



Privacy, Ethics, and Security on Social Media: An Islamic Overview

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ABSTRACT

Privacy is one of the most critical fields in recent years since the presence of social media that is increasingly eroding the fundamental human right to privacy. This phenomenon raises many people's concerns about the future of privacy. Commonly discussed by many people are privacy, ethics, and security, including the extent to which they are being taken seriously by designers and users of social media. The discussion is not only from the perspective of western culture but also from the religious point of view. The purposes of this paper is to investigate the privacy, ethics, and security concerns in social media from an Islamic overview. Towards this, we begin by introducing the Qur'an and Sunnah as the life guidelines for humanity. We then highlight the mention of privacy, ethics, and security in both these guidelines. Then we explain it in sequence in each section accompanied by the existing problems in social media. Finally, we discuss the future of privacy in social media.

Key words: Privacy, Ethics, Security, Social Media, Islam.

1. INTRODUCTION

Everyone needs privacy[1] to protect their lives and personal affairs from other people's distractions[2]. In Islam, the need for privacy includes all aspect behavior; from the design of the house[3]; to the way people dress; and to one's social interaction in the physical and digital environments[4][5]. In the Qur'an¹ and the Hadith², there is a lot of emphasis on the importance of maintaining 'awrah, closing people's disgrace, not spying, and also mutual secrecy. Its purpose is to maintain one's dignity in the context of interacting in society. The practice of controlling how, when, and to what extent personal information to others; and to what extent one to do

not something forbidden; with refers to the Qur'an and Hadith is the manifestation of a Muslim's privacy rights every day.

The problem is now along with the development of SNS increasingly popular [6s] and has become part of the lifestyles of many people globally [7], [8], someone often loses track of the extent to which personal information is hidden or revealed. The sense of connectedness and intimacy established among digital "friends" often leads to damaging or inappropriate disclosures[9]. Not to mention, prohibited-content publicly available makes privacy protection more complicated and often forgotten. Privacy issues were a paramount and substantial topic in social media for currently[10] as more data that is exchanged and collected[11]. A survey conducted by 'IDExperts' in 2019 [12] has reported about more than 2-3 in 5 adults are concerned about the security and privacy of Facebook (see Figure 1). The famous phrase of "privacy is no longer exists, forget it" from Scott McNealy (CEO at Sun Microsystems) in 1999 is now increasingly relevant. Of course, a statement that is counterproductive because of privacy is an individual's rights given God that does not die only due to technological sophistication.

Concerns about the future of privacy [13] and the disadvantages of SNS [14][15] from the Islamic perspective has given rise to an interesting discussion in this field. Reference [16][17] highlighted the mention of privacy in the Quran and Hadith to obtain the definition of privacy based on the Islam perspective. Meanwhile, the most common discussion produces a complete set of Islamic ethics [18][14][19] and guidelines [14] for using SNS and its applying ethics[20]. These Islamic ethics and guidelines can help Muslim users to overcome most of the SNS disadvantages. In contrast to previous discussions, other research discusses Islamic ethics [21] and privacy design [5][17][22] to provide input for developers of SNS in developing SNS that is more culturally sensitive. Although Islamic ethics and guidelines can help Muslim users to overcome most of the SNS disadvantages; and Islamic ethics and privacy design that can help developers of SNS; however, there is no comprehensive discussion about security on SNS in Islam perspective.

¹ Al-Quran is the main religious text of Islam

² Hadith is the record of the words and actions of the Islamic prophet Muhammad

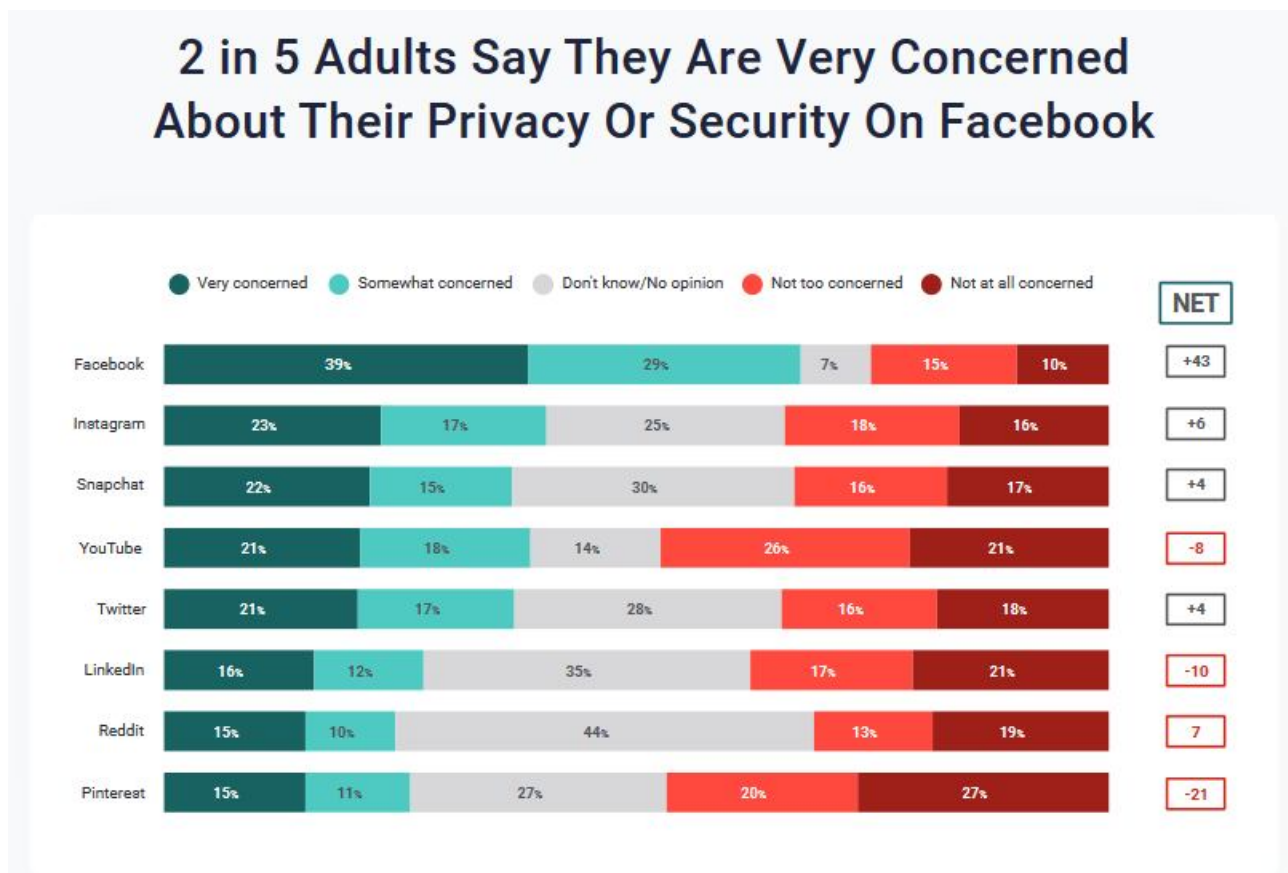


Figure 1: Survey findings: very concerned about their privacy or security on Facebook

The purpose of this paper is for a comprehensive discussion of privacy, ethics, and security on social media from the Islamic perspective. We begin in section 2 by highlighting privacy and present challenges privacy issues that refer to Al-Quran and Hadith. We discussed sequentially ethics and security in the afterward section. Finally, we discuss the future of privacy in social media.

2. PRIVACY, ETHIC, AND SECURITY MODEL FROM ISLAM PERSPECTIVE

The content of the Qur'an is life guidelines and instruction for humanity to obtain salvation, happiness, and good pleasure of Allah. In the Quran Surah Al-Baqarah verses 1-2, Allah says:'

Alif, Lam, Meem. This is the Book about which there is no doubt, a guidance for those conscious of Allah' (QS. 2:1-2).

The Quran is the most complete guide to human life which includes all things included privacy, ethics, and security. Meanwhile, the Sunnah is the whole practice of a life lived by

the prophet to be used for the model behavior of a Muslim. It is a course, way, mode, manner, or rule of conduct or actions of life. It is the second law source in Islam, after Al Qur'an. The Sunnah has compiled via the communications of Prophet in the forms of Hadith which are narrative or information submitted by the companions of the prophet about attitude, act, speech, and way of the prophet. Because of its nature, the precision of the Sunnah under sufficient supervision, with concerns about possibilities dilution and fabrication. Figure 2 shows a theoretical model used as a reference to highlight privacy, ethic, and security from an Islamic perspective.

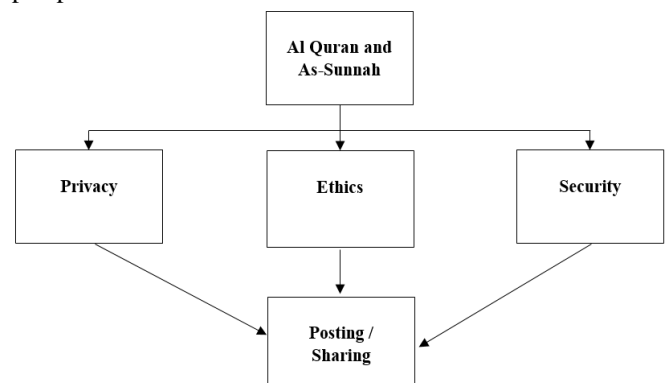


Figure 2: Privacy, Ethics, and Security in Social Media From Islam Perspective

3. PRIVACY

3.1 Privacy from Islam Perspective

Islam has explicitly regulated the importance of maintaining one's privacy. The mention of privacy in the Quran appears in a few passages. The first is an order to ask permission when entering someone else's house:

'do not enter houses other than your own houses until you ascertain welcome' (QS. 24:27).

The second is a prohibition to gossip and spy on one another:

'Do not spy on one another' (QS. 24:58).

The third is an order to avoid prejudice, a ban on spying and searching for the ugliness of others, and a prohibition of backbiting each other

'avoid much [negative] assumption. Indeed, some assumption is sin. And do not spy or backbite each other.' (QS. 49:12).

In reviewing the literature, reference [23] divided Islamic practice and privacy into three domains, which are the privacy of the home, privacy for gender-exclusive spaces and gatherings, and individual privacy. In the present paper, we focus on one type of privacy domain: Individual Privacy.

Many verses in the Quran and Hadith illustrate the importance of individual privacy which was primarily concerned with protection from the intrusion of others, especially the protection of intimate parts of one's body. The word '*awrah*' is a practice that represents such protection and refers to the parts of the body that must be covered by clothing³. '*awrah*' definition has much meaning and in detail explained in [24].

The mention of '*awrah*' in the Quran appears in a few passages that instruct men and women to cover private parts and lower the gaze when another's '*awrah*' is exposed.

"Tell the believing men to reduce [some] of their vision and guard their private parts." (QS. 24:30)

"tell the believing women to reduce [some] of their vision and guard their private parts." (QS. 24:31).

Above verses instruct everyone to cover certain body parts; which part is covered and when it depends on the specific situation. In particular, for a woman, there is additional instruction to wear head covers up to over their chests and not expose their adornment except for family members who have been specifically defined.

"and not expose their adornment except that which

[necessarily] appears thereof and to wrap [a portion of] their headcovers over their chests and not expose their adornment except to their husbands, their fathers, their husbands' fathers, their sons, their husbands' sons, their brothers, their brothers' sons, their sisters' sons, their women, that which their right hands possess, or those male attendants having no physical desire, or children who are not yet aware of the private aspects of women." (QS. 24:31).

Even a woman who is wearing clothes can still be said to be naked as the prophet Muhammad said: "*the women who would be dressed but appear to be naked*". Scholars interpreted it as a female who reveals part of her body with deliberate to show the beauty of her body. Others interpreted it as a female who wears a thin dress, so that still shows her skin color and body shape. Therefore, in Islam, Muslim clothing must meet the requirements such as presented in [25][26][27].

In other verses, Al-Quran mentions privacy related to the law to respect others, warns Muslims to refrain from manners that could lead to an intrusion of others' privacy. Included is a prohibition of gossiping, spying (QS. 24:58), mistrust, backbiting, and searching for the ugliness of others (QS. 49:12). Due to contained in the Qur'an, Muslims are obligated to obey it. Failure to carry out this rule is considered a sin.

3.2 Privacy Issues on Social Media

Privacy issues in social media are not only on account owners but also with his friends. It is in line with the Qur'an that instructs Muslims to protect '*awrah*' and lower his gaze if another's '*awrah*' is exposed. In reviewing the literature, reference [28] categorized the privacy issues on social media into different areas as follows: (1) privacy in publishing social graph, (2) privacy in activities in social media, (3) privacy in multimedia sharing, (4) privacy in cyber-physical social system, (5) privacy in mobile social networks, and (6) privacy in other social network application. In this paper, we focus on one areas of privacy issues: Privacy in activities in social media.

Social media are services that enable users to generate and share different content like text posts or comments, videos or photos, and data produced via all online interactions. For instance, YouTube is an example of sharing video and audio; Instagram is the ones for sharing pictures, and still much more. The existence of facilities stored image data on social media [29] led to visual data on the internet increasingly [30]. Posting content like video and pictures on social media arise new privacy issues because of their context showing visual of the subject physically so that it carries far more risk than text [31]. The user and their family can feel great embarrassment if a video or photo to spread to the public. In some cases, share inappropriate photos could exceptionally threatening the reputation of users itself or their family. One good example to illustrate this issue is below is an excerpt from Saudi female in

³ Instructions on which body parts to cover vary between different schools of Islamic thought.

[5], in which she shares her concern regarding her father gaining access to her account:

"I have my dad blocked on Facebook (laughing). The moment I learned he opened an account I blocked him because at the time he opened it I was getting tagged on a lot of pictures that I didn't want my family to see. Pictures of traveling photos or wearing shorts, etc.) I didn't even want to risk (loud voice) something accidentally being set on the wrong privacy setting. Even though I always had my privacy setting on pretty high. The only things I allow to be shown are the things I allow. I have ten different friends groups. I have 'limited', 'more limited' 'most limited' ...I have six to seven different levels of privacy."

She tried hard to ensure that his account was strictly set. If her father or other family member sees that she has a circulating photo showing him wearing shorts, for instance, reputation and her family's honor will be much damaged. Even though it has configured its privacy settings to be very strict, still there are unintended consequences where she cannot control the "tagging" and "like" by other users.

The keep of reputation and honor for women and their families have more heavy impacts than they do on men. Therefore, Muslims are very conscious of the effect related to any privacy violation. For instance, women Muslim women often don't use photos of themselves in profile photos because they are fearful that if a photo falls in the irresponsible people, with that photo, someone can blackmail them [5]. Young Muslim women have ever reported such happened to him after she is posting a photo of themselves on the internet [32]. Not only cases of extortion, but there also are several cases related to harassing to youngsters by pedophiles, which finally led to suicide. The cause is because bullies took photos of her boobs and then posted it [33].

The presence of a digital camera and social media services that are increasingly mobile make users with its easy posting the videos or photo content directly. Users share their daily lives is indeed fun, but users generally do not even aware of that digital information is "*persistent and can arbitrarily be copied, distributed, and repurposed.*"[34], privacy concerns have become more acute [35].

4. ETHIC FROM ISLAM PERSPECTIVE

Islam has taught a lot about ethics, even from an early age. Allah Almighty said in Surah An-Nur verse 58 about how to teach children, when is proper time, and how in a way to enter his parents' room.

"and those who have not [yet] reached puberty among you ask permission of you [before entering] at three times: before the dawn prayer and when you put aside your clothing [for rest] at noon and after the night prayer. [These are] three times of privacy for you." (QS. 24:58).

There are also several Hadiths of the Prophet Muhammad

about ethics that are closely related to maintaining one's privacy. Including the following "*If one of you seeks permission to enter three times but is not given permission, let him go back.*" Narrated by al-Bukhaari (6245). In this hadith contained the concept of maintaining privacy, because what is in someone else's home is not his right to see it.

There is a lot of content that contains the exposed 'awrah in photos or videos on social media and can publicly be accessed. This phenomenon adorns our social media. Under these conditions, the needed by Muslims is Islam ethics to filter activities on social media so that users can distinguish between right and wrong. Islam ethics relate to individual privacy concerns, in particular, the problem of 'awrah in photos or videos, among as follows:

- 1) Do not upload/share/view the private photos: Muslim users are not permitted to do not upload/share/view the content (like photos or videos) that contain 'awrah exposed the private photos that contain the exposed 'awrah, due to it leads to committing eye sins, and slowly it makes her/him closer to adultery. In the Quran, Allah says: "*Do not be closer to commit zina.*" (QS. 17:32).
- 2) Do not backbite: Islam forbids backbiting because it is a very despicable act. Its impact is the defamation, dignity of the maligned damaged, and any more problems arising.
- 3) Do not bully anyone: Bullying is the act of intimidating, coercing or harassing someone who is considered weaker. The impact of cyberbullying on the victim could range from mild threat and loss of privacy to serious physical harm and psychological damage [9].
- 4) Do not stalk: The user can choose to make his profile private. However, group affiliation and friendship links are frequently visible to unauthorized users. These group affiliation and friendship links may allow stalkers to follow user activities online and watching what users posted. In some case, women are more likely to be the victims of this offense [36], and therefore protecting private information may be more crucial for females. The other harmful activity that has the potential to be related to 'stalking' and tend to involve women is cyberbullying, in which stalker using social networking to publish embarrassing false information about another person, or hostile with others[32].

5. SECURITY FROM ISLAM PERSPECTIVE

Islam is a religion that talks a lot about security concerns. For instance, in the Qur'an Surah Al-Kahfi verse 90-98, Allah Almighty shows us through the story of Zulqarnain when protecting his people from the evil of *Ya'uj* and *Ma'uj*. At the time, Zulqarnain builds a wall made of copper and hot iron. The wall is used to meet the needs of people who need security. The current security technology adopts the concept of a wall made of these copper and hot iron that popularly known as Firewall. The function of this firewall is none other than to block the access of unauthorized parties to data owned by someone.

Another story that also shows that Islam has attention to information security concerns is the story of the Prophet Sulaiman (as) that contained in the Quran Surah An-Naml verses 21-30. Briefly at that time was told Hoopoe birds deliver news about there is a woman that leads the country that has abundant wealth and magnificent palace. This story then tells how Hoopoe birds delivered the letter themselves to the Balqis queens. Hoopoe birds do that to maintain the confidentiality of information on the letter. This story shows that even from the time of the Prophet Sulaiman (as), the concept of security has applied. The confidentiality of information in this story that popularly known as verification and authentication in the processing of information. This includes screening information, confirming its authenticity, verifying its accuracy and also assessing its implications[37]. In the Quran Surah Al Baqoroh Verse 282, Allah orders every agreement to writing it correctly. There must be witnesses of two men or one man with two women. If one of them is there forgets, then the other to remind him. if it has passed the time allotted, the agreement is then re-written up to the agreement complete. This verse that popularly known as rules of evidence: Availability, Integrity, and Non-Denial Measures. For instance, a peace agreement between the Muslims and the Quraish is known as the Hudaibiyah agreement. At the time, there is the rejection of some of the companions of the Prophet. Its reason is this agreement was very disappointing for some Muslims. Some of them even had doubts about the prophethood of the prophet. But gradually it was finally proven, it turned out that the Prophet Muhammad had a very great political vision, which other people were unable to capture. For the sake of secrecy of the strategy, he did not reveal the secret behind the agreement. In current terms of information security, "repudiation" is one risk of information that needs to be carefully considered. By hiding the user's identity, information security is increased[38].

6. SUMMARY

Islam is a perfect religion in which one of its teachings strongly emphasizes the importance of privacy in all aspects of life. However, with the growing popularity of social media among Muslims, the individual privacy of a Muslim is increasingly threatened or even virtually non-existent. By reference to the Quran and Sunnah, we highlighted the mention of privacy in Islam's perspective. 'awrah is one of individual privacy which mentioned in these both Islamic law sources. It refers to the private parts of the body that must be covered by clothed except specifically exempted. Each Muslim obliged to cover it and prohibited to view the exposed another's 'awrah. This obligation also includes in relationship with the exposed 'awrah in photos or videos.

The function of Islamic ethics in this regard is the activities filter section on social media, specifically to users so that they

can distinguish between right and wrong. One of Islam's ethics is to do not upload/share/view the content that contains the exposed 'awrah. Future work will involve more contextually related to how efforts to protecting individual privacy, in particular, the 'awrah issues.

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