

Indonesian Millennial Awareness to Privacy and Personal Data Protection on the Internet

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ABSTRACT

The internet is the daily consumption of millennials. Since all form of privacy violation on the internet is detrimental. Millennials awareness to protect the privacy and personal data on the internet is fundamental. This study aims to see what awareness of Indonesia's millennial related to protect their privacy and personal data, including what personal data that is concerned; how internet behaviour related to privacy and personal data, and how to response of privacy invasion on internet. This study uses a quantitative approach. The data collection method used is an online questionnaire. The analytical method used is descriptive analysis. The results of this study indicate that the millennials consider personal data that is closely related to family and their owns have to be protected. Millennials also show suspicious behaviour regarding their personal data on the internet and found that all forms of violation of privacy and personal data are disturbing and offensive. Millennials thought technical capability on the internet is essential to minimise the risk of privacy violation on the internet, and millennials tend trust in their own abilities than relying on the government. This research is open to being developed further, among others by looking at and measuring the competence of millennials and what factors determine the success of protecting privacy and personal data on the internet.

Keywords: Privacy; Personal data; Personal information; Information security; Awareness; Data protection.

1. INTRODUCTION

Indonesians millennial, aged between 18-35 years, numbered at 64 million or about 24 per cent of the population in 2017¹. Nielsen Media Research said millennials born from 1977-1996, McCrindle Research used the 1980-1994 range as a reference, PricewaterhouseCoopers used 1980-1995, and many other research institutes determine the range millennials is born². However, if conclusions are drawn, millennials are those born in the early 1980s until the late 1990s. Indonesian Internet Service Providers Association (APJII) data showed in 2017, 49.52 per cent of internet users in Indonesia are aged 19-34 with a penetration rate of 74.23 per cent³. Internet users in Indonesia is almost entirely (87.13 %) accessing the internet for social media³. Social media made it easy to exchange information, including personal information. Personal information, whether it is separate information or partial personal information that may be sensitive to some people or the data or included in the realm of privacy. Personal information can also be referred to as personal data. The issue of protecting personal data is not a brand-new issue; it has emerged from the early 2000s in several Western countries. In Indonesia, still, there has not been acts or laws that specifically address personal data protection. Recent developments stated that the government prepare for the drafting of personal data protection acts.

UNESCO estimated that more than 50 per cent of the world's population will connect to the network in 2018⁴. In 2019, data from the Internet World Stats internet penetration in the world has reached 56.1 per cent. Protect privacy and personal data on the internet is fundamental. Familiar opinion is younger generation is less concerned about their privacy since they post "anything" on the internet. However, other studies mention the younger generation respects privacy and try to protect their online lives from surveillance⁵. Privacy-related studies by Indonesian netizens said that personal data must be protected, with half of the population expressing fear of misuse of their personal data by other people/parties⁶. The results of previous studies showed that personal data is essential to be recognised and protected by millennials. As addition from previous studies found in social networking contexts, control over personal information is negatively and statistically associated with information disclosure. However, both user awareness and security notices have a positive statistical effect on information disclosure⁷. Privacy and personal data from those who cannot use the internet, marginalised from the internet, or technology stuttering is the most vulnerable. Because vigilance related to privacy is a fundamental thing in cyberspace life, social status can cause this ability, since social status affects the quality of access and autonomy in the internet⁸.

This study aims to see what awareness of Indonesia's millennial related to protect their privacy and personal data. This study is intended to provide a clearer picture of the

understanding and response of Indonesian millennials to the protection of their privacy and personal data. What personal data is most of the concern for the millennials. Previous studies in Indonesia related to personal data usually discussed from the legal and law perspective. This research tries to see privacy and personal data protection from the perspective of social and information sciences. This research aims to add insight to protect the privacy and personal data in Indonesia, particularly.

2. LITERATURE REVIEW

2.1 Privacy and Personal Data

Privacy is a mechanism that regulates boundaries between you and the others, and these limits can differ depending on the role being carried out by the individual. Inability to distinguish between these boundaries in various roles will result in conflict and discomfort⁵. The concept of information privacy is defined by Alan Westin, as follows: “claims from individuals, groups or institutions to determine for themselves when, how and to whom information about them is communicated to others”⁹. This is reinforced by another definition of privacy, namely “Control of personal information” or further, privacy is a claim by a person, group, or institution to determine for them when, how and what kind of information about them is communicated to others¹⁰. So that every person or entity has the right to determine what kind of wants to explain himself to others. The right to privacy has not been seen as an absolute right of anyone, but in general the protection of the right to privacy is categorised into four things, namely Information Privacy; Body privacy; Communication Privacy; and Territorial privacy¹¹.

Its relation to internet usage, information privacy and communication privacy are the most related things⁴. Essentially, privacy comes from the recognition of human dignity and integrity and concerns basic human rights. So, it is difficult to define with precision. In other contexts, the right to freedom of opinion, the right to self, the right to self-regulate, the right to protect reputation, the right to family life, the right to define one’s own sexuality, freedom of expression, freedom from supervision, personality, human dignity, identity and anonymity, confidentiality and others^{4,12}. Privacy in the modern world has two dimensions, first, problems related to one’s identity and second, how personal information handled⁴. To further clarify, the concept limits that are used, privacy are controls to determine what information may be known to other entities and whom entities may know that information while personal data is the privacy part that is controlled by the individual who owns the data.

Personal data according to the Indonesia Personal Data Protection Bill is any data about a person whether identified and/or can be identified separately or combined with other information either directly or indirectly through electronic and/or non-electronic systems. Table 1 is a type of personal data protected by Indonesia’s Law.

The Indonesia bill and laws divide personal data into

two types, ordinary personal data and sensitive personal data. Sensitive personal data define as personal data, which includes religion/beliefs, health conditions, physical and mental conditions, sexual life, personal financial data, and others. General personal data including names, passport numbers, photos, videos, e-mails, fingerprints and others¹¹.

As global usage of the internet and many businesses are doing business online serving customers internationally from different parts of the world. Hence, they should protect customer data. Data protection law has to apply both on the web provider or services provider and customer. It might create confusion and overlapping legal requirement. The most extensive and widely used privacy law is the General Data Protection Regulation (GDPR). GDPR applies to every Uni European member since 2018 and becomes a standard to global data protection laws¹³. The GDPR sets out seven principles for the lawful processing of personal data. Processing includes the collection, organisation, structuring, storage, alteration, consultation, use, communication, combination, restriction, erasure or destruction of personal data. On the other side, the United States has no single federal data privacy law in the country yet. US privacy laws apply on a state level and an industry sector level. While Not all Asian countries have enacted data privacy laws, but those who have done that have precise requirements that need to follow.

Table 1. Kind of personal data derived from Indonesian Act

Legal documents	Article 5 draft bill on protection of personal data	Article 84 section (1) and Article 85 Law No.23 of 2006 population administration
Kind of personal data	Full name	Family registration number
	Passport number	National identity number (NIN)
	Personal photo and video	Birthday date
	Phone number	Disability notes
	e-mail	
	Family Registration Number	Mothers’s NIN
	National Identity Number (NIN)	Father’s NIN
	Birthday Date	Special Events Note
	Mother’s NIN	
	Father’s NIN	

2.2 Internet Behavior Related to Personal Data

Millennials behavior on the internet relating to the use of personal data can be explained through several indicators such as questions asked when signing up or registering on a website, concerns about the reappearance of information that has been deleted on the internet, privacy settings on social media, privacy policies on a website, surveillance of track recordings while accessing the internet, and information that may appear when typing their names¹⁴. Hann et.al added that the behaviour regarding the acceptance of cookies on the site they use could be a reference for users in using their personal data on the internet¹⁵. Besides the privacy policy rules on a website can affect user behaviour in surfing¹⁶.

Today, protection of the right to privacy has evolved to

issues concerning issues related to the collection, use and dissemination of personal data in information systems. Some things about intrusion of privacy data that become a concern include the experience of invasion of personal data, responses to communication that you did not request, to whom you will report when you experience an invasion of privacy data what matters to concern when browsing on the internet⁹ other things that concern about personal data trust in the government will be the protection of the people's data, questions asked when registering, reluctance to provide personal data information to government institutions⁵. Some of the statements above are then compiled into indicators used in the dimensions of this study.

3. RESEARCH METHODOLOGY

This study uses a quantitative approach; this study seeks to see phenomena related to the understanding of personal data among millennials. This is descriptive research, intended to explore and clarify a phenomenon or social reality by describing several variables related to the problem under study¹⁷. The data analysis method used is descriptive analysis. Data processing method using a Likert formula and calculation using mean based on respondent answer, to find the average value on the indicator. The method of data collection uses an online questionnaire with purposive sampling, respondents aged 17-35 years chosen according to the millennial demographics that were discussed in this study and regional sampling techniques are used¹⁸. The online questionnaire was distributed through various social media to respondents were randomly obtained from various cities in Indonesia. The online questionnaire collection period conducts from September 2018 to February 2019. Regional sampling techniques are used to determine the sample if the object to examine, or data sources are extensive, for example, residents, province or district. The online questionnaire distributed by the help of many internet influencers on social media, this method used to maximise the random distribution in the whole nation. The variables used in this study divide into three dimensions, including personal data that is concerned; internet behavior related to privacy and personal data, and the response of privacy invasion on the internet.

4. RESULT AND DISCUSSION

4.1 Respondent Profile

Profile of respondents in this study aged between 18-35 years with the composition of respondents at the age of 26-30 years totaling 62 people, 21-25 years totaling 48 people, 18-20 years totaling 41 people and 30-35 years totaling 27 people. The sex of respondents in this study was dominated by women with a total of 108 people, while male respondents numbered 56 people. Respondents spread out in several cities in Indonesia, included Jakarta Greater Area, Bandung, Yogyakarta, Medan and Surabaya. The education profile represented by all levels of education, ranging from Senior High School to Doctoral Level. Respondents in this study are millennials whose internet consumption levels are high, for example 98.9 per cent of them use chat applications every day. Almost all respondents (93.8 %) access the internet every day.

Table 2. Personal data that is concerned

Indicator	Mean	Indicator	Mean
Full name	3,98	Disabilities notes	4,14
Passport number	4,61	Financial statement	4,75
Personal photos	4,20	Religion/belief	3,35
Personal videos	4,35	Sexual orientation	4,34
Phone number	4,61	Biometric data	4,81
Email	4,09	Political view	3,56
Family registration number	4,63	Crime record	3,71
Nin	4,71	Child record	4,50
Birthdate date	4,02	Geolocation browsing	4,41
Mother's nin	4,58	IP adress number	4,57
Father's nin	4,55	Social media username	3,96

Source: Authors

4.2 Personal Data that is Concerned

Millenials concerned most at Financial Statement Information, Biometric Data and the NIN data. That phenomenon shows that in general, millennials is aware of what personal data must be protected. Sensitive matters such as financial statements, biometric data, and sexual life are the things that millennials want to protect the most. As in the Table 2.

Millennials also pay attention to the importance of protecting the data of their immediate family by entering data from their children, family card number, biological mother's NIN and biological father's NIN as personal data that needs to be protected. This assumption illustrates that the millennials does not want their families to be exposed by others without their knowledge. Moreover, millennials are concerned about protecting their personal data when they are active on the internet; this is indicated by their serious concern on geolocation data browsing and no IP address.

Things shared on social media such as full names, photos of themselves, e-mail addresses and social media usernames are lower concerns compared to the categories discussed earlier. Then political views and religion is the least protected thing for most millennials. As religion gets a score of 3.35 and becomes personal data which scores tend to be low, or there are 40 respondents (23.4 %) who say that Religion does not become personal data that needs to be protected. The openness of millennials in terms of what beliefs or religions made religion not included in personal data that needs to be protected. This view can be related to millennials behaviour in terms of accessing the internet; this was stated by McClure that the internet influences millennials in the way they view religion¹⁹. Indonesia Millennials tough religion/belief are not part of privacy.

4.3 Internet Behavior related to Privacy and Personal Data

On the dimensions of millennial generation behaviour on the internet related to the use of personal data shows several things, among others, there are only two indicators that show

great concern. Indicators that have very high scores (> 4.21) include fears of deleting self-information and rearrangements relating to personal data on social media. Most millennials are worried that there will be information about themselves that they have deleted from the internet, show up on the future, since almost no information can be deleted from the internet if it has ever been uploaded. Information displayed about the personal self is often tricky to adjust to the self-image that someone wants to build, Steeves et.al stated that many young internet users indicate that they have a love but hate relationship with social media and often feel that exposure to cyberspace makes them vulnerable to the judgment of others and feels they do not have the ability to adjust the self-image that they want to display in cyberspace⁵. As in the Table 3.

Table 3. Internet behavior related to personal data

Indicator	Mean
Sign up forms	3,94
Deleted Personal Data Reappeared on Internet	4,52
Social Media Privacy Setting	4,31
Cookies Setting	4,20
Browsing Tracer	4,19
Personal Data Shows by Search Engine	4,11
Privacy Policy on Website	4,19

Source: Authors

Millenials is concern on social media privacy setting. Social media feature that help millennials to protect their privacy is private account mode. However, not all social media offer private account feature. Though these features can reduce the risk of privacy violations, as said by Gurung and Raja, privacy and security issues influence the risk perception of internet users. So those who might want to protect their account but do not know or understand the feature are vulnerable and ultimately unprotected²⁰.

Millenials also concern cookies setting on website when their do sign up. This is reinforced by the statement stating that websites that offer economic benefits significantly increase the likelihood of someone registering on that site¹⁰. Massive use of technology demands that service providers such as social media in the future put attention to the design of the site or application that is concerned with privacy. Ensure proactive and preventive matter on privacy protection. Privacy have to be industry standard and embedd on any product or site²¹. When using a website, millennials expect trust and no worry about their personal data but rather on the usefulness or benefits of using it on the website.

4.4 Response of Privacy Invasion on Internet

Most Indonesian internet users(62.88 %) used the internet before 2013, they have been using the internet for more than 5 years³. Practically they might experience violations of their personal data, whether they realise it or not. How they respond if they experience a violation or invasion of their personal data or privacy. The results describe in the Table 4.

Table 4. Response of privacy invasion

Indicator	Mean
Received email from corporate without prior notice	3,79
Received short message from corporate without prior notice	4,10
Excessive personal data query when sign up	4,29
Personal information posted without prior notice	4,52
Personal Photos posted without prior notice	4,50
Personal Videos posted without prior notice	4,52
Corporate accessed personal data without prior notice	4,64
Social media hacking	4,66

Source: Authors

Almost all, 6 out of 8 indicators, scored> 4.20, which if translated form of invasion of personal data will have a very severe impact on respondents. This result is typical, all forms of hacking and violations are detrimental, whether known by the victim or not. However, in the case of hacking on social media, Facebook in particular, who have experienced hacking or retrieval of personal data feel they do not get help from Facebook. Facebook should be able to warn users of personal data abuse²². Since not all victims of hacking know that they are being hacked and have their privacy violated.

Today, ease in taking pictures and recording videos makes this violation of personal information more vulnerable. In self photos and videos there could be improper information, such as physical imperfections, deviant behaviour, or other things that according to the person is a disgrace for him. Privacy is control of personal information, by disseminating information, photos and videos of other people without permission, that person’s control of his personal information is taken. Furthermore, there are some sites that ask too far and lot of personal data or information when the user did sign up. Data from previous studies show that individuals with a high level of concern for their personal data will tend to refuse to participate in activities that require complete personal data²³.

Other indicators that score high is when they receive SMS and e-mails from corporations without asking. Cellphone and e-mail data has become a public secret, sold in Indonesia with prices starting from Rp. 100,000 containing hundreds of customer phone and e-mail data²⁴. So that it can be understood the results of this study indicate that respondents felt disturbed when they found out that corporations were accessing their personal data without permission for any purpose and when respondents found out that they were experiencing hacking of social media accounts, excessive question and invasion of privacy.

To see a picture of awareness of privacy protection and personal data in this study, two indicators look at what level of trust the millennials has to protect their personal data, the results of which are displayed in the Table 5.

Millenial trust themselves more than government in terms of protecting personal data. This is indicated by a high score on the indicator of protecting personal data independently, while millennial generation tends to be less (score <3.40)

Table 5. Reliance Perceptions by millennial for personal data protection

Indicator	Mean
Protect Personal Data Independently	3,60
Government Protect Personal Data	3,31

Source: Authors

in terms of trusting the government in terms of protecting personal data. It can be related to the condition of legal acts in Indonesia related to the protection of personal data, which is still minimal, and the absence of laws relating to the protection of personal data specifically. Millennials believe that they can protect their personal data on the Internet will be useless if it is not accompanied by technical ability. Technical capability is needed to actively protect personal data on the internet.

5. CONCLUSIONS

Indonesian millennials find data relating to their family need to be protected than personal data relating to themselves. However, millennials are concerned about track records on the internet. Millennials behaviour on the internet related to personal data shows that millennials are concerned and cautious when using the internet. To protect their personal data on the internet, millennials trust in their own abilities than relying on the government. These conditions indicate the need for a legal standing such as acts, and laws related to the protection of personal data from the government. This research is still wide open to being developed into further research, including looking at the relationship between variables, so that each can be seen in the effect of protecting personal data. In addition, it can also see what competencies and skills are needed by people to protect their personal data on the internet

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