Student's Readiness for Knowledge Management Through E-learning during Pandemic: A Study of Christ University (Delhi)

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Abstract

The study has aimed to investigate the student's readiness for Knowledge Management (KM) through e-learning during the Pandemic. Data were collected from both undergraduates and post-graduate students of Christ(Deemed to be University) Delhi, India, by using structured questionnaires. The data collection technique was done by using Google forms, and the links of the questionnaires were submitted to online platforms such as Facebook groups of the respondents. The study found 116 valid responses for data analysis. Statistical Package for the Social Sciences (SPSS) software 20.0 versions was used to analyse the collected data. Descriptive statistics were used to analyse the demographic information of the students. The non-parametric Mann-Whitney U and Kruskal-Wallis test was conducted to measure the difference among students' demographics and variables of the study. The study found students have the readiness of KM through e-learning during the Pandemic. This research also identified that students are willing to share their knowledge with teachers and friends. Present study examined there are no differences among gender, age and students' readiness for KM through e-learning. The study recommended that the university organise more training sessions to equip faculty and students to be more effective in delivering online learning content through KM. The current study offers several areas for future research, like surveying students and teachers of various faculties currently participating in online education.

Keywords: E-learning, KM, Knowledge, Christ University, COVID-19.

Introduction

The impact of the COVID-19 epidemic on education was unlimited to the international or national level that had been unexpected earlier (Agnoletto & Queiroz, 2020; Carlson, 2020). Even the educational system's content, educator responsibilities, student positions, and evaluation systems have been changed by COVID-19 (Shawaqfeh et

al., 2020). Additionally, it has resulted in the rethinking of the educator's position (Luthra & Mackenzie, 2020). So, Covid-19 emphasises the relevance of life skills for the future age and expands the role of technology in assisting education. The COVID-19 Pandemic's implications for education are further highlighted by the terms digital technology and educational innovation. It has become a goal for governments to capture knowledge as a critical asset for developing new knowledge quickly, to remain competitive (Abel & Deitz, 2012). It is imperative to manage existing knowledge before converting it into e-learning. The cycle of KM is incomplete without learning. It encompasses establishing, disseminating, applying, and maintaining an organisation's knowledge and information. It is a multidisciplinary approach to achieving corporate goals through the most effective use of knowledge. Before introducing online education, people and groups were able to use traditional educational and vocational training methods. KM is expected to help establish an e-learning framework that combines e-learning and KM activities to accomplish hierarchical learning (Soltani et al., 2019).

Nevertheless, to remain innovative, companies now need to have shorter invention cycles and provide a constantly trained and competent workforce. This objective can only be achieved by developing new disruptive forms of learning and by promoting lifelong learning (LLL) (Abcouwer & Takács, 2018). E-learning is one of the methods for capturing and transferring knowledge; it enables corporations and educational institutions to conduct training using electronic media and the internet. Numerous institutes and organisations have been forced to conduct training and education activities via e-learning platforms due to the COVID-19 epidemic (Maatuk et al., 2021). Online education presents a computer-based means of sharing thoughts and ideas with others while feeling safe and comfortable. However, this type of learning requires users to have the right level of technological competence and ability. A certain level of preparedness is required for consumers to get the most out of this virtual learning style.

This study is based on a question about Business Schools' lessons gained following the COVID-19 Pandemic and the complex triangle of e-learning, student transformation, and KM. This research was designed to discover how well students are prepared for e-learning using KM. Additionally, research examined whether any demographic or personal characteristics (gender, age, and frequency of internet use) had an effect on their learning throughout the Pandemic. This raises the question of whether Delhi's students are equipped and capable of easily adopting e-learning and overcoming the attendant hurdles. As a result, this study sought to determine the readiness of Christ University's Business students for e-learning via KM. This paper has both theoretical and practical implications. The research findings are significant in identifying possible cost-effective strategies for shifting from traditional to digital educational frameworks. In concerns to the COVID-19 Pandemic and school officials, the method is both relevant and valuable, since it incorporates students' learning preferences.

Literature Review

This part will introduce some new research on the topic of this study, including discussions of cutting-edge techniques in KM, e-learning, training technology, organisational learning and performance.

KM in University

KM is widely regarded as a critical component of any company, even more so for educational institutions such as universities. Acquiring, converting, and applying knowledge are intrinsic components of any KM paradigm (Gold et al., 2001). Implementing KM demonstrates an organisation's ability to acquire, convert, and apply specialised knowledge (Liao & Wu, 2009) as a possible component of any innovation and performance strategy. In higher education, concerns about universities' readiness for organised KM date back two decades (López-Nicolás & Meroo-Cerdán, 2011). As part of their fundamental character, higher education institutions have information stores available to students, whether in print or electronically, and they make these resources available as part of their mission (Ngah & Bontis, 2016). Universities are not automatically efficient examples of KM methodologies and practices simply because they exist. Instead, the best instances of KM translations can be found in enterprises (Hargitai et al., 2021). At the same time, universities should be learning institutions, not just purveyors of knowledge to students (Brtianu, 2018).

KM concerning e-learning

Evans and Ali (2013) demonstrated how KM and learning work in tandem. The prior creations and transfer of information may be the groundwork for the development of new ones and for updating the current ones. Employees learn and acquire experience when professionals give context to a particular concept. The researcher will need to revisit the identity/creation step if the researcher believes that the knowledge resources are insufficient or incomplete. Two approaches can be used to examine the interaction between KM and e-learning systems: KM is necessary for developing robust e-learning systems, and KM development frameworks are available through e-learning systems. A definition of an e-learning system would be "an educational solution" that enables the delivery of knowledge, facilitates learning, and improves performance through the development, use, and management of appropriate technology procedures and resources. Given the organisation's aims and mission, online education provides several new chances to expand the educational environment and establish KM systems (Petrides & Nodine, 2003). E-learning-based KM facilitates the transmission of knowledge between students and institutions (Tessier & Dalkir, 2016). The implementation of interactive internet technology has significantly energised the knowledge-based educational environment (Hasan et al., 2021). Beyond traditional topic learning, online education emphasises the importance of students' self-management (Campbell, 2004). Individualised learning is made feasible by e-learning. However, such a strategy works only if teachers modify their preparation methods (Weichhart et al., 2018). The practical integration of KM with e-learning systems looks to be somewhat tricky. Ras et al. (2005) highlighted conceptual and technological issues as impediments, the presence of neglected learning processes, and a lack of engagement and adaption difficulties. It is possible to overcome the integration constraints of KM and e-learning systems by adopting competence management and teaching processes at the process level (Ras et al., 2005). After the COVID-19 outbreak, e-learning became mandatory, and many students, educators, and educational officials were unprepared.

One of the challenges with e-learning in this context is information retention. This could be improved if educational institutions adopted KM, specific to e-learning best practices. Several of these best practices include the following: virtual sessions that are easy and uncomplicated; the utilisation of a variety of multimedia tools;

simulation and gamification; the utilisation of student and teacher-friendly platforms; the materials accumulated after each session from the students; information repetition; promoting student participation and collaboration through fostering dialogue and teamwork; and increasing participation and collaboration among students.

Student's willingness to Knowledge Sharing

While empirical studies of particular KM systems are sparse, research on the problem stresses the necessity for knowledge sharing, primarily to bring together uncorroborated material from universities (Hanan & Stemke, 2014). Tan (2016) asserts that, while knowledge sharing in universities may be a significant component of KM methods, it depends heavily on the organisational culture of the university, which in turn depends on the direct support and engagement of higher management. This can be accomplished by the identification and promotion of appropriate rewards for knowledge sharing-positive activities. KM also increases the chances of successful interpersonal contact, which strengthens trust and refreshes the KM process, and fosters a climate conducive to collaboration and, as a result, academic outputs that contribute to corporate performance. These findings reflect Chugh's past findings, revealing that universities no longer overtly facilitate tacit knowledge transmission for several technical and cultural reasons. Furthermore, even though managers are mentioned in almost every study as a critical component of any KM process, they appear to obstruct the transmission of tacit knowledge at several universities (Chugh, 2015). Many university studies on KM have a common theme: it is essential, managers must publicly endorse it, and it should highlight both formal and informal features related to trust, communication, transparency, and collaboration.

Students' KM readiness through E-learning during the COVID-19 Pandemic

Since the COVID-19 outbreak, most academic institutions have transferred their learning and teaching functions online. Since then, experts have looked into how students prepare for online learning. As a result, a lot has been published about this topic recently. Naji et al. (2020) discovered that four factors influenced students' preparedness for a Pandemic: 1) initial motivation and preparation for online education, 2) attitudes toward online learning that are based on self-efficacy, 3) online education that is self-directed, and 4) assistance with online learning. According to Callo and Yazon (2020) preparedness for online learning was found to be influenced by familiarity with online learning, prior experience with technology, self-efficacy, and preparation for online learning in the context of COVID-19. Students and teachers' readiness for online learning can be judged by their ability to use technology and self-efficacy.

Shawaqfeh et al. (2020) investigated pharmacy students' experiences with online distance learning in the Kingdom of Saudi Arabia during the COVID-19 outbreak. They discovered that throughout the COVID-19 quarantine period, pharmacy students were amenable to receiving an education through an online learning environment. Allam et al. (2020) surveyed communication and media studies students during the COVID-19 outbreak to determine their readiness for online learning. While study participants exhibited computer/internet literacy, they lacked the motivation to engage in self-directed learning online. Sharma et al. (2020) examined medical students' preparedness for online learning during the COVID-19 Pandemic. They demonstrated that students were prepared for online learning during the lockdown and possessed the necessary technological infrastructure.

Online learning was more comfortable for female students and degree-seeking students than for male students. Students also stated that if given a choice, they would prefer onsite over online programs. Student preparedness for online education in a Pandemic was determined.

Research Objectives (RO) of the Study:

The main aim of this study is to explore the strategies for KM concerning e-learning. This study incorporates the following objectives.

RO1: Examined the levels of KM readiness among the Business students of Christ University (Delhi).

RO2: To identify how e-learning practices affect Christ University (Delhi) students and support from the university during the lockdown.

RO3: To reveal the students' willingness to share their knowledge with teachers and friends.

RO4: To detect the practical challenges for e-learning

Research Questions (RQ) of the Study:

Based on the above objectives, the present study combines the following research questions:

RQ1: Examined the levels of KM readiness among the Business students of Christ University (Delhi).

RQ2: How do e-learning practices affect students and the availability of support from the university during a lockdown?

RQ3: What extent students are willing to share their knowledge with teachers and friends?

RQ4: What are the practical challenges for e-learning during Pandemic?

Methodology

We used a quantitative approach by using an online questionnaire circulated to the students of the School of Business at Christ(Deemed to be University). This University was born out of the educational vision of St Kuriakose Elias Chavara, an educationalist and social reformer of the nineteenth century in South India. This multi-disciplinary University which focuses on teaching research and service offers Bachelor, Master and Doctoral programmes in humanities, social sciences, science, commerce, management, etc. to over 27,000 students. It was established as a Christ college in 1969. This University offers its programmes at three campuses in Bangalore, Pune and Delhi. In 2008 under Section 3 of the UGC Act, 1956, the Ministry of Human Resource Development of the Government of India, declared the institution a Deemed to be University, in the name and style of Christ University (Christ University, 2021)

The data gathering procedure was done through Google forms, which were sent to the Facebook group (link of the Google form) using an online survey questionnaire. The first part of the questionnaire asked about the demographic details, while the second part focused on questions specific to KM and e-learning. We sent the Google forms to about (135) students, among whom (116) students replied. The collected data were downloaded to Excel and then analysed using both MS Excel and SPSS version 20. Descriptive statistics were used to analyse the demographic information of the students. Later, we conducted the Mann-Whitney U test and Kruskal-Wallis test to

measure the relationship among students' demographics and variables of the study. We got Cronbach's alpha score to check for the reliability of the questionnaire items. The resulting alpha score was 0.892, indicating the questionnaire had a reliable alpha score (Table 2).

The hypothesis of the study

Based on the literature covered so far, it may be worth noting that we tested the following null hypotheses:

H01: There is no significant relationship between gender and students' KM readiness through e-learning.

H02: There is no significant relationship between age and KM readiness through e-learning.

H03: There is no significant relationship between student's frequency of computer use and online learning practices that affect Christ University (Delhi) students during the lockdown.

Results

Reliability and Validity Analysis

To ensure the validity of the constructs, the measurement items and variables were developed from prior studies. The variables, coding and items are listed in Table 1.

Table 1: Variables and items included in the questionnaire

Variables	Coding	Items
Students Readiness for KM(SRKM)	SRKM 1	I am familiar with the term KM and E-learning
	SRKM 2	I am familiar the term KM and E-learning by seminar/conference/training
	SRKM 3	I am interested to integrated KM and E-learning in my university
	SRKM 4	Integrate KM with E-learning can be benefitted to the learners
	SRKM 5	Your university should make future plan for KM and E-learning integration for taking advantages during Pandemic
	SRKM 6	I save my task and activities into electronic files
	SRKM 7	I understand the importance of KM and E-learning
	SRKM 8	I think providing the necessary IT facilities serves KM through E-learning
	SRKM 9	I need more time to accept digital learning
	SRKM 10	I have all the necessary skills to enable online learning.
Support of your University Available (SUA)	SUA 1	The decisions that are made my university to move in online are fair and help to reduce spread of COVID-19:
	SUA 2	My university has adequate ICT infrastructure and clear policies for online learning.
	SUA 3	My university have installed high speed internet.
	SUA 4	I agree that teachers and other staff's inadequate training and empowerment on the application of ICT is an obstacle to online learning.
	SUA 5	I am technically prepared to move in online
	SUA 6	My university motivate me mentally and psychologically to join online learning
	SUA 7	Moving online was hastily and rambling at my university
	SUA 8	I think the university has to move in online more gradually and thoughtfully
	SUA 9	The support of my University during Pandemic is satisfactory.
Knowledge Sharing with Teacher and	KSTS1	I share my knowledge with friends and encourage them to share with others
	KSTS2	The teacher provided me feedback on my work through comments
	KSTS3	I am able to interact with my teacher during e-learning
	KSTS4	The teacher informed me about my progress periodically
	KSTS5	I am able to share online learning experiences with other students

Students (KSTS)	KSTS6	I am able to communicate with other students through e-learning
	KSTS7	I am able to share online learning experiences with other students
	KSTS8	I am able to communicate with other students by e-learning
	KSTS9	This online course encouraged me to work in small groups/teams
	KSTS7	I am able to share online learning experiences with other students
	KSTS8	I am able to communicate with other students by e-learning
	KSTS9	This online course encouraged me to work in small groups/teams
E-learning Practices Affect(EPA)	EPA-1	Having strong impact of COVID-19 Pandemic on my educational or career plans
	EPA-2	Online learning is a great source of inspiration to me.
	EPA-3	I feel highly motivated during online learning
	EPA-4	I spend more time to learn online material than offline ones.
	EPA-5	The novel coronavirus to me feel stressful
	EPA-6	I get quickly tired during online learning
	EPA-7	I suffer stress and frustration during digital learning
	EPA-8	I have health problems after online learning
	EPA-9	I feel loneliness and isolation

Reliability Statistics

We tested the reliability of the questionnaire by using the Statistical Package for Social Sciences (SPSS) program. Table 2 shows the reliability coefficient of the questionnaire. Cronbach's Alpha test shows that the alpha is 0.892, which is reliable as the alpha value is greater than 0.05.

Table 2: Reliability statistics

Cronbach's Alpha	No. of Items
.892	37

Demographic profile and personal characteristics of the respondent

A total of 116 respondents has participated in this study. Of this number, 72 participants (62.1%) were male, and 44(37.9%) were female. The data in table 3 show that 113 participants (97.4%) constitute the age group of 17-21 years, and only 3(2.6%) were the age group of 22-25 years. Among them, 113 respondents (97.4%) were undergraduate students, and 3 participants (2.6%) represented master's students. Table 3 also shows that nearly half of the respondents, 45(38.8%), used the internet from 8 to 10 hours a day. About One fourth 33(28.4%) used the internet depending on the situation, followed by More than 10 hours a day (29; 25%), less than 5 hours (8; 6.9%) a day.

Table 3: Demographic profile of the respondent

Demographic/personal characteristics	*Frequency (N=116)*	*Percentage (%)*
Gender		
Male	72	62.1
Female	44	37.9
Age group		
17-21	113	97.4
22-25	3	2.6
Level of education		
Undergraduates	113	97.4
Master	3	2.6

Frequency of Internet Use		
More than 10 hours a day	29	25.0
From 8 to 10 hours a day	45	38.8
Less than 5 hours	8	6.9
Depends on situation	33	28.4
Never	1	.9
Total	113	100

Mean and Standard Deviation (SD) of students' readiness for KM through e-learning during Pandemic

In order to determine students' level of readiness for KM through e-learning, we put ten statements on a five-point Likert scale and asked them to rate their level of agreement among those statements. The findings of this question are shown in table 4, which indicates "I have all the necessary skills to enable online learning" obtained the highest mean score of 3.76 (SD=1.010; Rank 1). "I save my tasks and activities into electronic files" achieved the second highest mean score of 3.70 (SD=1.166; Rank 2). Among the ten statements, "I need more time to accept digital learning" obtains the lowest mean score of 2.91 (SD=1.251; Rank 10). The other seven statements were between 3.16-3.64.

Table 4: Mean and Standard Deviation (SD) of students' readiness for KM through e-learning

Statements	N	Mean(SD)	Rank
I have all the necessary skills to enable online learning.	116	3.76(1.010)	1
I save my task and activities into electronic files	116	3.70(1.166)	2
I understand the importance of KM and E-learning	116	3.64(1.122)	3
Providing the necessary IT facilities serves KM through E-learning	116	3.63(1.026)	4
Your university should make future plan for KM and E-learning integration for taking advantages during Pandemic	116	3.59(1.187)	5
I am familiar with the term KM and E-learning	116	3.41(1.112)	6
Integrate KM with E-learning can be benefited to the learners	116	3.41(1.157)	7
I am interested to integrated KM and E-learning in my university	116	3.39(1.155)	8
I am familiar the term KM and E-learning by seminar/conference/training	116	3.16(1.172)	9
I need more time to accept digital learning	116	2.91(1.251)	10

Mean and Standard Deviation (SD) of how e-learning practices affect Christ University (Delhi) students during the lockdown.

To reveal how students' e-learning practices affect Christ University (Delhi) students during the lockdown. We put nine statements on a five-point Likert scale and asked them to rate their level of agreement among those statements. The findings of this question are shown in table 5, which indicates "Having strong impact of COVID-19 Pandemic on my educational or career plans" obtained the highest mean score of 3.66(SD=1.230; Rank 1). "The novel coronavirus to me feels stressful" achieved the second highest mean score of 3.64(SD=1.295; Rank 2). Among the nine statements, "I feel highly motivated during online learning" obtained the lowest mean score of 2.72 (SD=1.147; Rank 9). The other seven statements were between, 2.78-3.48.

Table 5: How e-learning practices affect Christ University

Statements	N	Mean(SD)	Rank

Having strong impact of COVID-19 Pandemic on my educational or career plans	116	3.66(1.230)	1
The novel coronavirus to me feel stressful	116	3.64(1.295)	2
I suffer stress and frustration during digital learning	116	3.48(1.309)	3
I get quickly tired during online learning	116	3.47(1.282)	4
I feel loneliness and isolation	116	3.09(1.456)	5
I spend more time to learn online material than offline ones.	116	3.05(1.376)	6
I have health problems after online learning	116	3.03(1.399)	7
Online learning is a great source of inspiration to me.	116	2.78(1.173)	8
I feel highly motivated during online learning	116	2.72(1.147)	9

Mean and Standard Deviation (SD) of students' support of the university available during Pandemic

To reveal students' support of the university available during Pandemic, we put nine statements on a five-point Likert scale and asked them to rate their level of agreement. Table 6 showed that "The university's decisions to move in online are fair and help reduce spread of COVID-19" obtained the highest mean score of 3.84(SD=1.108; Rank 1). "My university has adequate ICT infrastructure and clear policies for online learning" obtained the second mean score of 3.70(SD=1.121; Rank 2). Among the nine statements, "Moving online was hastily and rambling at my university" achieved the lowest mean score of 3.08(SD=1.128; Rank 9). The other six statements were between 3.17-3.56.

Table 6: Mean and Standard Deviation (SD) of students' support of the university

Statements	N	Mean(SD)	Rank
The university's decisions to move in online are fair and help reduce the spread of COVID-19.	116	3.84(1.108)	1
My university has adequate ICT infrastructure and clear policies for online learning.	116	3.70(1.121)	2
I am technically prepared to move in online	116	3.56(1.137)	3
I think the university has to move in online more gradually and thoughtfully	116	3.34(1.164)	4
My university motivate me mentally and psychologically to join online learning	116	3.33(1.125)	5
The support of my University during Pandemic is satisfactory.	116	3.28(1.198)	6
Teachers and staff's inadequate training and empowerment on the application of ICT is an obstacle to online learning.	116	3.22(1.150)	7
My university has installed high speed internet.	116	3.17(1.182)	8
Moving online was hastily and rambling at my university	116	3.08(1.128)	9

Willingness to share knowledge with teachers and students

Students were asked to rate their opinion on sharing knowledge with their teacher and friends on a 5-point Likert scale. Most of them replied that "I share my knowledge with friends and encourage them to share with others" (Mean=3.70; SD=.989; Rank 1) and "I am able to share online learning experiences with other students" (Mean=3.60; SD=1.110; Rank 2). It is evident from table 7 that students are in favour of all the statements as their ratings fall above the average score of 3.00.

Table 7: Willingness to share knowledge with teacher and students

Statements	N	Mean(SD)	Rank
I share my knowledge with friends and encourage them to share with others	116	3.70(.989)	1
I am able to share online learning experiences with other students	116	3.60(1.110)	2
I am able to share online learning experiences with other students	116	3.53(1.059)	3
I am able to communicate with other students through e-learning	116	3.46(1.106)	4
I am able to communicate with other students by e-learning	116	3.44(1.066)	5
I am able to interact with my teacher during e-learning	116	3.43(1.159)	6
The teacher provided me feedback on my work through comments	116	3.41(1.055)	7
This online course encouraged me to work in small groups/teams	116	3.33(1.045)	8
The teacher informed me about my progress periodically	116	3.19(1.149)	9

Practical challenges for e-learning during Pandemic

To reveal the practical challenges during learning, we put six problems. Among the six specific problems in table 8 majority of the respondents indicated that "Slow speed of internet connection" (n=55; 47.4%) is the practical challenge of e-learning. One-fourth of the students chose the "others challenges" option, but they did not specify the problems (n=33; 28.4%). Among the participants, 15(12.9%) replied that Frequent electricity failure is another e-learning challenge, followed by "I do not have adequate IT training" (n=8; 6.9%). Only one student replied, "I don't have any electronic device"(n=1; .90%).

Table 8: Practical challenges for e-learning

Statements	Frequency	Percent
I don't have any electronic device	1	.9
No internet connection in my location	2	1.7
Slow speed of internet connection	55	47.4
Frequent electricity failure	15	12.9
Financial problem in my household	2	1.7
I do not have adequate IT training	8	6.9
Others	33	28.4
Total	116	100

Hypothesis Testing

H01: There is no significant relationship between gender and students' KM readiness through e-learning.

The Mann-Whitney U test was conducted to test the null hypothesis. Table 9 presented the test result of H01. The following table demonstrates no differences among gender and students' readiness for KM through e-learning for all the statements as the p-value is greater than 0.05. So, we accepted the null hypothesis.

Table 9: Relationship between gender and students' KM readiness through e-learning

Student's readiness for KM through E-learning	Gender	Mean Rank	Mann-Whitney U	Asymp. Sig. (2-tailed)	Results of H01
I am familiar with the term KM and E-learning	Male(N=72)	57.53	1514.000	.678	Accepted
	Female(N=44)	60.09			
I am familiar the term KM and E-learning by seminar/conference/training	Male(N=72)	58.21	1563.000	.902	Accepted
	Female(N=44)	58.98			

I am interested to integrated KM and E-learning in my university	Male(N=72)	56.00	1404.000	.288	Accepted
	Female(N=44)	62.59			
Integrate KM with E-learning can be benefited to the learners	Male(N=72)	55.18	1345.000	.159	Accepted
	Female(N=44)	63.93			
Your university should make future plan for KM and E-learning integration for taking advantages during Pandemic	Male(N=72)	56.23	1420.500	.335	Accepted
	Female(N=44)	62.22			
I save my task and activities into electronic files	Male(N=72)	59.44	1516.500	.690	Accepted
	Female(N=44)	56.97			
I understand the importance of KM and E-learning	Male(N=72)	54.38	1287.500	.080	Accepted
	Female(N=44)	65.24			
I think providing the necessary IT facilities serves KM through E-learning	Male(N=72)	56.39	1432.000	.364	Accepted
	Female(N=44)	61.95			
I need more time to accept digital learning	Male(N=72)	57.71	1527.000	.738	Accepted
	Female(N=44)	59.80			
I have all the necessary skills to enable online learning.	Male(N=72)	56.94	1472.000	.505	Accepted
	Female(N=44)	61.05			

H02: There is no significant relationship between age and KM readiness through e-learning.

The Mann-Whitney U test was conducted to test the null hypothesis. Table 10 presented the test result of H02. The following table demonstrates no differences among age and Students' readiness for KM through e-learning for all the statements as the p-value is greater than 0.05. So, we accepted the null hypothesis.

Table 10: Relationship between age and KM readiness through e-learning

Student's readiness for KM through e-learning	Age(Years)	Mean Rank	Mann-Whitney U	Asymp. Sig. (2-tailed)	Results of H02
I am familiar with the term KM and E-learning	17-21 (N=113)	58.53	166.000	.949	Accepted
	22-25(N=3)	57.33			
I am familiar the term KM and E-learning by seminar/conference/training	17-21 (N=113)	58.41	159.500	.857	Accepted
	22-25(N=3)	61.83			
I am interested to integrated KM and E-learning in my university	17-21 (N=113)	58.28	145.000	.658	Accepted
	22-25(N=3)	66.67			
Integrate KM with E-learning can be benefited to the learners	17-21 (N=113)	58.00	112.500	.305	Accepted
	22-25(N=3)	77.50			
University should make future plan for KM and E-learning integration for taking advantages during Pandemic	17-21 (N=113)	58.22	138.000	.570	Accepted
	22-25(N=3)	69.00			
I save my task and activities into electronic files	17-21 (N=113)	58.35	153.000	.766	Accepted
	22-25(N=3)	64.00			
I understand the importance of KM and E-learning	17-21 (N=113)	58.54	164.500	.928	Accepted
	22-25(N=3)	56.83			
I think providing the necessary IT facilities serves KM through E-learning	17-21 (N=113)	58.21	137.000	.553	Accepted
	22-25(N=3)	69.33			
I need more time to accept digital	17-21 (N=113)	58.01			

learning	22-25(N=3)	76.83	114.500	.324	Accepted
I have all the necessary skills to enable online learning.	17-21 (N=113)	58.61			
	22-25(N=3)	54.50	157.500	.827	Accepted

H03: There is no significant relationship between student's frequency of computer use and e-learning practices affecting Christ University (Delhi) Business students during lockdown.

Kruskal-Wallis test was conducted to test the null hypothesis. Table 11 presented the test result of H03. The following table demonstrates no differences among frequency of using computers and e-learning practices affect students' readiness for KM through e-learning for all the statements as the p-value is greater than 0.05. So, we accepted the null hypothesis.

Table 11: Relationship between student's frequency of computer use and e-learning practices affect students

E-learning practices affect students	Chi-Square	Df	Asymp. Sig	Results of H03
Having strong impact of COVID-19 Pandemic on my educational or career plans	.891	4	.926	Accepted
Online learning is a great source of inspiration to me.	3.023	4	.554	Accepted
I feel highly motivated during online learning	2.633	4	. 621	Accepted
I spend more time learning online material than offline ones.	2.396	4	.663	Accepted
The novel coronavirus to me feel stressful	3.249	4	.517	Accepted
I get quickly tired during online learning	9.510	4	.050	Accepted
I suffer stress and frustration during digital learning	2.341	4	.673	Accepted
I have health problems after online learning	4.522	4	.340	Accepted
I feel loneliness and isolation	4.496	4	.343	Accepted

Theoretical and Practical Implications

This study would be a great complement to online teaching, especially during a pandemic. This study establishes a foundation for future research on Delhi's Business students. In COVID-19, this study might be repeated with students from different fields. This experiment tested students' readiness for online learning during the Pandemic. The study's findings have immediate implications for Deans of Business schools, university administrators, and policymakers. This has a significant impact on their academic achievement. In order to boost students' self-efficacy in online communication, Business schools must give training and orientation programs. Randel et al. (2002) also claimed that such activities would boost students' grades.

Finally, the university administration should contribute significantly to this endeavour by establishing a robust framework for monitoring student behaviour in online classes. Policymakers might use this finding to construct and deliver short ICT-related courses to Business students. These courses would help them strengthen their ICT skills and prepare them for the challenges of online learning during the COVID-19 outbreak.

Discussion and Conclusion

The primary objective of this study is to investigate KM techniques in connection to e-learning. In our RQ1, we attempted to examine the levels of KM readiness through e learning among the Business students of Christ University (Delhi). We found that students have the readiness of KM through e-learning during Pandemic. We asked

participants to score the degree of agreement between ten statements using a five-point Likert scale. Among the ten statements, nine statements fell above score 3. This finding is partially supported by the study of Rafique et al. (2021).They found LIS students in Pakistan were motivated to learn through e-learning.

In RQ2, we try to identify how e-learning practices affect Christ University (Delhi) students and support from the university during a lockdown? We discovered that e-learning practices affect the present life of Christ University (Delhi) students during the lockdown. We asked participants to score their level of agreement with nine statements using a five-point Likert scale. Among the nine statements, seven statements fell above the score of 3.00. The study also found that students are satisfied with the support provided by the university during the lockdown. All the statements fell above the score of 3.00.

Under RQ3, we try to find to what extent students are willing to share their knowledge with teachers and friends? We asked participants to score their level of agreement with nine statements using a five-point Likert scale. We identified that students are willing to share their knowledge with teachers and friends. Students are in favour of all the statements as their ratings fall above the average score of 3.00. This finding supports the findings of Rafique et al. (2021). They identified that students are willing to share their knowledge with their friends and teachers.

In RQ4, we asked the students what are the practical challenges for e-learning during the Pandemic? Among the six specified problems, most respondents indicated that the slow speed of internet connection is the practical challenge of e-learning. Our finding is supported by the study of Othman et al.(2021). They found that most of the students of Department of Information Science and Library Management in University of Dhaka, Bangladesh reported that unstable internet and power blackouts are their primary concerns during online class. One other study, Chung et al. (2020) found that key challenge for Malaysian degree students is poor internet connection during online class. The present study tested three null hypotheses based on the student's gender, age and frequency of internet use.

The result of H01 and H02 showed no differences among gender, age and students' readiness for KM through e-learning. However, Chung et al. (2020) discovered that seniors are more prepared for online learning than younger students. The result of H03 showed no differences among the frequency of using computers and e-learning practices affecting students' readiness for KM through e-learning. The study recommended that the university organise more training sessions to equip faculty and students to be more effective in delivering online learning content through KM. So, e-learning platforms used for teaching and learning by the university are necessary to avoid problems related to different platforms used by instructors.

Limitations and future research directions

This study has several shortcomings. To begin, the study assessed Delhi's Business students' readiness during the Pandemic. As a result, its findings may not be generalisable to students from other disciplines. The current study offers several areas for future research, such as surveying Business teachers who are currently participating in e-learning. Once the Pandemic is over, a mixed-methods study dubbed a post-pandemic study could be conducted.

Conflict of interest: There is no conflict of interest.

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