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Reciprocity and Trust as Predictors of Technology-Enabled Knowledge Sharing among Library and Information Science Professionals in Public Universities of South-East, Nigeria

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Abstract

The study investigated reciprocity and trust as predictors of technology-enabled knowledge sharing among Library and Information Science (LIS) professionals in public universities of South-East, Nigeria. The purpose of this study is to determine how reciprocity and trust predicts technology-enabled knowledge sharing among the LIS professionals. This is a descriptive survey involving two hundred and thirty-eight (238) LIS professionals. Validated structured questionnaire consisting of 40 items was used to collect the data from the 238 LIS professionals working in the five public universities in South-East Nigeria, without any sampling. The distributed instrument recorded an 82% return rate and all were found usable. Simple and multiple regression analysis were used to answer the research questions while the significance of the prediction for the hypotheses was determined using p-value. The findings revealed that both reciprocity and trust are positive significant predictors of technology-enabled knowledge sharing. Reciprocity however has moderate effect and trust a modest effect as predictors of technology-enabled knowledge sharing among LIS professionals in the public universities. Among the recommendations is the need to organise and closely monitor platforms for technology enabled knowledge sharing to ensure that no knowledge sharer is left unattended at the point of need.

Keywords: Reciprocity, Trust, Technology-enabled knowledge sharing, Social Exchange Theory, Library and Information Science Professionals, Universities

Introduction

Knowledge sharing has been identified as perhaps the most important aspect of knowledge management. This has prompted many studies aimed at understanding the concept and process of knowledge sharing. Furthermore, the many benefits of knowledge sharing have resulted in the call to facilitate its engagement in various organisations for competitive advantage. Knowledge sharing without using technology however is grossly limited in terms of geographical distance, time, etc. Beyond the conventional platforms, knowledge sharing has become possible on a worldwide scale, across borders due to the emergence and advancements in technology. Some of this knowledge sharing technology-enabling tools include wikis, weblogs, emails, social networking sites, video conferencing applications, and instant messaging applications, virtual training applications, collaborative workspaces, discussion forums, virtual communities of practice and institutional repositories.

Technology-enabled knowledge sharing is simply the use of ICT platforms to share knowledge and in this case, work processes among professional colleagues. Technology-enabled knowledge sharing (TEKS) is a specific form of work practices through which knowledge workers share knowledge using technologies. The aim is to create a connected virtual environment for knowledge exchange by allowing knowledge seekers to identify and communicate with knowledge sources (Handzic et al., 2004). Some studies have posited that technology is a key enabler in facilitating knowledge sharing. Shahid and Alamgir (2013) opined that technology can be a helpful tool for effective knowledge sharing and can facilitate knowledge sharing in both time and space dimensions. According to Onifade (2013), use of technology makes knowledge sharing cost effective and very easy. Researchers have recognised different barrier types that technology can help to overcome, such as, social, physical and geographical distance (Shahid & Alamgir, 2013). Engaging in technology-enabled knowledge sharing further facilitates knowledge retention, use, growth and transfer across border and generations (Akanwa & Okorie, 2020).

The engagement of technology-enabling tools for knowledge donating and knowledge collecting in work collaboration and networking for effective service delivery ensures rapid diffusion of best practices across geographical boundaries. Through the use of these web-based technologies for knowledge sharing, a group of distributed individuals, dispersed across space, time, and organisational boundaries, organise themselves and share knowledge useful in the creation of a useful product of high quality. Technology-enabled knowledge sharing among LIS professionals is key enabler in facilitating effective collaboration for the utilization of one another's knowledge to provide services for their users; and be more proactive in teaching and learning as well as for professional development. This collaboration is a function of will, and thus cannot be forced. Whether or not an LIS professional will willingly engage in technology enabled knowledge sharing may be predicted if certain constructs are existent. Using the social exchange theory, two important constructs were identified as likely predictors of technology-enabled knowledge sharing. This study therefore considers trust and reciprocity as predictors of technology-enabled knowledge sharing among LIS professionals.

Reciprocity is being considered as a predictor of technology-enabled knowledge sharing among professional and paraprofessional librarians. It can be defined as a benefit that individuals gain from social exchange (Hung & Chuang, 2009). For knowledge contributors, reciprocal relationship means that they can improve relationships with others via their contributions and they expect future help from others. Trust on the other hand is another construct being considered as a predictor of technology-enabled knowledge sharing because knowledge sharing requires building a culture of trust, and any practice or action that destroys trust adversely affects the motivation to share information with others (Hinds & Pfeffer, 2003). Bordering on this allusion, technology-enabled knowledge sharing may not be if there is no culture of trust among LIS professionals. The issue of trust in an online environment has however been a topic for contention as the traditional view holds that communication that is technology-mediated is insufficiently rich or social to establish real trust. There is therefore, the need to investigate how these two variables predict technology-enabled knowledge sharing as this could help those charged with the enormous and ever evolving task of acquisition, organisation and distribution of knowledge resources in this technology-driven and knowledge-centred work environment, bridge the gap and bring the university to the limelight in this global competition for best practices of the 21st century.

Statement of the Problem

The ubiquitous nature of technology as a key facilitator and enabler in almost all aspects of life has necessitated its engagement for efficient and effective work processes. Technology-enabled knowledge sharing is needed to overcome the challenges Library and Information Science (LIS) Professionals are facing in the everevolving technology-driven, knowledge-centred and competitive work environment. Its engagement can be predicted and expected when the right things are in place. Knowledge accumulated over a period of time distinguishes, and gives an edge over another. Thus only the right circumstances may predict its sharing. The issue of reciprocity and trust appears to be important if professionals would release their hard-earned knowledge gained through several years of service and studies. The study therefore is set to:

- a. Ascertain how reciprocity predicts technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria.
- b. Find out how trust predicts technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria.

Theoretical Framework

This work was guided by the Social Exchange theory which is one of the most influential conceptual paradigms in organisational behaviour (Cropanzano & Mitchell, 2005). It is a commonly used theoretical base for investigating individual's knowledge sharing behaviour (Liang et al., 2008). The theory interprets behaviour in terms of transactions and proposes that interaction between persons is an exchange of goods,

material and non-materials. It is of the view that a person engaged in exchange will seek maximum profit for himself; that is the reward must be more than the cost and proposes that if this does not happen, then the behaviour of the person doing the giving may change. Knowledge sharing- with or without technology, is a two-way process-giving and collecting. For most people, there must be a balance before they will continue to give their knowledge. Furthermore, as Chua (2003) pointed out, sharing of knowledge is usually seen as a costly activity, especially for the knowledge giver. Thus, unless the perceived benefits exceed the costs of sharing, the sharing process is hard to realize. Reluctance in sharing knowledge may have a lot to do with reciprocity and trust issues. Reciprocity (giving expecting to be given) and trust (belief that I will not be disappointed and made to lose out in my giving) are likely predictors of technology-enabled knowledge sharing among LIS professionals. This theory is thus being applied to find out if the presence of trust and reciprocity among LIS professionals are considered as essential in order to maximize benefits and minimize costs of technology-enabled knowledge sharing.

Research Questions and Hypotheses

The research questions that this study will address include:

- 1. How does reciprocity predict technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria?
- 2. How does trust predict technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria?

The hypotheses formulated to guide this study at 0.05 level of significance include:

H₀1Reciprocity will not significantly predict technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria.

H₀2Trust will not significantly predict technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria.

Literature Review

Reciprocity has been considered one of the most important constructs in knowledge sharing literature (Sun et al., 2014). Reciprocity as a predictor of technology-enabled knowledge sharing among professionals also has a link to Social Exchange Theory (SET). SET proposes that interaction between persons is an exchange of goods, material and non-materials. It is of the view that a person engaged in exchange will seek maximum profit for himself; that is the reward must be more than the cost. Knowledge sharing practices are thus affected by peoples' willingness to share knowledge, and which in turn is caused by peoples' behaviour/misbehaviour (Islam & Ashif, 2014; Shaari et al., 2014). This unwillingness to share knowledge is observed probably irrespective of the platform the knowledge sharing is being carried out. Reciprocity however may increase trust in technology-enabled knowledge sharing

because when reciprocal acts occur in social interaction, individuals may trust each other and are likely to share personal feelings, information, and knowledge (Chen et al., 2014). Hew and Hara (2006) affirmed that reciprocity encourages willingness to share knowledge. Reciprocity is a process of exchanging things with other people to gain a mutual benefit. The norm of reciprocity (sometimes referred to as the rule of reciprocity) is a social norm where one is obligated to return any act of favour done by another (Cherry, 2023). Reciprocity refers to knowledge exchanges that are mutual and perceived by the parties as fair, and builds trust, which in turn is centrally important to social exchange relationships. It comprises two major activities: viewing (receiving) and posting (giving) knowledge. The significant relationship between reciprocity and individuals' quantity of knowledge sharing implies that participants of a virtual community may seek a fair balance between what they contribute to the community and what they receive from it (Chiu et al., 2006).

At the core of knowledge sharing is one's willingness to release the knowledge one knows and communicate it freely with others in order to learn something from them (Yeo & Gold, 2014). For people who are willing to share their knowledge, the norm of reciprocity is important – they expect others to contribute as well. Kipkosgei et al. (2020) noted that people's willingness to share their unique knowledge is often based on the law of reciprocity such that they share knowledge anticipating that others will return the good deed when required. People expect 'soft benefits' such as elevated reputation and peer recognition in return (van den Hooff & Hendrix, 2004). Putting it in another way, Yeo and Gold explained that when one shares knowledge openly with others one creates a boundary of a reciprocal relationship where the party receiving the knowledge is expected to share something back in return. Majewski and Usoro (2011) recognised that knowledge receivers themselves are often expected to and often feel obligated to reciprocate by also giving their knowledge, skills, values or something else of value with the consequent development of trust in such relationships. In this instance, reciprocity could be used as a payment for knowledge sharing (Wu & Sukoco, 2010). Hew and Hara (2006) observed that reciprocity can also work the other way. Instead of people sharing knowledge as a way to fulfill an obligation, some people share knowledge in the expectation of getting help in return. Soo (2006) referred to this kind of practice as giving a down-payment for an expected later payback. Kollock (1999) suggested that when people help others due to the possibility of future reciprocation, there must exist the expectation that interaction will be available in the future. Reciprocity in technology enabled knowledge sharing also has a link to trust. Elaborating on this Chen et al. (2014) explained that when reciprocal acts occur in social interaction, individuals may trust each other and are likely to share personal feelings, information, and knowledge.

Knowledge sharing is a two-way process- giving and collecting. Trust as a predictor of technology-enabled knowledge sharing in this study is hinged on the Social Exchange Theory (SET) which interprets behaviour in terms of transactions in which a balance in the exchanges must be worked out. For most people, there must be a balance before they will continue to give their knowledge. SET proposes that if this balance does not happen, then the behaviour of the person doing the giving may change. Trust (belief that I will not be disappointed and made to lose out in my giving) has been identified as one of the predictors of knowledge sharing. In fact, Wu and Sukoco (2010) viewed trust as fundamental in knowledge sharing between parties. It is vital for achieving an atmosphere of knowledge sharing in teams and organisations and is also important in online settings (Majewski & Usoro, 2011; Fang & Chiu, 2010). Renzl et al. (2005) opined that definitions of trust are manifold, however, there are two central issues: firstly, trust is about dealing with risk and uncertainty; and secondly, trust is about accepting vulnerability. Mayer et al. (1995, as cited in Wu & Sukoco, 2010) defined trust as the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustee, irrespective of the ability to monitor or control that other party. Although the members in a virtual community were not previously familiar with each other, trust can be developed for successful interaction and knowledge sharing to take place.

In the virtual community, trust is developed between individuals and maybe a group of strangers or colleagues that provide positive outcomes for the community as a whole (Wu & Sukoco, 2010). A trusting environment would be more conducive for technology-enabled knowledge sharing. Fostering knowledge sharing is about creating a trusting environment in which people are able to discern whether their colleagues are both knowledgeable and willing to extend their knowledge to the benefit of others. Trust will cause professionals to actively share their knowledge, being sure that the knowledge will not be used against its goals, will be compensated, and will earn considerable benefit in return (Levin et al., 2007; Seyyedeh & Daneshgar, 2010). For trust to exist among colleagues, individuals must believe that their goodwill will be reciprocated, even in the absence of formal controls. Since individuals amass knowledge at considerable expense of time, resources and energy, they would not simply give it away unless they are assured that they are handing this information in good hands and that there is a good chance of reciprocity. Sharing knowledge in an online community has consequences for the degree of trust among the members of such a community (van den Hooff et al., 2003). This is because trust is required in both sides of the knowledge sharing activity: knowledge recipients must be able to trust that the knowledge that they receive is qualitative and accurate, and knowledge transmitters must be able to trust that the knowledge they are divulging will be used appropriately. The reputation of both the knowledge seeker and knowledge transmitter is also an integral component in the establishment of trust among colleagues. Loss of face that results from abusing the good will of helpers destroys one's capacity to receive further help or assistance (Connelly, 2000). There is also trust from the point of view of the knowledge seeker. After all, the knowledge seeker doesn't know that the knowledge that he/she is about to get is quality knowledge (Ghosh, 2004). Wu et al. (2007) submitted that once people realise that a transmitted knowledge is valuable or comes from experts, they will be eager to acquire it. Some schools of thought however hold the traditional view that without face-to-face interactions, trust cannot emerge or be maintained (van den Hooff et al., 2003).

In seeming response, Roberts (2000) acknowledged that the use of technologically mediated communication will be more successful when it is between individuals who

share common social, cultural and linguistic characteristics, and less effective when it is between persons from diverse backgrounds, particularly in the early stages of interaction. Roberts noted however that overtime such persons will develop an appreciation for each other's social context. Together they will establish their own social norms and expectations of one another, thereby the development of trust and with it the successful exchange of knowledge. This view was buttressed by Burgoon et al. (2003) in a study on trust and deception in mediated communication where they concluded that participants who communicated exclusively through Information Communication Technologies were able to establish trust and mutuality without meeting face-to-face. This upheld an earlier view by Jarvenpaa and Leidner (1999) who affirmed that virtual teams that exclusively interact through technology-enabled platforms can very well develop trust, albeit a task-related, "swift" kind of trust instead of truly interpersonal or socially based trust.

Methods

This is a descriptive survey involving two hundred and thirty-eight (238) LIS professionals working in the five public institutions in each of the five states of South-East, Nigeria. There was no sampling as the population was not considered unwieldy. Thus, all the LIS professionals in these universities were used for the study. The pilot study was done in a public university in south-south, Nigeria, after which the validated structured questionnaire consisting of 40 items was used to collect the data. Some of the items used to measure the variables under study were adopted from previous studies. The scale of the items to measure trust was adapted from Fetzer institute (n.d). Reciprocity items were modified from both van den Hooff et al. (2003) and, Hsu and Lin (2008) while the scale of items used to measure technology-enabled knowledge sharing was adapted with modifications from Adamovic, Potgieter and Mearns (2012). The instrument consists of three (3) sections. Sections A to B are made up of ten (10) items each while Section C is made up of twenty (20) items, all designed to elicit information on the constructs being studied. Section A and Section B each examines reciprocity and trust respectively, while Section C measures technology-enabled knowledge sharing among professional and paraprofessional librarians. For all the questions, the respondents were asked to rate their opinion on the statements using a four-point rating scale of Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1). A sample item for reciprocity is "If my help will not be reciprocated, I will stop rendering my own help". Cronbach Alpha (α) for reciprocity was 0.83 in this study. A sample item for trust is "Most people would try to take advantage of me if they got the chance". Cronbach Alpha (α) for trust was 0.81. A sample item for technology-enabled knowledge sharing is "I obtain work related information and knowledge using social networking sites, online groups and internet forums". Cronbach Alpha (α) obtained for TEKS was 0.90. Attached in the appendix is the instrument used for the study. One hundred and ninety five (195) subjects completed and returned the questionnaire. The response rate was eighty-two percent (82%). All were found usable upon collection. In answering the research questions, Muijs' (cited in Cohen, Manion & Morrison, 2007, p. 523) suggestion for assessing the goodness of

fit of regression model using squared regression coefficient (R^2) and Beta weights (β) was adopted for the study. For the hypotheses, *p*-value was used to determine the significance of the prediction. These were all calculated using statistical package for social sciences (SPSS) software.

> .45 .39

.39

Results

Valid N (listwise)

I I			
	Ν	Mean	Std. Deviation
Reciprocity	195	2.39	.45
Trust	195	2.82	.39

Table 1: Descriptive statistics of the variables

Technology Enabled Knowledge Sharing

Table 1 shows the mean scores of respondents on how reciprocity will predict engagement in technology-enabled knowledge sharing. From the output shown in Table 1, obtained mean scores indicate that items on reciprocity was the lowest 2.39, with standard deviation of .45; trust had a mean score of 2.82, and a standard deviation of .39; while technology-enabled knowledge sharing had the highest mean score at 3.01 with standard deviation of .39. Mean score of the ten items on reciprocity studied shows that respondents rated reciprocity low on predicting technology-enabled knowledge sharing. The mean scores of respondents on the ten-items on how trust predicts their engagement in technology-enabled knowledge sharing revealed a modest prediction. Additionally, responses on the items measuring technology-enabled knowledge sharing had a mean score of 3.01 indicating a moderate engagement in technology-enabled knowledge sharing.

195

195

3.01

Table 2: Model Summary of rec	procity as a predictor	r of	technology-enabled
knowledge sharing			

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.340ª	.116	.111	7.38087

Goodness of fit of regression model using squared regression coefficient (R²): 0–0.1 weak fit; 0.1–0.3 modest fit; 0.3–0.5 moderate fit; >0.5 strong fit.

In answering the research question 1, table 2 shows the manner in which reciprocity predicts technology-enabled knowledge sharing. The table showed that R=.340 which implies that there is a positive relationship between reciprocity and technologyenabled knowledge sharing. That is, the higher the level of reciprocity, the more the likelihood of engagement in technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria. More so, the Adj $R^2 = .111$

which implies that the variation in technology-enabled knowledge sharing could be explained using 11.1% contribution of reciprocity. This indicates that reciprocity as a predictor of technology-enabled knowledge sharing among LIS professionals has a modest fit as it explains only 11.1% of the variance.

Table	3:	Coefficients	with	reciprocity	as	predictor	of	technology-enabled
knowle	edge	e sharing						

	В	SE B	β	Remarks	
Constant Reciprocity	46.189 .588	2.849 .117	.340	Moderate	positive

Note: $B = Unstandardized Beta; SE B = Standard error; \beta=Standardized Beta$ For beta weighting (β): 0 - 0.1 = weak effect; 0.1 - 0.3 = modest effect; 0.3 - 0.5 = moderate effect; >0.5 = strong effect

The beta weight (β =.340) in table 3 suggests that reciprocity has a moderate effect and is a positive predictor of technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria.

Table 4: Model Summary of trust as a predictor of technology-enabled knowledge sharing

Mode l	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.257ª	.066	.061	7.58447

a. Predictors: (Constant), Trust

In answering research question 2, R was given in table 4 as .257 thus depicting a positive relationship between trust and technology-enabled knowledge sharing. The coefficient of determination (R^2) is .066 while the Adj R^2 =.061 which implies that the variation in technology-enabled knowledge sharing could be explained using 6.1% contribution of trust. This shows that trust as a predictor of technology-enabled knowledge sharing among LIS professionals has a weak fit as it explains only 6.1% of the variance.

 Table 5: Coefficients with trust as a predictor of technology-enabled knowledge sharing

	В	SE B	β	Remarks	
Constant	45.85	3.93			
Trust	.51	.13	.25	Modest predictor	positive

Note: $B = Unstandardized Beta; SE B = Standard error; <math>\beta = Standardized Beta$ For beta weighting (β): 0 - 0.1 = weak effect; 0.1 - 0.3 = modest effect; 0.3 - 0.5 = moderate effect; >0.5 = strong effect

As depicted by the data in table 5, the beta weight (β) is .25. The beta weight (β) shows that trust has a modest effect, and is a positive predictor of technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria.

Hypotheses

H₀1: Reciprocity will not significantly predict technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria.

Table 6: Test of Significance of Simple Regression Analysis with reciprocity as apredictor of technology-enabled knowledge sharing among LIS professionals

Model		Sum of Squares	f Squares Df Mean		F Sig.	
				Square		
1	Regressio	1374.581	1	1374.581	25.23	.000 ^b
	n				2	
	Residual	10514.106	193	54.477		
	Total	11888.687	194			

a. Dependent Variable: TEKS_Among_Professional_And_Paraprofessional_Librarians

b. Predictors: (Constant), Reciprocity

To test this hypothesis, simple linear regression was used and the result is as presented in table 6. A cursory look at the Analysis of Variance (ANOVA) table showed that (F=25.232, p=.000). Since p (.000) is less than p (.05), this implies that reciprocity will significantly predict technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria. Therefore the null hypothesis is rejected.

 H_02 : Trust will not significantly predict technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria.

Table	e 7:	Test of	Signi	ficance o	of Simple	Regression	Analysis	with trust as	a
predi	ctor	of techn	ology	-enabled	knowledg	e sharing a	mong LIS	professionals	
3.6			0			DA	3.6	Б	

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regressio	786.525	1	786.525	13.673	.000 ^b
	n					
	Residual	11102.162	193	57.524		
	Total	11888.687	194			
-		Ta <u> </u>	1			

a. Dependent Variable: TEKS_among_Professional_and_Paraprofessional_Librarians

b. Predictors: (Constant), Trust

As displayed in table 7, the F-ratio associated with this ANOVA table is 13.673 and the P-value = .00. Since the P-value is less than the stipulated 0.05 level of significance, it was decided that trust will significantly predict technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria. The null hypothesis is therefore rejected.

Discussion of findings

In relation to reciprocity, the study found that it has a positive and moderate effect, and significantly predicts technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria. The findings of this study suggest a likelihood that an increase in LIS professionals' reciprocity will result in an increase in engagement in technology-enabled knowledge sharing. The result of this study is consistent with previous studies (Kankanhalli et al., 2005) which reported that reciprocity significantly and positively predicted electronic knowledge repositories usage. It further agrees with the study by Jameel et al. (2023) who observed that reciprocity can significantly improve the online KS among the employee, noting that when individuals have strong reciprocity, they are more inclined to share knowledge online throughout the organization and among peers. In the concept of reciprocity, a knowledge owner willingly consumes his time and energy in providing technology-enabled knowledge sharing to the knowledge seeker with the belief that the knowledge seeker will in turn provide knowledge to him when the knowledge seeker becomes the knowledge owner anytime in the future (Jinyang, 2015).

The findings of the study also showed that trust has a modest effect, as well as a positive and significant prediction on technology-enabled knowledge sharing among LIS professionals in public universities of South-East Nigeria. This signifies that an upturn in trust may likely enhance technology-enabled knowledge sharing among LIS professionals. The finding of this study is in agreement with other scholars (Fang & Chiu, 2010) which found that trust positively and significantly predicted knowledge sharing in a virtual community of practice. Trust has impact on participants' behaviors in technology-enabled knowledge sharing. The positive significant effect of trust on technology-enabled knowledge sharing is no marvel as Majid and Wey (2011) stated that mutual trust is often developed using technology over time through frequent interactions. When this is achieved, participants in a technology-enabled knowledge sharing environment will be less hesitant to post information to other members of a given technology-enabled knowledge sharing platform, thereby creating a necessary atmosphere to sustain social exchange in the platform (Ardichvili et al., 2002; Jinyang, 2015). This way, trust becomes not only a prerequisite for technology-enabled knowledge sharing but also, to a large extent, the outcome of such sharing and collaboration (Paroutis & Saleh, 2009).

Conclusion

Technology-enabled knowledge sharing among LIS professionals is very necessary, especially in this age when work processes are becoming more complex and increasingly digitized. The issue of trust and reciprocity cannot however be relegated to the background. It goes a long way in determining what should be shared, how much should be shared, when it should be shared, and to whom it will be shared.

Recommendations

Based on the findings of the study, the following recommendations are made:

- Platforms for technology enabled knowledge sharing should be organised and closely monitored so to ensure that no knowledge sharer is left unattended to at the point of need. The realization that one will always receive help will spur one on to give help.
- There is need for policy, and where existent, policy review to ensure that there is fairness in technology-enabled knowledge sharing among LIS professionals.
- Employers of LIS professionals should set up monitoring committees to ensure that the knowledgeable older professionals share knowledge gained via their experiences. The trust on the wider experience of these older professionals will in turn provide the institutions with LIS professionals' workforce that makes for more efficient and effective services.

References

- Adamovic, D., Potgieter, A., & Mearns, M. (2012). Knowledge sharing through social media: Investigating trends and technologies in a global marketing and advertising research company. *SA Journal of Information Management 14*(1), 514-520. http://dx.doi.org/10.4102/sajim.v14i1.514
- Akanwa, P.C. & Okorie, O.N. (2020). Knowledge sharing for knowledge retention, growth and use. In U. Nwokocha (Ed.), *Knowledge Sharing and sustainable LIS education in Nigeria* (pp.12-23). Zeh Communications.
- Ardichvili, A., Page, V., & Wentling, T. (2002). Motivation and barriers to participation in Virtual knowledge sharing communities of Practice. Paper presented at OKLC 2002 conference Athens, Greece. https://warwick.ac.uk/fac/soc/wbs/conf/olkc/archive/oklc3/id78.pdf
- Burgoon, J. K., Stoner, G. M., Bonito, J. A., & Dunbar, N. E. (2003). *Trust and deception I mediated communication*. Conference proceedings of the 36th Hawaii International Conference on Systems Sciences (HICSS'03). http://www.computer.org/csdl/proceedings/hicss/2003/.../187410044a.pdf
- Chen, H.-L., Fan, H.-L., & Tsai, C.-C. (2014). The role of community trust and altruism in knowledge sharing: an investigation of a virtual community of teacher professionals. *Educational Technology & Society*, *17*(3), 168-179. https://search.proquest.com/results/94B0E146D09E4E06PQ/1?accountid=165872

- Cherry, K. (2023). *What Is Reciprocity?* https://www.verywellmind.com/what-is-the-ruleof- reciprocity-2795891#citation-5
- Chiu, C-M., Hsu, M-H., & Wang, E.T.G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, 42, 1872–1888. http://dx.doi.org/10.1016/j.dss.2006.04.001
- Chua, A. (2003). Knowledge sharing: a game people play. ASLIB Proceedings, 55(3), 117-129.

https://search.proquest.com/results/A2C86E15EC0547AFPQ/1?accountid=1658 72

- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6thed.). Routledge.
- Connelly, C. E. (2000). Predictors of knowledge sharing in organizations (Master's Thesis, Queen's University, Ontario Canada). www.profs.degroote.mcmaster.ca/ads/connell/thesis.pdf
- Cropanzano, R., & Mitchell, M.S. (2005). Social exchange theory: an interdisciplinary review. *Journal of Management*, *31*(6), 874–900. https://doi.org/10.1177/0149206305279602
- Fang, Y.-H., & Chiu, C.-M (2010). In justice we trust: exploring knowledge-sharing continuanceintentions in virtual communities of practice. Computers in Human Behavior, 26, 235–246. https://lms.ctl.cyut.edu.tw/sysdata/55/12655/doc/2a435a7ba28b7e37/attach/419900. Pdf
 - Fetzer Institute (n.d). *Self-Report Measures for Love and Compassion Research: Trust.* http://fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Self_Measure s_for_L_ve_and_Compassion_Research_TRUST.pdf
- Ghosh, T. (2004). Creating incentives for knowledge sharing. www.ocw.mit.edu/courses/sloan- school...management/.../tanu_15575.pdf
- Handzic, M., Lazaro, O., & Van Toorn, C. (2004). *Enabling knowledge sharing: Culture versus technology*.
 http://www2.warwick.ac.uk/fac/soc/wbs/conf/olkc/archive/oklc5/papers/d-3 handzic.pdf
- Hew, K.F., & Hara, N. (2006). Identifying factors that encourage and hinder knowledge sharing in a longstanding online community of practice. *Journal of Interactive Online Learning*, 5(3). 297–316. https://doi.org/10.1.1.454.2629
- Hinds, P. J., & Pfeffer, J. (2003). Why organizations don't "know what they know": Cognitive and motivational factors affecting the transfer of expertise. In M. S. Ackerman, V. Pipek & V. Wulf (Eds.), *Sharing expertise: beyond knowledge management* (pp.3–22). The MIT Press.

- Hsu, C. L., & Lin, J. C. C. (2008). Acceptance of blog usage: the roles of technology acceptance, social influence and knowledge sharing motivation. *Information & Management 45*, 65 74. https://doi: 10.1016/j.im.2007.11.001
- Hung, Y.C., & Chuang, Y.H. (2009). Factors affecting knowledge sharing behavior: a content analysis of empirical findings. Conference proceedings of the Association of ChineseManagement Educators (ACME). www.myacme.org/ACMEProceedings09/p.19.pdf
- Islam, M. S., & Ashif, S. M. (2014). An exploratory study on knowledge sharing practices among professionals in Bangladesh. *Knowledge Management & E-Learning*, 6(3), 332–343.
- Jameel, A. S., Massoudi, A. H., & Ahmad, A. R. (2023). Motivational Elements of Online Knowledge Sharing Among Employees: Evidence from the Banking Sector. In M.
 Al Emran et al. (eds.), *International Conference on Information Systems and Intelligent Applications, Lecture Notes in Networks and Systems*, 550 (pp. 491–501). https://doi.org/10.1007/978-3-031-16865-9 39
- Jarvenpaa, S.L. & Leidner, D.E. (1999). Communication and trust in global virtual teams. *Organization Science*, 10 (6). 791-815
- Jinyang, L. (2015). Knowledge sharing in virtual communities: a social exchange theory perspective. *Journal of Industrial Engineering and Management*, 8(1), 170–183. http://dx.doi.org/10.3926/jiem.1389
- Kankanhalli, A., Tan, B. C. Y., & Wei, K-K (2005). Contributing knowledge to electronic knowledge repositories: an empirical investigation. *MIS Quarterly*, 29(1), 113– 143.
- Kipkosgei, F., Kang, S-W, & Choi, S. B. (2020). A Team-Level Study of the Relationship between Knowledge Sharing and Trust in Kenya: Moderating Role of Collaborative. *Sustainability*, 12(1615). https://doi.org/10.3390/su12041615
- Kollock, P. (1999). The economies of on-line cooperation: gifts, and public goods in cyberspace. In M.A. Smith & P. Kollock (Eds.). *Communities in Cyberspace*. Routledge. (pp. 220-239)
- Levin, D. Z., Cross, R., Abrams, L. C., & Lesser, E. L. (2007). Trust and Knowledge sharing: a critical combination. *IBM Institute for knowledge-based organizations*. www- 935.ibm.com/.../g510-1693-00-cpov-trust-and-knowledge-sharing.pdf
- Liang, T. P., Liu, C. C., & Wu, C. H. (2008). Can social exchange theory explain individual knowledge-sharing behavior? A meta-analysis. Proceedings of the International Conference on Information Systems (ICIS). www.aisel.aisnet.org>Conferences>ICIS>ICIS2008>171
- Majewski, G., & Usoro, A. (2011). Barriers of and incentives to knowledge sharing in (Virtual) Communities of Practice: A critical literature review. *Bangkok University Academic Review*, 10(1), 387–405. http://www.bu.ac.th/knowledgecenter/epaper/jan june2011 /pdf/pdf 034.pdf

- Majid, S., & Wey, S. M. (2011). Knowledge sharing behaviour of Graduate Students. In M. E. Jennex (Ed.), Global aspects and cultural perspectives on knowledge management: emerging dimensions (pp.113–125). Information Science Reference. https://doi.org/10.4018/978-1-60960-555-1.ch008
- Onifade, F. N. (2013). Knowledge sharing among librarians and organizational culture as factors affecting organizational effectiveness of Federal University Libraries in Nigeria (Doctoral Dissertation). Department of Library, Archival and Information Studies, University of Ibadan, Ibadan, Nigeria.
- Paroutis, S., & Saleh, A.A. (2009). Determinants of knowledge sharing using Web 2.0 technologies. *Journal of Knowledge Management*, 13(4), 52–63. https://doi.org/ 10.1108/13673270910971824
- Renzl, B., Matzler K., & Mader, C. (2005). Impact of trust in colleagues and management on knowledge sharing within and across work groups. www2.warwick.ac.uk/fac/soc/wbs/conf/olkc/.../renzl matzler mader.pdf
- Roberts, J. (2000). From know-how to show-how? Questioning the role of Information and Communication Technologies in knowledge transfer. *Technology Analysis and Strategic Management*, 12 (4), 429-443. https://doi.org/10.1080/0953732002000414 0
- Seyyedeh, N., & Daneshgar, F. (2010). *What Drives Organizations to Share Knowledge with their Supply Chain Partners?* In Proceedings of the 18th European Conference on Information Systems (ECIS), Pretoria, South Africa. www.aisel.aisnet.org/cgi/viewcontent.cgi?article=1124&context=ecis2010
- Shaari, R., Abdul Rahman, S.A. & Rajab, A. (2014). Self-efficacy as a determined factor for knowledge sharing awareness. *International Journal of Trade, Economics and Finance*, 5(1), 39–42. https://doi.org/10.7763/IJTEF.2014.V5.337
- Shahid, A., & Alamgir, R. (2011). ICT Enabled Knowledge Sharing Impact of ICT on Knowledge Sharing Barriers- The Case of Avanade (Master's thesis, Malardalen University). http://www.diva portal.org/smash/get/diva2:423034/fulltext01
- Soo, K.S. (2006). *Why workers share or do not share knowledge: A case study* (Doctoral dissertation, Indiana University). https://www.learntechlib.org/p/123999
- Sun, Y., Peng, Z., Lim, K., & Wang, W. (2014). Norm of Reciprocity, Reciprocal Benefits, and Reciprocal relationships: A revisit of the role of Reciprocity in knowledge sharing. Conference Proceedings. https://aisel.aisnet.org/icis2014/proceedings/SocialMedia/1/
- van den Hooff, B., Elving, W., Meeuwsen, J.M., & Dumoulin, C. (2003). Knowledge Sharing in Knowledge Communities. In M. Huysman, E. Wenger & V. Wulf (Eds.), *Communities and Technologies*. Conference proceedings of the first International conference on communities and technologies (pp.119–141). Springer. https://doi.org/10.1007/97894017-0115-0_7

- van den Hooff, B. & Hendrix, L. (2004). *Eagerness and willingness to share: the relevance* of different attitudes towards knowledge sharing. www2.warwick.ac.uk/fac/soc/wbs/conf/olkc/archive/.../d-3 hooff.pdf
- Wu, W. Y., & Sukoco, B.M (2010). Why should I share? Examining consumers' motives and trust on knowledge sharing. *Journal of Computer Systems*, 50(4), 11–19.
- Wu, W-L, Yeh, R-S & Huang, C.C. (2007). Fostering knowledge sharing to encourage R&D team learning. Paper presented at Portland International Conference on Management of Engineering and Technology. https://doi.org/10.1109/PICMET.2007.4349433
- Yeo R. K., & Gold, J. (2014). Knowledge sharing attitude and behaviour in Saudi Arabian organisations: why trust matters. Int. J. Human Resources Development and Management, 14(1/2/3), 97–118.

APPENDIX A

RECIPROCITY AND TRUST ON TECHNOLOGY-ENABLED KNOWLEDGE SHARING QUESTIONNAIRE

SECTION A:	: Reciprocity	as a predictor	of technology	-enabled Kno	wledge Sharing
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S/N	Statement	SA	A	D	SD
1	I help people who can return the favour.				
2	If my help is not reciprocated, the defaulter will still get what				
	he/she deserves by and by.				
3	I don't mind helping even when I am not helped in return.				
4	I withhold help when others withhold help from me				
5	I cut off anyone that I am not benefiting from.				
6	If I help out people, then they will do the same in return.				
7	If my help will not be reciprocated, I will stop rendering my own				
	help.				
8	I find that always being handy to help can improve reciprocal				
	benefit.				
9	I only meet other peoples need when I know that mine will also				
	be met				
10	Responding to the needs of others makes them obligated to				
	respond to my own need				

S/N	Statement	SA	Α	D	SD
11	I avoid people because they are unpredictable				
12	Most people are trustworthy.				
13	I believe that people mutually help each other.				
14	Most people would try to take advantage of me if they got the				
	chance				
15	Most people are basically honest				

16	People usually help people who they consider as friends		
17	Most times one can't be too careful in dealing with people		
18	I hardly get help from others.		
19	People are mostly just looking out for themselves		
20	Those devoted to unselfish causes are often exploited by others.		

SECTION B: Trust as a predictor of technology-enabled Knowledge Sharing

S/N	Statement	SA	A	D	SD
21	I make use of diverse technologies for knowledge sharing				
22	I belong to professional Online groups, Social networking sites and				
	internet forums.				
23	I make use of technology when I have a question or problem relating to				
	my work practices				
24	I readily answer questions posted by my fellow professionals on blogs,				
	online groups and Internet forums				
25	I contribute to professional blogs and update wikis on issues relating to				
	the profession				
26	I use blogs, microblogs, instant messaging systems and video				
	conferencing tools for interaction with professional colleagues				
27	I participate in professional discussions in the online professional				
	groups, social networking sites and internet forums.				
28	I post messages regarding my work practices or experiences on the				
	Online groups.				
29	I hardly seek for solutions to work related issues using technology.				
30	I send emails to colleagues when I have issues with my work				
31	I share ideas for my researches using online workspaces				
32	I use email for collaborative authorship				
33	I keep contact with colleagues by following their discussions on				
	microblogs and social networking sites.				
34	I obtain work related information and knowledge using social				
	networking sites, online groups and internet forums				
35	I use social networking sites to maintain and strengthen communication				
	with professional colleagues				
36	I easily contact my professional colleagues using their email address				
37	I look up knowledge relating to my profession on professional blogs and				
	wikis				
38	I upload my academic works in institutional repository and social				
	networking sites for other professionals to benefit from.				
39	I use microblogs for personal knowledge sharing to a wider audience.			_	
40	I use video conferencing tools for meetings, seminars, conferences and				
	keeping up with best practices in the profession		1		1