BRIDGING THE GAP BETWEEN KNOWLEDGE MANAGEMENT AND DIGITAL TRANSFORMATION: THE CRITICAL ROLE OF DIGITAL LITERACY, ORGANIZATIONAL CULTURE

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SUMMARY

This paper explores the connections between knowledge management (KM), digital literacy (DL), organizational culture (OC) and digital transformation (DT). It investigates the role of KM on the usage of DL and OC and how both are interplaying determinants of successful digital change. To examine these relationships, the study conducted a path analysis of the path coefficients and coefficient of determination using the SmartPLS 4 software based on the Partial Least Squares Structural Equation Modelling (PLS-SEM). The survey was web-based research that gathered data of 600 faculty members in 15 publicly-financed universities in Islamabad, Pakistan. The findings underscore the importance of having all-round training markets to improve digital literacy to consolidate knowledge management strategies. Besides, the organizational culture should be democratic and adaptable in order to transform efficiently in digital form. To realise successful digital transformation, it is important that knowledge management techniques be combined with organizational change initiatives by organisations. The report as well suggests frequent monitoring and evaluation to determine the effectiveness of these interventions and introduce relevant amendments towards continued improvement. This study highlights the interrelationships that exist between the management of knowledge, deep learning, organizational culture, and digital transformation, and a comprehensive approach to knowledge and digital technology-driven initiatives is highlighted. The results indicate that knowledge management has significant positive influences on decision making, which intermediately impact decision taking in a good way. Moreover, KM creates a facilitating organizational culture, which is critical as an intermediary between distributed leadership and digital transformation.

Key words: *knowledge management, digital transformation, digital literacy, organizational culture.*

INTRODUCTION

The organizational culture has a significant impact on the efficacy of the digital transformation (DT) and Knowledge management (KM) projects. Innovation, collaboration, and learning are aspects that foster and are recognised in more environments that enable digital transformation initiatives and knowledge management (KM) strategies to succeed. The former encourages creativity and creativity in dealing with problems [2] [44], whereas the second one improves communication and teamwork [25]. In order to enhance the socioeconomic situation and digital competency of rural people, some investment has been put in the researches examining digital tools capabilities as tools of learning in rural areas [1]. Digital transformation (DT) and knowledge management (KM) have a synergy that is essential in ensuring that firms survive in the dynamic and fast changing business world today. The relationships of these disciplines are symbiosis type, which results in enhanced operational performance, encourages innovation, and ensures the competitive edge. There are four main pillars on which the idea of knowledge management (KM) is founded; these are creativity (knowledge creation), information sharing (knowledge utilisation), application (knowledge utilisation) and storage (knowledge storage).

A number of authors have stated a number of interpretations of the digital transformation, yet they can be grouped under three general types. Technological innovations brought about changes to society have rendered the global distribution of knowledge possible, and have fundamentally changed the product and service landscape, especially with the introduction of Industry 4. 0 on a global [39]. Besides, [11][13][32] claim that digital transformation demands organisations to create new business models or transform the existing ones [8]. Finally, one of the aspects of digital transformation, which has an influence on all spheres of human life, is the social one. It increases customer experiences, which are demonstrated by studies held by Buck, & Eder [15] [29] [43] [33]. Wang argues that the growth of a knowledge-based economy can be achieved because of the digital transformation. This creates the basis of what should be called Industry 4.0 revolution in the literature [35][26]. The intelligent and automated systems, digitalized production, and technological advancement will fall under this paradigm change. Industry 4.0 aims at independent communication and cooperation of the devices, not merely at adopting digital methods of manufacturing [19].

With reference to Bawden and Robinson [9], information literate persons can use the digital resources, make informed decisions and be able to explore, assess and use knowledge effectively. [26] Transforming change identifies the digital competences as the skill of analyzing and employing digital technology to solve multifaceted challenges. The given literature review examines why knowledge management (KM) and organizational culture (OC) are important to support digital transformation [10]. This study concentrates on knowledge creation, sharing, consumption and storing processes, knowledge development in technology and organisation. It also looks at information literacy, communication and digital competences. We would like to give some help by clarifying these interdependencies [4]. These points are also investigated based on their effect on flexibility, creativity, teamwork, and learning conditions. Implementing the new data and technology requires organisations to quickly adapt to the changes in the market and technological advancements [46].

According to Senge [45], knowledge management (KM) activities and constant advancement are propagated and enabled by a learning culture. The intellectual capital should be used to achieve organizational growth through the implementation of some procedures. A company must be able to scan its customer relationships, business model as well as business processes to implement digital transformation [47]. The work is important due to the fact that it provides useful information about how the knowledge management coupled with the digital change can lead to an increase in the level of creativity and performance within the businesses [6]. The study will seek to analyze how digital literacy, organizational culture, and knowledge management practices interact and are important in providing a dynamic and competitive business environment.

Knowledge Management and Its Dimensions

Knowledge Management (KM) is the required procedures, which organisations employ to manage intellectual resources well. Production of knowledge is crucial in coming up with new ideas and

inventions that are essential in development of an organisation [37]. Knowledge management can be regarded as a process of constant conceptual evolution, which is taken by organisations and people. considering normativity, it is clear that knowledge is the notion that has to be conceived and consequently conveyed in most types of media, including books, databases, and artefacts [5]. This explains why there is a wide variety of the ways through which knowledge can be understood.

In this sense, the socially advantageous cultural norms can shape the comprehension of an individual, despite the fact that the comprehension can be internal. Therefore, the necessity to pursue an investigation into knowledge management in the context of this issue arises [22]. Knowledge management became a discipline due to the focus on the formalization of knowledge and the organized retention of explicit information at the beginning of the 1960s [24][36]. At that time, knowledge management was aimed at applying the systematic techniques to obtain and share information, and learning was primarily based on lessons and best practices [42].

Its history highlights the continued development and importance of the knowledge management systems. It converts the tacit knowledge into explicit forms that contribute towards its massive spread. Transfer of knowledge is necessary when it comes to knowledge sharing among the workers and this leads to improved collaboration and performance on the whole [12] [7] Information utilisation is the efficient utilisation of the received information in making decisions that lead to the efficiency of operations and placement of the organisation in a strategic position [17]. Conversely, the role of knowledge storage aims at ensuring that the organization information does not get lost and that there ought to be continuous enhancement [3]. All aspects of knowledge management are critical to the capacity of the organization to be innovative and make adjustments, which forcefully affect the effectiveness of digital transformation. Through the integration of knowledge management (KM) in digital transformation efforts, organisations can utilise their intellectual assets in an efficient, and this way, they can foster a learning and adaptation culture.

Digital Literacy and Its Components

Modern understanding of literacy has accepted both technical, information and communication literacy. Technology literacy is an individual capability to competently use, innovate, create and appraise technology to have a positive impact upon his or her personal life, community as well as the environment [27]. According to Tiernan, (2015), information literacy is the ability to acquire and perceive information presented by a broad range of sources such as electronic and non-electronic ones. This perception aligns with the definition of information and communication literacy given by the educational testing service. This definition takes into consideration the skills that one needs to find, utilize, organize, assess, and communicate information in an effective manner.

Digital literacy builds up on this notion by narrowing down this idea by highlighting the ability to comprehend and apply information in alternative forms through a broad source when provided via computers, [40] asserts that digital literacy involves the skill to interpret not necessarily pressing keys but understanding ideas [34]. A comparison of various definitions of the digital literacy concept helps identify that those that focus on learning and assessment of information and those that focus on a specific set of skills and methodologies [51].

Additionally, thorough knowledge of digital tools and processes as well as great degree of competency in digital communication and information literacy are also imperative constituents of digital literacy. [28] says that digital skills are required in the effective navigation of the digital realm. These skills do not only relate to the most basic use of the digital tools, but also the skills to evaluate the digital content, as well as, address complex issues through the digital avenue. Effectiveness in the field of digital communication is the key to success in collaboration in the modern age of digitalization [49]. Information literacy would be important in making informed decisions regarding digital resources. It covers the abilities of the ability to find, evaluate, and utilize information in an effective way [9]. A combination of these aspects of digital literacy can help the firms utilize digital resources and enhance their Digital Transformation activities.

Organizational Culture and Its Impact

How an organization culture influences the creation, sharing, and use of information has significant influence on knowledge management (KM) and digital transformation. To maintain a competitive advantage, it is important to have a culture that facilitated innovation, and the innovation creates creativity and new ideas and processes [44]. This culture promotes the creation and dissemination of new information and is therefore KM-friendly, thus it assists in building an environment where individuals are constantly learning. In a cooperative culture that puts an emphasis on cooperation and shared problem-solving, knowledge sharing and collective intelligence is enhanced [25]. This culture enhances the KM processes as it creates a friendly atmosphere where the exchange of ideas and teamwork would take place. Helping KM through informing the staff of the information and skills they require, a learning culture emphasizes continuous learning and training [14] [45]. Finally, to be able to effectively respond to the changes in the market and advance in technology, adaptability and flexibility are vital in firms. Judge and Bono argue that these attributes strengthen KM since it becomes less cumbersome to integrate and utilize emerging information and technology.

The Role of Digital Literacy in Digital Transformation

There are writers who tend to use digital transformation and digitalization interchangeably [31]. The same can be said practically of Xiao [50] as he fails to distinguish between the two terms. In addition to digitization, digital transformation results in new forms of business and creating values, such as [18]. This study centered on the notion of digitization change Incorporation of new technology is not the sole stage of digital transformation. As an illustration, Digital Transformation Expert Panel workers are required to learn both digital and human skills to handle automation and digital technology. The requirement touches upon numerous aspects of a business, such as its strategy, culture, and processes [20]. The company will, therefore, be forced to ensure it makes the correct amendments in order to implement it. These impacts cut across all the sectors of the economy including the academic institutions.

Digital transformation is not only about technical integration. An example is the digital tools and automation which require employees to acquire digital and human skills. Early social theories of digital transformation emphasized the digital images of the shifting digital world, which is problematic. It is strange how this tunnel vision continues to persist when digital transformation is a product of the digital era. In the year 1945, digital technology and learning were still in their infancy even though there were electrical components available. The tele-business used the line scans rather than bits in television transmission, and radar recitivated images with a sweeping beam of the microwave frequency. The old systems were the teletype system, the Morse code and the punch card which was sluggish and low-fidelity. It is digital revolution that runs our contemporary world, but we end up arguing with substances which we do not understand unlike the illiterates of the past. There is a misrepresentation of digital world in our discussions about digital transformation. The deficiency of the theoretical contribution to the social theory (which may tend to be concerned only with empirical research and may refer to the previous methodologies) signals an idea of the digital signal as the necessity of making the consideration to a bigger world [16]. This requirement has an influence on organizational culture, processes, and strategy [23]. The organization therefore needs to change to be successfully implemented. These are the impacts that are experienced in all fields of corporations including higher education.

Digital transformation is not the only phenomenon with references to the inclusion of digital technologies into organizational processes. To build upon performance and create value, one has to make radical changes in the organizational processes, organizational culture and organizational strategy employing digital technology. This change makes technology relevant and the necessity of digital abilities and skills that are centered on human needs. The culture of companies and their practices are altered by the digital transformation (DT), hence altering the knowledge management and utilization. To sustain a competitive advantage, companies need to implement knowledge management (KM) practices that are compatible with the new digital possibilities and modify their organizational cultures respectively.

In this regard, digital literacy is necessary. It contains a spectrum of digital communication and information management abilities, basic up to advanced. Information literacy empowers people to make wise decisions and properly utilize digital services, whereas teamwork and information exchange between members of the team are supported using digital communication. Such capabilities can be extremely important to a Knowledge Management (KM) deployment, as they allow employees to operate the digital technology efficiently. The company culture will determine the success of KM (Knowledge Management) and DT (Digital Transformation). Knowledge management and digital technology were efficiently managed. The study is highly important because it provides viable information on how information management plus digital transformation can enhance creativity and performance in businesses. This paper aims to examine the relationship between digital literacy, organizational culture and knowledge management processes in order to develop a dynamic and competitive hotel environment. It is hoped that the outcome of this study will offer a valuable recommendation to companies that would want to effectively capitalize on these elements in order to spur innovations, improve performance and maintain a competitive edge.

Research hypothesis

(H₁): Knowledge Management has a significant positive impact on digital literacy

(H₁): Digital Literacy has a significant positive impact on digital transformation

(H₁): Knowledge Management has a significant positive impact on organizational culture

(H₁): Digital Literacy (Dl) has a significant positive impact on digital transformation

RESEARCH METHODOLOGY

The data were collected through an online survey of 600 faculty members of various academic departments in 15 Pakistani public institutions using the administration of 15 institutions located in Islamabad. The questionnaire was dispatched between February and May 2024 and all the subjects were requested to give their informed consent. The respondents were measured using a five-point Likert scale with 1 meaning strongly disagree and 5 strongly agree to conceptualize Knowledge Management (KM) and Digital Literacy (DL), Organizational Culture (OC), and Digital Transformation (DT). Among the sixteen indicators used in the different sub-constructs, there were Information Literacy, Innovation Culture, Collaborative Culture, Learning Culture, Adaptability and Flexibility, and Digital Strategy, Processes, Capabilities and Customer Engagement. To measure convergent and discriminant validity (through Average Variance Extracted and cross-loadings respectively), the statistical analysis employed the Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. To analyze the relationship among the variables, the structural model was used to determine path coefficients and the coefficient of determination (R^2). These variables consisted of effects of KM on DL, the effect of DL on DT, KM on OC and the role of OC as mediating variable between KM and DT. Exploring the relationships between KM practices and the use of DT in order to enhance the study, the researchers examined the mediating effects of both the DL and OC considering the importance of an organizational environment within which digital transformation can be successful (Table 1).

Table 1. Validity and Reliability Statistic

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Alpha	0.826	0.837	0.885	0.659
DL	0.825	0.827	0.883	0.654
DT	0.802	0.805	0.871	0.63
OC	0.79	0.797	0.864	0.614

The written table 1 above presents the validity and reliability statistics of the constructs in that all the measures have an excellent internal consistency. The AVE of the knowledge management tool is average 0.659, composite reliability score (rho a) is 0.837 and a Cronbach Alpha of 0.826. The same is reflected

by the high levels of dependability of digital literacy (DL) that is represented by its 0.825 Cronbachs Alpha, 0.827 rho a, 0.883 rho c and 0.654 AVE. Cronbachs Alpha of 0.802, AVE of 0.630, rho a of 0.805 and rho c of 0.871, Digital Transformation (DT) also has high dependability. Organizational Culture (OC) is slightly less, yet still adequate in terms of dependability with Alpha = 0.790, rho a =0.797, rho c =0.864 and AVE = 0.614. Cronbach Alpha is high, composite reliability measures are high and AVE is even more than the acceptable level of 0.5 which means that all constructs are of good reliability and validity. This implies that the constructs apply the correct measures to define the intended theoretical concepts (Table 2).

Table 2. Outer Loadings of the Constructs

	KM	DL	DT	OC
AF				0.793
CC				0.708
DC			0.704	
DCE			0.832	
DCM		0.81		
DCO		0.774		
DL		0.81		
DP			0.801	
DS		0.84		
DSTR			0.83	
GC	0.741			
GS	0.787			
IC				0.839
KST	0.878			
KU	0.835			
LC				0.789

The table 2 above illustrates results on the outer loadings how far each item is correlated to its construct. Knowledge Creation (GC) 0.741, Knowledge Sharing (GS) 0.787, Knowledge Storage (KST) 0.878 and Knowledge Utilization (KU) 0.835 imply that Knowledge Management (KM) is well represented. The loadings in Digital Literacy (DL) are the DCM 0.81, DCO 0.774, DL 0.81, and DS 0.84 that have significant relationships. The DC loadings of Digital Transformation (DT) are 0.704, DCE 0.832, DP 0.801 and DSTR 0.83 with DC being weaker. Organizational Culture (OC) loadings (organizational structure) are Adaptability and Flexibility (AF) 0.793, Collaborative Culture (CC) 0.708, Innovation Culture (IC) 0.839, and Learning Culture (LC) 0.789 where the lowest score is 0.708. The constructs were found to have all outside loadings greater than 0.7 that demonstrated construct measurement accuracy of the items (Table 3).

Table 3. Level Of Multicollinearity Variance Inflation Factor (VIF)

	VIF
AF	2.013
CC	1.353
DC	1.343
DCE	2.037
DCM	3.409
DCO	1.671
DL	1.814
DP	1.637
DS	3.662
DSTR	2.175
GC	1.698
Gs	1.676
IC	2.14
KST	2.573
KU	2.288
LC	1.508

In the table 3 above, the degree of multicollinearity among the predictor variables could be observed through the study of the Variance Inflation Factor (VIF) values. High values of VIF indicate minimal multicollinearity, which in this case is 1.353 with Collaborative Culture (CC), 1.343 with Digital Capabilities (DC) or 1.508 with Learning Culture (LC). The Digital Customer Engagement (DCE) and Adaptability and Flexibility (AF) variables have a moderate level of multicollinearity 2.013, 2.037 and 2.140. There is also the presence of Innovation Culture (IC). Multicollinearity levels are high because greater VIF values indicate higher multicollinearity like Digital Communication (DCM) with a VIF of 3.409, Digital Skills (DS) with VIF of 3.662, and Knowledge storage (KST) with VIF 2.573. Though most of the VIFs are below safe ranges (Table 4).

Table 4. Discriminant Validity of the Constructs

	Alpha	DL	DT	OC
Alpha				
DL	0.531			
DT	0.34	7.029		
OC	0.186	0.006	1.19	

The table 4 above explains that the findings of the discriminant validity study indicate that there exists a moderate correlation between digital transformation (DT) and digital literacy (DL) of 0.34 indicating the existence of some similarity but also some differences. The significances between DL and Organizational Culture (OC) are 0.186 and that between DT and OC are almost nonexistent with a value of 0.006 which shows their distinctiveness. Such features give reason to the originality of the constructions.
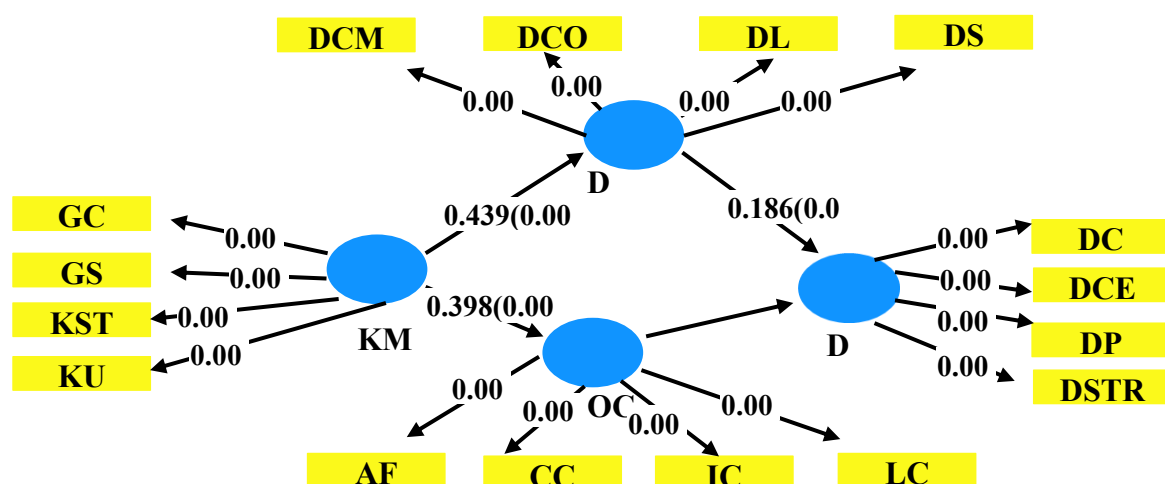

Figure 1. Theoretical framework showing the mediating roles of digital literacy and organizational culture in the relationship between knowledge management and digital transformation

Figure 1 To build a robust organizational culture necessitating digital transformation, the organization must first undergo digital literacy and digital capabilities, then embrace digital communication practices, subsequently adopt digital processes, and finally promote digital customer relationships, digital strategy, digital culture, and digital processes, (KM)Knowledge Management, (KST)Knowledge Storage (KU) Knowledge Utilization (GS) Knowledge sharing (GC) Knowledge creation, (DT)Digital Transformation (DSTR)Digital Strategy (DP) Digital Processes (DCE) Digital Customer Relations (DC) Digital processes, (D)

The figure 1 depicts the theoretical framework that explores how the Knowledge Management (KM) affects Digital Transformation (DT) through the intermediary variables of Digital Literacy (DL) and Organizational Culture (OC). This model entails a number of constructions which include DCM, DCO, DL, DS (KM constructions), GC, GS, KST, KU (OC constructions), DC, DCE, DP, DSTR (DT constructions), and AF, CC, IC and LC. Connections between the concepts are symbolized by path

coefficients, indicating the values and importance of connection. The 0.439 (p -value 0.000) path coefficient, representing the relationship between KM and DL, shows that there is a strong and statistically significant effect of KM on DL. Moreover, the path coefficient of 0.186 (p-value 0.000) existing between the variables DL and DT, implies that the variable of DL significantly mediates the effect of KM on DT. The coefficient of path of 0.398 (p-value 0.000) of KM to OC shows a powerful and statistically significant impact of KM on OC. Path coefficient of 0.804 (p-value 0.000) between OC and DT implies that there is significant mediation of the influence of KM on DT by OC. In a nutshell, the model highlights the essential role of deep learning (DL) and organizational culture (OC) in enabling the relationship between knowledge management (KM) and digital transformation (DT). The strong and statistically significant values of path coefficients mean that the use of appropriate knowledge management methods could help to strengthen digital literacy and positively affect organizational culture. The two are critical towards encouraging and influencing digital transformation within businesses.

Table 5. Path coefficients mean standard deviation T value and P value

DL -> DT	0.186	0.187	0.026	7.276	000
KM -> DL	0.439	0.441	0.04	11.064	000
KM -> OC	0.398	0.4	0.043	9.303	000
OC -> DT	0.804	0.803	0.023	34.89	000

The Table 5 above demonstrates the profound and multi-faceted effects between Knowledge Management (KM), Digital Literacy (DL), Organizational Culture (OC), and Digital Transformation (DT). The t-value (11.064) and the p-value (0.000) means that Knowledge Management positively influences Digital Literacy significantly. This implies that the Digital Literacy can be increased through the adoption of good Knowledge Management techniques. The Digital Literacy improvement has a positive and strong influence on the Digital Transformation with a t-value of 7.276, and p-value of 0.000. It implies that the higher the Digital Literacy level, the greater the Digital Transformation is appropriate. In addition, the effect of KM on Organizational Culture has the t-value of 9.303 and the p-value of 0.000, which implies that successful KM practices help in the establishment of an organization with a fostering culture. [41] Organizational Culture shows great effect on Digital Literacy and Digital Transformation with profile values of 34.890 and 0.000 t-value and p-value respectively. This underscores the fact that a good Organizational Culture enhances the effect of Digital Literacy on Digital Transformation. Two key factors Digital Literacy and Organizational Culture make Knowledge Management directly affect the Digital Transformation. Knowledge management (KM) has an indirect effect on digital transformation through the improvement of digital literacy and organizational culture. It stresses the importance of incorporating KM and the creation of a positive organizational culture into the successful completion of the successful digital transformation.

FINDINGS AND DISCUSSION OF THE STUDY

The research critically computed the validity, reliability and structural interaction between Knowledge management (KM), Digital literacy (DL), Organizational Culture (OC), and Digital transformation (DT) and gave some important results. Each of the constructs being studied showed very high internal consistency, which went above the maximum acceptable values of Average Variance Extrac (AVE), Composite Reliability (rho a and rho c) and the Cronbachs Alpha. In particular, Knowledge Management was found to have AVE of 0.659, composite reliability value 0.837 (rho a) and 0.826 (Cronbachs Alpha). Digital Literacy depicted an AVE of 0.654, and the Cronbach Alpha of 0.825, rhoa of 0.827 and rho C of 0.883. Digital Transformation had AVE=0.630, Cronbach- Alpha=0.802, rho- a=0.805 and rho- c= 0.871. Although the AVE of Organizational Culture was slightly less, at 0.614 as well as the Alpha of Cronbach, 0.790 there was satisfactory reliability with rho a of 0.797 and rho c of 0.864. These findings confirm that the constructs are valid and reliable in gauging the theoretical finds to be aimed at.

The outer loadings of each construct were also measured to determine how each item is a measure of the construct of interest, and all the items had a high correlation of more than the 0.7 mark. The knowledge Management represented itself well with loadings of 0.741 Knowledge Creation (GC), 0.787

Knowledge Sharing (GS), 0.878 Knowledge storage (KST), and 0.835 Knowledge Utilization (KU). Digital Literacy had high loadings of 0.81 in regards to Digital Communication (DCM), which is equivalent of 0.774 in regards to Digital Competency (DCO), 0.81 in regards to Digital Literacy (DL) and 0.84 in regards to Digital Skills (DS). The loadings of Digital Transformation consisted of 0.704 of Digital Capabilities (DC), 0.832 of Digital Customer Engagement (DCE), 0.801 of Digital Processes (DP) and 0.83 of Digital Strategy (DSTR). Organizational Culture before and during 0.793 Adaptability and Flexibility (AF) and 0.708 Collaborative Culture (CC) and 0.839 Innovation Culture and Learning Culture (IC and LC) represented the strong loadings. These findings show that the constructs reflect their theoretical dimensions well.

The Variance Inflation Factor (VIF) analysis values helped to understand that there existed multicollinearity between predictor variables. Most of the variables have had a slight degree of multiple collinearities, and the VIF has an exported value lower than 2.0. Nevertheless, the values of VIF were also higher in Digital Communication (3.409), Digital Skills (3.662) and Knowledge Storage (2.573), which suggests that the existence of some considerable multicollinearity. These increased values notwithstanding, most of the VIF levels were within a reasonable range implying that multicollinearity was well controlled. The analysis of discriminant validity showed a low positive correlation of 0.34 between Digital Transformation and Digital Literacy, which means that there is a certain similarity and differences are also present. Correlations between Digital Literacy and Organizational Culture were low at 0.186 and between Digital Transformation and Organizational Culture were not appealing at 0.006, which confirms the exclusiveness of the constructs and justifies the conceptualization of same.

The conceptual analysis discussed Knowledge Management influence on Digital Transformation as a mediator using Digital Literacy and Organizational Culture. Knowledge management has been found to foster performance within organizations. Zaied, Soliman, Hussein and Hassan discovered that knowledge management enhances the performance of the organization. The path coefficients showed that KM has a significant effect on both DL (= 0.439, = 0.000) and OC (= 0.398, = 0.000). In addition, the KM has a significant mediating variable of DL (coefficient of 0.186, p=0.000) and OC (coefficient of 0.804, p=0.000), where both have a greater role in the mediation relationship between KM and DT. All the hypotheses and KM enhance the performance of the organization, as the study confirmed Zaied [52]. KM moderately changes digitally. Contemporary online technologies and the Internet assist DT in competing [33]. The first hypothesis was H1 that Knowledge Management has a significant impact on Digital Literacy with the path coefficient of 0.439, t-value of 11.064, and p-value of 0.000 that shows that Knowledge Management has a strong positive relationship with Digital Literacy. Hypothesis H 2: Digital Literacy has a significant impact when predicting Digital Transformation with the path coefficient of 0.186, t-value of 7.276, and p-value of 0.000 indicating that greater Digital Literacy is an important factor in effective Digital Transformation. The Hypothesis H3 was that Knowledge Management has a significant influence on Organizational Culture with the path coefficient of 0.398, t-value of 9.303 and a p-value of 0.000. Finally, Hypothesis H 4 revealed that the Organizational Culture has a strong influence on Digital Transformation with the path coefficient of 0.804, t -value = 34.890, and p -value = 0.000. All the hypotheses were therefore adopted on the basis of strong and statistically significant relationships.

All these results contribute to the overall significance of the Knowledge Management integration and the encouragement of the positive Organizational Culture to trigger the successful Digital Transformation [38]. Alongside contributing to the Digital Literacy, effective Knowledge Management also contributes to the Organizational Culture which is essential to successful Digital Transformation of business processes as it is indicated in the literature The potential impact of innovation on performance has been evident in the past as well as Khin, and Ho[30] report that digital skills are required to transform business processes, and effective knowledge management is an effective way to increase digital literacy and corporate culture.   There are strong correlations between knowledge management, digital transformation, organizational culture, and digital literacy in the study. Digital literacy (DL) and digital transformation (DT) have a significant correlation (0.848) and organizational culture (OC) facilitates the same (0.823 and 0.957). For DT to succeed, knowledge management (KM) and OC assistance is required. KM is an effective tool that increases DL (0.439), DT (0.441), and OC (0.398). [21] support these results.

CONCLUSIONS

The researchers came to the conclusion that Knowledge Management (KM) can affect the enhancement of Digital Literacy (DL) in a significant manner, which, in its turn, positively impacts Digital Transformation (DT). Adopting optimal practices in knowledge management (KM) is also important in promoting a positive Organizational Culture (OC), which represents an effective mediator in the relationship between Digital Learning (DL) and Digital Transformation (DT). The findings provide an underpinning of the importance of integrating knowledge management (KM) and developing a positive organizational culture (OC) to achieve successful digital transformation (DT). Altogether, the research points at the interdependence of Knowledge Management (KM), Deep Learning (DL), corporate Culture (OC), and Digital Transformation (DT) that support the accomplishment of corporate objectives.

RECOMMENDATIONS

Universities can contribute to the digital transformation process by investing in training opportunities that would encompass all of the elements of digital literacy and enhance their knowledge management processes [48]. Their culture must be a flexible organizational culture where there is teamwork among them. The two parts will be in sync provided that; KM plans and organizational culture endeavors have been synchronized. The efficiency of such processes can be measured and necessary changes implemented to continually increase the effectiveness by constant monitoring and evaluation.

Conflict of Interest: According to the authors, they do not have a conflict of interest.

Data Availability Statement: The information underpinning this study is incorporated as part of the article. There is no associated data.

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