Information Sharing in the Social Media Era: A User in African **Perspective**

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Abstract

While the role of information for the functioning of any social system is enormous, individuals do not possess all the information that they require. It has to be shared. Using a systematic literature review this study presents an African perspective of information sharing in the era of social media. Electronic journals and reports written in English language and published from 2004 to 2021 were searched and reviewed. The study selection criteria flown directly from the review questions and was specified a priori. A Pareto analysis was used for summarizing, the vital and least important motivational factor for information sharing on social media platform. The study found that unlike the preceding era, social media makes information sharing ease, ubiquitous and convenient. Motivational factors to share information using social media included source credibility; networking motives, altruism, reciprocity, self-promotion, socializing, monetary rewards, perceptions of information quality and entertainment among others. Yet, Information sharing in Africa is contextually controlled by attitudes, perceptions, norms, values and belief systems inherent to local culture that in turn influence access, use and acceptance of shared information. Challenges revealed were mainly related to security; infrastructure, technical skills, resource related and inadequate supportive policies. The study concludes by proposing a conceptual model that explains information sharing in the African perspective.

Keywords: Information, information sharing, social media, social media era, information user, African perspective

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Introduction

The role of information in human life is immense. Information is essential for the functioning of every social system, especially for our modern society. According to Nyam et al. (2015), just like food, shelter, and cloths, information is indisputably one of the necessities of life. Evans (2001) asserts that information is needed in all spheres of life to facilitate decision making and engendering progress. When we get informed about something, we get knowledge that protects us from making mistakes. Information is considered as an input to our minds that we work with when thinking. It interacts with the inner mind, altering it based on the outer world for behavioural change. Dervin et al. (1980) see information as anything a person finds informing, through which people perceive to have a sense of control and power. Information is thus considered as power, with which, one can control his/her own destiny, career, and money. It is knowledge accumulated from information that gives one the power of decision making. Through information one can confidently devise strategies, make decisions, and implement action. Thus, Information sharing in the Social media era: A User in African perspective

it keeps one ahead, making him/her knowledgeable, brings respect, it is valuable and brings control. To that extent, information is considered as increasingly being perceived as a valuable asset in today's modern society, de facto that in some occurrences information is by far the most valuable asset of a business and its activities. Evidences (such as Moody &Walsh, 2002; Li & Sheu, 2014) indicate that information provides the capability to deliver services, make better decisions, improve performance and achieve competitive advantage. It is therefore important that an information user - individual who actively exercises his/her right to access different information sources (Reddy *et al.*, 2018), irrespective of the contextual differences, have access to required information.

Africa is the second-largest and second most populous continent on earth with an estimated population in 2021 of 1,373,480,428 people (World Population Review, 2021). According to Berman (2013), Africa will have the world's largest workforce even sooner; in this decade the workforce will increase by 163 million and by 2035 it will be larger than that of China. Studies (such as Alexander, 2013; Ponelis & Holmner, 2015) had projected that within the next 35 years, Africans would account for a quarter of the world's workers. Unless this population is accessible to information, it will remain competitively disadvantaged.

Mathiesen (2014) posits that a person has access to information when he/she has the opportunity to obtain, make use of, and benefit it. Yet, since at any one time individuals do not possess all the information that they require, they turn to others in search for that information. That is why information sharing is important. According to Moody and Walsh (2002) the value of information increases when it is shared and used (1st and 2nd Moody & Walsh information laws), and it does not provide any value, if it is not used at all (7th Moody & Walsh information law). Information sharing - defined as the voluntary act of making information possessed by one entity available to another entity; is therefore important for making information available to others' socio-economic decision making needs. According to Savolainen (2017) information sharing is one of the easiest means to improve information access to users. The process of information sharing incorporates two major aspects, i.e., giving information to others, and receiving information that has been provided by the information giver via some channel (Savolainen, 2017). It is a means for information exchange between organizations, people and technologies. According to Sonnenwald (2006), information may be provided to others, either proactively or upon request, such that the information has an impact on another person(s). It is therefore an important component of information behaviour (Spink & Cole, 2004; Afzal, 2012). However, the contexts and levels that information may be shared are different - in private and public spaces, at work or non-work settings, by people from different disciplines as well as culture and depending on the content requested (Rafaeli & Raban, 2005).

As social animals, human beings routinely share personal information to one another with motivation to socialize, maintaining relationships with others, while sharing own impression, sensational, and experiences (Oh & Syn, 2015; Kim, 2017). According to Galindo *et al.* (2010), the ability to work well with others is a function of effective information sharing. It is an essential activity in all collaborative works, and helps to bind groups and communities together. In organization perspective information sharing, enables members to be the eyes and ears of an organization including being gatekeepers, in the sense of assisting their organizations in response to some incidents as soon as they occur (Kim, 2017). According to Kim (2017), information sharing is crucial to many businesses, helping to promptly meet customer and client needs through customer relationship systems which share information about products and services and improve access to their customers. For example, consumers can have access to



banking, financial and credit products from across the nation and even internationally where appropriate. Appropriate information sharing is an essential part of the provision of safe and effective care. Hospitals sharing medical records (under stringent conditions) about people so that their medical personnel can make better decisions are a good example of how organizations can share information for productive purposes. In fact, appropriate information sharing is an essential part of the provision of safe and effective care (Kim, 2017). Tchouakeu & Tapia (2015) exemplifies that collecting and sharing timely, reliable and accurate information during a crisis is critical to improving humanitarian response, maximizing resources and minimizing human suffering.

Praditya & Jansen (2015) summarize benefits of information sharing in an organization set up to include among others building wider professional networks; simplify administrative procedure; accelerate the processing of information; better information quality; more comprehensive information; high quality service; reduce duplicate data; improve decision making; cost efficiency; improve transparency; increase productivity and improve compliance. Thus, when used intelligently, information sharing is a useful way of lowering costs, improving overall accuracy of public data and allowing organizations and individuals alike to have access to information that they might need (Bentley, 2018).

Unlike in the past, current technology offers much more possibilities not only for archiving, processing and retrieving information, but also sharing information among individuals or people at work or non-work settings, from different disciplines as well as culture (Galindo et al., 2010). Heeks (2014) exemplifies that, with the increasing use of mobile telephony in Africa, there is huge potential to increase access to diverse information and services and connect users to others across the entire world. Yet Africa is associated with several constraints including being resource poor, limited access to finance, illiteracy and underdeveloped infrastructure (Kanza, 2016), unfavourable legal as well as regulatory framework, together with poorly coordinated institutional support framework (Heeks, 2014; Kanza, 2016). The constraints, in one way or another hamper development, access to and use of information. Thanks to the emergence of social media enabled by the Internet and Web 2.0 that have for great extent enhanced information sharing among information users. Although studies (Bradley & McDonald, 2011; Hanna, Rohm, & Crittenden, 2011; Kietzmann et al., 2011; Kumar & Nanda, 2019; Masele & Rwehikiza, 2021) avow how social media offers easy access to information through followership, user generated contents and engagement, the literature is not specific on the extent of, and antecedent for information sharing in an African perspective as there is no specific documentation on the matter. Using systematic literature review this paper presents an African perspective of information sharing in the era of social media. It focuses on Information user. Specifically, this study seeks to answer the following questions:

How is information shared in the era of social media? How contextually social media relevant for Information sharing in an Africa perspective? What are the motivators for use of social media for information sharing in the African context? What are the challenges for effective information sharing in Africa?

The rest of the paper covers methodology used, followed by findings and discussion, and finally conclusion and a way forward.

Methodology

This study makes use of comprehensive systematic literature review. Comprehensive review method is a systematic, explicit, and reproducible for identifying, evaluating, and interpreting the existing body of literature (Fink, 2005; Rashman et al., 2009; Soni & Kodali, 2011). Guided by thematic topics, it reviews studies from journals and reports. The themes aim at capturing the African perspective of information sharing of an information user in the era of social media. As per Khan et al. (2003), the review included five steps: framing questions for a review; identifying relevant work; assessing the quality of studies; summarizing the evidence; and, interpreting the findings. The review involved articles published from 2004 to 2021. As per Kümpel et al. (2015), the year 2004 was chosen as a starting point since (a) Facebook nowadays the largest social media platform worldwide—was launched in this year and (b) earlier founded and already publicly available social media platforms like LinkedIn or Myspace started to gain popularity and thus scientific interest. In order to assess the quality of studies, the following questions guided by Taylor & Gadoud, (2013) and Young & Solomon (2009) were asked: Is the study question relevant? Does the study add anything new? What type of research question is being asked? Was the study design appropriate for the research question? Did the study methods address the most important potential sources of bias?

The review integrated both the automatic and manual search strategies, in order to cover all relevant research papers published in this period. The problem to be addressed by the review was specified in the form of clear, unambiguous and structured questions before beginning the review work. This review was guided by four specific questions including: (1) How is information shared in the era of social media? (2) How social media is contextually relevant for Information sharing in an Africa perspective? (3) What are the motivators and inhibitors/challenges for effective use of social media for information sharing in the African context? Electronic journals and reports written in English language were searched and reviewed. These were supplemented by other sources such as local articles; and reports/policy documents. The study selection criteria flown directly from the review questions and was specified *a priori*. The articles selected were classified into article title and journal details before article analysis (see also Hohenstein *et al.*, 2014; Cassia *et al.*, 2020).

Table 1 presents a summary of themes, authors and respective selected journal articles/reports used. Analysis was done using content analysis. A Pareto analysis was used for summarizing, the vital and least important motivational factor for information sharing on social media platform (Table 3 summarizes). According to Chad Brooks (2014), Pareto analysis is a formal technique useful where many possible courses of action are competing for attention. Information synthesis followed before interpreting the findings.

Table 1: Themes, authors and journal articles/reports

Theme	Author(s)	Journal article/Report	
	&Year		
Motivatio	Mathiesen,	Facets of Access: A Conceptual and Standard Threats Analysis. In	
n for	K. (2014).	iConference 2014 Proceedings (p. 605–611). doi:10.9776/14265	
informati	Heeks, R.	Future Priorities for Development Informatics Research from the Post-	



	(2014	
on	(2014.	2015 Development Agenda, Institute for Development Policy and
sharing.		Management, SEED,
		http://www.seed.manchester.ac.uk/subjects/idpm/research/publications/wp/di/
	Kim, L.	Information Sharing: What Is It? How to Do It? Why Does It Matter?
	(2017).	HIMSS Published on July 14, 2017. Retrieved from:
		https://www.himss.org/resources/information-sharing-what-it-how-do-
		it-why-does-it-matter. Retrieved on 9th May 2020.
		Motivations for sharing information and social support in social
	Syn, S. Y.	i i i i i i i i i i i i i i i i i i i
	(2015).	YouTube, and Flickr. Journal of the Association for Information
	Coston	Science and Technology, 66(10), 2045-2060. doi:10.1002/asi.23320.
	Coston, J. (2011).	Knowledge is power and this is why we share. Humanizing Technology Blog. Retrieved from
	(2011).	https://www.nomensa.com/blog/2011/knowledge-power-and-why-we-
		share on 11/05/2020.
	Moody, D. &	Measuring the value of Information: An Asset Valuation Approach. In
	Walsh, P.	-
	(2002).	resource Management (4th Ed). Seattle, USA: DAMA International
		Press.
	Hur, K.,	An exploration of the factors influencing social media continuance
	Kim, T. T.,	usage and information sharing intentions among Korean travellers.
	Karatepe, O.	Tourism Management, 63, 170-178.
	M., & Lee, G. (2017).	
	Schiuma, G.,	Knowledge sharing motivational factors of using an intra-
	Vuori, V.,	organizational social media platform. Journal of knowledge
	&Okkonen,	management. 16 (4): 592-603.
	J. (2012).	типадетет. 10 (4). 392-003.
	Apuke, O.D.	Fake news and COVID-19: modeling the predictors of fake news
	&Omar, B.	sharing among social media users. Telematics and Informatics. 2021
	(2020).	Jan; 56: 101475. Published online 2020 Jul
		30. doi: 10.1016/j.tele.2020.101475.
	Shang, L.,	Understanding older adults' intention to share health information on
	Zhou, J., &Zuo, M.	social media: the role of health belief and information processing.
	&Zuo, M. (2020).	Internet Research.31(1), 100-122 (2021).
	Dedeoglu, B.	Are information quality and source credibility really important for
	B. (2019).	shared content on social media? <i>International Journal of</i>
	` '	Contemporary Hospitality Management, 31(1): 513–534.
	Liu, L.,	An empirical investigation of information sharing behaviour on social
	Cheung, C.	commerce sites. International Journal of Information Management,
	M., & Lee,	36(5), 686-699.
	M. K. (2016)	

	Razmerita, L., Kirchner, K., & Nielsen, P. (2016).	What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication. Journal of knowledge Management. 20, (6) 1225-1246.
Africa Uniquene ss in	Meyer, H.W.J. (2009).	The influence of information behaviour on information sharing across cultural boundaries in development contexts, 14 (1), Paper 393.
Culture and informati	Kanza, Elsie S. (2016). Iyanda, F.	Africa's digital revolution: a look at the technologies, trends and people driving it. World Economic Forum, Africa. Africa doesn't just need a digital revolution – it needs a cultural one,
on sharing	(2016).	too. Regional Agenda. World economic Forum retrieved from https://www.weforum.org/agenda/2016/04/africa-doesn-t-just-need-a-
	Hepworth, M. (2007).	digital-revolution-it-needs-a-cultural-one-too on 12th Mat 2020 Knowledge of information behaviour and its relevance to the design of people-centred information products and services. Journal of Documentation, 63(1), 35-56
	Rafaeli, S. & Raban, D.R. (2005).	E C
	Mawela, T. (2017)	Exploring the role of social media in the G2C relationship: A South African Perspective, <i>Information Development</i> , 33 (2), 117–132
Social media as anefficie	Gerlich, R. N., et al., (2010)	The social media affinity scale: implications for education.
nt means for informati	Kietzmann, J. H. et al. (2011).	Social media? Get serious! Understanding the functional building blocks of social media. <i>Business horizons</i> , 54(3), 241-251.
on sharing	Mtega, W.P. and Msungu, A.C. (2013)	Using Information and Communication Technologies for Enhancing the Accessibility of Agricultural Information for Improved Agricultural Production in Tanzania, <i>The Electronic Journal of Information Systems in Developing Countries</i> , 56 (1) 1-14.
		Motivations for sharing information and social support in social media: A comparative analysis of Facebook, Twitter, Delicious, YouTube, and Flickr. Journal of the Association for Information Science and Technology, 66(10), 2045-2060. doi:10.1002/asi.23320.
	Pierson, J. & Bauwens, J. (2015).	Digital Broadcasting: An Introduction to New Media. Bloomsbury Publishing: London,UK.
	Martin, J.N. & Nakayama,	Intercultural Communication in Contexts; McGraw-Hill Education: New York,NY, USA
Opportun ities	T.K. (2017). Norman, J. M. (2005).	From Gutenberg to the Internet: Sourcebook on the History of Information Technology. Novato, California: historyofscience.com,



coming		2005.		
from	Chen, H.T. &	The contribution of mobile social media to social capital and		
mobile	Li, X. (2017)	psychological well-being: Examining the role of communicative use,		
telephony		friending and self-disclosure. Computer Human Behavior, 75,958-		
and web		965.		
2.0 in	Anawati, D.,	Behavioral adaptation within cross-cultural virtual teams. IEEE		
Africa	& Craig, A.	transactions on professional communication, 49(1), 44–56.		
	(2006).			
	Galindo, F.	Information Sharing in Knowledge Society. IOS Press, pp.15-22.		
	et al. (2010).			
	Rafaeli, S. &	Information sharing online: A research challenge. International		
	Raban, D.R.	Journal of Knowledge and Learning, 1 (2): 62-79.		
	(2005).			
	Tchouakeu,	Collaborative Humanitarianism: Information Networks that reduce		
	L.M.N. &			
	Tapia, A.H.	Social Indicators Research Series. Springer Science + Business Media,		
	(2015).	Dordrecht.		
	Praditya, D.	Benefits and Challenges in Information Sharing Between the Public		
	& Janssen,	and Private Sectors. Proceedings of the 15th European Conference on		
	M. (2015).	eGovernment 2015: ECEG 2015. Academic Conferences Limited, 246.		

Findings

The findings are presented based on specific research questions: (1) How is information shared in the era of social media? (2) How contextually social media is relevant for Information sharing in an Africa perspective? (3) What are the motivators for use of social media for information sharing in the African context? (4) What are the challenges for effective information sharing in Africa?

Information sharing in the era of social media

Findings as presented in Table 2 indicate that unlike the preceding era, social media makes information sharing ease, ubiquitous and convenient. What makes social media powerful is its user generated content characteristics. Its users are united online based on their interests, activities, and common views or goals, a feature that eases engagement between the sender and potential information receiver. Yet most of interactions are documented. The findings in Table 2 further indicate that flourishing of social media is not without important enablers including the emergency of the Internet supported by Web 2.0; a good number of population owning smart phones; huge investment made in the construction of the National ICT Broadband Infrastructure Fibre Optic Backbone (NICTBB) in some countries such as Tanzania, with mobile phone users accessing internet at lowest costs; access to competitive data bundle packages; enactment of cybercrime Acts that criminalises cyber crime activities. As a result, social media has emerged as a tool that powers to connect and share information among global users ubiquitously; deemphasizes media concentration, centralization, professionalization, bureaucratization and

monopolization of information; and creating a market made up of interacting users thus facilitating communication with customers.

Table 2: Information sharing in the era of social media

Social media	Description
item	
Characteristics	User generated content
	Ubiquitous such that it is available everywhere and at all the times
	Users are united online based on their interests, activities and common views or goals.
	Easy engagement offers opportunities for clarification
	Interactions are documented
Enablers	The Internet supported by Web 2.0
	Good number of population owning smart phones
	Huge investment (for example in Tanzania) made in the construction of the
	National ICT Broadband Infrastructure Fibre Optic Backbone (NICTBB), with
	mobile phone users accessing internet at lowest costs.
	Competitive data bundle packages
	Enactment of cybercrime Acts that criminalises cyber activities
Impact	Powers to connect and share information with anyone on the earth ubiquitously
	Deemphasizes media concentration, centralization, professionalization,
	bureaucratization and monopolization of information
	Creating a market made up of interacting users thus facilitating communication
	with customers

Information sharing motivation using social media in African perspective

The study observes a number of motivational factors to share information using social media in African perspective. In reference to Pareto analysis, the vital factors and least important factors are as presented in Table 3 and Figure 1. They are indicated as perceptions of source credibility; networking/relationship maintenance; enjoying helping others/altruism; reciprocity; socializing; monetary rewards; perceptions of information quality/content types; boosting own reputation/self-promotion; instant news sharing /making day-to-day work easier; and, entertainment. Of the least important factors, they include: self-perceptions of opinion leadership; perceived preference of online news; self-perceptions of opinion seeking; perceived susceptibility; perceived usefulness; trusting that sharing is worthwhile; argument quality and organizational knowledge sharing culture.

Table 3: Pareto analysis on factors motivating information sharing on social media

Factors motivating information sharing on social media Vital factors	Tally	Freq	%age freq	Cum %age Freq
Perceptions of source credibility (CRE)	11111	5	12.2	12.2
Networking/ relationship maintenance motives(NET)		5	12.2	24.4
Enjoy helping others/altruism(ALT)		4	9.8	34.1



Reciprocity (REC)	1111	4	9.8	43.9
Boosting own reputation/ self-promotion(REP)	1111	4	9.8	53.7
Socializing /homophily (SOC)	111	3	7.3	61.0
Monetary rewards (REW)	11	2	4.9	65.9
Perceptions of information quality/content types(QUAL)	11	2	4.9	70.7
Instant news sharing /making day-to-day work easier(EASE)		2	4.9	75.6
Entertainment (ENT)	11	2	4.9	80.5
Least Important facto	ors			
Self-perceptions of opinion leadership	1	1	2.4	82.9
Perceived preference of online news		1	2.4	85.4
Self-perceptions of opinion seeking		1	2.4	87.8
Perceived susceptibility		1	2.4	90.2
Perceived usefulness		1	2.4	92.7
Trusting that sharing is worthwhile		1	2.4	95.1
Argument quality		1	2.4	97.6
Organizational knowledge sharing culture		1	2.4	100.0
TOTAL		41		

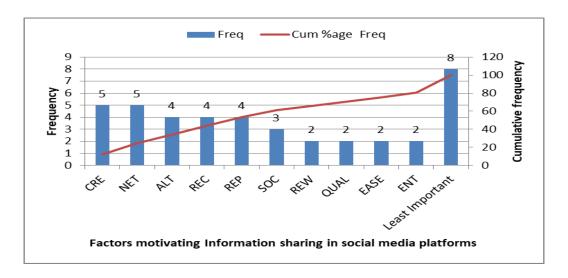


Figure 1: Factors motivating information sharing in social media

Information sharing and social media use in an Africa perspective

Findings as presented in Table 4 indicate that contextually (in terms of cultural environments, organizations, tasks, circumstances, systems, technology, and formal or everyday settings), Africa is unique, an aspect that influence the manners with which information sharing can be done (Meyer, 2009). The findings further indicate that information sharing is within cultural boundaries and tacit in nature that consequently does not always live up to expectations. Besides, findings indicate that, African live in a collective culture that determines information behaviour.

Along with, incoming information is more readily accepted if the messenger or the sender has credibility among the group.

Table 4: Information sharing and social media use in an Africa perspective

Africa	contextual	Being culturally unique
Uniquen	ess	Sharing is within cultural boundaries and it is tacit in nature
		Mostly, African live in a collective culture that determines information
		behaviour.
		Incoming information is more readily accepted if the messenger/sender
		has credibility among the group
		Being resource poor

Challenges to effective information sharing in Africa

The last specific research question was "What are the challenges for effective information sharing in Africa?" The study observes a number of documented challenges to effective information sharing in Africa. As presented in Table 5, the pressing challenges include security threats; availability of electronic devices/hardware and software; knowledge and skills of use; underdeveloped information technology infrastructures such as reliable power supply, affordable internet services, and supportive policies; resources constraints including financial, time, human and ICT equipment; and source/information authority credibility challenge.

Table 5: Challenges to effective information sharing in Africa

Item	List description
Challenges to	Security threats
effective	Availability of electronic devices/hardware and software
information	Knowledge and skills of use
sharing in Africa	Underdeveloped information technology infrastructures
	Being developing country, Africa is resource poor (financially, time, and
	human resources)
	Source/authoritativeness credibility challenge

Discussion of findings

Information sharing in the era of social media

The study has observed how the emergency of social media services (such as LinkedIn, Instagram, Twitter, Flickr, Youtube and Facebook) has increased people's willingness to share personal and professional information now more than ever before (Baccarella *et al.*, 2018). Unlike other websites, online social networks are based on users as opposed to content, without them there would be empty forums, chat room and even applications. Social media users are united online based on their interests, activities and common views or goals. Dollarhide (2019) adjoins that social media tools connect and enable users to interact with one another and have fun with friends and family, thus mirroring basic social norms and human social needs (Chen & Yu-



Qian, 2015; Fuchs, 2017). According to Sawyer & Chen (2012) social media has emerged as an important part of human life through promoting interconnectedness and interdependence of culturally diverse world and cultures. Accordingly, it shapes people's culture and way of thinking, including information sharing behaviour. The number of people who use social media for information sharing is thus increasing, a mechanism almost replacing the traditional ways.

The study has observed that unlike in the past information sharing with social media is ubiquitous (Norman, 2005; Anawati & Craig, 2006) enabling participants to easily and quickly connect, create, comment, view, share, rate, discover, profile and exchange user-generated content wherever they are at all the times (Wasserman & Benequista, 2017; Bradley & McDonald, 2011; Hanna, Rohm, & Crittenden, 2011) than before. Notably, access to desired information can be simply accomplished through friendship requests, followership and likes (Masele & Rwehikiza, 2021). Yet the tools enhance engagement as well as clarification on issues that matter.

According to Kümpel *et al.* (2015), social media not only offer convenient and easy-to-use tools for posting content, but also simplify and facilitate information sharing among organizations and individuals. Studies (Dervojeda, *et al.*, 2014; Domingo *et al*, 2008) indicate increasing engagement over social media among people who trust one another such that they can freely share information. It thus deemphasizes media concentration, centralization, professionalization, bureaucratization, and monopolization of information as hindrances to user access to information (Alemoh& Ishima, 2013). Beyond being fast, vast, and cheap, an advantage of online information sharing is that most interactions are documented.

Globally, there are more than 3 billion social media users today (Clement, 2020) sharing information through articles, photographs, videos, and recordings with others (Salmerón, *et al.*, 2018). In Africa, a number of local social media forums are already in boom. For example, in Tanzania, apart from Facebook, Twitter YouTube, LinkedIn, Blogs, WhatsApp and Instagram, local popular social media platforms include the Jamii Forums, Michuzi blog, Mabadiliko forum, Milard Ayo blog, Mpekuzi blog, Bongo 5, Bongo-Lob and other more (Masele& Magova, 2017). Other sites with added social media features include newspaper sites such as The Citizen, Daily News, Global Publishers, and the This Day (Masele& Magova, 2017). Other countries in Africa, likewise, have their own locally used platforms. It is thus an opportunity for users to share information and engage for their information needs efficiently. Mawela (2017) asserts that where the potential of social media tools is optimally exploited it will enable information gathering and exchange to meet user satisfaction for information access and sharing needs.

The study has identified a number of important supporting factors that has led to social media use booming in Africa. The factors include, the emergence of internet supported by Web 2.0 and growth of; phones technology especially smart-phones (Grewal & Levy, 2014; Chen & Li, 2017) thus reaching more and more people including those in remote areas. The Africanews (2017), records that there were about 731 million phone users in Africa by 2016 and it was expected to rise by 2020. The speed of Internt has kept improving, from first generation (1G) to the much anticipated fifth generation (5G), come 2020 allowing data transfer of up to 1 terabyte per second (BBC, 2015) catalysed by heavy infrastructural investments including layinng down fibre optic technology. Selected African countries mobile phone subscription include Nigeria (172.73 mil), Egypt (93.78 mil), South Africa (92.43 mil), Ghana (40.93 mil.), Kenya (49.50 mil) and Uganda (24.47 mil) [ITU, 2018]. Already Tanzania had seven Mobile Service Providers by December 2019 including; Airtel, Tigo, Vodacom Tanzania, Zantel, Smart, TTCL, and Halotel

(TCRA, 2020), serving more than 43 million subscribers, with mobile phone usage projected to be 20 times by 2019 (ITU, 2018). These are driving social media use through their competitive data bundle packages, and affordable smart-phone campaigns. If well contemplated it has a lot of promise to ensure effective information sharing through social media

While, the emergence of social media has led to the expansion of the level of information sharing and socialization among individuals in the society in general, its impact to businesses has been enormous including reaching out its customers. According to Hajli & Lin (2016), social media give useful data to businesses for future strategies based on online sharing. It has power to connect and share socio-economic information wellbeing with anyone on Earth or with many people simultaneously at low cost possible (Masele & Magova, 2017; Grewal & Levy, 2014; Stelzner, 2014; Okoh & Lucky, 2014). According to Lin et al. (2013), social media has been a market that is completely made up of interacting users and has become a platform where users share and discuss their own experience with each other about everything. It facilitates business enterprises communication with customers, enabling the melding of social interactions on ecommerce sites thus easily accessing virtual communities, allowing individuals to be easily accessible. Through social media individuals then interact with each other or within groups that share common business interests and goals. They help fulfil communication needs and wants of users by disseminating information among different groups in a more efficient manner, resulting in increased productivity (Kietzman et al., 2011), increased venture opportunities and efficiently reaching established communities of information users for their information needs (Okoh & Lucky, 2014).

Information sharing motivation in social media

Social media could not have thrived so successfully without some motivators. The study has identified that credibility of the source of information and networking motives are the top priority motivators for sharing information on social media platforms. Other vital factors include altruism, reciprocity, self-promotion, socializing, monetary rewards, perceptions of information quality, entertainment, information seeking behaviour among others (Liu et al., 2016; Hur et al., 2017; Dedeoglu, 2019; Shang, et al., 2020). According to Oh and Syn (2015), motivation towards using social media can be intrinsic or extrinsic. Where motivation is intrinsic people visit social media simply because they like to use them with self-encouragement or self-interest (Król & Zdonek, (2020). Extrinsic motivation on the other hand is externally motivated, for monetary (e.g. quest for financial rewards) or non-monetary incentives including a desire for reputation building (Schiuma et al., 2012) as well as to stimulate people to contribute more in community activities (Oh & Syn (2015), relationship maintenance (Liu et al., 2016; Hur et al., 2017), knowledge sharing, making day-to-day works easier; adding value to knowledge and trusting that sharing is worthwhile (Schiuma et al., 2012). Razmerita (2016) identified that the drivers for information sharing on social media are; enjoy helping others, monetary rewards, management support and organizational citizenship and culture to share information products and knowledge.

A study on Information sharing activities in five different types of social media- Facebook, Twitter, Delicious, YouTube and Flickr, identified a number of social media activities, including creating postings, photos, and videos. Other identified activities include sharing information on products advertised online and later buy it through online as well (Sin *et al.*, 2012); playing games online and to discuss on sports like football and computer software (Ali et al., 2010);



communicating on matters regarding self-interest and music (Oh and Syn, 2015); sharing education related such as educational materials (Gerlich *et al.*, 2010); having fun and for knowing about the current status of others (Quan-Haase & Young, 2010); posting photos; expressing their feelings and impressions; sharing videos and music; and posting new links. This is also in line with to Kietzman *et al* (2011), who argue that people in social media are connected to each other by shared objects, whether it is a picture, text, video, link, audio or location, depending on the aim and the content of the site.

Oh and Syn (2015) summarizes ten motivation factors to using social media including: enjoyment (participating in social media as a hobby, useful for finding information and sharing it with those who need it); self-efficacy (feeling a sense of accomplishment); learning (updating oneself with information about topics of interest), personal gain (information related to ones' businesses); altruism (need to help others without expecting external rewards); empathy (providing social and emotional support for one another); social engagement (communication with peer users or collaborate with them to find solutions to problems, or simply enjoy feelings of engagement with others); community interest (discussing certain community topics of interest), reciprocity (share information to return favours that they receive from others); and reputation (seeing increasing in the number of friends or followers or to be recognized as top contributors) as the motivations of social media users based on reviews of major motivation theories and models (see also Hsu & Lin, 2008; Lin & Lu, 2011; Kietzman *et al.*, 2011; Oh & Syn, 2015). Findings from Oh & Syn (2015) study further indicate that all of the ten motivations are influential in encouraging users' information sharing to some degree and strongly correlate with one another.

The findings of this study further have revealed that effective information sharing depends on each party disclosing information that may facilitate the other party's activities. People share personal information in order to maintain relationships with other individuals. The findings are in line with Martin & Nakayama (2017) who observes that social media is a means of exchanging opinions, ideas, and viewpoints with other people from diverse communities such as churches, schools, diverse volunteer groups, organizations, and workplaces. In doing so it endows every one with rich information important for various socio-economic endeavours.

Information sharing and social media use in an Africa perspective

Unlike most of developed countries, developing countries including Africa are contextually different in terms of culture and developmental levels which affect the way information is shared (Meyer, 2009). While, the process of information sharing across cultural boundaries can be affected by a variety of factors, some of them are not easily detected, because they are of a tacit in nature. Some of these contextual elements include power structures and the hierarchical nature of society, as well as social forces in communities where knowledge, characteristics, expectations and norms are internalized to varying degrees in the individual (Hepworth, 2007). Studies indicate that Africa society is collectivistic in nature and seeks to maintain existing relations in social network sites. Besides, Africa is to a large extent used to oral culture, and information flow is controlled by attitudes, perceptions, norms, values and belief systems inherent to local culture that in turn influence access, use and acceptance of shared information (Meyer, 2009; Sawyer & Chen, 2012). Meyer (2009) observes that in a collective culture, incoming information is more readily accepted if the messenger or sender has credibility among

the group. Or else users may approach a knowledgeable person they trust for approval. If the group thinks the incoming information, product or technology is a viable option, the individuals in the group will accept it more readily or else it may be rejected (Sawyer& Chen, 2012). This consequently affects how information users behave through social media.

As Kanza (2016) advices that while the digital revolution is hoped as a way to transform Africa it must not lose sight of its cultural aspects. This is also supported by Iyanda (2016) who arguments that, Africa doesn't just need a digital revolution – it needs a cultural one, too. Iyanda (2016) further argues that if well taken, digital technologies are helping Africans forge a sense of cultural cohesion that could lead to wider continental integration. Without careful scrutiny, ICT can become either bridges or barriers in information sharing practices.

Challenges to effective information sharing in Africa

Information sharing is a complex multi-dimensional phenomenon affected by behavioural, social, economic, legal, and technological influences, to name a few. Yet, this study has observed that, the impact with each factor varies with context. For example, the quality, availability and accessibility of information are low in Africa as compared to the counter parts in developed world. According to Rafaeli & Raban (2005), acquiring information and knowledge demand many resources including technology, time, and skills and funding which without properly planning and managing them it may make information sharing difficult. Erlandson (2010) adds that user knowledge and skills are important as exchange does not rest upon computers but, rather, the people who use them. Related to personnel/ people knowledge and skills include the moral, technical, didactic, information asymmetric, as well as self efficacy. Yet, presence of well-established ICT infrastructure and respective facilitating conditions including presence of well-established sharing guidelines, supportive laws and regulations are important to enable successful information sharing (Kanza, 2016).

Literature asserts that when someone shares information in an online environment, several security threats related consequences exist including failure to recognize the actual recipients of information and failure to get as much information (Schiuma *et al.*, 2012). For example, shared information through the social networking is realized on Internet and all information resources could be accessible from different points in the world (Romansky, 2014). Each user uploads information that will be shared between a set of users of social network and it could be disseminated to different locations (Romansky, 2014). In this case the data subject does not know what policy and measures are used for counteraction to eventual attacks. Among the top consequences are identity theft and stalking, privacy breach, fraud, blackmail and other cybercrimes including hacking (Romansky, 2014; Praditya & Jansen, 2015) that consequently lead to lack of trust. Besides, a huge amount of personal information about users is stored by the online social networks which might be used not only by truthful users but also third parties with rather adverse purposes as well (Romansky, 2014).

A study by Apuke and Omar (2020) in Nigeria relating to COVID-19 pandemic for example revealed that altruism, instant news sharing, socialization and self-promotion were found to be high predictors of fake news sharing related to COVID-19 pandemic among social media users. Dedeoglu (2019) study on tourists' perceptions of social media, identified that tourists' perceptions of source credibility regarding social media content and perceptions of information quality had a positive impact on the importance attached to participant shared content. This is in



line with Kim *et al* (2021) who identified that source type and content types had a high influence on click intention and the intentions to share information on social media platforms.

Barnes (2006) posits three different ways/solutions to protect privacy in online SNSs—social solutions, technical solutions, and legal solutions. The social solutions to the privacy paradox begin at ethical upbringing from home and community around the user. The technical solutions have to do with skills to develop, operate and maintain the hardware and software in order to discourage any privacy violations. New user of social media needs to learn the features of a particular social media website to be able to use. To ensure confidentiality, measures for counteraction to all forms of destruction or loss of personal data, to an unauthorized access, and to all illegal forms of processing need to be well installed. They may include authentication of users, use of strong passwords, encryption, and others. According to Romansky (2014), the service providers should guarantee an effective protection of data integrity and data availability.

Although there are already existing laws in Africa, their enforceability level is not clear. In Tanzania for example although the Cybercrime Act of Tanzania enacted in 2015, criminalizes and penalizes among others cyber activities such as publication of false, deceptive, misleading or inaccurate information, initiating transmission of or re-transmission of unsolicited messages and violation of intellectual property rights and other types of cybercrimes, cybercrime activities are still ongoing. If well contemplated it has a lot of promise to ensure quality information sharing through social media. Gercke (2012) suggests that laws need to grant local and national authorities new tools and mechanisms for identifying, tracing and prosecuting cybercriminals.

Conclusions, Study Conceptual Model and Implications

Considering the findings from this study it is evident that information sharing is inevitable especially in resource poor contexts like Africa. With well contemplation, social media has a lot of promise to ensure effective information sharing - one that enhances bi-directional, horizontal, and vertical information-sharing relationships; that ensure that critical information infrastructure is fully accessible to the public; and which it done under clearly defined information sharing roles, rules, and responsibilities among members.

The study has conceptualized that the ease of use, ubiquity, and convenience social media offers to information user influences the effectiveness of information sharing. However, the study considers extent of use as a function of presence on Social Media platforms and required components to allow for ubiquitous exchange of information as it avails to a user, and extent to which individuals and entities pass information to each other. The challenges revealed by this study act as influencing factors on the extent of use of social media. These include ICT infrastructure; security & privacy concerns; knowledge and skills; allocation of adequate resources (financials, equipment, time, and human resources); and availability of supportive national policies and regulations. Investments in important ICT infrastructure, user knowledge and skills and ensuring security and privacy are important for effective social media usage in sharing information. Although there are already existing laws in Africa, they need to be enforced. For example, the Cybercrime Act of Tanzania enacted in 2015, criminalizes and penalizes among others cyber activities such as publication of false, deceptive, misleading or inaccurate information, initiating transmission of or re-transmission of unsolicited messages and violation of intellectual property rights and other types of cybercrimes (URT, 2015).

The proposed model notes that there are important moderating factors that resonate how social media use can influence information sharing in African context. They include attitudes, values and belief systems inherent to local culture; concerns on source type and content credibility; networking motives; self efficacy and desire for reputation building; quest for financial rewards; and feeling a sense of accomplishment. Figure 2 details.

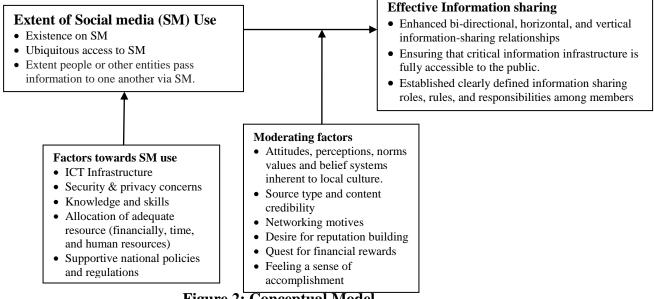


Figure 2: Conceptual Model
Source: Author's own conceptualization

This study has a number of implications. Unless issues related to information sharing are contextually examined, it may contribute to poor use or non-use of the information or information services at a particular social media disposal. A mechanism needs to be formulated that fits the belief systems inherent to African local cultures. Inculcating networking motives; self efficacy and attitude and a sense of accomplishment and altruism is important. Yet, attaching social media usage to monetary values; quest for financial rewards and enterprising user competitiveness through ease learning about competitors and connecting with potential customers globally have awesome results. It is thus a game changer that Africa can invest and capitalize for information sharing.

References



- Africanews. (2017). Over half a billion mobile subscribers in Africa by 2020 [Hi-Tech]. Retrieved from https://www.africanews.com/2017/07/25/over-half-a-billion-mobile-subscribers-in-africa-by-2020-hi-tech.
- Afzal, W. (2012). Management of Information Organizations. *Libraries Research Group, Information and Communication Studies*. Chandos Publishing.
- Alemoh, T. A., & Ishima, L. (2013). Social Media: An emerging conundrum? *An International Journal of Arts and Humanities*, 2(2), 236-253.
- Alexander, R. (2013). How much of the world's workforce will come from Africa? BBC News. Retrieved from https://www.bbc.com/news/magazine-23030403
- Anawati, D., & Craig, A. (2006). Behavioral adaptation within cross-cultural virtual teams. *IEEE Transactions on Professional Communication*, 49(1), 44–56.
- Apuke, O.D. & Omar, B. (2020). Fake news and COVID-19: Modeling the predictors of fake news sharing among social media users. *Telematics and Informatics*, 56, 101475. doi: 10.1016/j.tele.2020.101475.
- Baccarella, C.V., Wagner, T.F., Kietzmann, J.H., &McCarthy, I.P. (2018). Social media? It's serious! Understanding the dark side of social media. *European Management Journal*, 36 (4), 431–438.
- BBC (2015). 5G Researchers Manage Record Connection Speed. [Online] Available at: http://www.bbc.com/news/technology-31622297 [Accessed 28 June 2020].
- Bentley, C. (2018). Information sharing: Advice for practitioners providing safeguarding services to children, young people, parents and carers. Bevan Brittan.
- Berman, J. (2013). Vision statement: Seven reasons why Africa's time is now. *Harvard Business Review*, 91(10), 34 35.
- Bradley, A.J., & McDonald, M.P. (2011). The Social Organization: How to Use Social Media to Tap the Collective Genius of Your Customers and Employees, Harvard Business Press.
- Chad Brooks (2014). What is a pareto analysis? Business News Daily Senior, March 29, 2014.
- Chen, H.G. & Yu-Qian, Z. (2015). Social media and human need satisfaction: Implication for social media marketing. *Business Horizons*, 58 (3), 335-345.
- Chen, H.T. & Li, X. (2017). The contribution of mobile social media to social capital and psychological well-being: Examining the role of communicative use, friending and self-disclosure. *Computer Human Behavior*, 75,958–965.
- Clement, J. (2020). Number of global social network users 2010-2023. Retrieved fromhttps://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/
- Coston, J. (2011). Knowledge is power and this is why we share. Retrieved from https://www.nomensa.com/blog/knowledge-power-and-why-we-share.
- Dedeoglu, B. B. (2019). Are information quality and source credibility really important for shared content on social media? *International Journal of Contemporary Hospitality Management*, 31(1), 513–534.
- Dervin, B., Harlock, S., Atwood, R. & Garzona, C. (1980). The human side of information: An exploration in a health communication context. In: Nimmo, D., ed. *Communication Yearbook 4. New Brunswick, N.J.:Transaction Books, 1980,591-608.*
- Dervojeda, K., Verzijl, D., Nagtegaal, F., Lengton, M., Rouwmaat, E., Probst, L., & Frideres, L. (2014). Innovative business models for competitiveness: Social Media for Internationalisation. *Case Study, Business Innovation Observatory, European Commission*, 190(12), 1-21.

- Dollarhide, M.E. (2019). Social media definition. Retrieved from https://www.investopedia.com/terms/s/social-media.asp
- Erlandson, R.J. (2010). *Digital culture: the shifting paradigm of systems librarians and systems departments*. In: An Overview of the Changing Role of the Systems Librarian: Systemic Shifts, Iglesias, E. (Ed.). Oxford, UK: Chandos Publishing. pp. 1-14.
- Evans, C. (2001). *Developing and Retaining Organisational Knowledge*. Roffey Park Institute Fink, A. (2005). *Conducting Research Literature Reviews*. Sage.
- Fuchs, C. (2017). From digital positivism and administrative big data analytics towards critical digital and social media research. *European Journal of Communication*, 32(1), 37–49.
- Galindo, F., Guidotti, M., Gulevich, V., Gursky, E., Kolesnikove, S., (....) & Vinograd, N. (2010). *Information Sharing in Knowledge Society*. IOS Press, 15-22.
- Gercke, M. (2012). Understanding cybercrime: Phenomena, challenges and legal response. ITU publication. Retrieved from www.itu.int/ITU-D/cyb/cybersecurity/legislation.html
- Gerlich, R. N., Browning, L., & Westermann, L. (2010). The social media affinity scale: Implications for education, *Contemporary Issues in Education Research*, 3(11), 35-41.
- Grewal, D. & Levy, M. (2014). Marketing. 4th ed.McGraw-Hill Education; 4th Edition.
- Hajli, N.& Lin, X. (2016). Exploring the security of information sharing on social networking sites: The role of perceived control of information. *Journal of Business Ethics*, 133 (1), 111–123. doi:10.1007/s10551-014-2346-x.
- Hanna, R. Rohm, A. & Crittenden, V. (2011). We're all connected: The power of the social media ecosystem. *Business Horizons* 54(3), 265-273. DOI:10.1016/j.bushor.2011.01.007.
- Heeks, R., Foster, C., & Nugroho, Y. (2014). New models of inclusive innovation for development. *Innovation and Development*, 4 (2), 175-185, DOI: 10.1080/2157930X.2014.928982.
- Hohenstein, N. O., Feisel, E. & Hartmann, E. (2014). Human resource management issues in supply chain management research: A systematic literature review from 1998 to 2014. *International Journal of Physical Distribution & Logistics Management*, 44(6), 38-52.
- Hur, K., Kim, T. T., Karatepe, O. M. & Lee, G. (2017). An exploration of the factors influencing social media continuance usage and information sharing intentions among Korean travellers. *Tourism Management*, 63 (C), 170-178.
- Iyanda, F. (2016). Africa doesn't just need a digital revolution it needs a cultural one, too: Regional Agenda. World economic forum. Retrieved from https://www.weforum.org/agenda/2016/04/africa-doesn-t-just-need-a-digital-revolution-it-needs-a-cultural-one-too
- Kanza, E. S. (2016). Africa's digital revolution: A look at the technologies, trends and people driving it. World Economic Forum, Africa.
- Khan, K.S., Kunz, R. Kleijnen, J. & Antes, G. (2003). Five steps to Conducting a systematic review, *Journal of the Royal Society of Medicine*, 96(3):118-121, DOI:10.1258/jrsm.96.3.118.
- Kietzmann, J. H., Hermkens, K. & McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54 (3), 241-251.
- Kim, L. (2017). Information sharing: What is it? how to do it? why does it matter? Retrieved from: https://www.himss.org/resources/information-sharing-what-it-how-do-it-why-does-it-matter.



- Król,K. & Zdonek, D. (2020). Social media use and its impact on intrinsic motivation in Generation Z: a case study from Poland, *Global Knowledge, Memory and Communication*, 70(4–5), 442–458. https://doi.org/10.1108/GKMC-08-2020-0113
- Kumar, V. & Nanda, P. (2019). Social media in Higher Education: A framework for Continuous Engagement. *International Journal of Information and Communication Technology Education*, 15 (1), 25-41.
- Kümpel, A. S., Karnowski, V. & Keyling, T. (2015). News sharing in social Media: A review of current research on news sharing users, content, and networks. *Social Media + Society*, DOI: 10.1177/2056305115610141
- Li, Y., Ye, F. & Sheu C., (2014). Social capital, information sharing and performance, *International Journal of Operations & Production Management*, 34 (11), 1440 1462.
- Liu, L., Cheung, C. M., & Lee, M. K. (2016). An empirical investigation of information sharing behavior on social commerce sites. *International Journal of Information Management*, 36(5), 686-699.
- Ma, L., Lee, C. S., &Goh, D. H. L. (2014). Understanding news sharing in social media: An explanation from the diffusion of innovations theory. *Online information Review*, 38 (5), 598–615.
- Martin, J.N. & Nakayama, T.K. (2017). *Intercultural Communication in Contexts*. McGraw-Hill Education.
- Masele, J.J. & Magova, G.B. (2017). Towards social media usage for promotional activities in Tanzanian pension schemes: A factor scores regression analysis of perceived factors. *Business Management Review*, 20 (1), 38-53.
- Masele, J.J. & Rwehikiza, D.P. (2021). Applications of social media for promoting higher learning institutions' activities in Tanzania. *International Journal of Education and Development using ICT*, 17 (2), 37-54.
- Mathiesen, K. (2014). Facets of access: A conceptual and standard threats analysis. In *iConference 2014 Proceedings* (p. 605–611). doi:10.9776/14265.
- Mawela, T. (2017). Exploring the role of social media in the G2C relationship: A South African perspective. *Information Development*, 33 (2), 117–132.
- Meyer, H.W.J. (2009). The influence of information behavior on information sharing across cultural boundaries in development contexts. *Information Research*, 14 (1), Paper 393. Accessed on May 20th, 2020 at http://InformationR.net/ir/14-1/paper393.html
- Moody, D. & Walsh, P. (2002). Measuring the value of Information: An asset valuation approach. *In B. Morgan and C. Nolan (Eds). Guidelines for implementing data resource Management* (4th Ed). DAMA International Press.
- Norman, J. M. (2005). From Gutenberg to the Internet: Sourcebook on the history of information technology. Novato.
- Nyam, A. & T. (2015). Information needs and seeking behaviour of medical students, International Journal of Innovative Research Development, 4 (11): 158-163.
- Oh, S. & Syn, S. Y. (2015). Motivations for sharing information and social support in social media: A comparative analysis of Facebook, Twitter, Delicious, YouTube, and Flickr. *Journal of the Association for Information Science and Technology*, 66(10), 2045-2060.DOI: 10.1002/asi.23320.

- Okoh, M.I. & Lucky, A.O. (2014). Use of Social media for information sharing among students of federal university of petroleum resources Effurun (FUPRE). *Journal of Applied Information Science and Technology*, 7 (2) 66 76.
- Ponelis, S. R. & Holmner, M. A. (2015). ICT in Africa: Enabling a better life for all. *Information Technology for Development*, 21(1), 1-11. DOI:10.1080/02681102.2015.1010307.
- Powell, C. A., & Smith, J. C. (2003). Information literacy skills of occupational therapy graduates: A survey of learning outcomes. *Journal of Medical Library Association*, 91(4), 468–477.
- Praditya, D. & Janssen, M. (2015). Benefits and challenges in information sharing between the public and private sectors. *Proceedings of the 15th European Conference on eGovernment 2015*: ECEG 2015. Academic Conferences Limited, 246.
- Rafaeli, S. & Raban, D.R. (2005). Information sharing online: A research challenge. *International Journal of Knowledge and Learning*, 1 (2): 62-79.
- Rashman, L., Withers, J. & Hartley, J. (2009). Organizational learning and knowledge in public service organizations: A systematic review of the literature, *International Journal of Management Reviews*, 11(4), 463-494. DOI:10.1111/j.1468-2370.2009.00257.x.
- Rashman, L., Withers, J. & Hartley, J. (2009). Organizational learning and knowledge in public service organizations: A systematic review of the literature. *International Journal of Management Reviews*, 11(4), 463-494. DOI:10.1111/j.1468-2370.2009.00257.x.
- Razmerita, L., Kirchner, K., & Nielsen, P. (2016). What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication. *Journal of Knowledge Management*, 20, (6) 1225-1246.
- Reddy, B.S., Krishnamurthy, M. & Asundi, A.Y. (2018). Information use, user, user needs and seeking behaviour: A review. *Journal of Library & Information Technology*, 38 (2): 82-87, DOI: 10.14429/djlit.38.2.12098
- Romansky, R. P. (2014). Social media and personal data protection. *International Journal on Information Technologies & Security*, 4 (2014), 65-80.
- Salmerón, L.; García, A. & Vidal-Abarca, E. (2018). The development of adolescents' comprehension-based Internet reading activities. *Learning Individual Differences*, 61, 31–39.
- Savolainen, R. (2017). Information sharing and knowledge sharing as communicative activities. *Information Research*, 22 (3).
- Sawyer, R. & Chen, G-M. (2012). The impact of social media on intercultural adaptation. *Intercultural Communication Studies*, 21 (2), 151-169.
- Schiuma, G., Vuori, V., &Okkonen, J. (2012). Knowledge sharing motivational factors of using an intra-organizational social media platform. *Journal of Knowledge Management*, 16 (4), 592-603.
- Shang, L., Zhou, J., &Zuo, M. (2020). Understanding older adults' intention to share health information on social media: The role of health belief and information processing. *Internet Research*, 31(1), 100-122.
- Sin, S. Nor, K. M. &Al-Agaga, A.M. (2012). Factors Affecting Malaysian young consumers' online purchase intention in social media websites, *Social and Behavioral Sciences*, 40, 326 333.
- Soni, G. & Kodali, R. (2011) A critical analysis of supply chain management content in empirical research. *Business Process Management Journal*, 17 (2), 238-266. https://doi.org/10.1108/14637151111122338.



- Sonnenwald, D.H. (2006). Challenges in sharing information effectively: examples from command and control. *Information Research*, 11(4), paper 270. Retrieved from http://www.informationr.net/ir/11-4/paper270.html
- Spink, A. & Cole, C. (2004). Introduction. *Journal of the American Society for Information Science and Technology*, 55(9), 767-768.
- Stelzner, M.(2014). 2014 Social media marketing industry report. How marketers are using social to grow their business, social media examiner. Retrieved from https://www.academia.edu/20766156/How_Marketers_Are_Using_Social_Media_to_Grow _Their_Businesses_M_A_Y_2_0_1_5.
- Taylor, P., Hussain, J. A., & Gadoud, A. (2013). How to appraise a systematic review? *British Journal of Hospital Medicine*, 74(6), 331-334. doi:10.12968/hmed.2013.74.6.331
- Tchouakeu, L.M.N. & Tapia, A.H. (2015). Collaborative humanitarianism: Information networks that reduce suffering. In Anderson, R.E (ed). World suffering and quality of life. *Social Indicators Research Series*. Springer, Dordrecht.
- TCRA. (2020). Tanzania number of internet users crosses 27 million. https://www.webcontactus.com/tanzania-communication-regulatory-authority/.
- The International Telecommunication Union, ITU (2018). Tanzania: Mobile phone subscribers. Retrieved from https://www.theglobaleconomy.com/Tanzania/Mobile_phone_subscribers/on 12/05/2020.
- URT (2015). The Cybercrimes Act, 2015. United republic of Tanzania.
- Wasserman, H. & Benequista, N. (2017). Pathways to media reform in Sub-Saharan Africa: Reflections from a Regional Consultation, Centre for International Media Assistance. Retrieved from https://www.cima.ned.org/publication/pathways-to-media-reform-in-sub-saharan-africa/.
- World Population Review. (2021). World Population Prospects (2019 Revision): United Nations population estimates and projections, Retrieved from https://worldpopulationreview.com/continents/africa-population.
- Young, J. M., & Solomon, M. J. (2009). How to critically appraise an article. *Nature Clinical Practice Gastroenterology and Hepatology*, 6(2), 82-91. doi:10.1038/ncpgasthep1331.