

RE-CONCEPTUALIZING INFORMATION CREDIBILITY IN THE AGE OF NETWORKING SOCIETY

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Abstract

The main objective of this paper is to re-conceptualize the concept of information credibility. This is due to the fact that the current society, which is best labelled as ‘network society’ are becoming more complicated in relation to consuming information. The boundary of information producer and consumers are becoming thinner due to the advances in information technology. The existing body of knowledge about information credibility also warrant further investigation. Studies on information credibility are dispersed between the disciplines of communication, information technology and business studies. This has resulted in different conception of information credibility. Thus, this study was carried out using the Grounded Theory approach. There were four focus group discussions held to identify how the current society perceived information credibility. The choice of informants was based on the existing dialogue of digital natives and digital migrants. The finding shows that there is indeed new conception of information credibility. The concept of source and message are being strengthened, while two new concepts; ‘viral’ and ‘behaviour’ were added. The finding also reveals generational differences that warrant further investigation. The finding of this study is still open for further test due to the limitations of grounded theory approach.

Keywords: Information credibility, networking society.

Introduction

The sole aim of this paper is to re-conceptualize the concept of information credibility. The need for this was fuelled up by the MH370 incident whereby people were actively involved in the public domain not only as

the consumers but also as the producers of information. And, this was done with or without verification of the facts being shared. The organization of this paper is divided into three main parts. The first part will discuss on the foundation of the research i.e problem statement, research questions and objectives, literature review and theoretical framework as well as the research methodology and design. The second part of the paper will present the complete findings of this research. And, finally the last part of this paper will be discussing the implication, suggestion and conclusion.

Problem Statement

The 2014 tragedy of MH370 has really open up the Pandora box of information credibility and dissemination. Lots of news, stories and opinion were brought up to the public domain. All these were presented to the public for consumption either verified or unverified by the authority. This had resulted in confusion as well as posed challenges to the authority to establish one central command in facing the crisis. At a time like that, credible information was what the society need. But what makes information credible?

Petty and Cacioppo (1984) argued that traditional analyses of persuasion (Hovland, Janis & Kelley, 1953) have sought to identify how source, message, recipient, channel and contextual factors affect a person's susceptibility to persuasion or what makes information more credible. Over the years, large numbers of theories (see, Insko, 1967; Kiesler, Collins & Miller, 1969; Petty and Cacioppo, 1981) have developed to account for the many different effects that have been observed when these variables have been manipulated. However, there is still little agreement concerning how and why the traditional variables affect attitude change. (Petty & Cacioppo, 1984: p.668). It is worth noting here that those traditional analyses of persuasion as well as Petty and Cacioppo (1986) own 'elaboration likelihood model' were focusing more on persuasion and the credibility of information using the traditional mass media.

Most recent studies on the credibility of information such as Wathen and Burkell (2002), Flanagin and Metzger (2003), Metzger (2007), Castillo, Mendoza and Poblete (2011) concentrate more on analysing information

credibility on the new media. However, all these studies have use Petty and Cacioppo' (1986) Elaboration Likelihood Model (ELM) as the starting point of their research.

However, there are two new developments that needed to be taken into account before we can further investigate what makes information credible. First, in reality both traditional and new media exist in parallel. This is more common nowadays where the traditional media also venturing into the realm of new media. It is common to have print and website version of a newspaper or what we would later termed as 'hybrid media'.

Second, today society is known as networking society whereby most of them are 'connected to the net' most of the time. This 'connectivity' provides the society with more freedom in searching as well as participating into the creation of information. In other word, today society is multi-tasking not only they consume information but also act as a co-creator of information. The above-mentioned studies were too focusing on either traditional or new media. Therefore, this study aims to look into how people perceived information credibility presented by both traditional and new media. At the same time, this study also aims to re-assess on what it takes to have credible information.

Main Research Question

To re-conceptualise the meaning of information credibility.

Research Questions and Research Objectives

- i) To investigate how sources affect information credibility.
- ii) To assess how different medium affect credibility of information
- iii) To investigate how messages can affect information credibility.

Information Credibility from Three Different Perspectives

This section aims to uncover how the study of information credibility has evolved over the years. The discussion will show the different angle or scope of study on information credibility. The study of information credibility in

general can be divided into three main strands. There are studies conducted by communication scholars, business scholars and the information and communication technology scholars (ICT scholars). Each of these strands offer different focus on what it takes as credible information. Therefore, it is essential to establish the differences in order to frame this research in the right context. The differences could help in showing the gap or gaps in the study of information credibility which eventually become the aims of this research project.

Studies on information credibility by the communication scholars are tightly related to the field of persuasion. Petty and Cacioppo (1984) argued that traditional analyses of persuasion (Hovland, Janis & Kelley, 1953) have sought to identify how sources, messages, recipients, channels and contextual factors affect a person's susceptibility to persuasion or in other words how the person perceived the information as credible.

Communication researchers have studied 'source credibility' but have primarily used it as an independent variable predicting persuasion (McKnight & Kacmar, 2007: p.423). For instance, Johnson and Kaye (1998), have conducted a survey to find out whether politically-interested web users online view web publications as credible as their traditional versions. In their subsequent survey, Johnson and Kaye (2004) found out that weblog users rated blogs as highly credible, more credible than traditional sources. Wathen and Burkell (2002), Flanagin and Metzger (2003), and Metzger (2007) have all conducted studies on credibility of information by focusing on the web as the medium.

Apart from studying the source of messages, communication researchers have been conducting studies on the various elements of messages such as language intensity style, attractiveness and quality that could affect message perceptions (Adoni et al. 1984; Chartprasert, 1993; Hamilton, 1998), cited from Eastin (2006). Studies on the individual extrinsic information or using outside information to evaluate mediated messages have also been explored by communication researchers tries to understand how people perceived credible information. Eastin (2006) cited the study conducted by Cozzens and Contractor (1987) argues that individuals assess the content

of a message based on extrinsic information. Eastin (2006) further argued that while the source of a message is a commonly used attribute to assess the perceptions of credibility, other content-driven variables can also affect message perceptions and thus should be considered for further research in this subject.

Thus, the next discussion is on the study of information credibility from the perspective of the ICT scholars. The ICT scholars studies on information credibility focuses both on the content as well as the medium itself. McKnight and Kacmar (2007) conducted a study on the factors and effects of information credibility found out that perceived reputation, perceived website quality, and willingness to explore the website play an important role in developing information credibility. Castillo, Mendoza and Pobleta (2011) conducted a study on information credibility on twitter. Their study found out that there are measureable differences in the way messages propagate, that can be used to classify them as credible or not credible. This two studies shows that in order to achieve information credibility on mediated media, mediated in the sense of using new media, there is a need to look into both the medium and content together. As shown in the early discussion that communication scholars focus more on the sources or other elements such as the medium, the messages, and the recipient separately in their studies.

Business scholars on the other hand also have huge interests in information credibility. However, it is worth noting here that their definition is somewhat different than the way communication and ICT scholars defined information credibility. Information credibility from the perspective of business researchers place more emphasis on trust as a variable over other variables commonly studied by the communication and ICT scholars. Research conducted by Grefen, Karahana and Straub (2003), Jarvenpaa, Tractinsky and Vitale (2000) for instance concerns more on how to build trust in website vendors or store. McKnight and Kacmar (2007) however, argued that 'trust in web vendor is not the same as website information credibility. E-Commerce trust research focuses on trust in the people behind the website, while credibility research should focus on the believability of the information the website provides' (p.423).

While there is clear differences between trust and credibility as argued by McKnight and Kacmar (2003), there is something that we could learn from the business scholars' perspective. Their emphasis on the 'person' behind the website is akin to the sources, one of the main variables in studying information credibility from the communication scholars' perspective. This shows that the source variable is indeed essential in determining the credibility of information.

Even though we began the discussion by outlining the three different schools of thought on information credibility, there was one obvious similarity between them. All three school of thoughts share the same premise of persuasion which believes that credible information must come from either or all of the following variables or elements; (i) Source, (ii) Medium, (iii) Messages, and finally (iv) Recipient. Thus, in this research project, the effort to re-conceptualise the concept of information credibility will attempt to look into all the above variables/elements as one and not as previously done by past studies either conducted by communication, ICT or the business researchers.

In brief, based on the above discussion, we could conclude that credible information must fulfil the needs of good sources, medium and messages. What makes sources, medium and messages good is much depends on the judgement of the recipient. To understand how the recipients judges the credibility of sources, medium and messages the set of criteria draw out from the discussion of the previous research as aforementioned has been set up. This is clearly shown in the following diagram which forms as the starting block of investigation in this research.

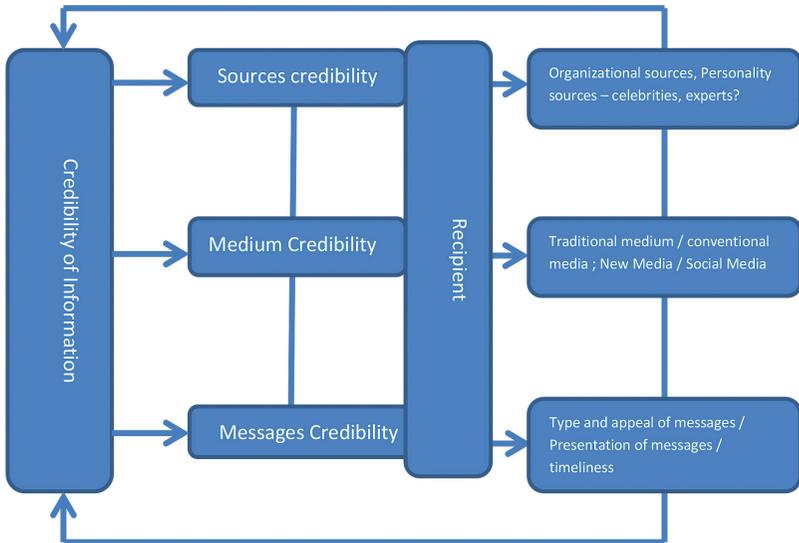


Diagram 1 Research theoretical framework

Network Society

The inclusion of this section is to lay the foundation for the investigation. The context of investigation in this research project is motivated by the concept of network society. The over-dependence and ever growing dependency on the internet technologies over the years has seen the emergence of new type of society which is fitting the concept of network society.

Network society is a conception of a new society by Castells (1996, 2000, 2010) when he sense the radical changes in the realm of communication. There was huge shift from traditional mass media to a system of horizontal communication networks organized around the advancement of ICT particularly in reference to the Internet. Castells (2010) argued that “network society is made of networks in all the key dimensions of social organization and social practice”.

While admitting that networks was an old form of organization in the human experience, Castells (2010) argued that it was the information age/the internet that “powered social and organizational networks in ways

that allowed their endless expansion and reconfiguration, overcoming the traditional limitations of networking forms of organization to manage complexity beyond a certain size of the network”.

Castells (2010) further argued that the internet as the backbone of network society has introduced a multiplicity of communication patterns and it has become the source of a fundamental cultural transformation. He supported this argument by claiming that network society accept that virtuality has become an essential dimensions of reality.

The second characteristic of network society is that the institutions of the nation-state have gradually lost their capacity to control and regulate global flows of wealth and information. We purposely highlighted this point here because the social media (internet) has enabled the consumers to also become producer of information. The changes of communication pattern from vertical to horizontal have changed the pattern of relationship between producers and consumers of information.

The conception of network society has its own critics too. For instance, Van Dijk (2006) argued that Castells completely ignores the problems of the digital divide and the lack of skills among at least half of the internet users, even in high-access countries. But Castells (2000) himself had argued that network society is indeed based on technology, so there is always a question of social inclusion and exclusion. It has been the challenges in network society to both connect and disconnect.

Our stance on this issue is to take Castells’ network society as it is. Because we believe, at the moment his (Castells) conception of network society is self-explanatory on what is actually happening on the ground especially on the way the Internet has change the pattern of communication. A network society can be characterised into two types. A digital migrant refers to the older generation that were born before the emergence of the new technology. For instance, generations that were born before the social media things can be considered as digital migrant because they are migrating to the social media. On the other hand, digital natives refers to the generation that were born at the same time with the emergence of the new media.

Methodology

As stated in the beginning of this paper that the aim of this research is to re-conceptualise the meaning of information credibility, and it is rightly situated within the symbolic interactionism school. This paradigm “focuses on interaction between human beings, it attempts to understand how individual interpret one another’s behaviour and language, how people give meaning to their own actions and thoughts (by communicating) and how they reorganize them when interacting and negotiating with others” (Daymon & Holloway, 2011: p.134).

Locke (2001) argued that the nature of symbolic interactionism are reflected in the research practices of grounded theory and its product. Thus, this study will be employing grounded theory approach. The reason grounded theory being employed is because grounded theory allows the researcher to conceptualise and explaining the phenomenon not merely describing (Daymon & Holloway, 2011: p.130). Hence, this is a perfect match for the main aim of this study.

Grounded theory also allows “researchers to carry out theoretical sampling where decisions about the data to be collected are determined by the concepts they discover, both in the early stages and then later as the theory is in the process of being constructed” (Daymon & Holloway, 2011: p.131).

Thus, unlike other research approaches, researcher using Grounded theory need to approach the study with an open mind and make no assumptions before the research starts. Usually grounded theory approach allows the researcher to begin the research without a hypothesis or theory (Daymon & Holloway, 2011). This however does not mean that there should not be any early theory to guide the researcher at least in the early stage of the research. Hence, a simple theoretical framework has been developed, as shown in the literature review section. This theoretical framework however only serve as a temporary mechanism, at least as the starting block for the investigation, because during the course of analysis a new propositions will arise as we need to check out against further incoming data.

Research Design: Data Collection and Data Analysis Procedure

The uniqueness of grounded theory compare to other research approach is the data collection process and data analysis is go hand in hand. Data from initial interview and observation was used as a cue to develop the next set of interviews and observation. Hence, in this section we will describe the research design together with the data analysis approach

Daymon and Holloway (2011) argued that traditionally, data collection in grounded theory is based on observed events and it is also common practice to include interviews based on the respondents or participants' accounts of events. Therefore, for this research, the starting block for data collection was based on observing the initial theoretical framework which covered the elements of sources, medium, messages and the recipients. Data from the first focus group interview was used to determine the next set of interviews.

There were four focus group interviews conducted throughout the research process. The first focus group consists of ten informants all of them were undergraduate students of Universiti Malaysia Sabah (UMS), a mixture of first to final year. It was from this first focus group interview that we found six themes of how they perceived information credibility, as shown in the following table.

Table 1 Concepts and description of 1st FGD

Concepts	Description
1. Authority	Refers to individual who are being formally recognise and showing professionalism in his profession. Also refers to formally recognise institutions representing certain profession.
2. Medium	A medium (media) is deemed credible if it is strong, have been in existence for a longer period of time, as well as formally recognise. This measure is applicable to all the type of media be it the conventional media, new media or the hybrid media (conventional media in the form of the new media platform)
3. Evaluation	A process by which the recipient of messages will evaluate the role of the journalist (for conventional media) or the personality of the blog owner (for the new media). It is also involves evaluating the medium.
4. Messages	The types and the content of messages will affect how the recipient perceived the credibility of the information. If the content of messages is close to the recipient they will easily assume that the information is credible. The same goes to 'interesting' information which can score higher credibility as opposed to the less interesting information.
5. Behaviour	This concept implies how the recipient online behaviour such as 'like', 'sharing' or 'commenting' could affect the credibility of the information. Sometimes the recipient' excitement also affect the credibility of the information.

From the above early finding, we conducted the second focus group discussion (FGD). The ten informants were also UMS undergraduate students. The questions for the second FGD were formulated based on the findings from the first FGD. The choice of undergraduate students was purely based on theoretical sampling procedures. The informants from the second FGD were representing the digital natives group. The findings from the second FGD are shown in the following table. Please note that there are differences in themes emerging from the FGD between the first and the second FGD. In the first FGD, there were five concepts/themes emerged, however these were reduced to just four themes in the second FGD (Table 2).

It is interesting to note here that the first three concepts in the first FGD (Table 1) is now grouped together under the concept of source. The message and behaviour concepts/themes also emerged in the second FGD. The newly emerged concept is the concept of viral.

Table 2 Concepts and descriptions from 2nd FGD

Concepts	Descriptions
1. Viral	Information shared by lots of people especially on the net can become credible even though the informants are aware that viral information might have been added up.
2. Source	While authoritative of sources can add to credibility of information, it is still open to be challenged. The medium as source can be evaluated whereby the new media powered by the internet is seen as the quick alternative to compared information gained from other type of medium.
3. Messages	Content of the messages that are closely related to the recipient are deemed credible.
4. Behaviour	Refer to the off-line behaviour of the recipient whereby peer pressure, political ideology as well as past experience will come into play to judge a credible or not credible information.

Based on the findings from the second FGD (Table 2), we conducted the third FGD. This time, the ten informants were representing the digital migrant group. They were all UMS staff who was born in the 1970's or early 1980's. The questions of the 3rd FGD were similar to that of the 2nd FGD. This was needed to check if there are any differences between the digital natives and digital migrant conception of information credibility. And, there were differences between these two as shown in the following Table 3.

Table 3 Concepts and description of the 3rd FGD

Concepts	Descriptions
1. Sources	In terms of evaluation, the informant from this group believe that first hand sources can be accepted but is not believable. While they accept that new media could be seen as 2 nd or 3 rd hand sources thus less credible, they also will be using the easy access of new media to compare the information they received from the conventional media. This group of informant also believe that authoritative sources are open to be challenge due to the existence of the new media.
2. Viral	This group of informant believe that viral information are less credible. Less believable.
3. Messages	It is the content of the messages that count as credible information and not the medium. On conventional media, recipient will accept entertainment info but not politics. Good messages should shows balance reporting.
4. Behaviour information.	Emotional implication will affect the recipient perception on the credibility of

Comparison between what was emerged from the first three FGD and the existing concept of information credibility, as shown in Diagram 1, shows some differences. However, to further ‘validate’ this new finding and to achieve data saturation, we conducted the final FGD. For the final FGD, the ten informants were a mixture of digital natives and migrant group. The findings from the final FGD could be considered as achieving data saturation as there were no more new themes emerged from the data. The following Table 4 shows the themes emerged from the 4th FGD. It shows no difference from the previous two FGD.

Table 4 Concepts and descriptions of the 4th FGD

Concepts	Description
1. Sources	Credible information must come from credible sources. A credible source must fulfil one of these three criteria; (i) source will be open to evaluation either from third party or peer pressure; (ii) higher dependency on certain medium will increase the credibility of the source; finally (iii) authority must be socially accepted.
2. Message	Messages will be deemed credible if the content of the message is closely related to the recipient (proximity).
3. Viral	Information can become credible (believable) if it has become viral.
4. Behaviour religious matter	Recipient will be more careful on their on-line behaviour whenever it is concern with

Findings, Discussion, Implications and Conclusion

After achieving data saturation from the four FGDs, the following are the complete finding of the data. As shown in the following Diagram 2, except for the first two concepts which are the 'source' and 'message', the remaining two concepts are the new additions to conceptualize information credibility. These two are the concepts of 'Viral' and 'Behaviour'.

While the concepts of 'source' and 'message' were inherited from the previous model of persuasion as well as the Elaboration Likelihood model, the definition of these two are somewhat different than the old definition of source and message. The following are the details descriptions of each concept.

Source: Sources in this study maintain the same concept as in any of the previous study. There three elements that form this concept found in this study. These elements are the medium, authoritative and evaluation. In the previous studies, 'medium' is a separate element in information credibility. However, for this study, medium is the essential part in describing the element of sources. A credible medium will be judge based on the name (brand/reputation?) and the period of existence (the longer, the better). Medium also refers to the conventional, new and hybrid media.

Authority in this study refers to either the formally recognise institutions or individual or the socially-accepted (informal) authoritative of individual or institution. However, it is also shown in this study that authority can be challenged. The next elements that form the concepts of source is the evaluation. People will evaluate the source in order for them to consider if the source is credible or not. This indirectly answered the first research question of how the source will affect the information credibility.

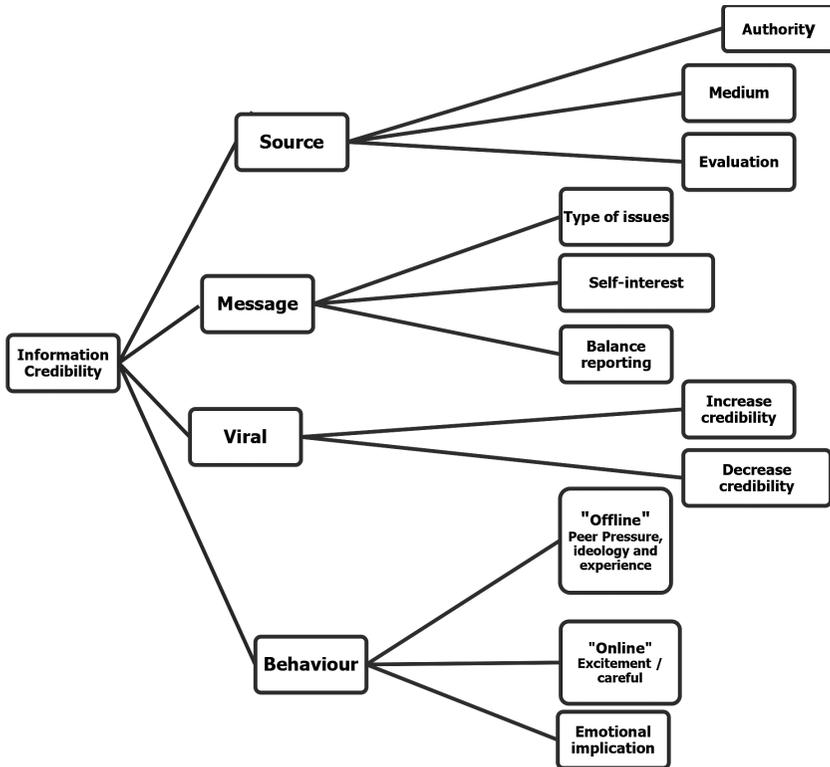


Diagram 2 Information credibility in the age of networking society

Viral: This is the new concept in information credibility. Viral in the context of this study refers to the phenomena whereby an information being shared by lots of people until the reach become very big. Usually, it is hard to trace the originality of viral information. In the context of this study, viral can be referred to two opposing implication. The first implication refers to how viral makes the information become more credible, the more people shared the information, the degree of believability is even higher. The second implication is on the opposite, whereby viral information is seen as less credible due to the suspicion that there could be some add ups from the original information.

This conception indirectly answers the second and third research question which is how medium and messages affect information credibility.

The process of viral involves both the messages as well as the medium. Interesting to note here that there are obvious generational differences on virality of information. It was the digital natives who believe that viral information was credible while the digital migrants are more critical on the credibility of viral information.

Messages: The conception of messages that affect information credibility was formed under three essential elements. First, it is the autonomy of the media users in deciding which message genre that they most liked every time they have accessed to any particular media. Second, the content of the message must be closely related to the users, or fulfil the users' self-interest. And, finally the third element that makes up the conception of messages is the needs of balance reporting. Users will accept a message as credible if it has the view of both parties. The fact that messages conception is related to the power of the users, this has set the differences between messages and sources.

Behaviour: This is the new concept found in this study. While arguably it is not the newest finding because Longley-Cook (1962) and Johnson and Kaye (1998) had mentioned about users behaviour in deciding information credibility but the conception of behaviour was referred to as the users' experience in using the medium. On the other hand, our study found that behaviour was related to the users' offline and online behaviours in determining information credibility, as well as the users' emotional implication. As a note, our study found that users' experiences are best grouped under the element of evaluation under the concept of source.

Offline behaviour refers to the external pressure or more likely the peer-pressure. A user may force to accept information as credible if he or she being pressured by his or her peers, i.e in group 'whatsapp' discussion. Online behaviour refers to the users' excitement as well as careful consideration towards information he or she presented with. If the users' get excited with the information especially in the context of online information, he or she will most likely did not put information credibility as the first priority in believing the information. On the other hand, there are times when online users will be more critical on information especially if the information is religious in nature.

This finding indirectly answers almost all the three research questions. Users' behaviour does affect how credibility of information is being affected by source, medium and messages.

Discussion

There are two important points that are worth discussion. The first point is about the comparison between the old conception of information credibility and the new conception of information credibility found from this study. It is indeed essential to highlight this to answer the main research objective which is to re-conceptualize the information credibility. The second point is about the obvious, what we termed as 'generational differences' between the digital natives and the digital migrant. These generational differences further strength the concept of digital natives/migrant by Mark Pransky and at the same time also helps to explain why there is indeed new conception of information credibility.

The first notable difference between the old conceptions of information credibility with this study is element of **medium**. In ELM model, medium is a concept of its own together with, source, message and receiver. However, in this study, we found out that medium is no longer a concept it is now just an element under the concept of **source**. It has become part of the concept of source because users are referring to the medium as part of the source, not as concept by itself.

The second notable differences are the new concepts that has emerged from this study which are the concept of viral and behaviour. Behaviour refers to the offline and online behaviour as well as excitement and careful consideration. This is in stark contrast with previous study by Longley-Cook (1962) and Johnson and Kaye (1998), which refer to the users' behaviour as users' experience, while experience in this study was grouped under the evaluation elements.

The other finding worth discussion is the concept of viral especially information found circulating on the net. Viral information can be seen as credible however it is also can be seen as less credible at the same time.

The contrasts view on the virality of information is due to the generational differences. As mention earlier, the digital natives believes that viral information can be seen as believable while the digital migrants believes that viral information is less credible. This generational difference has certainly justified our decision to investigate the conception of information credibility from the context of networking society.

There is a subtle meaning that can be inferred from this generational difference. It has been always perceived that younger generation, or the digital natives as anti-establishment, living in their own world, being disintegrated from the mainstream and any other similar label. However, we are of the opinion, based on the finding of this research that we were all, somehow were wrong on this labelling thing.

At least from the context of information credibility, all the younger generation or the digital natives want is for balanced reporting of issues especially the political and economic issues. However, what they were presented with is mostly one sided story especially from the conventional media. This is what we can further infer from the data that the authority of the source can be challenged. Challenge in this context is not about challenging the establishment but as a quest for truth. The digital natives are being critical because their quests for truth (if there are any) are not fulfilled.

Limitation and Suggestion

While the findings of this study is exciting, there are also limitations that we need to acknowledge. The first limitation is due to the nature of investigation. As mentioned earlier, the study employed qualitative approach utilising grounded theory as data collection and analysis procedures. Qualitative approach are always open to subjectivism even though careful consideration has been put in place such as analysing the data in group to reach consensus among the researcher.

The second limitation is concerned with the choice of informants, while we have followed the procedure of grounded theory of doing theoretical sampling; our informants were mostly undergraduate students

(to represent the digital natives group) and staff of UMS to represent the digital migrant group.

However, despite all of these limitation, we believe that the finding from this study do have contributed to the existing body of knowledge about information credibility. Thus, we would like to suggest for next investigation to further test the concepts found in this study. These concepts can be used as domain and the explanation given can be utilised as items to develop a questionnaire to measure users' perception of what constitute information credibility. By applying quantitative approach, we believe the concept can be further strengthen because it goes without saying that quantitative approach offer generalization that qualitative approach cannot.

Conclusion

We would like to conclude this paper by reiterating that this study has managed to achieve the main objective which is to re-conceptualize the concept of information credibility. Our study manages to strengthen the concept of source and messages within the context of networking society. On top of that we also managed unearth another two important concepts in information credibility that we believe are particularly connected to the nature of networking society. These two concepts are the 'viral' and users' behaviour.

References

- Castillo, C., Mendoza, M., & Pobleta, B. (2011). Information credibility on twitter. Paper presented in the *International World Wide Web Conference*, March 28 – April 1, 2011, Hyderabad, India.
- Daymon, C., & Holoway, I. (2011). *Qualitative research method in public relations and marketing communications*. London: Routledge, Taylor & Francis Group.
- Eastin M.S. (2001). Credibility assessment of online health information: The effects of source expertise and knowledge of content. *Journal of Computer-Mediated Communication*, Vol 6. No.4. Page 0.
- Jarvenpaa, S.L., Tractinsky, N., & Vitale, M. (2000). Consumer trust in an internet store. *Information Technology and Management*, Vol. 1 (1/2), pp. 45 – 71.
- Johnson T.K., & Kaye B.K. (1998). Cursing is believing?: Comparing internet and traditional sources on media credibility measures. *Journalism and Mass Communication Quarterly*, Vol. 75 No.2, pp. 325 – 340.
- Johnson T.K., & Kaye B.K. (2004). Wag the blog: How reliance on traditional media and the internet influence credibility perceptions of weblogs among blog users. *Journalism and Mass Communication Quarterly*, Vol. 81, No.3, pp. 622 – 642.
- Karahana G.D., & Straub D.W. (2003). Trust and TAM in online shopping: An intergrated model. *MIS Quarterly*, Vol.27 (1), pp. 51 – 90.
- McKnight DH., & Kacmar C.J.(2007). Factors and effects of information credibility. *ICEC 07' Proceedings of the Ninths International Conference on Electronic Commerce*. ACM, New York. Available online: <http://dl.acm.org/citation.cfm?doid=1282100.1282180>. (accessed on 24th July 2015).
- Metzger MJ. (2007). Making sense of credibility on the web: Models for evaluating online information and recommendations for future research. *Journal of the American Society for Information Science and Technology*, Vol.58. No. 13, pp. 2078 – 2901.
- Pandit, N.R. (1996). The creation of theory: A recent application of the grounded theory method. *The Qualitative Report*, Vol. 2(4) Available online: <http://www.nova.edu/ssss/QR/QR2-4/pandit.html> (accessed on 24th July 2015).
- Petty, R.E., & Cacioppo, J.T/ .(1984). Source factors and the elaboration likelihood model of persuasion. *Advances in Consumer Research*, Vol.11, pp. 668 – 672.
- Wathen N., Beirkell, J. (2002). Believe it or not: Factors influencing credibility on the web. *Journal of the American Society for Information Science and Technology*, Vol. 53. No.2, pp.134–144.

