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Published in:
Journal of Work-Applied Management

DOI:
[10.1108/jwam-12-2020-0055](https://doi.org/10.1108/jwam-12-2020-0055)

Published: 21/09/2021

Document Version
Publisher's PDF, also known as Version of record

[Link to publication on the UWS Academic Portal](#)

Citation for published version (APA):
Edghiem, F., Guo, X., Bridge, C., & McAreavey, M. (2021). Unlocking Covid-19 knowledge sharing within North West Universities. *Journal of Work-Applied Management*, 13(2), 172-183. <https://doi.org/10.1108/jwam-12-2020-0055>

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Unlocking Covid-19 knowledge sharing within North West Universities

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Abstract

Purpose – Based on initial observation, this paper aims to explore the current practices of collaborative knowledge sharing (KS) between North West Universities and highlight new avenues of future relevant research. **Design/methodology/approach** – A netnographic observation was conducted to unveil the current practices of KS between North West Universities.

Findings – The paper concludes that there is little or no evidence of collaborative KS practices amongst North West Universities in response to the present Covid-19 transition.

Practical implications – This paper provides useful, practical insight that may assist decision-makers to establish KS initiatives within North West Universities and beyond. A strategy is also proposed to nurture collaborative KS amongst North West Universities and within wider work-applied management practice.

Originality/value – This paper presents an unconventional conceptualisation of KS practices amid the present Covid-19 pandemic with the fresh perspective of North West England Universities.

Keywords Knowledge management (KM), Knowledge sharing (KS), Crisis knowledge, North West Universities, Covid-19

Paper type Conceptual paper

1. Introduction

Knowledge management (KM) plays an important role in higher education institutions' (HEIs') success (Nair and Munusami, 2020), and it could enrich knowledge sharing (KS) and overall performance (Hossain *et al.*, 2013). The global Covid-19 pandemic has brought significant challenges to governments and organisations worldwide. HEIs are no exception. The scale of the outbreak and its unpredictability make it extremely difficult to respond (D'Auria and De Smet, 2020). Howitt and Leonard (2007) termed such disease outbreaks (e.g. Ebola, SARS, H5N1) as emergent crises, and they believed that this kind of crisis involves ongoing processes and continuing evolution of damage and response. Due to the unfamiliarity and uncertainty of the crises, effective responses are mainly improvised (D'Auria and De Smet, 2020).

This paper aims to explore collaborative KS practices between Universities in the North West (NW) of England amid the major transition implied by the current Covid-19 pandemic.

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The paper begins by outlining KM in higher education (HE) and crisis KM, discussing how NW Universities responded to the Covid-19 transition by adopting unconventional adaptive measures. Finally, we propose a strategy to nurture collaborative KS practices amongst NW Universities that may be cross-sector applicable and promote action learning initiatives.

2. Knowledge management in higher education institutions

The practices of KM have intensely evolved as an inevitable challenge to UK Universities amid the Covid-19 pandemic. Alike other UK higher education institutions (HEI), the Universities in the NW region of England have undergone major transitions to cope with the current Covid-19 developments (The Guardian, 2020). Conclusively, NW Universities are expected to establish essential KM traditions in response to the present pandemic featured by:

- (1) timely and accurate knowledge transfer between the participating actors within the knowledge network;
- (2) nurture KS between Universities at inter, intra and external levels;
- (3) create knowledge that is readily accessible to influenced stakeholders; and
- (4) overcome KS barriers and establish trust between participating actors to leverage knowledge transfer.

KM remains extensively debated within academic communities since the term was originally coined in the artificial intelligence literature in the 1980s (Seviby, 1997). KM research has been developed extensively in the past decade in response to the emergence of *Internet of Things* and associated *Big Data* applications (Gehl, 2015; Santoro *et al.*, 2018) and continues to be a key determinant of organisational effectiveness and value creation (Geisler and Wickramasinghe, 2015). Horwitch and Armacost (2002) describe KM as the creation, extraction, transformation and storage of the correct knowledge and information to design better policy, modify action and deliver results. Clobridge (2013) further claims that KM is the process of systematically capturing, describing, organising and sharing knowledge – making it useful, useable, adaptable and re-useable. Essentially, an extensive list of KM approaches can be identified in the literature; the focus of this paper would be on KS practices in the formal prescribed methods such as mandatory meetings, computer-assisted and online mediums, and *knowledge workers* interaction.

KS is a fundamental element of KM. Nevertheless, KS is deemed as a major challenge for KM (Chow and Chan, 2008). Considerations of management values and supportive attitudes towards innovation strategies were the precursors to KS (Hsu and Lin, 2008). For KS to be effective, the knowledge type is a key aspect. For instance and despite its significance, tacit knowledge can be more difficult to share than explicit knowledge, which could be practically shared through formal methods and different forms of training and development (Abdullah and Sinha, 2009). The individuals engaged in KM-type activities are frequently referred to as *knowledge workers*, defined by Debowsky (2006, p. 18) as those who “spend most of their time generating, applying or conveying knowledge”. As the continuity of knowledge is founded upon the communication between people within an organisation (Levy, 2011), it is imperative that knowledge workers have an understanding of what they and others know or need to know and what information has to be shared within their organisation (Jeon *et al.*, 2011). A large number of studies focused on KS among employees in the commercial and public sectors (Cabrera and Cabrera, 2002; Gurteen, 1999; Magnier Watanabe and Senoo, 2010; Reid, 2003), while little has been done in understanding this within the HEI context (Al-Kurdi *et al.*, 2018). Given the fact that knowledge is so crucial to HEIs, it would be expected that HEIs have adopted KM and KS strategies applied in other sectors (Al-Kurdi *et al.*, 2018). However, the literature showed that few HEIs have attempted to implement comprehensive KM and KS

programmes (Abdullah *et al.*, 2008; Fullwood *et al.*, 2013; Goh and Sandhu, 2013; Kim and Ju, 2008; Ramachandran, 2013; Rowley, 2000).

KM has been substantiated as key processes within academia clearly classified as research, teaching and publication (Hussein and Nassuora, 2011). However, there may be shared considerations between KM within Universities and sector organisations. These considerations include demographic change, market pressures, lifelong learning, globalisation and the internationalisation of higher education, new technology, shifts from teaching to learning and government demands for cost efficiency and the availability of useable knowledge (Middlehurst and Woodfield, 2006). Therefore, the way forward for Universities may be determined by the adoption of effective KM forms (Meyer and Scholl, 2005; Witt *et al.*, 2007). Al-Kurdi *et al.* (2018, pp. 232–233) stated that “a positive approach to KM by HEIs would facilitate the transition to a knowledge-based economy, enhance knowledge sharing, improve educational programmes, and consequently improve the overall performance of universities”. Essentially, Steyn (2004) emphasised that there is a need to focus on technology, structures and people for the power of knowledge to be fully exploited.

It was around late 1980s when KM in Universities attracted the attention of researchers (Leitner and Warden, 2004), where, as noted by Cheng *et al.* (2009), knowledge hoarding was more common than KS. In general, empirical evidence supports the view that there is an implicit KS culture in Universities that seem to be individualistic and self-serving (Fullwood *et al.*, 2013). This may also create challenges for Universities that seek to improve the ways in which knowledge is created, shared and disseminated. If mastered effectively, KS can lead to improved decision-making in terms of enhancing quality of programmes, curriculum development and research (Howell and Annansingh, 2013).

In an initial investigation of KM failure, it was underlined that successful implementation factors are not yet clear (Wong, 2005). Often, KM initiatives fail to deliver on their potential benefits; Frost (2014) reviews literature on KM and reports a number of failure factors. Some issues like the success of KS in organisations are not solely technological issues but are also related to human behavioural factors (Liao, 2003). For example, Kankanhalli *et al.* (2003) suggest that KM is plagued by problems such as low contributions and low usage. Moreover, KS activities do not always fit within the norms of traditional universities where reward and promotional mechanisms are often focused on publications, funding, teaching and technology commercialisation activities (Miller *et al.*, 2014).

3. Crisis knowledge management

Due to the fact that knowledge is a complex and abstract term, there are different ongoing debates on the definition of knowledge. Epetimehin and Ekundayo (2011) stated that knowledge is an invisible or intangible asset, in which its acquisition involves complex cognitive processes of perception, learning, communication, association and reasoning. One of the well-accepted definitions about knowledge is that knowledge is a dynamic human resource of justification of the personal beliefs to obtain the truth (Nonaka, 1994).

There are two main broad categories of knowledge types: tacit and explicit knowledge (Hubert, 1996). Tacit knowledge represents knowledge that cannot be clearly articulated to others and may include personal beliefs, thoughts and perspectives that are hard to communicate (Blackman *et al.*, 2011). On the contrary, explicit knowledge is the type of knowledge that is well documented in the form of data, formula and specific instructions preserved systematically for future references (Sharma and Dey, 2018). Amid the current Covid-19 pandemic, relevant knowledge may feature special characteristics to appear as socio-materialistic (Nova and González, 2016; Orlikowski, 2007; Paananen, 2020; Shoter, 2013). The implications of this would be, *firstly*, relevant knowledge could be classified as timely and rapidly dynamic, formalised and explicit. *Secondly*, the relevant knowledge would be essential for NW Universities and ought to be shared. In accordance, the specific

knowledge required by NW Universities to cope with the present Covid-19 transition may be detailed as follows:

- (1) health and well-being knowledge in the form of Covid-19 preventative measures and equipment, mental health and personal well-being;
- (2) higher education teaching and assessment adapted processes such as virtual online teaching and assessment; and
- (3) transitional management process to maintain operations and overcome Covid-19-associated difficulties.

Crises can occur at any time that makes it challenging for governments and organisations to have the right resources where and when they are needed (Jennex and Raman, 2009). According to Bdeir *et al.* (2013), a pandemic is a type of disaster where the dynamics of the situation are particularly important, and it is different from other disasters, such as earthquakes, bushfire or floods. Many institutions and government do not have the experience of dealing with real crises or emergencies so that they have to take advantage of available experience but still have to make critical decisions. Crisis decisions are different from routine decisions because of their relatively high uncertainty and complexity (Dearstyne, 2007), where the complexity of communicating, collaborating and decision-making processes in the context of crisis response cannot be undermined (Jennex and Raman, 2009).

Knowledge building and KS not only play an essential part in productivity, competitiveness and maintaining institutional memory (Leonard-Barton, 1998; Laycock, 2005) but also have a key role in coordinating disaster management and relief efforts (Zhang *et al.*, 2002). Seneviratne *et al.* (2010) further claimed that KM can play a key role in reducing the impacts of disaster through ensuring the availability and accessibility of accurate and reliable disaster risk information when required, through effective lesson learning. They identified gaps in KM within the context of disaster management. Bdeir *et al.* (2013) also concluded that further research on sharing knowledge during disasters needs to be carried out.

In essence, KM resembles an important part of identifying, recording and sharing disaster lessons (Robert and Lajtha, 2002) similar to the present Covid-10 pandemic, where it could be argued that the associated highly adaptive process forms an early stage of the knowledge creation cycle that requires nurturing KS practices between NW Universities. The accumulated knowledge, which is required to be accurate and up to date (Burnell *et al.*, 2004), is vital for NW Universities to maintain their operations effectively.

4. The context of North West Universities

The UK's higher education sector has, until recently, enjoyed relative stability and, consequently, strategies were focused on alignment and resource planning rather than significant change (Kellaway, 2006). Difficulties have arisen when the radical transition became eminent to cope with the Covid-19 pandemic ramifications such as when Public Health England recommended social distancing, which involves methods such as working from home, reducing social activity and avoiding non-essential travel. The pandemic has created widespread uncertainty across all aspects of society, with a number of studies predicting potentially massive impact on the education sector, and specifically within higher education (see the Office of Budget Responsibility (OBR) report, the Universities and Colleges Union (UCU) report). Due in part to the unprecedented nature of the Covid-19 pandemic and its potential persistence, the outlook facing UK Universities seems as *continuous uncertainty* or even *true ambiguity* (Courtney, 2003). Calls from concerned organisations such as Universities UK and Competition and Markets Authority encourage Universities to take a coordinated approach by moving away from competitive responses to Covid-19, such as

offering a free master's programme to all undergraduate students who sign up in September 2020 as a means of attracting students. The University and College Union (UCU) provides to its registered members through elected branch members and regular bulletins advice on issues arising from the Covid-19 transition.

Universities in the Northwest (NW) region of England in particular, face additional pressures since they face more competition than any other region outside of Greater London. The official 15 Universities in the NW resemble exceptional significance by hosting 76,880 students from the rest of the UK, and a further 36,735 international students provide 31,085 jobs and contribute £1.7bn to the local economy (UK Universities, 2017). Additionally, the city of Manchester leads the NW region as a regional hub of business and employment outside Greater London and South East England regions.

5. Netnographic observation

NW UK Universities' online platforms were observed to undergo dynamic patterns of KS in response to the Covid-19 developments, which drew our attention. Consequently, our *netnographic* observation (Kozinets *et al.*, 2014) focused on the websites and social media accounts of the 15 official Universities in NW UK. We justify our applied *netnographic* strategy based on two justifications: *firstly*, Universities' webpages are extensively used to address students, employees and other concerned stakeholders and are observed as useful mediums to share knowledge in relation to the Covid-19 pandemic. Secondly, social media platforms largely provide the opportunity to disseminate knowledge and interact with the knowledge providers that are not available through other conventional online mediums.

NW Universities' webpages revealed unprecedented activities to disseminate knowledge focused around the Covid-19 pandemic. However, the disseminated formalised knowledge was explicit and varied from one webpage to another. The Hootsuite application was used to curate posts and mentions focused around the Covid-19 pandemic. The knowledge shared through NW UK's Universities websites or social media accounts is mainly formalised and explicit and range from Covid-19 research update, advice on health and well-being, adapted learning and assessment procedures to operational adaptive measures.

From another perspective, we reviewed the records of the UCU branch managers at NW Universities for details on email updates to staff and students and cross-institutional KS collaboration in relation to the Covid-19 pandemic. No evidence of collaborative KS between NW Universities in response to the Covid-19 transition was detected.

In response to the Covid-19 pandemic, NW Universities were observed to take varied measures to safeguard students' and staff welfare, and at the same time, both support current students through end of semester assessments whilst also planning for a new intake of students in September 2020. Responses appeared to be highly autonomous and varied from the timeliness of adopting preventative measures to the University of Manchester website turning to a Covid-19 information hub and the University of Bolton announcing to be first to partially reopen its campus by September 2020. Whilst collaborative initiatives existed amongst NW Universities such the NW Universities Purchasing Consortium, NW Doctoral Training Centre and the former NW Universities' Association, none of these initiatives involved a collaborative approach towards the Covid-19 transition. This autonomous orientation was evident within our *netnographic* observation (Kozinets, 2014) of the NW Universities' online mediums, which revealed separated KS sharing conduct and little or no evidence of cross-University collaboration (Table 1).

6. Discussion

Large-scale epidemics or pandemics such as SARS, H1N1 or Covid-19 do not occur regularly and therefore involve an element of newness when emerging. This element of newness is associated with such developments as not only the usability of knowledge but also the

University	FAQ staff	FAQ students	Web updates	Email updates to staff and students	Press release	Social media updates (Twitter, Facebook, LinkedIn)	Collaborative KS with other institutions
University of Bolton	✓	✓	✓	✓	✓	✓	Not evident
University of Central Lancashire	Not publicised	✓	✓	✓	✓	✓	Not evident
University of Chester	✓	✓	✓	✓	✓	✓	Not evident
University of Cumbria	Not publicised	✓	✓	✓	✓	✓	Not evident
Edge Hill University	✓	✓	✓	Not publicised	✓	✓	Not evident
Lancaster University	✓	✓	✓	✓	✓	✓	Not evident
The University of Liverpool	✓	✓	✓	Not publicised	✓	✓	Not evident
Liverpool Hope University	✓	✓	✓	Not publicised	Not publicised	✓	Not evident
Liverpool John Moores University	✓	✓	✓	✓	✓	✓	Not evident
University of Manchester	✓	✓	✓	✓	✓	✓	Not evident
Manchester Metropolitan University	✓	✓	✓	✓	✓	✓	Not evident
The University of Salford	✓	✓	✓	✓	✓	✓	Not evident
BPP University	✓	✓	✓	✓	✓	✓	Not evident
Royal Northern College of Music	✓	✓	✓	Not publicised	✓	✓	Not evident
Liverpool Institute of Performing Arts	✓	✓	✓	Not publicised	✓	✓	Not evident

Table 1.
NW Universities' network
observation analysis

capacity for experimentation (Hutton, 2019). Therefore, it could be argued that there is a high degree of uncertainty associated with the Covid-19 pandemic marking an early phase of knowledge accumulation cycle. Provided that this knowledge may be essential for human survival, we make the *proposition* that the knowledge shared amongst NW Universities should be formalised, explicit, accurate and available to the Universities' staff, students and other stakeholders.

Largely, the transition of the role of UK Universities from focusing on building a national elite and competing on a global scale to regional distinctiveness has led to initiating policies to

nurture Universities regional engagement (Chatterton, 2000; Chatterton and Goddard, 2000). For instance, Faggian *et al.* (2013) substantiated the importance of higher education institutions as local research and development providers. Chatterton (2000) additionally advocated that the higher education sector needs to focus in more detail on fostering regionally embedded, co-created and co-owned knowledge. Previous literature tended to focus on the macro level, where for KS, legislative provisions are governed by national policies (Bruneel *et al.*, 2010; Carayannis and Campbell 2011; Bozeman *et al.*, 2013).

In line with the above argument on the transition towards regional engagement and development, NW Universities are expected to prioritise cross-University collaboration in the form of best practices KS to collectively support regional development. This collaboration is more necessitated during periods of crisis and uncertainty such as the ongoing Covid-19 pandemic.

In addition to the KS barriers discussed in Section 2, there is a real concern of when Universities are developing contingent control systems in response to the Covid-19 pandemic that they develop centralised systems to maintain financial sustainability. These centralised systems models, for the sake of institutional advantage, might damage the whole sector in the long run. For instance, the higher education frameworks that support the funding of research and teaching encourage competition between Universities and encourage academics to focus inwardly. Since tuition fees have risen up to £9,000 in England and Wales in 2011, students' satisfaction has also become key to maintaining the stream of income that is generated through students' fees; this may discourage Universities to share their best practices with their competitors. In view and based on our observation of NW Universities, we make a second *proposition* that the competition between NW Universities may hinder establishing collaborative KS initiatives in response to the Covid-19 transition.

From another perspective and as knowledge is widely acknowledged to exist at the individual level (Nonaka, 1994), a key concern in implementing KS mechanisms would be the organisational factors affecting the motivation and willingness of academics to engage in KS (Siegel *et al.*, 2003; Perkmann *et al.*, 2013; Miller *et al.*, 2016) such as the perceived bureaucracy and inflexibility of Universities (PACEC, 2012; Galán-Muros and Plewa, 2016). Essentially, the third *proposition* to be made is that micro factors may demotivate academics to practice KS in NW Universities.

A more collaborative cross-University KS approach may drive forward developing better measures to cope with the current Covid-19 transition. This collaborative approach should prioritise the welfare of staff and students but should also not ignore the institutional interests of the participating Universities. In consideration of this, we propose the following strategy to nurture KS sharing amongst NW Universities.

6.1 Proposed strategy

The underlying ethos of this strategy should be that cooperation should prevail over competition during this critical phase. This ethos should be driven by the senior management board of each NW University where we recommend assigning a chief knowledge officer and KM advisory group to coordinate KS practices at both strategic and operational levels. The new roles should promote best practices amongst NW Universities to support academic progression in and non-academic operations such as information technology (IT), management and estates to implement effective procedures as implied by the Covid-19 transition.

We also recommend establishing cross-University working groups to facilitate KS between NW Universities. This will enable *knowledge workers* (Debowski, 2006) to learn and share knowledge across Universities without prevalent restrictions. This will not only allow timely sharing of Covid-19 adaptive best practices but also share the results of experimenting new creative initiatives to guide the responses to Covid-19 developments.

7. Conclusion

This paper explored the current collaborative KS practices within NW in response to the transition implied by the current Covid-19 pandemic. A *netnographic* observation was conducted to unveil the current subject practices where it can be concluded that there is little or no evidence of collaborative KS practices amongst NW Universities in response to the present Covid-19 transition. The paper concludes three propositions; *firstly* and based on the produced novel classification of relevant Covid-19 knowledge, NW Universities should share formalised, explicit and accurate Covid-19 knowledge with staff, students and other stakeholders. *Secondly*, the competition between NW Universities may hinder establishing collaborative KS initiatives in response to the Covid-19 transition. *Thirdly*, academics may be demotivated to practice KS by the micro factors in NW Universities. In view of the aforementioned, we propose the following conceptual model to summarise our propositions and our suggested strategy to nurture collaborative KS amongst NW Universities (Figure 1). The proposed strategy should also guide other HEIs, in the UK and worldwide, where there is a need to adapt operating measures to cope with the major transition implied by the Covid-19 pandemic. The relevant knowledge generated within the context of NW Universities in the form of best practices could be shared at regional, national and worldwide scales to assist HEIs to cope with similar future developments.

The limitation entailed in this study may be that the access to NW Universities ICT systems to enable a thorough *netnographic* investigation of the collaborative KS practices was not possibly available. Essentially, we recommend that future research should explore further the characteristics of knowledge associated with Covid-19 in the higher education context and investigate in depth how NW Universities could facilitate effectively collaborative KS practices to cope with the present Covid-19 transition.

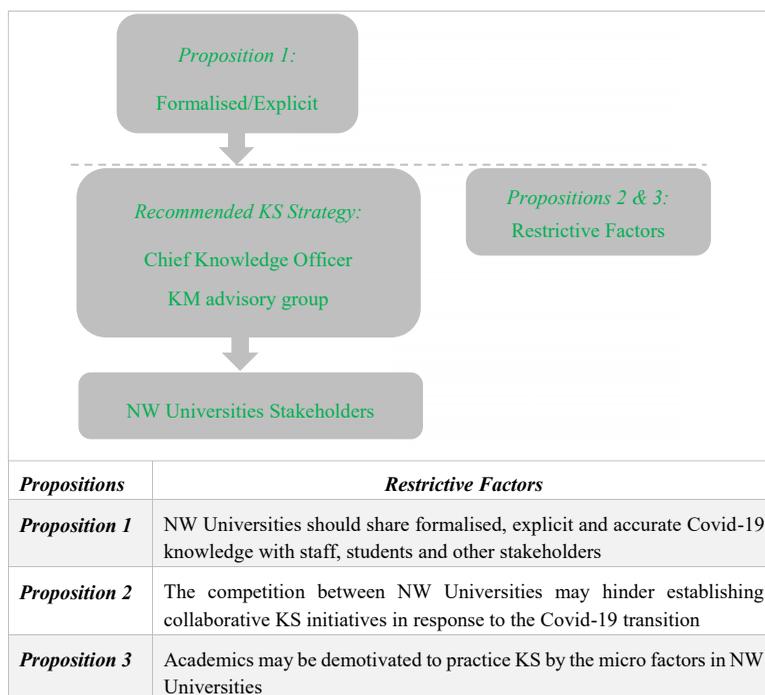


Figure 1.
Paper's
conceptual model

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