within the organization are significantly more positive than a neutral or non-existent level.

Construct Validity			
Digital	Knowledge	Organizational	
Transformation	Management	Performance	

DTL1	0.179		
DTL10	0.832		
DTL11	0.866		
DTL12	0.911		
DTL13	0.037		
DTL14	0.014		
DTL15	-0.023		
DTL16	0.028		
DTL2	0.223		
DTL3	0.248		
DTL4	0.895		
DTL5	0.849		
DTL6	0.853		
DTL7	0.891		
DTL8	0.877		
DTL9	0.825		
KM1		0.270	
KM10		0.859	
KM11		0.822	
KM12		0.824	
KM13		0.801	
KM14		0.820	
KM15		0.823	
KM16		0.876	
KM2		0.712	
KM3		0.760	
KM4		0.471	
KM5		0.431	
KM6		0.735	
KM7		0.906	
KM8		0.852	
KM9		0.833	
OP1			0.933
OP2			0.935
OP3			0.929

The data appears to provide evidence of good construct validity for the DTL, KM, and OP constructs. The high factor loadings and lack of cross-loadings indicate that the observed variables are well-aligned with their respective constructs, and the significant relationships between the constructs are consistent with the underlying theory.

Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Digital Transformation	0.862	0.944	0.888	0.432
Knowledge Management	0.944	0.954	0.953	0.575
Organizational Performance	0.926	0.937	0.953	0.870

The high reliability coefficients for DTL, KM, and OP indicate that the measurement scales for these constructs are internally consistent and produce stable and dependable results. This reliability ensures that the data collected using these scales is trustworthy and can be used with confidence to draw conclusions and make inferences about the relationships between these constructs in your study.

TT	4	•	4	•
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,				

Hypothesis	Path coefficient (β-value)	P values
DTL -> OP	0.443	0.000
DTL -> KM	0.519	0.000
KM -> OP	0.162	0.000

The results of the SEM analysis support the following hypotheses:

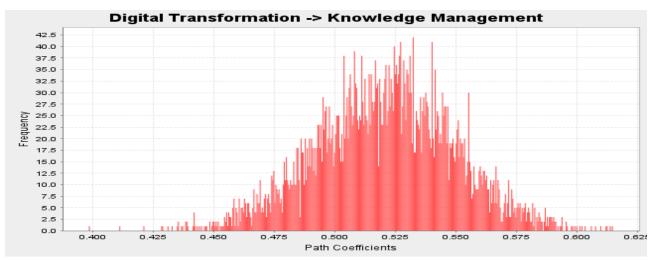
H1: DTL has a positive impact on OP.

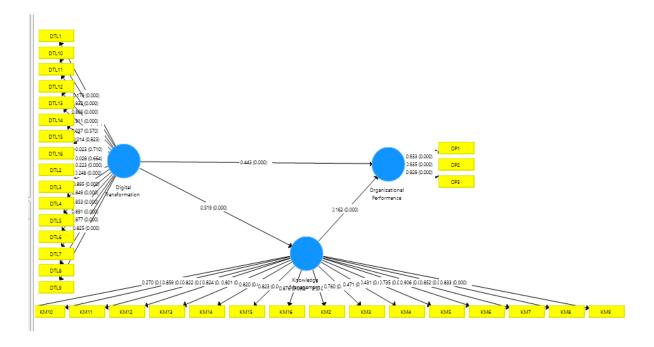
H2: DTL has a positive impact on KM.

H3: KM mediate between DTL and OP as positive impact.

The significant path coefficients and p-values indicate that the relationships between the constructs are statistically significant and support the theoretical framework of this study.

This result shows the significance of the research objectives, organizational performance being effected by digital transformational leadership positively and it enhances its results. Knowledge management plays a mediation positively between digital transformational leadership and organizational performance. That ultimately have high performance in organization.





Discussion:

Overall, the study reveals a moderately good opinion of both digital transformational leadership and knowledge management practices inside the organization. Leaders actively participating in digital initiatives and having digital skills is promising, though communicating vision stronger and offering more help for innovation could make them more effective. Knowledge capturing and sharing, as well as using knowledge for decisions, shows a fundamental capability, but encouraging sharing more and fostering continuous learning more fully leverages knowledge management. Still, ratings and significant t-test results emphasize workforce engagement in these areas over indifference, with initiatives recognized above neutral.

While foundations exist to build upon, communication and resources could better help leaders' digital visions. Moderate scores also mean potential remains for stronger support and encouragement of innovation. Similarly, the organization has progressed in knowledge management but can further enhance practices by promoting sharing and learning cultures to leverage knowledge and performance fuller. Significance of findings lies in t-test clarifying beyond neutral perceptions, employees actively engaged in and recognizing efforts in both domains.

Conclusion:

The study's findings highlight the moderate effectiveness of digital transformational leadership and knowledge management practices within the organization. Leaders are perceived as moderately effective in communicating digital transformation visions, encouraging innovation, and participating in digital initiatives. While these aspects are positively recognized, the moderate ratings suggest that there is considerable scope for enhancement. Similarly, knowledge management practices, including the systems for capturing and sharing knowledge, the encouragement of knowledge sharing, and the utilization of knowledge in decision-making, are also viewed as moderately effective. This indicates a foundational presence of these practices but also points to areas that could be improved.

The significance of these perceptions, as shown by the t-test results, underlines that these elements are neither absent nor merely neutral within the organization. Employees recognize the efforts made in digital transformation and knowledge management, yet there is room for growth and development. Practically this research brings an addition to learn the leaders about digitalization for effective communication.

Based on these findings, several recommendations can be made for the organization to enhance its digital transformational leadership and knowledge management practices. Leaders should aim to more clearly and frequently communicate their vision for digital transformation. This can involve regular updates on digital initiatives, transparent discussions about digital strategies, and active engagement with employees at all levels. This study is cross sectional, in future longitudinal study should be made. Some other variables should also be analyzed in this relationship like organizational learning, sustainable developmental goals and innovation. This research is limited to its extend that it is on specific population and future research should be with different population set.

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