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Unpacking Knowledge Sharing in Universities through Critical Lens

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Abstract—Knowledge is commonly regarded as the most strategic asset in any organization. Higher education institutions (HEIs) are generally considered as knowledge intensive organizations engaged in producing, promoting and sharing knowledge. Managing knowledge flows in knowledge sharing (KS) processes is vital for universities to respond to the challenges of the dynamic internal and external environments in achieving their goals. Hence, a critical review of literature in knowledge sharing is presented to provide alternative and critical lens of deeply understanding the needs and complexities of promoting and innovating knowledge sharing practices and to consider for future studies.

Keywords—academics; knowledge, knowledge sharing; university

I. INTRODUCTION

Knowledge is commonly regarded as the most strategic asset in any organization. Organizational members, who are basically the most critical elements engaged in creating and influencing the means to knowledge processes [13; 26] share their own distinct views, values and norms [12; 23]. These members are the organization workers and managers who should effectively create and share knowledge and apply such knowledge into practice to improve organizational practice and culture [12, 20]. Organizational culture is oftentimes regarded as the primary barrier in knowledge sharing [17, 31].

Higher education institutions (HEIs) are generally considered as knowledge intensive organizations engaged in producing, promoting and sharing knowledge. HEIs in the present knowledge economy are challenged to respond to two battling priorities, one to deliver quality instruction and research works, and the other, to guarantee more effective and efficient management of their tangible and non-tangible assets in an ever volatile market [10]. HEIs have to respond to these challenges more than ever by putting in place policies and mechanisms that will help them achieve their goals of which knowledge sharing (KS) should be

one of these initiatives. Indeed, knowledge sharing is often regarded as a be-all and end-all in knowledge culture of local and international industries which call themselves learning-based organizations [32, 37]. Like any other organizations, universities have their own inherent influences at the micro-and-meso levels. Inclusive development of university life demands an inclusive approach in exploring individual academic practices [29] to provide an opportunity to greatly understand the changes in organizational life. Most academics coming from diverse scientific communities are not limited to doing teaching or researching in and out of the campus. They also have to deal with administrative and logistic affairs most specially when given executive positions, research grants and other extension works duties [15]. Critical knowledge in performing extra tasks are sometimes borne out of practice and procedural knowledge. Thus, ability to from and/or capture knowledge predecessors and/or colleagues is fundamental in dynamic knowledge intensive organizations worldwide.

For particular programs to work more effectively, higher education organizations have to address their most critical process which is "to facilitate knowledge sharing between faculty members" [6, p. 133] aside from other tangible and unobservable factors to consider. To meet higher education organizations' objectives, organization must deal with the knowledge flow in problematic organizational process [11, 19] which is more painful when the most knowledgeable or more experienced employees leave and new workers come in. Thus, managing knowledge flows through effective, innovative and inclusive knowledge sharing mechanisms, structures and processes are of great significance for universities to respond to the challenges of dynamic internal and external environments in achieving their goals.

II. METHOD

This critical review encapsulates the initial stage of thesis development. Recently, a systematic literature review especially focusing on knowledge sharing at the university



context was published by Al-Kurdi, El-Haddedah, and Eldabi, [2] that refreshed existing critical review by Ali, Gohneim and Roubaie [4]. We then updated such existing reviews by including three (3) new studies after conducting similar search methodology including Google Scholar and other academic database (See Table 1 for KS studies summary). The additional peer-reviewed and published studies limited to KS in higher education include: Bibi and Ali (2017), Yasir, Majid and Yasir (2017), and Tan and Noor (2013). Instead of framing the results of the papers in the traditional review of literature, we approached our analyses of these studies through a critical lens as discussed in the succeeding part of this paper.

III. DISCUSSIONS

In terms of the most studied country in the context of university knowledge sharing, Malaysia is undeniably the country that is the most productive in this area including other predominantly Muslim countries in the list like Pakistan, Iraq and Iran. Additional KS studies in the HEIs setting can be found in the contexts of UK, Korea, and Canada but further international studies will be beneficial.

In the Asian context, earlier studies found that trust, personal attitude and subjective norms are chief obstacles among faculty in Malaysian universities whilst management support, incentive systems and organizational culture were among the organizational barriers identified in the review [28].

Meanwhile, a Knowledge Sharing Behavior Scale (KSBC) to assess KS behaviors among university faculty was validated by Ramayah, Yeap and Ignatius [30]. This scale can be used to assess the condition of knowledge sharing among employees therefore aiding the university to plan and to implement a knowledge sharing culture by understanding its writing artifacts, organization identity, IT acceptance and subjective norms.

In a similar survey, although attitudes are found to have significant connection with knowledge sharing intention, trust seems not to have influence on KS [24]. This however is contradicted by other studies in the same Malaysian context. Testing the KM-KS-collaboration model, it was confirmed that trust, organizational culture, organizational rewards, KM system quality, face to face interactive communication and openness in communication are enablers of KS [36]. Similarly, this reinforced that KS is influenced by active commitment and active trust [18]. This also confirmed what Kim and Ju [25] found in Korean universities where reward system and trust found to highly stimulate faculty members' tendency to engage in KS.

On the other hand, compelling academics to share knowledge is not as effective as a reward [9]. KS in university is characterized by many channels and limiting to the use technologies would not encourage knowledge sharing among academics without addressing internal institutional issues likes cultures [34]. Incentivizing KS processes with promotions, rewards and job assessments would be a significant productive measures [35, 36]. Moreover, attitudes, normative norms,

perceived behavioral control and compliance norm have influenced knowledge sharing behavior among academic [27] which was further confirmed by the study related to attitude

and motivation related to KS [34]. To show distinction, such study by Sohail and Daud [34] examined the constructs that

were important for enhancing knowledge sharing among faculty in both public and private institutional settings. It was found that there were significant differences between views of academics in both sectors. Differences could be attributed to access to resources and priority areas. Private universities tend to focus more on instruction while public HEIs on research.

Across the Middle East regions, [8] recently replicated similar KM enablers like intrinsic motivation, interpersonal trust, extrinsic motivation, job involvement, continuance commitment and job satisfaction toward academic knowledge behaviors in Pakistan universities. Contrastingly, job involvement and sustained commitment remained to be strong determinants of knowledge sharing tendencies among academics. Moreover, such commitment and involvement is significantly influenced by trust and face to face interactive communications as enabling factor [38]. In Iraqi universities, however, it was found that more academics would rather collect knowledge than to share [1]. Despite that fact that KS and innovations is positively related, departmental or discipline culture seems to influence the overall university KS behavior. Nevertheless, senior faculty in Iran universities tend to share more compared to junior academics [7].

In the context of UK universities, a study by Fullwood, Rowley and Delbridge [16] assessed the behavior and intention to share knowledge among academics in 11 universities. Similar to some universities in Asia, academics tend to be more individualistic with their parochial and discipline-based interests. Surprisingly, academics were neutral whether leadership, organizational culture and use of information technology impact their KS behaviors. But they did acknowledge the importance of KS among colleagues and university success. Evidently, faculty members who engage in KS did categorize that the types of knowledge shared which include knowledge related "with research, teaching and learning" [16, p. 130]. Further research however is needed to examine the role of culture and subcultures in the university context and development of models that would serve as the platform/s of leveraging untapped and existing knowledge culture [16].

Across the globe, KS experiences in an Australian university was earlier explored via a qualitative case study [14]. Using 25 semi-structure interviews, the case revealed the challenges observed by academics which included unwillingness to share knowledge, lack of time, disciplined-based language issues and deficiency of shared cultures. Unwillingness to share knowledge was attributed to academics' autonomy whilst gap in KS language communication was influenced by college or faculty cultures. After almost a decade going back to UK context, another qualitative study was undertaken [21] by examining the



TABLE 1. Summary of KS Studies in Universities

Author (s) and Year	Country	Methodology	Determinants researched
Bibi and Ali (2017)	Pakistan	self- administered questionnaire	Intrinsic motivation, extrinsic motivation, interpersonal trust, job involvement, job satisfaction and continuance commitment
Yasir, Majid and Yasir (2017)	Pakistan	self- administered survey	role of trust, KM enablers, knowledge sharing
Norulkamar and Hatamleh (2014)	Malaysia	Narrative review	Individual; trust, subjective, norms, personal, knowledge is power attitude Organizational: culture, support, incentives, team support
Ramayah et al. (2014)	Malaysia	Survey-based questionnaire and interviews	Writing contributions Organizational culture IT acceptance Subjective Norms
Jolaee et al. (2014)	Malaysia	Survey-based questionnaire	Attitudes, Subjective Norms, Trust
Tan and Noor (2013)	Malaysia	Self- administered questionnaire	Impact KM enablers on knowledge sharing among academics through a KM-KS- collaboration model
Fullwood et al. (2013)	UK	Survey-based questionnaire	Intention to share Types of knowledge shared Organization climate Rewards
Goh and Sandhu (2013)	Malaysia	Survey-based questionnaire	Active commitment Active trust Subjective norms Perceived behavioral control
Howell and Annansingh (2013)	UK	Focus Groups	Organizational culture Subcultures, Path dependency
Nordin et al. (2012)	Malaysia	Structured questionnaire survey	Attitude toward KS Subjective norms Compliance norms Normative norms
Al Husseini and Elbeltagi (2012)	Iraq	Self- administered questionnaire	Relationship between knowledge sharing and process innovation in HEIs
Babalhavaeji and Kermani (2011)	Iran	Survey-based questionnaire	Attitudes Intention to share knowledge Intrinsic motivation Length of experience
Sohail and Daud (2009)	Malaysia	Survey-based questionnaire	Organizational culture Type of knowledge shared, Attitudes, Motivations
Cheng et al. (2009a)	Malaysia	Survey-based questionnaire	Organizational Factors Individual Factors Technological Factor
Kim and Ju (2008)	Korea	Survey-based questionnaire	Trust, Collaboration Openness to share, Reward system
Suhaimee et al. (2006)	Malaysia	Survey-based questionnaire	Incentives, Promotions, Job Assessment
Dyson (2004)	Australia	Case Study	Challenges to sharing knowledge among faculty members
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cultural influences and path-dependency on knowledge

generating and sharing in two UK universities via constructivist ethnography. Focus group discussion data on the

two groups of academics revealed insightful themes and propositions which supported existing models in KS [22, 23].

Built on the culture and knowledge themes, Howell and Annansingh [21] explored two different group of academics. The knowledge producing and sharing major theme exposed how knowledge is "generated, transferred, shared or disseminated is necessary for the survival of these institutions (universities)" [21, p. 30]. Although forging links with colleagues is advantageous to KS, FGD participants noted that knowledge hoarding was existing in the faculty silos and groups of faculty with various types of connections. Also, research engagements in conferences and publication has increased the climate of competitions among the academics. Notably, informal structures (like informal discussions of conferences, parties, etc.) were perceived to be more favorable than formal structures which is more vulnerable to competition of limited resources or access to information.

By and large, the existing studies cover the organizational determinants, behavioral determinants, technological determinants and cultural elements of knowledge sharing in the context of higher education. While there has been a great number of researches dedicated on exploring the barriers to KS, little to none has been undertaken in extending such within the realm of HEIs [2, 5, 16] particularly in the teacher education setting.

IV. CONCLUSION

Although not exhaustive, this initial stage of thesis development however highlights the current and emerging conditions, gaps and significance of addressing the knowledge sharing issues in university environment. The exploration of other more contextual factors influencing personal social network and knowledge sharing for employees in recent literature is called for [3]. More so, there is limited research regarding knowledge sharing among the primary university employees who are the academics coming from different disciplines and communities [16, 34]. Most studies or papers on KS enablers and challenges however were mostly in quantitative approaches and commonly in western and some privileged Southeast Asian countries in term of scope. Thus, knowledge sharing studies using other methodologies in the Philippine context and other Asian countries not found in the review are ripe for explorations.

Finally, deeply exploring the contextual factors in knowledge-intensive organizations like specific universities (for example, business schools, teacher education institutions and others) could lead to unearthing emerging novel factors and/or restructuring our understanding of knowledge sharing issues and concerns across different settings and disciplines. At this point, critical questions remained to be unanswered or not fully addressed in the past studies. In conclusion, it would be more progressive and reflective to further build on these critical questions:



- 1) How do academics characterize such knowledge interactions or inaction within and across the intraorganizational layers of engagement?
- What critical issues or factors must be considered so knowledge does not stay in silos but become a leverage for university's competitive advantage and success?
- 3) What formal and informal mechanisms or structures, or specific procedures can be embedded in people and processes so academic knowledge will sustainably be generated and shared?
- 4) What will be the KS role/s to new hires, experienced, experts, in-betweens, and soon-to-retire, or soon-to-move-to-a-different-functions/office academics including the essential positions of academic leaders?
- 5) Lastly, how is academic knowledge shaped, formed or remained untapped at the various layers or levels in a university?

REFERENCES

- [1] Al-husseini, S., & Elbeltagi, I. (2013, October). Knowledge sharing and innovation: An empirical study in Iraqi private higher education institutions. In *International Conference on Intellectual Capital and Knowledge Management and Organisational Learning* (p. 129). Academic Conferences International Limited.
- [2] Al-Kurdi, O., El-Haddedah, R., & Eldabi, T. (2018). Knowledge sharing in higher education institutions: A systematic review. *Journal of Enterprise Information*, 31(2), 226-245.
- [3] Al Saifi, S. A., Dillon, S., & McQueen, R. (2016). The relationship between face to face social networks and knowledge sharing: an exploratory study of manufacturing firms. *Journal of knowledge management*, 20(2), 308-326.
- [4] Ali, O. F., Gohneim, A., & Roubaie, A. A. (2014). Knowledge sharing culture in higher education institutions: Critical literature review. European, Mediterranean & Middle Eastern Conference on Information Systems.
- [5] Amayah, A. T. (2013). Determinants of knowledge sharing in a public sector organization. *Journal of Knowledge Management*, 17(3), 454–471.
- [6] Arntzen, A. A. B., Worasinchai, L., & Ribière, V. M. (2009). An insight into knowledge management practices at Bangkok University. *Journal of Knowledge Management*, 13(2), 127–144
- [7] Babalhavaeji, F., & Kermani, Z. (2011). Knowledge sharing behaviour influences: A case of library and information science faculties in Iran. *Library & Information Science*, 16(1), 1–14.
- [8] Bibi, S., & Ali, A. (2017). Knowledge sharing behavior of academics in higher education. *Journal of Applied Research* in Higher Education, 9(4), 550-564.
- [9] Cheng, M., Ho, J. S., & Lau, P. M. (2009). Knowledge sharing in academic institutions: a study of multimedia university Malaysia. *Electronic Journal of Knowledge Management*, 7(3), 313–324.
- [10] Cranfield, D. J., & Taylor, J. (2008). Knowledge Management and Higher Education: A UK Case Study. The Electronic Journal of Knowledge Management, 6(2), 85–100.
- [11] Dehghani, R., & Ramsin, R. (2015). Methodologies for developing knowledge management systems: an evaluation framework. *Journal of Knowledge Management*, 19(4), 682– 710.
- [12] De Long, D. W., & Fahey, L. (2000). Diagnosing cultural barriers to knowledge management. Academy of Management Perspectives, 14(4), 113–127.

- [13] Drucker, P.F. (2002). They're not employees, they are people. *Harvard Business Review*, 80(2), 70-77.
- [14] Dyson, L. E. (2004). Barriers to sharing and creating knowledge in higher education. In *International Conference* on *Information Resources Management*. Idea Group Publishing.
- [15] Elena-Pérez, S., Saritas, O., Pook, K., & Warden, C. (2011). Ready for the future? Universities' capabilities to strategically manage their intellectual capital. *Foresight*, 13(2), 31–48.
- [16] Fullwood, R., Rowley, J., & Delbridge, R. (2013). Knowledge sharing amongst academics in UK universities. *Journal of Knowledge Management*, 17(1), 123-136.
- [17] Ford, D.P., & Chan, Y.E. (2003). Knowledge sharing in multi-cultural setting: a case study. *Knowledge Management Research & Practice*, 1(1), 11-27.
- [18] Goh, S. K., & Sandhu, M. S. (2014). The influence of trust on knowledge donating and collecting: An examination of Malaysian universities. *International Education Studies*, 7(2), 125.
- [19] Hannay, L., Ben Jaafar, S., & Earl, L. (2013). A case study of district leadership using knowledge management for educational change. *Journal of Organizational Change Management*, 26(1), 64–82.
- [20] He, W. and Abdous, W.(2013). An online knowledgecentered framework for faculty support and service innovation. VINE: The Journal of Information and Knowledge Management Systems, 43(1), 96-110.
- [21] Howell, K. E., & Annansingh, F. (2013). Knowledge generation and sharing in UK universities: A tale of two cultures? *International Journal of Information Management*, 33(1), 32–39. https://doi.org/10.1016/j.ijinfomgt.2012.05.003
- [22] Ipe, M. (2003). Knowledge sharing in organizations: a conceptual framework. *Human Resource Development Review*, 2(4), 337-59.
- [23] Intezari, A., Taskin, N., & Pauleen, D. J. (2017). Looking beyond knowledge sharing: an integrative approach to knowledge management culture. *Journal of Knowledge Management*, 21(2), 492–515.
- [24] Jolaee, A., Md Nor, K., Khani, N., & Md Yusoff, R. (2014). Factors affecting knowledge sharing intention among academic staff. *International Journal of Educational Management*, 28(4), 413-431.
- [25] Kim, S., & Ju, B. (2008). An analysis of faculty perceptions: Attitudes towards knowl- edge sharing and collaboration in an academic institution. Library & Information Science Research, 30(4), 282–290.
- [26] Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. Organization Science, 5(1), 14-37.
- [27] Nordin, N. A., Daud, N., & Osman, W. U. K. M. (2012, December). Knowledge sharing behaviour among academic staff at a public higher education institution in Malaysia. In Proceedings of World Academy of Science, Engineering and Technology (No. 72, p. 234). World Academy of Science, Engineering and Technology (WASET).
- [28] Norulkamar, U., & Hatamleh, A. (2014). A Review of Knowledge Sharing Barriers among Academic Staff-A Malaysian Perspective. Sains Humanika, 2(2).
- [29] O'Donnell, V. L. (2016). Organizational change and development towards inclusive higher education. *Journal of Applied Research in Higher Education*, 8(1), 101–118.
- [30] Ramayah, T., Yeap, J. A., & Ignatius, J. (2014). Assessing knowledge sharing among academics: A validation of the knowledge sharing behavior scale (KSBS). *Evaluation* review, 38(2), 160-187.
- [31] Ribiere, V. M., & Sitar, A. S. (2003). Critical role of leadership in nurturing a knowledge-supporting culture. Knowledge Management Research & Practice, 1 (April), 39– 48. Retrieved from:
- [32] Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, 9(3), 18-35.



- [33] Rowley, J. (2000). Is higher education ready for knowledge management? *International Journal of Educational Management*, 14(7), 325-333.
- [34] Sohail, M. S., & Daud, S. (2009). Knowledge sharing in higher education institutions: Perspectives from Malaysia. *Vine*, 39(2), 125-142.
- [35] Suhaimee, S., Bakar, A., Zaki, A., & Alias, R. A. (2006). Knowledge sharing culture in Malaysian public institution of higher education: An overview. In *Proceedings of the Postgraduate Annual Research Seminar* (p. 354).
- [36] Tan, C. N. L., & Md. Noor, S. (2013). Knowledge management enablers, knowledge sharing and research collaboration: a study of knowledge management at research universities in Malaysia. Asian Journal of Technology Innovation, 21(2), 251-276.
- [37] Variant Anna, N., & Puspitasari, D. (2013). Knowledge Sharing In Libraries: A Case Study of Knowledge Sharing Strategies in Indonesian University Libraries. In IFLA WLIC 2013 (pp. 1–11). Singapore.
- [38] Yasir, M., Majid, A., & Yasir, M. (2017). Nexus of Knowledge-Management Enablers, Trust and Knowledge-Sharing in Research Universities. *Journal of Applied Research in Higher Education*, 9(3), JARHE-10-2016-0068.