Social Media and Knowledge Management Disruptive Technology

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ABSTRACT

Social media emerged as a disruptive technology that has brought many advantages in different fields beyond communication and socialization. However, social media lacks the consideration of knowledge management utility, which leads to the creation of several negative impacts such as fake news, data manipulation, Cambridge Analytica. These bad effects contribute to the decreasing level trustworthiness, truthfulness accountability of these disruptive technologies besides the emergence of an unstable economy, politics, and society. Therefore, knowledge management and code of ethics should govern the utilisation of this disruptive technology to overcome the negative effects. Social media use should be governed based on the objectives of Syari'ah (Maqasid Al-Syari'ah): Daruriyat, Hajiyat and Tahsiniyat. The five values of protection include: religion, life, intellect, lineage and property. The best example of interaction should be derived from the Madani Society.

I INTRODUCTION

Disruptive technologies transform the society and people's life by introducing new technologies, salute the old and existing technologies. It brings transformation in the way they conduct business, media is working, they publish intellectual property, and they present education. Nowadays people use social media widely around the world as they consider it as an indispensable object in their daily life. Social media is not just a platform which connects people together, but it is a wide platform in which it allows conducting businesses, connecting people, finding job, sharing knowledge over the globe. It has changed the lifestyle of people and it has influenced the life of people a well as their mindset.

Disruptive technology provides a fast and sophisticated technologies that help achieve the

personal and organizational goals easier than before, despite that social media has a negative influence on the society and people via various means including sharing of fake news, time wastage, influencing people's social behavior, Cambridge Analytica. Therefore, knowledge management should be introduced in social media networks to reduce the bad impacts of social media as a disruptive technology and increase accuracy and truthfulness. Knowledge is defined as a dynamic social process of justifying personal belief towards the truth, goodness, and beauty (Nonaka); in other word, knowledge is created by the interaction of people with the environment and other people, and knowledge management is defined as doing what is needed to get the most out of knowledge sources (Fernandez & Sabherwal, 2010). While disruptive technology is defined as an innovation in technology having major effects on the old technologies making them obsolete.

The spread of social and digital media exploding throughout the world. Statistics has shown that there were 2.46 billion social media users worldwide in 2017, and it is estimated to increase to 3.02 billion users in 2021 (social media usage worldwide, 2018). While, the statistics for the digital world in 2018, has shown that the internet users are approximately 4 billion users, 3.2 billion active social media users, 5.1 billion of unique mobile users, and 2.96 billion active mobile social users. In addition, statistics has shown that Facebook is the most used social networking site as there are 2234 million Facebook users compared to 1500 million YouTube and WhatsApp users, and 980 million WeChat users (social media usage worldwide, 2018).

This paper is structured as follows: section 2.0 presents on the problem statement; section 3.0 discusses on studies of social media's negative impacts; section 4.0 proposes on the solution for the stated problem; and section 5.0 concludes the study.

II ISSUES

Social media as a disruptive technology was introduced to enhance the quality of life by meeting the individual's needs faster, easier, and cheaper by transforming the existing traditional activities into a social platform where consumers and sellers\providers can communicate easily and provide products and services in an online social platform. However, technology this disruptive lacks consideration of knowledge management utility, which leads to the creation of several negative impacts by using these technologies such as fake news, data manipulation, Cambridge Analytica. These bad effects contribute to the decreasing level trustworthiness, truthfulness and accountability of these disruptive technologies besides the emergence of an unstable economy, politics, society. Therefore, knowledge management and code of ethics should govern the utilisation of this disruptive technology to overcome the negative effects.

A. The Impact of Disruptive Technology: Social Media.

The concern of social media users is the privacy aspect as users' data is being stored in the social networking sites and are vulnerable to leakage and concern continues increasingly regarding the safety and privacy issues while using social media. Lee (2015) has described social media as a double-edged sword as it provides users with opportunities and various benefits and it results in some negative impacts and issues. The low trustworthiness level and fake privacy measures have led to the exploitation of the data of social media users, the occurrences of Cambridge Analytica cases, and manipulation of data in social media, for instance, the scandal that happened in 2015 revealing a data leakage on Facebook via a quiz application; where the company has sold the information of 87 million Facebook user to a political consulting firm in U.S to support the election campaign of Donald's Trump and Brexit (Paasonen, 2018).

However, social media has played a crucial role in improving the performance of business organizations by advertising, selling of products and services on social networking sites such as Facebook. In addition, Siddiqui and Singh (2016) has discussed on the positive effects of conducting business in social media and emphasized on the marketing function of social networking sites that eases the means of

reaching the targeted consumers and increases awareness about the organization's products and services. Advertisements through social media has improved the profitability of the social networking sites and the companies itself. The figure below (Figure 1) shows the revenues of the social networking sites (Facebook, Twitter, LinkedIn, Snapchat, social games and others) from 2015 to 2018; Facebook generated the highest revenue among other social networks throughout the years from 2015 to 2018 in which it gained \$8,027.6 in 2015 and increased gradually till it reaches \$18,570.2 in 2018. Moreover, the total revenue generated by social networking sites has increased dramatically from \$10,867.8 in 2015 to \$23,458.2 in 2018 ("U.S. advertising revenues of selected social networks 2015-2018", 2018).

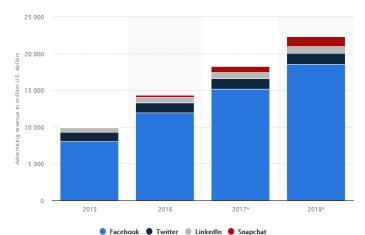


Figure 1. US Social Network Ad Revenues (2015-2018) Source: Statista, 2018.

In recent years, social media is used and exploited for spreading fake news intentionally to bring certain goals and advantages to specific individual or group of people. The sharing of fake news is being practiced in different aspects including politics, health, business etc. Allcott and Gentzkow (2017) defined fake news as the news, which are not genuine and is created and shared intentionally to mislead people, to favor a situation, and to influence people's behavior. Statistics of USA shows that 62% of adults use social media as a news source, with Facebook is the most social networking site containing popular and huge amount of fake news compared to other social networking sites, and many social media users believe the fake news shared (Allcott & Gentzkow, 2017).

Kumar and Shah (2018) highlighted the different types of false information in social

media which are fake news and reviews. Hoaxes on platforms are also categorized as information addition false in misinformation, in which information is spread with the intention of deceiving people. The reasons behind the sharing of false information in social media is because individuals want to earn money, or they want to favor a situation (Kumar & Shah, 2018; Allcott & Gentzkow, 2017). The fake news can have a huge impact in the whole society and people's life in various aspects including politics, economics, health, and businesses. The fake news shared in social media during the time of Donald's Trump election campaign was conducted by a teenager from Vales, Macedonia, in which he has generated 1,800 Euros (£1,500) from sharing fake news about Trump on Facebook to a targeted audience and earned money from advertising on Facebook when targeted audience liked and shared the fake news, thus influencing people's opinion and voting behavior, and reducing the truthfulness and fairness of the election campaign (BBC, 2016).

B. Deployment of Knowledge Management in Social Media

Social media is part of web 2.0, which is characterized as user generated content platform with the abilities of producing, storing, sharing information and knowledge over the globe. Social media should deploy knowledge management (including tacit and explicit knowledge) due to its role in creating, storing, sharing, and disseminating just like the functions of social media in which it allows users to create knowledge, interact with people. and share knowledge ("Perspective of social as an organizational km tool: contemporary literature review", 2018). Using social media with knowledge management results in having positive impacts in education as students use social networking sites to exchange knowledge with teachers and classmates and for innovation. Social media influences the knowledge sharing behavior of individuals including students (Sharabati, 2018).

Social media is a platform which should involve knowledge management as a tool for creating, sharing and exchanging information via an online platform which has changed the communication means and allows the transmission of knowledge around the world unlike the traditional method of sharing and exchanging information which occurs only face to face; leading to the creation of disruptive

technology where social media and knowledge management replaces the old approaches of communication and transmission of information and knowledge between people (Social Media + Knowledge Management = Disruptive Technology).

C. Disruptive Technology

The digital disruption has already happened (Phillips, Hameed, & El Akhdary, 2017):

- Worlds largest taxi company owns no taxi.
- Largest accommodation provider owns no real estate (Airbnb).
- Largest phone companies own no telecommunications infrastructure (Skype, WeChat).
- World's most valuable retailer has no inventory (Alibaba).
- Most popular media owner creates no content (Facebook).
- Fastest growing banks have no actual money (SocietyOne).
- World's largest movie house owns no cinemas (Netflix).
- Largest software vendors do not write the apps (Apple and Google)

Hughes (2018) emphasized that the concept of digital disruptive seems to be having negative influences but it is actually the way a world would be disruptive with innovation that will affect and change the society creating opportunities of prosperity, advancement for people to have a better life.

Disruptive technology is brought up with the fear of losing some current valuable things and fear of the changes that will occur as it has massive effects on societies in all its aspects, for instance, internet has changed the way people live and it transformed the actual world regarding relationships, education, trades, and others from the traditional to the sophisticated electronic platform (Geer, 2018).

IV **SOLUTIONS**

A. Maqasid Al-Syari'ah

The objectives of Syari'ah (Maqasid Al-Syari'ah) are traditionally divided into three categories:

Daruriyat

The essentials are the self-interests upon which people depend, such as faith, life, intellect, posterity, and wealth. A human without those essentials cannot survive and thus leads to disruption in human life.

Hajiyat

The complementary interests supplement the essentials and refer to those interests that, if neglected, would lead to hardship but not to the total disruption of life's normal order.

Tahsiniyat

The embellishments refer to those interests that, if realized, would lead to refinement and perfection in the customs and conduct of people at all levels of achievement.

According to Imam Abu Hamid Al-Ghazali, there are five values of necessities (Daruriyat) that should be preserved to achieve Maqasid Al-Shariah which are listed based on priority as follows:

Protection of Religion (Deen)

Social media contains knowledge about religion and is not always authentic and accurate. It is aimed to raise false information and use the technology to post and disseminate wrong religious knowledge by which some social media users do believe whatever is shared in social networking sites. An individual should preserve religion from any false and inaccurate beliefs and information by reporting the source of false information and going back to the authentic religion resources. Besides, individuals should know the social media threats and be cautious for any defective knowledge or involving in sharing wrong information.

Protection of Life (Nafs)

The preservation of life should be observed by humans from any means that will lead to harmful effects on human health since a human body is a human's custody we need to protect. The emergence of social media has played the role of knowledge sharing with no limitations as it covers all life aspects. False information is a phenomenon raised in social media. Those inaccurate information regarding health and medication may lead to the exposure of some health diseases and reduce the level of healthiness of individuals. Besides, negative influence of using technologies affect the health of individuals. Hence, people must be aware and ensure that only the accurate and

authentic knowledge and information are disseminated on social networking sites.

Protection of Intellect (Agal)

The preservation of intellect should be observed by humans from any means that will lead to changes in an individual's opinion and decision-making process. Social media is accused by having false information and practicing Cambridge Analytica by which it affects the behavior of individuals along with opinion and decisions which results in misleading and deceiving individual and that is against the good manner of humans. Therefore, social media should protect the right of human in getting accurate information and knowledge to ensure a better decision-making process, which is based on true knowledge via deployment of knowledge management in social media.

Protection of Lineage (Nasl)

The preservation of lineage is important since the current generation has adopted technologies at their early age. This issue came up with the concern of raising this generation to have a bright future. It should provide them with good source and trusted social media educational sources. The Star (2018) has reported on the unethical abuses of the social media which people application WeChat, from conduct unethical and forbidden relationships that jeopardize the preservation of lineage and leads to several bad consequences. In addition, occur on social scams highly applications, such as, WeChat, as people communicates and make relationships in the virtual environment (Fun, 2017). Thus, people should avoid using such applications that threaten the protection of the fives important values and objectives in terms of losing dignity, wealth, and life.

Protection of Property (Maal)

The preservation of wealth is one of the objectives considered as the main source for meeting the essentials (Daruriyat) of human's life. The role of social media is not being limited to the creation of social relationship platform but a wide platform for businesses to conduct their business in a virtual world with no physical existence, the potential fraud level has increased. Wealth should be protected from the three prohibited elements namely, Riba (Interest), Gharar (Uncertainty), and Maysir (Gambling) conducted over the social networking sites.

The Macau Scam is spreading in Malaysia through social network applications such as Facebook and WeChat. It was reported that cases of Macau scam have occurred in Malaysia where people cheat others by offering Job opportunities with great salaries to entice them into their scamming behavior via the use of WeChat social media application (The Star, 2017). Individuals in the country should know the bad intentions of people, cautious, and learn not to trust anything written or offered on those social networking sites to protect their wealth.

B. Social Media & Knowledge Management According to Madani Society (Al-Farabi)

The Madani term referred to in Madani society means Urban society (Fogg, 2017). Al-Farabi, whose full name is Abu Nasr Al-Farabi from Turkestan, is one of the great translators and interpreters of Greek philosophy and the founder of philosophy. Al-Farabi has introduced the objectives of human's existence in this world as four main objectives which are (Tanabayeva, Massalimova, Mukhatova, Alikbayeva, & Alikbayeva, 2015):

- Promote the truth
- Inculcate the love of knowledge.
- Achieve happiness.
- Promote good deeds

Therefore, the exploitation of social media will be ceased by the realization of these four objectives and the deployment of knowledge management to produce a disruptive technology that enhances the quality of human's life, improve organization's profit, and ensure safety, security and privacy by eliminating the bad impacts of social media.

C. Code of Ethics

Social media is not governed by restricted ethical principles. Unethical behaviors are not completely controlled, and thus, creating a need for a set of ethical principles and code of conducts that holds social media users liable to any misconduct. Denecke (2014) defined ethics discipline identifies which differentiates between what is bad and good accompanied with moral obligations. The social work professional association has set ethical guidelines to govern the social media use (Boddy & Dominelli, 2017). However, Sormanen and Lauk (2016) stated that there are no standard rules of ethics to govern the social

networking sites. Instead, each social networking site sets its own rules on data usage, privacy and some of these can be decided by the user. There should be a general code of ethics for online research such as the Copyright Act and the Personal Data Act.

Strom-Gottfried, Thomas, and Anderson (2014) highlighted some qualities professionalism which includes trustworthiness and integrity. Data integrity is very important to keep the data confidential and increase level. In addition. Communications and Multimedia Commission (MCMC) has specified a set of acts to govern the internet content and its issues related to trade, finance, fraud, gaming, and copyright including Electronic Commerce Act 2006, Common Gaming Houses Act 1953, Direct Sale Act 1993, Companies Act 1965, Financial Services Act 2013 and many more.

that Malaysian Bernama (2012) stated Communications and Multimedia Commission (MCMC) has introduced and started a click wisely (KDB) campaign in 2012, which aims at increasing the ethical manners of internet protecting internet users cybercrimes and internet threats, increasing awareness and educating users about the and internet's misconduct threats precaution purposes, and ensuring a safe and secure internet usage.

V CONCLUSION

Social media emergence from the last decade has transformed the human life and the way they conduct their day-to-day activities. Social media emerged as a disruptive technology that has brought many advantages in different fields beyond communication and socialization. Social media has resulted in raising some ethical issues that affect individuals by the abuse of social media as a tool for knowledge management. Disruptive technology has brought many advantages to the various aspects of human life. In addition, people should know its negative impacts.

REFERENCES

Becerra-Fernandez, I., & Sabherwal, R. (2010). Knowledge management systems and processes. New York, NY: Library of Congress.

Number of global social media users 2010-2021, (2018).

Statista. Retrieved from https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/

Paasonen, S. (2018). Affect, data, manipulation and price in social media. Distinktion: Journal of Social Theory, 1-16.

Lee, J. (2015). The double-edged sword: The effects of journalists' social media activities on audience perceptions

- of journalists and their news products. *Journal of Computer-Mediated Communication*, 20(3), 312-329.
- Siddiqui, S., & Singh, T. (2016). Social media its impact with positive and negative aspects. *International Journal of Computer Applications Technology and Research*, 5(2), 071-075.
- U.S. advertising revenues of selected social networks 2015-2018, (2018). Statista. Retrieved from https://www.statista.com/statistics/426520/us-socialnetworks-ad-revenues/
- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211-36.
- Kumar, S., & Shah, N. (2018). False information on web and social media: A survey. arXiv preprint arXiv:1804.08559.
- Kirby, E. J. (2016, Dec 5). The city getting rich from fake news. BBC News. Retrieved from https://www.bbc.com/news/magazine-38168281
- Perspective of social media as an organizational km tool: contemporary literature review. (2018).
- Sharabati, M. M. (2018). The Impact of Knowledge Sharing through Social Networks on Students' Academic Performance. *International Journal of Business and Information*, 13(2).
- Phillips, F., Yu, C. Y., Hameed, T., & El Akhdary, M. A. (2017). The knowledge society's origins and current trajectory. *International Journal of Innovation Studies*, 1(3), 175-191.
- Hughes, J. (2018). Are you ready for the digital disruption?. Retrieved from https://www.masterstudies.com/article/are-you-ready-for-the-digital-disruption/

- Boddy, J., & Dominelli, L. (2017). Social media and social work: the challenges of a new ethical space. *Australian Social Work*, 70(2), 172-184.
- Strom-Gottfried, K., Thomas, M. S., & Anderson, H. (2014). Social work and social media: Reconciling ethical standards and emerging technologies. *Journal of Social Work Values* and Ethics, 11(1), 54-65.
- Sormanen, N., & Lauk, E. (2016). Issues of ethics and methods in studying social media. Media and Communication, 4.
- 'Click Wisely' campaign to educate, protect Internet users, (2012, Jul 2). Mysinchew. Retrieved from http://www.mysinchew.com/node/74983
- Denecke, K. (2014). Ethical aspects of using medical social media in healthcare applications. Stud Health Technol Inform, 198, 55-62.
- Fogg, K. W. (2017). Islamic Post-traditionalism in Indonesia.
- Al-Talbi, A., (2000). Al-Farabi's doctrine of education: Between philosophy and sociological theory. Retrieved from http://www.muslimheritage.com/article/al-farabisdoctrine-education-between-philosophy-and-sociologicaltheory#sec1
- Tanabayeva, A., Massalimova, A., Mukhatova, O., Alikbayeva, M., & Alikbayeva, Z. (2015). Al-Farabi's humanistic principles and "virtuous city". The European Proceedings of Social & Behavioural Sciences, 124-129.

- Geer, D., (2018). The disruption of future media is already happening. Retrieved from https://thenextweb.com/contributors/2018/01/22/disruption-future-media-already-happening/
- Benjamin, N. (2017, Aug 29). Job offer via WeChat, interview at a coffeeshop and another Macau Scam begins. The Star. Retrieved from https://www.thestar.com.my/news/nation/2017/08/29/job-offer-via-wechat-interview-at-a-coffeeshop-and-another-macau-scam-begins/
- 'Sugar daddy' app banned from WeChat after call for its shutdown. (2018). The Star. Retrieved from https://www.thestar.com.my/news/regional/2018/05/27/sug ar-daddy-app-banned-from-wechat-after-call-for-its-shutdown/
- Fun, P., (2017). WeChat love rat scams 6 women of over RM100,000 & keeps their nudes as blackmail. World of Buzz. Retrieved from https://www.worldofbuzz.com/wechat-love-rat-scams-6-women-rm100000-keeps-nudes-blackmail/