CHAPTER SIX

SOCIAL MEDIA RESEARCH METHODOLOGY: CONDUCTING QUALITATIVE, QUANTITATIVE AND MIXED APPROACHES

Nicholas Anyuor

Communications, Journalism and Media Studies, Rongo University, Kenya

nanyuor@gmail.com

CHAPTER OBJECTIVES

- Detailed discussions on types of social media research methodologies.
- The approaches to use in applying quantitative, qualitative and mixed methodologies in social media research.

ABSTRACT

Social media is not simply the utilisation of social networks such as the passing of time and finding about other people, as has been expressed by many scholars. However, the platform is shifting towards serious aspects of human life. It has been evident that it plays a crucial role in socialisation, public debate, interactions and exchanging ideas; helps in trade, legislation, peace and conflict matters, and governance, among others. All of these are key and of great interest to social scientists, and therefore conducting social media research is of great value to society. Howbeit, handling social media research is quite challenging and requires innovative approaches. It is in this understanding that this Chapter has been dedicated to tackling social media research methodologies. It discusses different approaches of research such as quantitative, qualitative and mixed, and how they can be applied in conducting social media research.

Keywords: Mixed methodology, Qualitative, Quantitative, Quantitative, qualitative and mixed approaches, Social media research

INTRODUCTION

In everyday life, good and bad things happen. Complexities such as climate change, the development of new technologies, among others, have become matters of concern. The emergence of new technology has empowered and fuelled the utilisation of 'new' social media platforms such as *Facebook, WhatsApp, Twitter,* and *Instagram*, which have so far become tools of massive interactive communication, changing human communicative behaviour at a very fast pace.

The 'newness' of social media has brought concerns in the world of communication that need to be researched; phenomena that require investigations that can be achieved through systematic discovery in order to give the correct answers. It is at this level that research is needed to provide helpful insights toward demystifying such societal mysteries. This Chapter

has, therefore, discussed the concepts of research and social media; the meaning of research, the origin of social media, and three major research approaches (qualitative, quantitative and mixed) involved in social media.

THE CONCEPT OF SOCIAL MEDIA RESEARCH

When discussing research, it is invaluable to first understand what kind of research this Chapter is deliberating on. This is because there are many different types of research, some of which are not relevant to this Chapter. For example, a communication skills student who goes to the library, interviews librarians about Library Skills, reads books about the same topic, and eventually writes a paper, will also claim to have conducted research. However, this is not the kind of research we want to talk about in this Chapter. The Chapter discusses research that, according to Jwan and Ong'ondo (2011), is a 'deliberate, systematic, critical, trustworthy and ethical process of inquiry that is undertaken to make a worthwhile contribution to knowledge within a particular aspect of life' (p.1); it is research that focuses on empirical evidence where data are systematically collected, analysed, interpreted and reported (*ibid*).

Nyandemo (n.d), for example, argues that research is the logical, purposeful, formal and critical activity meant to create knowledge; that it is a process of discovery in which answers and solutions to immediate and long-term problems and questions are sought, exposed, examined and investigated. In this case, through research, societal phenomena that affect man directly or indirectly are investigated and the right answers are sought in effort to demystify the mysteries. Mugenda and Mugend*a* (2003) argue that research has become one of the many different sources of knowledge meant to describe a phenomenon, predict a situation and empower individuals.

Social media, on the other hand, as the name suggests, is a kind of media platform that is 'social.' It is 'social' as it creates an opportunity or space for social interaction where web-based technologies are used (Kanwar*, 2021). These are websites that create room for users to share content such as ideas, messages, photos, and videos in the form of networking sites such as *Facebook, Google Plus, Blogs, Twitter, and WhatsApp*, among others (Kanwa*r, 2021). The era of social networking using different forms of media did not start recently. Kanwar (2021) avers that social media is more than networking websites such as WhatsApp, Facebook, Twitter, and the rest. It is an area that includes all activities and services that facilitate the creation, sharing and exchange of user-generated content (Urquhart & Vaast*, 2012). Therefore, the technology of 'social media' is not as new as people may think. The aeon started around 2, 000 years ago (Standage, 2013). Standage (2013) asserts that social communication was in existence at the times of Romans in the form of different documents such as letters, for example, which were shared through papyrus rolls. In this way, the opportunity for commenting was created.

Baruah (2012) traces 'social media' to the use of drums, smoke and beacon fires in ancient China, Egypt and Greece; arguing that these forms of communication opened space for interactions among the people even though they were not as fast as the modern web-based

platforms of *Facebook, Twitter*, and the rest. "The seeds of social media were sown during 550BC when the regular postal system was established in Iran where horse-drawn wagons carried mail" (Baruah, 2012: 3). Then later there was a turning point in the area of social media as technology advanced and the emergence of 'modern' social media came to fore. This has provided a faster opportunity for information sharing; what many scholars see as acritical juncture in the history of the internet since it has made technology all-inclusive where the audience isno longer silent consumers of the media content.

On the level of popular usage, these technological advancements had not been known until after the 1990s when blogs and Google, for example, came into existence (Allen, 2012; Scholz, 2008). Scott and Jacka (2011) opine that between the years 1993 and 1995, Internet Services Providers (ISPs) started offering internet access in some cities in the United States of America. This promoted wide sharing of opinions through individual homepages. Later other social media platforms such *MySpace, YouTube, Twitter,* and *Facebook,* were launched between the years 2000 and 2009 (Murphy & Dean,2014). Fuchs (2017) observes that social media, just like other media, are not only technology oriented but are also techno-social where apart from the technological aspect, they are also social at the levels of human activities. Development of such technological advancements allows people to create their own contents that they can share, respond to, collaborate with, and therefore, giving impetus to the development of social media that we use in the current world (Kanwar, 2021).

Today, according to Dean (2021), there are more than 4.48 billion social media users in the world with an average engagement of 6.6 on various social media platforms. This puts social media as a very crucial outlet whose impact cannot be gainsaid. The impact of the digital revolution is so immense that social media can fuel violence and crush a community or society to smithereens or can promote democracy and good governance for the betterment of society. Globally, social media has played a critical role in revolutions and in democratisation. For example, past revolutions that struck Arab countries like Egypt, Tunisia, Yemen, to mention a few, have been partly a result of the use of social media platforms such as *Facebook and Twitter* (Soliman, 2021). On the other hand, social media has been effectively used in countries such as Namibia to promote good governance. In a study by Mwilima *et al. (*2018), the increased use of information technology in Namibia, especially during elections, facilitates communication between government and its people. This study concluded that since internet came into being, consumption of content via traditional media such as newspapers and television is losing strength in the 21st century as audiences rush for content found on different social media platforms (*ibid*). This proves that social media has an impact on society and its people. It is on this impact and strength of social media that more research is needed. And as the word 're-search' gives birth to 'research', meaning 'to search again'(Pandey & Pandey,2015); 'research' is a systematic investigation to gain new knowledge, new facts, new ideas and new concepts of the already existing ones, it is importunate to continuously re-search on social media.

Therefore, when we talk about social media research, we talk of logical, purposeful, formal and critical activity meant to create knowledge in the social media field; a process of

discovery in which answers and solutions to immediate and long-term problems and questions of social media are sought, exposed, examined and investigated. Even though social media is popular, it is giving a narrow view of human social life since not all groups are equally represented on social media platforms (McClay-Peet et al., 2017). Again, there are sections of the population and some areas of the world that do not access the Internet.Social media research is indeed associated with big data that are classified into 3Vs - namely volume, velocity and variety - derived from different platforms such as *Facebook, Twitter, Instagram*, and the rest (Kitchin, 2014). Scholars argue that the social media large data that are published create a problem of including sensitive data in the study; data that can easily be linked to personal identifiers (Fuchs, 2017). For the researcher to be on the safe side when conducting a social media study, the data should be read item by item and then anonymise the identities of the originators of the sensitive data (ibid).

To effectively conduct social media research, different relevant methods should be utilised. Therefore, some of these methods, which are discussed in this Chapter include qualitative, quantitative and mixed research (both qualitative and quantitative combined). However, handling social media research is quite challenging and requires innovative approaches. For example, a researcher posts on a *Facebook* page, asking where those who are HIV positive store their ARVs. The study gets big data, over 10, 000 responses. Even though this is big, who has responded? How sure is the researcher that the responses are from those who are HIV positive, store their ARVs and are giving facts? Such noise in social media research has traditionally been handled using different approaches to data collection and analyses in some fields; but, social media has fronted many new types of noise that remain unclear to researchers as to how to integrate them into the analysis and interpretation of findings (Sloan, 2017).

QUALITATIVE, QUANTITATIVE AND MIXED APPROACHES IN SOCIAL MEDIA RESEARCH

Even though research has many different purposes, its main aim is to find out the truth which is hidden and which has not been discovered yet (Pandey & Pandey, 2015: 9). Therefore, in order to effectively unearth these phenomena, it is better we understand types of research. Some of the types include applied research, basic, action, evaluation, descriptive, correlation, survey, historical, philosophical, and cross-sectional, among others (Mugenda & Mugenda, 2007; Pandey & Pandey, 2015). However, this Chapter has looked at qualitative, quantitative and mixed research methodologies in social media study.

When we talk of 'research methodology', we mean a different thing from 'research methods.' Research methods are the techniques used in conducting research. It is a -sub-set of research methodology, which again is the 'description, explanations and justification of various methods of conducting research' (Varghese, 2017: 7). Varghese argues that 'research methodology' is wider; with many dimensions that 'research methods' is part of it. 'Research methodology' is beyond methods or techniques; it is all about why a method has been picked for research, what particular data is to be collected, and why, among other questions (ibid). On the other hand, 'research methods' are techniques that are used to conduct research;

methods used to collect data; statistical techniques and methods used to evaluate the accuracy of results obtained (UoK, n.d).

Even as we discuss types of research, it is important to realise that there are only three main research approaches, which are also classified as types of research by some scholars that this Chapter has also looked at. These are approaches used both in collecting data and analysis. These are qualitative, quantitative and mixed methodologies, which in a real sense, are key research methodologies. The three approaches work differently and independently to some extent, even though can also be combined for the realisation of more effective results in a study (Flick, 2011). Quantitative looks at the data numerically while the qualitative is concerned with subjective assessment of attitudes, opinions and behaviour; mixed approach is the combination of both qualitative and quantitative methodologies.

Social media research utilises all these approaches or methodologies. There are cases where social media research can use only one of the approaches (either qualitative or quantitative), while at times it can use both qualitative and quantitative approaches at the same time (Mixed approach) (Ngai et al., 2014). Another important aspect of social media research is the fact that it involves a study of different platforms-discussing a variety of issues and disciplines. This makes this kind of study to be tackled by scholars from various disciplines who can 'draw on diverse methods, theoretical lenses and interpretive frameworks' (Mcay-Peet, 2017: 40). In social media research, one can use only one approach of data collection from qualitative, quantitative and mixed. In qualitative, one can decide to only analyse the content of social media and end their research at that.

For example, an ethnographic study is a qualitative approach where one takes time to get deep into the study personally and finds out about behaviour, among other things (Myers, 1999). In a study by Jordan (2022) on the influence of social media on the behaviour of newsroom editors and journalists in the US's *Rapport* and the *Mail & Guardian*, the research explains why the use of mixed method was important; so that apart from just giving questionnaires for the quantitative data, the study also involved the use of ethnography, which as Jordan (2020: 26) states, has principles that, "enabled the researcher to identify where the journalists' perceptions of their own actions and behaviours differed from reality…and provided the opportunity to observe the journalists within a group setting…".

This is the beauty of the qualitative bit of the research. The researcher argues that use of only quantitative approach would not get him the quality and detailed data he wanted - and so resorting to mixed method was necessary: 'Closed-ended questionnaires alone would not have provided the findings necessary for in-depth analysis of themes and issues related to professional social media use' (Jordaan, 2022: 26). This means, therefore, that when only qualitative research is conducted, it might be difficult to get data that is whole for meaningful analysis. Inasmuch as one can observe, content analyses and interview key informants about the use of social media for qualitative data, it is also important and necessary to interview - using questionnaires - other stakeholders such as the audience and the social media users to find out their take on the subject to fill the gap through quantitative approach.

With this, one would end up conducting research where a weakness of one data collection approach is taken care of by the other approach; what is known as 'mixed methodology.' The mixed methodology can be classified based on whether the qualitative and quantitative data are gathered concurrently or sequentially-concurrent mixed and subsequent mix methods. Using both qualitative and quantitative approaches at the same time in social media research as observed above is better than either qualitative alone or quantitative alone as it provides strengths that offset the weaknesses of these two (Anyuor, 2021). For instance, the use of questionnaires, according to Jordaan's study explained above is weak in understanding the behaviour of the journalists, which qualitative research, through ethnography used, makes up for.

On the other hand, qualitative research is seen as deficient because of the potential for biased interpretations made by the researcher and the difficulty in generalizing the findings to a large group (ibid). So this design of mixing both qualitative and quantitative enables the researcher to gain in breadth and depth the understanding and corroboration of the study and at the same time offsets the weakness that is inherent to using each approach on its own; what Anyuor (2021: 17) argues is 'better than either qualitative alone or quantitative alone as it provides strengths that offset the weaknesses of these two'.

The qualitative approach in social media research
According to Flick (2014), the evolution of social media over time has made it a phenomenon that requires research with different approaches; qualitative being one of them. Since there is a lot of qualitative data that goes into the internet daily, these researchers have indeed been provided with the space for investigating people's world views, experiences and interpretations in social media. However, some scholars again claim that many researchers have not embraced qualitative research approach in social media (Muller, 2016).

Lack of adequate qualitative research as Muller (2016) argues, is a concern that has been also witnessed in some other fields of research, not only in social media industry. Mugenda and Mugenda(2007) argue thatfor many decades, quantitative research approach has been treated as the only conventional mode of research studies and as the only legitimate scientific research method. The scholars assert that the high esteem given to quantitative research was so widespread that some donors and funding agents put pressure on researchers to only using quantitative research methodology in conducting certain studies. Qualitative research methodology is indeed traced from research of the quantitative approaches –the experiments and the surveys - emerging as results of the failings of quantitative research (Bird *et al.,* 1993). Jwan and Ong'ondo (2011) argue that it was because of lack of richness in terms of contents in quantitative that qualitative research rose.

The role of qualitative approach is traced back to 1960s and 70s in the United States and Europe (Atkinson et al., 1993: 7); which was the time of universities and colleges expansions, and 'time for widespread questioning of education and other orthodoxies'. But what is qualitative research approach? This is a process of collecting, analysing and interpreting non-

numerical data in effort to understand how a person perceives a phenomenon. It is the opposite of quantitative; which is a research approach that is collecting, analysing and interpreting numerical data (Bhand, 2020). Qualitative is a methodology where the researcher is immersed in the study personally - considering themselves as 'instruments' since they are involved in all observations, interpretations and analyses-which again are 'filtered through their own personal lens' (ibid p.4). It is important to list here some key different methods and techniques that are used in the qualitative methodology for data collection and analysis. They include: case study, ethnography, discourse analysis, the narrative and ground theory (Jwan & Ong'ondo, 2011). All these can be used in social media research.

A look at the social media contents, there is too much qualitative data that goes into the internet on daily basis-which researchers can download, interpret and analyse to answer a problem (Shi, 2014). The huge data on social media has made it easier for researchers to study much about social media. Currently, different techniques can be used in harnessing social media content or ways of social media communication in order to understand a phenomenon. In qualitative research, social media platforms' content such as those on *YouTube, Blogs, Facebook, Twitter*, among others are analysed (Murphy, 2014). Murphy argues that in qualitative approach for social media, data is not mostly collected, but often available for analysis after being provided by the social media users. Social media qualitative research will focus more on 'human angle-what are the people thinking and feeling? What is their rationale for doing something?' (Humphrey, 2020: 4). An example is research that was conducted by Nicholas Anyuor on social media and political conflict, titled: *Social Media Content and Political Conflict in Kenya: Case Study of Facebook in Migori County ahead of 2017 Polls* (Anyuor, 2018).

The study analysed the contents of two Facebook forums, namely: *The Migori Republican Council (MRC)* and The *Nyatike Sub County Politics Form (NSCPF)*. In content analysis, the researcher investigated people's opinions and feelings, and the reason behind all that in order to make a clear conclusion. This is qualitative data; not numerical quantitative data. It was found that there were postings of opinions, remarks and feelings of the social media users that promoted political violence in Migori County, Kenya. During the analysis, one of the posts read: 'Nonsense, parrots, continue wallowing, Obado is the Governor upto 2022' (Anyuor, 2018: 20). Another post: 'if you claim to be anyone's choice, why did you lose miserably in the nominations? Stop being clueless' (ibid: 20). From these remarks, one can conclude that they can bring bitter exchanges which eventually lead to violence. In another social media study, Anyuor and Achieng' (2021) employed qualitative approach to research social media use by tourists in Kenya. It analysed the contents of social media platforms about tourism in Kenya. During this study, 93 digital content from different social media platforms such as *Websites, Blogs, Facebook* and *Instagram* were analysed and a conclusion was reached that many tourism stakeholders in Kenya's western region do not effectively utilise social media platforms.

However, qualitative analysis is not only based on content analysis where the researcher immerses deeply into the content and studies it. But there are other ways of data collection in

qualitative approach that are also used in social media. These include, among others; the use of interview schedules, focused group discussions (FGD), observations, informal conversations, use of relevant documents, and journals.Interview and FGD are used to find out social media users' opinions on social media itself and or on social media content. They also include interviewing those who are not social media users but can talk about social media and give relevant information required for social media study. A study can interview users and conclude. This has been effectively utilised in research by Mmbwanga (2018) titled, *Gender Stereotyping in Social Media among University Students: A Case of Machakos University*. Here, 50 members of the staff, who were the key informants and use social media platforms, were purposively interviewed using interview schedules.

The study further concluded that Machakos University students, 'group themselves based on the social networking sites they visit' whereby the female students are said to be 'more wordy, emotional and expressive… while male ones tend to be brief, to the point and factual' (Mmbwanga, 2018: 111). Observation is key in qualitative research. It is where data is collected through watching social media users or social media use in a particular activity in order to obtain a deeper understanding of what is under study (Cohen, 2011). Observation involves 'watching what people do; listening to what they say; sometimes asking them clarifying questions…' (Gillham, 2000: 45). This technique can be used in a social media study where the researcher would watch what people say, listen to them, and read their contents about a phenomenon under study. Informal conversation is another method of data collection that has just been accepted in qualitative approach and can be used effectively in social media research. The researcher can discuss with social media research participants over general issues concerning social media or that are trending on social media. Researchers may also decide to eavesdrop on participants' own comments, remarks or discussions and end up getting the relevant information for the study (Pedamkar, 2020).

Netnography, according to Kozinets (2010), is also another method that can be used in qualitative approachesto social media. This looks at the ethnographic research among online communities. This type of content analysis bridges the gap that at times exists between passive data collection and the investigator-initiated one (Murphy, 2014). Netnographers may use content or sentiment analysis to understand the communities, but as an ethnographic method, it involves some interaction with research subjects; the researcher becomes a participant in the online community to better understand its culture and content. Both content and sentiment analysis may be used to analyse the results of netnographic data collection (Murphy, 2014: 22). The use of journals and other documents are also key in data collection in qualitative research. In this, the study will look at what has been published about social media activities that are relevant to the study. Many such have been published in different journals and documented. Qualitative data, to some extent, can be turned to quantitative. This applies tosocial media research. Humphrey (2020) argues that there is a point where qualitative data can be turned into quantitative. In social media, for example, Humphrey gives an example with email conversations. That in its raw form, email conversations would be considered qualitative data as researchers will look at them and do content analyses.

However, when it comes to answering questions, like for example, 'what are the most popular greetings in emails?', the researcher would be forced to numerically check the conversations, add all the different occurrences of a variety of greetings and make a conclusion about the most popular greetings in emails (Humphrey, 2020). This is now quantitative research got from qualitative.

Quantitative research methodology in social media

For many decades, quantitative research approach has been treated as the only conventional mode of research studies, according to Mugenda and Mugenda (2007) as the only legitimate scientific research method. This is any research study that yields quantifiable data; the designs, techniques and measures that result in data that is numerical (ibid). Creswell (1994), on the other hand, defines quantitative as a type of research that explains a phenomenon after collecting numerical data, which is eventually analysed mathematically.

Qualitative research is different from quantitative one since the former's goal is to become deeply immersed in the setting and among those participating in the study (Metler, 2014). This is different from quantitative study where the researcher remains as objective as possible. Quantitative data looks at the value of data in form of numbers and counts. Surendran (2020) observes that quantitative data answer questions such as 'How many?' 'How often?', 'How much?' It is data that can be verified and mathematically evaluated. Social media effectively uses quantitative approach where numerical data can be collected and analysed using different methods. Some of the data collection methods here include surveys, interviews (through questionnaires), and online polls, among others. All these can be used in social media research. For example, in a social media quantitative study, the researcher would gather numerical data by asking questions that quantify opinions and attitudes from a sample size so that it is possible to know the quantity of what is to be investigated (Humphrey, 2020).

In two types of research by Anyuor (2018) and Mmbwanga (2018) on social media, quantitative approach was used. Mmbwanga, (2018) used questionnaires to gather information from 100 students. The study, after collecting data through questionnaires, found out that while 60 percent of women use social media sites to compare themselves with others online, men tend to use the sites to look at profiles and search for more friends. On the other hand, 10 percent are women who tend to post face pictures (selfies). Again, Anyuor's quantitative approach looked at 200 social media texts and images whereby it was found that 186 (93%) of the contents were violence-oriented while 14 (7%) were not violence-oriented.

The above two examples are quantitative research in social media. They count and give data in numbers; the quantification. However, sometimes quantitative and qualitative approaches cannot work individually; they have to be used together in research, in what we call a 'mixed research approach', so that in-depth study is achieved.

Mixed research methodology in social media research

Qualitative research methodology recognises the fact that every person - the poor, the rich, those living with disabilities, and the illiterate, among others, are source of knowledge. This is what qualitative researchers feel is ignored by quantitative researchers in their data collection procedures (Mugenda & Mugenda, 2003). Quantitative research is good at providing information from many respondents, especially when administering questionnaires to many people during data collection. However, the qualitative researchers feel it fails when exploring the problem in depth. According to Sukamolson (n.d), when a research problem seems very complicated and somehow complex, and in-depth research is required, it is of value to use qualitative more than quantitative.

This is because quantitative is better at 'looking at cause and effect while qualitative methods are more suited to looking at the circumstances (ibid: 10). It is in this understanding that scholars recently developed a 'mixed research methodology' that embraces the use of both qualitative and quantitative research. It can be realised that this method, which has now become widely used, has come as a result of paradigm wars between qualitative and quantitative approaches. Those in support of quantitative research argue that for a better study, researchers must detach themselves and remain uninvolved with the objects of the study, while qualitative research purists claim that better research is one where 'knower and known cannot be separated because the subject knower is the only source of reality (Johnson & Onwuegbuzie, 2004: 14).

To fill this gap, therefore, it is important to mix the two methods - the use of mixed research - where the researcher has a variety of design choices 'which involve a range of sequential and concurrent strategies' (Terrel, 2012: 254). According to Mugenda and Mugenda, 2003), mixing qualitative and quantitative methods is advantageous as it gives the researcher many objectives which can better be assessed to come up with complete work without unnecessary gaps. Since both methods have some bias, it is important to use both sides of research as it helps to amend such biases because each method can be used to check the other. For example, the subjectivity associated with qualitative research is minimized by the objectivity of quantitative research, and so the findings derived from one approach validate the other (Mugenda & Mugenda, 2003: 156).

The mixed research method works very well in social media studies. This can be done at different levels. Firstly, a study can engage qualitative research by analysing social media content such as texts, photos, and videos, among others. At the same time, look at the frequencies at which these appearances occur (Anyuor, 2018). In *Social Media Content and Political Conflict in Kenya; Case Study of Facebook in Migori County ahead of 2017 Polls* (ibid), the study used mixed approach whereby qualitative, texts, pictures and other images were analysed. On the other side of the quantitative approach, the quantification of the study was performed by counting the frequencies of the appearance of the postings. These were likely to cause political violence on the two selected *Facebook* pages (Anyuor, 2018). At another level, mixed research methodology can be achieved by distributing questionnaires to

social media users and quantifying their responses, and at the same time analysing contents in qualitative approach.

This is what Mmbwanga (2018) did in the study, *Gender Stereotyping in Social Media among University Students*. In this study, questionnaires were distributed to 100 students between the ages of 20-25 years for quantitative data. At the same time, key informants, about 50 members of the university staff were interviewed for qualitative approach (ibid). After collecting such data, analysis is done and the results are corroborated to find out the link.

CONTRIBUTIONS TO THE CHAPTER

Social Media research is a new field that many scholars have not written a lot about. This is because social media is ever in the process of advancement as technology improves. Therefore, content about social media research is crucial, not only to those conducting research but also to learners who would want to gain knowledge about it. This Chapter, therefore, is important in the area of Social Media studies and research. It makes the understanding of Social Media research easier. By doing this, the content herein is expected to help in improving Sustainable Development Goal (SGD) Four of Quality Education as it gives details on matters research on Social Media that can be read by learners and can also be used to improve research activities either by individuals or institutions; and at the same time can promote Industry, Innovation and Infrastructure, which is also an SDG goal Nine.

IMPLICATION OF THE CHAPTER

From the literature reviewed for this Chapter, social media research is an area with huge data that can be of importance for research. However, the huge data should also be analysed with a lot of caution since it is full of the noise of misinterpretation, ismisinformation, , among other complexities. Therefore, contents such as in this Chapter are key in demystifying the mysteries that have come with Social Media development. It means whoever will be reading this Chapter will benefit a lot in terms of Social Media research in regards to qualitative, quantitative and mixed approaches.

CONCLUSION

Social Media Research is a multidisciplinary area that engages stakeholders from other fields such as Political Science, and Literature, among others. And with the huge data and complexities that are found in Social Media, the platform has become so crucial that it prompts more research work. To effectively achieve this, efficient research methodologies such as qualitative, quantitative and mixed approaches are invaluable. Sometimes Social Media study can utilise only one approach, say, quantitative, or just qualitative; however, it is argued that for proper results in Social Media research, mixed approach is important as it enables the researcher to gain breadth and depth in the understanding and corroboration of the study and at the same time offsets the weakness that is inherent to using each approach on its own (Anyuor, 2012). Therefore, this Chapter is of value regardless of understanding of Social Media research methodologies.

REFERENCES

Allen, M. (2012). What was Web 2.0? Version and the Politics of Internet History. *New Media and Society 15(2)*, 260-275.

Anyuor, N. (2021). Print Media and Functions of Devolved Governance in Kenya: A study of Awareness Creation among Residents of Embakasi East Sub County, Nairobi. *African Social Science and Humanities Journal, 2(1)*, 2709-1317.

Anyuor, N. (2018). Social Media Content and Political Conflict in Kenya: A Case of Facebook in Migori County Ahead of 2017 Polls. In Akama (Ed). *Research Innovation and Sustainable Development Goals*.

Atkinson, P., Delamont, S., & Hammersley, M. (1993). Quantitative Research Traditions. In Hammersley, M. (Ed). *Educational Research: Current Issues, Vol.1*, London: Paul Chipman Publishing Ltd, 16-31.

Baruah, T. D. (2012). Effectiveness of Social Media as a Tool and its Potential for Technology Enabled Connections: A Micro-Level Study. *International Journal of Scientific and Research Publications, 2, 1-10*. Retrieved from https://www.ijsr.org/research-paper-may2012/ijsrp-may-2012-24pdf

Bird, M., Hammersley, M., Gomm, R., & Woods, P. (1993). *Educational Research in Action: Study Guide*, Open University: Milton Keynes.

Cohen, H. (2011). Social media definitions. Actionable marketing guide. Retrieved from http://heidicohen.com/social-media-definition/Coleman

Dean, B. (2021). Social Network Usage & Growth Statistics: How Many People Use Social Media in 2022? Retrieved from https://backlinko.com/social-media-users

Creswell, J.W. (1994). *Research Design: Qualitative & Quantitative Approaches*. London: SAGE Publications. Retrieved from https://www.iicseonline.org/Quantitative_MethodsII.pdf21

Flick, U. (2011). *Introducing research methodology: A beginner's guide to doing a research project*. London: SAGE Publications Ltd.

Fuchs, C. (2017). *Social Media: A Critical Introduction*. London. Sage Publications.

Gillham, B. (2000). *Case Study Research Methods*. New York: Cambridge University Press.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed-methods research: a research paradigm whose time has come. *Educational Researcher, 33(7)*, 14-26.

Jordaan, M. (2016). Back to the Future: Reinvigorating the 'Newsroom Genre' to Study Social Media Use in Developing Contexts. In Mabweazaru, *et al,*. (Eds). *Online Journalism in Africa: Trends, Practices and Emerging Cultures*. New York: Routledge.

Jwan, J. O., & Ong'ondo, C. O (2011). *Qualitative Research: An Introduction to Principles and Techniques*. Eldoret. Moi University Press.

Kanwar, P. (2021). *Understanding Social Media*. Retrieved from www.bookboon.com

Kitchin, R. (2017). Big Data-Hype or Revolution?In Luke, S. & Quan-Haasse, A. (Eds). *Social Media Research*. London: Sage Books. Retrieved from https://kitchin.org/wp-content/uploads/2019/04/BD-Handbook-social-media-2016.pdf

Kozinets, R. (2010). *Netnography: Doing ethnographic research online*. Thousand Oaks, CA: Sage Publications Ltd.

McCay-Peet, L., & Quan-Haasse, A. (2017). What is Social Media and What Questions Can Social Media Research Help Us Answer? In Luke, S. & Quan-Haasse, A. (Eds). Social Media Research. London: Sage Books. Retrieved from https://www.worldcat.org/title/sage-handbook-of-social-media-research-methods/oclc/957659958

Mmbwanga, F. (2018). Gender Stereotyping in Social Media among University Students: A Case of Machakos University. In Akama (Ed).*Research Innovation and Sustainable Development Goals*. Machakos University.

Mugenda, O.M., & Mugenda, A. G. (2003). *Research Methods: Quantitative & Qualitative Approaches*. Nairobi: African Centre for Technology.

Metler, J. (2014). in Sage Publications, Inc (2016). Quantitative Research Methods. Retrieved from https://us.sagepub.com/sites/default/files/upm-binaries/70019_Mertler_Chapter_7.pdf

Müller, O., Junglas, I., Vom Brocke, J., & Debortoli, S. (2016). Utilizing Big Data Analytics for Information Systems Research: Challenges, Promises and Guidelines. *European Journal of Information Systems, 25*, 289-302.

Murphy, C., & Dean, K. (2014). *Social Media, Sociality and Survey Research RTI International-Research Triangle North Carolina*. New York: John Wiley & Sons, Inc.

Myers, M. D. (1999). Investigating Information Systems with Ethnographic Research. *Communications of the AIS*, 2(23), 1-20.

Scholz, T. (2008). Market Ideology and the Myths of Web 2.0. First Monday 13 (3). Retrieved from https://firstmonday.org/article/view/2138/1945

Mwilima, F. J. (2018). Social Media as an Effective Communication Tool for Youth Engagement on Social Political Issues: A case Study of the Affirmative Repositioning Movement in Namibia. Mutonga Matali University of Namibia, Namibia. DOI: 10.30547/worldofmedia.1.2018.4.

Nyandemo, S.M. (n.d). *Research Methodology: Methods and Approaches*. Nairobi. Richmond Designers and Printers.

Ngai, S., Tao, S., & Moon, K. I (2014). Social Media Research: Theories, Constructs and Conceptual Frameworks. *International Journal of Information Management, 35 (15)*. pp. 33–44.

Pandey, P., & Pandey, M.M. (2015). *Research Methodology: Tools and Techniques*. Romania: Bridge Centre.

Pedamkar, P. (2020). Types of Quantitative Research. Retrieved from https://www.educba.com/types-of-quantitaive-research/

Scott, P.R., & Jacka, J.M (2011). A*uditing social media: A governance and risk guide.* ISBN: 978-1-118-06175-6. New Jersey: John Wiley & Sons, Inc.

Shi, Z., Rui, H., & Whinston, A. B. (2014). Content Sharing in a Social Broadcasting Environment: Evidence from Twitter. *MIS Quarterly, 38(1)*, 123-142.

Sloan, L. (2017). Social Media Research Methods. In Sloan, et al (Eds). *Handbook of Social Media Research Methods*. London: Sage Publications Ltd.

Soliman, D. (2021). Social Media: A Decade of Leading Change in the Arab World. Retrieved from https://amp.dw.com/en/social-media-a-decade-of-leading-change-in-the-arab-world/a-57854912

Standage, T. (2013). *Writing on the Wall: Social Media-the First 2000 Years*. London: Bloomsbury.

Terrell, S. R. (2012). Mixed-Methods Research Methodologies. The Qualitative Report, 17(1), 254-280. https://doi.org/10.46743/2160-3715/2012.1819

Sukamolson, S. (n.d) Fundamentals of Quantitative Research. Retrieved from https://www.iicseonline.org/Quantitative_MethodsII.pdf

Surendran, A. (2020). Quantitative Data: Definition, Types, Analysis and Examples. Retrieved from https://www.questionpro.com/blog/quantitative-data/amp/

UoK (n.d). Retreived from
https://southcampus.uok.edu.in/Files/Link/DownloadLink/RM%20U1%20P1.pdf
https://www.sagepub.com/sites/default/files/upm-binaries/48453_ch_1.pdf

Urquhart, C., & Vaast, E. (2012). Building Social Media Theory from Case Studies: A New Frontier for IS Research. Paper presented at the Thirty Third International Conference on Information Systems (ICIS).

Verghese, S. P. K. (2017). *Research Methodology: Study Material*. University of Calicut.