# Introduction

Over the years, knowledge has been an indispensable asset used to expand the economy of a nation. It has taken a central stage as the most acceptable stimulant of growth and development, and also the driving force behind every successful achievement in the lives of individuals and organizations. There is a popular saying that “No man is absolutely an island in the world of knowledge”, this popular statement however revealed the important nature of knowledge sharing of which many scholars believed its one major attitude that leads to knowledge expansion among individuals and professionals in an organisation. To this end, since knowledge may seem to be ideas, experiences recorded or inherent in the mind of an individual, man immensely depends on one another in the learning and teaching, formulating of ideas and contributing to knowledge creation.

Knowledge sharing is a process by which an individual knowledge is converted or translated into a form that can be understood and used by other individuals. In this regard, knowledge of personalities is transformed into a comprehensible way and used for the improvement of others in an organization (Gaàl et al in Ahmed etal, 2021). As indicated by Akparobore (2015), it is a mutual exchange of skills, experiences, and understanding to jointly create new knowledge. This however implies that a new knowledge is created when people interact and exchange ideas either physically or electronically. In a nutshell, knowledge sharing is the process of exchanging knowledge and getting new knowledge by both parties for knowledge improvement and expansion through a common link or a network.

Networking emanated from the word “network” to mean an interconnected group or system for the purpose of resource sharing (Onwuchekwa, 2015). The networking and knowledge sharing has always been an important prime factor among knowledge organisations. For people to interact there must be an interface or a link between two or more persons and this interface or link is the network. Networking is the informal social exchange of information and ideas among people who share a shared profession or special interest, it usually starts with a single point of agreement. Networking helps to establish a link where people meet and interact. Professionals utilize networking to broaden their circles of contacts, learn about career prospects in their areas, and gain a better understanding of current events and trends in their fields or the greater world (Kegan, 2021). Today, it is better done through the use of digital channels called networking apps.

An App is an abbreviated form of “application”. It is a software program designed to perform a specific function. In this technological era, various networking apps have been invented and adopted by librarians to interact and leverage the available knowledge that may help to carry out their tasks more effectively (Islam etal, 2014). Networking apps are those application software designed for mutual exchange of resources, views, ideas and communication between two or more persons. The use of networking apps brought new openings for knowledge sharing and has played a very significant role in facilitating effective networking and decisions making (Kim & Abbas, 2010). The primary goal of sharing knowledge using apps is for quick responses and contributions among participants. More so, any interaction that took place is stored automatically on the app and can be retrieved for later use. There are lots of apps invented for this purpose, the most popular among others include Zoom app, LinkedIn, Facebook messenger, Yahoo messenger, Whatsapp, Instagram, Emails, Tweeter, Skype, etc. Librarians can use these various applications to transfer their knowledge in the form of knowledge-based services and products to end-users. In the words of Agarwal & Islam (2014), Wiki as a networking tool can be read and edited simultaneously, helping to facilitate and improve collaboration amongst librarians, between librarians and patrons, and even across libraries. Hence, it is important to investigate the use of the available networking apps for knowledge sharing among librarians in University of Port Harcourt.

# Statement of the problem

Librarians as knowledge professionals are indispensable in harnessing existing knowledge resource and disseminating them to the end-users. Due to the paradigm shift from analogue to virtual information services, librarians are faced with the task of having to develop themselves virtually to meet the ever-changing needs of the knowledge-based society. Librarians are expected to network and share common ideas on how to keep pace with the constantly changing user needs and information environment. As indicated by Boateng etal (2017), sharing ideas enables librarians to tackle issues, adapt new things and advance understanding to achieve results. Awodoyin etal (2016) reported an observation that most knowledgeable librarians in academic institutions often transfer, disengage or retire from service without sharing their knowledge to others, thus leaving their positions in the hands of the amateurs.

However, for librarians to interact and leverage the available knowledge that may help to carry out their tasks more effectively in this technological era, various networking apps are expected to be used. Though there are other channels in which knowledge can be shared, but the use of networking apps will help to eradicate the problem of distance and physical participations among librarians. Librarians can also participate virtually in workshops, seminars, conferences using networking applications like Zoom network, whatsapp, facebook livestreaming and others. Use of networking apps facilitates effective interactions and quick responses among participants as well as standardising the mode of operations and services delivery, and many other benefits. However, despite the numerous benefits, observation has shown a poor knowledge sharing attitude using social networking apps among academic librarians which may be attributed to lack of awareness, skill, interest and willingness to share ideas technologically. Hence, the study seeks to investigate the use of networking applications for knowledge sharing among librarians in University of Port Harcourt, Rivers State.

# Objectives of the study

1. To identify the types of networking apps used for knowledge sharing among librarians in University of Port Harcourt.
2. To show the extent of usage of networking apps for knowledge sharing among librarians in University of Port Harcourt.
3. To determine the perceived benefits of using networking app for knowledge sharing among librarians in University of Port Harcourt.
4. To identify the problems militating against the use of networking apps for knowledge sharing among librarians in University of Port Harcourt

# Research Questions

1. What types of networking apps used for knowledge sharing among librarians in University of Port Harcourt?
2. To what extent are the various networking apps used for knowledge sharing among librarians in University of Port Harcourt?
3. What are the perceived benefits of using networking app for knowledge sharing among librarians in University of Port Harcourt?
4. What problems militate against the use of networking apps for knowledge sharing among librarians in University of Port Harcourt?

# Literature Review

# Concept of networking apps and knowledge sharing

In the knowledge-based society, knowledge is a critical resource that provides a sustainable competitive advantage over others. It is intelligence, ideas or experiences recorded or inherent in the memory of an individual that others may not have. According to Awodoyin (2016), an individual Knowledge can either be explicit or tacit in the manner such knowledge was shared. The explicit knowledge refers to knowledge which is easily expressed by words or documents, easily codified and articulated in language, and can be packaged, transferred and shared among individuals. While tacit knowledge is an informal personal knowledge embedded in the mind and uniquely rooted in individual experience, beliefs, values and often times not easily learn or fully expressed because it was obtained is obtained.

This type of knowledge can only be shared by close interaction between people or by observations (Heng-Li Yang etal in Awodoyin, 2016). Organizations like libraries must consider how to harness and transfer both the explicit and tacit knowledge from experts who have it to novices who need to know (Islam etal, 2014). Thus resulting to what is known as knowledge sharing among librarians in order to leverage and utilise available knowledge for services delivery.

Knowledge sharing has been described from a variety of concepts. Gaàl etal in Ahmed (2021) disputed that “sharing is a common activity for everyone, but knowledge sharing within an organization is a multifarious and complicated issue”. According to Ford & Staples (2010), knowledge sharing is a process by which an individual or groups offer insight to an existing knowledge or comprehension either in an unsaid or express arrangement to a beneficiary. In the words of Cyr & Choo (2010), it includes exercises of spreading information starting with one individual then onto the next, to a gathering of individuals, or to the entire association. As indicated by Akparobore (2015), Knowledge sharing is the process of coordinating learning activities where individuals bring knowledge and get new knowledge so that those with limited knowledge can benefit from the advantage of knowledge sharing. Thus, it is the processes where individuals, mutually exchange their knowledge and jointly create new knowledge. However, knowledge sharing among librarians is perceived as one of the most convenient and effective way to obtain knowledge. It enhances the ability to seek studies-related help from one another. Knowledge sharing among staff essentially facilitates achieving outcomes of collective learning (Akparobore, 2015).

 However, ways in which knowledge can be shared among professionals was categorised into four by O’Dell & Hubert in Ogunmodede & Popoola (2019), they include: socialisation, externalisation, combination and internalisation. Parirokh (2008) states that although tacit knowledge is not measurable, but can be understood and can create new tacit knowledge through social interaction in a professional discussion groups, chat rooms, tea rooms, and round tables discussions where stakeholders meet to discover answers to problems, as well as brainstorming sessions for analyzing library issues.

Networking on the other hand has a significant relationship with knowledge sharing, though used interchangeably by most scholars. The word networking emanated from network. A network consists of two or more computers or persons that are linked in order to share resources, exchange files or communicate. In as much as knowledge sharing deal with exchange of ideas, experiences and others, networking ensure that there a link or a connection to enable people interact freely. Networking, according to Kegan (2021), is the informal social interchange of information and ideas among people with a common profession or special interest. He added that it often begins with a single point of common ground. According to Onwuchekwa (2015), the advent of modern information technology has made the task of networking and knowledge sharing very simple and convenient. In the process of knowledge sharing, technology is needed for processing, storing and retrieval of information within the knowledge workers. However, even though technology might not be the best solution for the success of knowledge sharing, it allows employees to share their knowledge easily and anytime (Anna & Puspitasari, 2013). Example of such technology is the social networking tools or apps.

# Types of networking apps used for knowledge sharing among Librarians

In this technological era, knowledge sharing methods has shifted from physical communication to virtual communication. A lot of networking apps are in place to ensure the success of knowledge sharing among librarians. These apps are described as computermediated tools that allow people to create, share or exchange information, ideas and media in virtual communities and networks (Kaplan & Haenlein, 2010). Ogunmodede & Popoola (2019) carried out a study on Knowledge Sharing Behaviour by Librarians in Federal Universities in Nigeria. The population of study comprised 654 librarians from 40 federal universities in Nigeria. A total enumeration technique was used to cover 654 librarians. The descriptive statistics was employed for data analysis. Their study however found that knowledge is shared using social media technologies to include Whatsapp, Emails, Tweeter, LinkedIn, RSS feed, blog, facebook, yahoo messenger and others. In a similar vein, Awodoyin etal (2016) carried out a study Knowledge Sharing Behaviour Pattern Analysis of Academic Librarians in Nigeria. The study used an ex-post facto descriptive survey research design. Total enumeration was used to capture one hundred and seventeen (117) academic librarians in selected academic libraries in Nigeria using questionnaire as the research instrument. The findings revealed that librarians primarily share knowledge using mobile phones, emails, and web forums.

Omotayo & Salami (2018) identifies Facebook and Whatsapp are the widely used social media tools for knowledge sharing. Agarwal & Islam (2014) also confirms that information professionals can also transfer their knowledge in the form of knowledge-based services and products through e-mail, Web 2.0, websites, online discussion forums, videoconferencing and other collaboration tools. Webster (2006) suggested open source software as another example of collaborative technology at work in libraries. The open source movement in general is an important means for librarians to share software resources. Every individual open source project establishes its own dynamic resource-sharing network.

# Benefits of using networking apps for knowledge sharing

Networking apps are those application software designed for mutual exchange of resources, views, ideas and communication between two or more persons. The use of networking apps brought new openings for knowledge sharing and has played a very significant role in facilitating effective networking and decisions making among individuals and organisations (Kim & Abbas, 2010). Al-Busaidi etal (2011) categorised the benefits of using networking sites into three; individual benefits, organisational benefits and knowledge sharing process benefits. In the words of Ridings & Gefen (2004), people may likely use networking sites for seeking information, social support, friendship, and recreation. Though, networking platforms may not only be for networking and socialization with friends, but have been recognized as a platform for knowledge exchange. Most times as indicated by Friedman etal (2014), they are used within the workplaces of organisations to facilitate work related communication and collaboration. Their use is gaining more popularity and they have been identified as beneficial to the performance and competitive advantage of organisations (Leftheriotis & Giannakos, 2014). Speed and ease of use, managing personal knowledge, easier communication with users and colleagues and powerful communication tool are the major perceived benefits that motivate individuals to use social networking devices (Islam & Tsuji, 2016).

However, networking app as an interactive technology has helped to fulfil employees’ knowledge tasks and objectives (Alberghini etal, 2014). It has perfectly empowered quick exploration, access to, and retrieval of information. It also supports communication and link collaboration between staff in the organization. More so, organizations use networking sites to reach customers and as a useful source of identifying potential employees by organization. For internal employees, it can be used to support cooperative work and build stronger bonds in customers and organisational relationships, improves employees’ engagement, improves internal communication, and improves development of internal communities (LorenzoRomero et al., 2011). Majchrzak et al (2013) proclaimed that the use of social networking creates the opportunity to turn organization-wide knowledge sharing in the workplace from irregular activities to continuous conversion of sharing knowledge.

# Problems militating against the use of networking apps for knowledge sharing

The factors militating against the use of apps for sharing ideas are enormous among information professionals across the globe. These factors are related to individual, technical, organizational and social factors (Al-Busaidi etal, 2011). Most persons in an online forum fear to release their ideas or anything confidential because the feeling that they might be violating the policy of the group. Also, the fear that people might treat their opinions in negative ways. The uncertainty of the credibility of information equally contribute to problem of not sharing information.

Similarly, Islam & Tsuji (2016) carried out a study on Information Professionals’ Knowledge Sharing Practices in Social Media: A Study of Professionals in Developing Countries. Their study population was information professionals from 11 countries. They used Open and close ended web-based questionnaire, which were sent out via emails. The study however found some major barriers like lack of support, familiarity, trust, unfiltered information and fear of providing information. Adequate internet provision is another challenge as lack of internet access has deprived most information professionals the latest search for information, web based learning, opportunities to be part of international research teams, and the ability to connect campuses with video conferencing (Etim in Akparobore, 2015).

# Methodology

The study investigated the use of networking applications for knowledge sharing among librarians in University of Port Harcourt, Rivers State. The objective was to identify the types, extent of use, perceived benefits, and problems associated with the use of networking apps for knowledge sharing. The study adopted a descriptive survey design. The population of the study comprised the total of 25 librarians (practicing & teaching staff) working in the University of Port Harcourt. Census sampling was used to sample the entire population because of its manageable size. Structured Questionnaire was used as primary instrument for data collection. Out of 25 copies of questionnaire administered, 21 copies was found valid for analysis. Data collected was analysed using the descriptive statistics of arithmetic mean (X) and standard deviation (SD). The decision rule for the mean was calculated at 4+3+2+1/ 4 = 2.5. Therefore, responses from RQ1,2,3,4 with mean scores above

2.5 were rated positive while those below were rated negative.

# Analysis and Discussion of findings

*Table 1: Types of Networking apps used for Knowledge sharing*

RQ1: What types of networking apps used for knowledge sharing among librarians in University of Port Harcourt?

|  |  |  |  |
| --- | --- | --- | --- |
| **Identify your type of networking app used for knowledge sharing**  | **x̄**  | **±**  | **Decision**  |
| I use my “LinkedIn App” for knowledge sharing  | 1.61  | .432  | Reject  |
| I use my “Zoom App” for knowledge sharing  | 3.03  | .912  | Accept  |

|  |  |  |  |
| --- | --- | --- | --- |
| I use my “Facebook App” for knowledge sharing  | 3.92  | .951  | Accept  |
| I use my “WhatsApp” for knowledge sharing  | 3.97  | .998  | Accept  |
| I use my “Email App (yahoo, gmail, hotmail)” for knowledge sharing  | 3.99  | .999  | Accept  |
| I use my “Skype App” for knowledge sharing  | 1.78  | .578  | Reject  |
| I use my “Tweeter App” for knowledge sharing  | 2.54  | .646  | Accept  |
| I use my “Instagram App” for knowledge sharing  | 3.79  | .8.21  | Accept  |

N=21, Decision rule: x̄ =2.50 and above is Significant

Table 1 above shows the types of networking apps used for knowledge sharing among librarians in University of Port Harcourt. According to the respondents as indicated, Email Apps (x̄ =3.99); followed by WhatsApp (x̄ =3.97); Facebook App (x̄ =3.92); Instagram App (x̄ =3.79); Zoom App (x̄ =3.03); and Tweeter (x̄ =2.54) are the various networking apps used for knowledge sharing among themselves. This finding however corroborates with the study of Ogunmodede & Popoola (2019) on knowledge sharing behaviour by Librarians in Federal Universities in Nigeria. Their study also identified Whatsapp, Emails, Tweeter, LinkedIn, RSS feed, blog, facebook, yahoo messenger and others as the common channels of sharing knowledge. Though in this current study, LinkedIn App (x̄ =1.61) and Skype (x̄ =1.78) were rejected. Their rejection is due to the fact that their mean scores are <2.5 in accordance to the decision rule. Though, they are also used but only by few persons in the institution understudy.

*Table 2: The extent of usage of networking apps for Knowledge sharing*

RQ2: To what extent are the various networking apps used for knowledge sharing among librarians in University of Port Harcourt?

|  |  |  |  |
| --- | --- | --- | --- |
| **Identify your extent of usage of networking app for knowledge sharing** (Frequently, Occasionally, None of the above**)**  | **x̄**  | **±**  | **Decision**  |
|  I visit my LinkedIn App  | 0.98  | .092  | Reject  |
| I visit my Zoom App  | 2.03  | .212  | Reject  |
| I visit my Facebook App  | 3.97  | .981  | Accept  |
| I visit my WhatsApp  | 3.99  | .999  | Accept  |
| I visit my Email App (yahoo, gmail, hotmail)  | 3.98  | .989  | Accept  |
| I visit my Skype App  | 1.18  | .178  | Reject  |
| I visit my Tweeter App  | 2.51  | .546  | Accept  |
| I visit my Instagram App  | 2.79  | .5.71  | Accept  |

N=21, Decision rule: x̄ =2.50 and above is Significant

Table 2 above shows the extent of usage of networking apps for knowledge sharing among librarians in University of Port Harcourt. According to the respondents as represented in the table, Librarians visit and use their WhatsApp (x̄ =3.99) regularly, followed by Email Apps (x̄ =3.98), Facebook App (x̄ =3.97); Instagram App (x̄ =2.79); and Tweeter (x̄ =2.51) in order to read, share and retrieve knowledge. This present study however confirms an earlier study of Omotayo & Salami (2018) that identifies Facebook and Whatsapp as the most widely used social networking tools for knowledge sharing. While LinkedIn App (x̄ =0.98), Zoom App (x̄ =2.03) and Skype (x̄ =1.18) were used occasionally. The zoom app may only be visited and used during conferences, meetings and workshops that are visible through Zoom, same goes to Skype that can be used to engage librarians in an extensive study through voice and video calls features. In the case of LinkedIn App, some of the librarians in the University of Port Harcourt may have not received its full awareness that it can be used for knowledge sharing, even if they do, they may not have created their individual accounts for knowledge sharing among themselves.

*Table 3: The perceived benefits of using networking apps for Knowledge sharing*

RQ3: What are the perceived benefits of using networking app for knowledge sharing among librarians in University of Port Harcourt?

|  |  |  |  |
| --- | --- | --- | --- |
| **Perceived benefits of using networking apps**  | **x̄**  | **±**  | **Decision**  |
|  Ease of use  | 3.58  | .932  | Accept  |
| Cost effectiveness  | 3.03  | .812  | Accept  |
| Speed of access and retrieval  | 3.97  | .981  | Accept  |
| Competitive advantage  | 3.29  | .929  | Accept  |
| Social support and cooperative work  | 3.90  | .989  | Accept  |
| Automatic storage and preservation  | 3.78  | .978  | Accept  |
| External and internal communication and collaboration  | 3.51  | .896  | Accept  |
| Crowdsourcing and funding  | 2.89  | .798  | Accept  |
| Virtual participations  | 3.76  | .972  | Accept  |

N=21, Decision rule: x̄ =2.50 and above is Significant

Table 3 above shows the perceived benefits of using networking app for knowledge sharing among librarians in University of Port Harcourt. According to the respondents as represented in the table, they perceived Ease of use (x̄ =3.58, ± .932); Cost effectiveness (x̄ =3.03, ± .812); Speed of access and retrieval (x̄ =3.97, ± .981); Competitive advantage (x̄ =3.29, ± .929); Social support and cooperative work (x̄ =3.90, ± .989); Automatic storage and preservation

(x̄ =3.78, ± .978); External and internal communication and collaboration (x̄ =3.51, ± .898);

Crowdsourcing and funding(x̄ =2.89, ± .8=798); and Virtual participations (x̄ =3.76, ± .972); as the major benefits of using networking apps for sharing knowledge. This however indicates that all of the items are the perception of using networking apps for knowledge sharing. The study of Islam & Tsuji (2016) on Information Professionals’ Knowledge Sharing Practices in Social Media: A Study of Professionals in Developing Countries also identified ease of use and access as the major benefits. In the case of crowdsourcing and funding, networking apps can be used to source fund from a crowd in an online forum. It could be a fund raising project in regards to an association or a committee of friends. It was also perceived to have eradicated the problem of physical participations in conferences and workshop etc and has now paved way for virtual participations.

*Table 4: problems militating against the use of networking apps for Knowledge sharing*

RQ4: What problems militate against the use of networking apps for knowledge sharing among librarians in University of Port Harcourt?

|  |  |  |  |
| --- | --- | --- | --- |
| **Identify the problems that affect using networking apps for knowledge sharing**  | **x̄**  | **±**  | **Decision**  |
|  Lack of Skills  | 2.83  | .832  | Accept  |
| Inadequate internet access  | 2.53  | .812  | Accept  |
| High cost of networking devices/subscriptions  | 3.67  | .921  | Accept  |
| Uncertainty of the credibility of knowledge  | 2.59  | .829  | Accept  |
| Lack of awareness and familiarity  | 2.70  | .871  | Accept  |
| Lack of interest  | 3.68  | .928  | Accept  |
| Fear of domination (others might take credit and dominate)  | 3.91  | .996  | Accept  |
| Fear of criticism  | 2.89  | .798  | Accept  |
| Lack of knowledge sharing culture  | 2.76  | .872  | Accept  |

N=21, Decision rule: x̄ =2.50 and above is Significant

Table 4 above shows the problems militate against the use of networking apps for knowledge sharing among librarians in University of Port Harcourt. According to the respondents as represented in the table, the major problems include: Fear of domination (others might take credit and dominate) (x̄ =3.91, ±.996); High cost of networking devices/subscriptions (x̄ =3.67, ± .921); Lack of interest (x̄ =3.68, ± .928); lack of skills (x̄ =2.83, ± .832); Lack of awareness and familiarity(x̄ =2.70, ± .871); inadequate internet access (x̄ =2.53, ± .812);Uncertainty of the credibility of knowledge); Fear of criticism and Lack of knowledge sharing culture (x̄ =2.76, ± .872). This indicates that all of the items really affect the use of networking apps for knowledge sharing among librarians. The findings however corroborate an early study of Akparobore (2015) and Islam & Tsuji (2016) where they identified Lack of familiarity, unfiltered information and lack of internet access as major problems.

# Summary of findings

The study identified some networking applications used for knowledge sharing among librarians in the university understudy to include Email Apps, WhatsApp, Facebook App, Instagram App, Zoom App, and Tweeter App. But only few persons used LinkedIn App and Skype App. The study also shows that only Email Apps, WhatsApp, Facebook App, Instagram App and Tweeter App were used regularly due to certain perceived benefits to include Ease of use, Cost effectiveness, Speed of access and retrieval, Competitive advantage, Social support and cooperative work, Automatic storage and preservation, External and internal communication and collaboration, Crowdsourcing and funding and Virtual participations. Despite these benefits, Fear of domination, High cost of networking devices/subscription, Lack of interest, lack of skills, Lack of awareness and familiarity**,** inadequate internet access, Uncertainty of the credibility of knowledge, Fear of criticism and lack of knowledge sharing culture are still militate against the use of networking apps for knowledge sharing.

# Conclusion and Recommendations

Knowledge is an indispensable tool that develops an individual if shared. Sharing of knowledge is one major culture that leads to knowledge expansion among professionals. It also brings recognition to the person who shared. Remember, no man is an island in the world of knowledge. Librarians can gain from one another and derive advantage from new knowledge and advancement by each other. Technology is here to make the exercise easier and convenient. Therefore, the utilisation of networking applications for knowledge sharing is and will remain very essential for all librarians that wish to remain relevant in order to collaborate and compound with the countless needs of the knowledge-based society.

The study therefore recommends a capacity building among librarians on the use of emerging networking applications for knowledge sharing. This will help to keep pace with new media that could be used for knowledge exchange. Also, Librarians should develop the culture, the enthusiasm and the willingness to collaborate and share their knowledge with their colleagues through social networking applications which could be helpful in terms of updating their knowledge and promoting their skills for better and efficient services delivery to end users.