

The Growth and Impact of the Internet on the Users:

A Research on Internet Phenomena in Indonesia in 2016

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Abstract— This work is motivated by the phenomenon of sophistication of Internet technology which nowadays is rapidly evolving in Indonesia. Indonesia is a developing country which has a great enthusiasm for Internet technology. In history, the Indonesian government began developing the Internet in the early 1980s at the state universities in Indonesia. Internet started to become popular since the collapse of the Suharto regime in 1998. Until the end, the Internet became a tool used by many college students to perform a political movement. Since then, the Indonesian community began to recognize the internet-based activity. However, the progress of the Internet in Indonesia also has an impact on behavior change for young generation. This article shows to the government, parents and internet users in Indonesia how shall we manage the advancement of the Internet.

Keywords— *internet; online; networking; social media; behavior; and generation*

I. INTRODUCTION

On April 6th, 2015, the Ministry of Communication and Informatics (Kemenkominfo), Republic of Indonesia has established a task force which is called Forum Penanganan Situs Internet Bermuatan Negatif (FPSBIN) that aims at overseeing, monitoring and if needed banning the sites that allegedly have negative contents. The forum has been regulated in the Regulation of the Minister of Communication and Informatics, No. 19 of 2014, on July 17th, 2014 (Aditya Panji, April 7th, 2015). It has four panels, namely, first, the panel of Pornography, Violence on Children and Internet Security; second, the panel of terrorism, racism and hatred; third, the panel of Investigation of Illegal Cases, Fraud, Gambling, Drugs & Food, Drug; and fourth, the Panel of Intellectual Property Rights.

This plan was followed by the closing of 22 radical Islam websites which were proven as spreading radicalism through the internet (Yoga Hastyadi Widiartanto, April 2nd, 2015) as it was requested by Badan Nasional Penanggulangan Terorisme (BNPT), the national institution which is formed to fight terrorism.

According to the Secretary General of the Ministry of Communications and Informatics, Dr. Suprawoto SH, M.Si,

internet access should provide added values for the users, and not otherwise such as online sexual transactions, hoax and fraudulence (Kominfo.go.id, May 15th, 2015).

The Indonesian government is concerned about these problems due to the rapid progress of the internet accompanied by the increasing number of Internet users in Indonesia. It is then necessary to learn how the Internet has changed the behavior of young generation in Indonesia nowadays.

II. LITERATURE REVIEW

The method we use in this research is the documentation study. We use four primary sources of data. The first source is a scientific journal taken from the findings of Garcia et al. (2014) entitled Youth Engaged in the Internet: The Role of Social Networks in Social Active Participation. The second source is a scientific journal from Bolton, et al. (2013) entitled Understanding Generation Y and Their Use of Social Media: A Review and Research Agenda. Both were downloaded from the Library of the Republic of Indonesia, which was accessed on November 21st, 2015 from <http://e-resources.perpusnas.go.id/>

The third source is the result of the Indonesian Internet Service Provider Association (APJII), entitled Penetrasi dan Perilaku Pengguna Internet Indonesia (The Penetration and the Behavior of Internet Users in Indonesia) in 2016. This research was conducted on 2000 internet users in 34 cities and released in November 2016. (<http://www.apjii.or.id>).

The fourth source is the result of collaborative research between the Ministry of Communication and Informatics with UNICEF entitled "Digital Citizenship Safety Among Children and Adolescents in Indonesia." It was conducted on 400 children and adolescents with the targeted age of 10-19 years old, starting from November 2011-January 2013. The result of this research was downloaded through the official website of Kemenkominfo (<http://web.kominfo.go.id>).

Those studies are drawn using the technique of proportional probability cluster random sampling, which means it is drawn based on the sample unit of the population into groups of specific areas throughout Indonesia.

III. THE DEVELOPMENT OF THE INTERNET IN INDONESIA

The trend of the 20th and the 21st century will be the advancement of the Internet. The Internet has been proven to create a virtual world for all users to express and communicate about their lives.

The Indonesian government began developing the Internet in the early 1980s in many public universities in Indonesia (APJII, 2015). Internet is becoming popular since the collapse of the Suharto regime in 1998. Since then, the Indonesian people began to recognize the Internet-based activities.

The growth of Internet users in Asia is growing very rapidly, from 114.3 million in 2000 to 1.2 billion in 2014. (Tempo.co, 2014).

The research results of Netindex.com (March 7th to April 5th, 2014) in Figure 1 shows that the internet connection in Indonesia can only penetrate a 4.1 Mbps for average internet speed of ASEAN. This means the internet speed in Indonesia falls behind other ASEAN countries.

However, lack of internet access connections in Indonesia is totally inversely proportional to the high number of Internet users in Indonesia. The Internet users in Indonesia in 2013 reached 63 million people and 95 percent users access social networks (Kominfo.go.id, November 7th, 2013). In 2014, the number of Internet users has reached 83.7 million people and 80 percent of teens have aged 15-19 years (Kominfo.go.id, November 24th, 2014). The Internet users use social networking as a place to show their solidarity, especially towards social injustice (Garcia, 2014: 42).

Agung Yudha as Public Policy and Government Relations from Google Indonesia said that the Indonesian people have got addicted with the internet (Hani Nur Fajrina, 6 April 2015). The curiosity of Indonesian people about technology is higher than citizens in western countries.

Four countries with high levels of mobility internet are South Korea, Hong Kong, Singapore and Indonesia. Asia became an internet marketplace of the world. It is used for the mobile activity and to connect with social media.

Burhanuddin (2015) describes 2 triggering factors that help the increase of Internet users in Indonesia. First, the cheapening of devices and mobile broadband connections in the market. Second, the growing number of mobile subscriptions significant in Asia, because many users switch to smartphones since 2012.

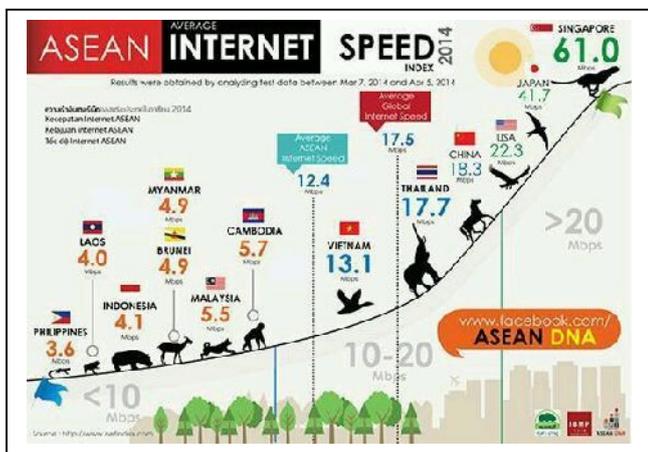


Fig.1. How's Southeast Asia performing in the internet speed race? (Magdirila, Phoebe. 2014, TechnAsia)

IV. THE RESULT ANALYSIS

The results of the research study by the Ministry of Communication and UNICEF on "Digital Citizenship Safety Among Children and Adolescents in Indonesia" (Keamanan Penggunaan Media Digital pada Anak dan Remaja di Indonesia) shows that about 320 of the 400 respondents are Internet users (Broto, 2014). They mostly have mobile phones.

Figure 2 points out that the majority of Internet users aged 14-15 years old (27%) and 18-19 years old are minority (8%). By gender, males dominate internet users by 53%.

Education level of Internet users is dominated by Junior High School students, followed by the age-level of Senior High School. The respondents have three main motivations to access the internet: to find information, to connect with friends and for entertainment.

The results of this research found that many children and adolescents freely giving their personal information such as home address, school address and phone number on the website. Unfortunately, not many parents supervise them when accessing the internet. But, the respondents remain interested in learning about Internet safety.

APJII and Communication Studies Center, University of Indonesia (UI PusKaKom) has made a research to provide questions to 2,000 respondents about what they do on the Internet (APJII, 2015). The samples were drawn using random cluster sampling technique probability proportional, meaning that the sample drawn by the unit of the population into groups of specific areas throughout Indonesia.

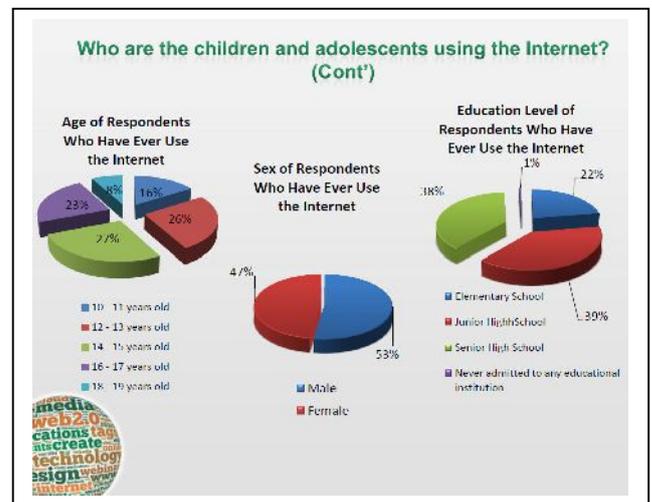


Fig.2. Digital Citizenship Safety among Children and Adolescents in Indonesia (Kominfo Presentasi Laporan Hasil Penelitian, web.kominfo.go.id)

The research shows that Internet users in Indonesia reached 88.1 million at the end of 2014 with a total population of Indonesia recorded 252.4 million (APJII, 2015). That means penetration amounted to about 34.9%. But, in 2013 only about 71 million Internet users. This increase is considered inseparable from the growing popularity of social media. (Aditya Panji, March 26, 2015). There are five things that are mostly accessed by Internet users in Indonesia namely social media, instant messaging, news channels, and video streaming (APJII, 2015).

49% of Internet users are 18-25 years old (born in 1989-1996). 33% of internet users are aged 26-35 years (born in 1979-1988). 14.6% of Internet users are aged 36-45 years (born in 1969-1978). 85% of them use mobile phones to access the Internet.

Most of the internet users have busy life as an employee or self-employed (approximately 55% of them). Most of them just finished their education at the high school level and the majority of the Internet users are still living with the nuclear family or their parents.

In November 2016, APJII conducted a survey to 2000 respondents so as to ask them about their motivation when accessing the Internet and the kind of the contents they commonly access (APJII, 2017). The result of the survey (Figure 3) shows that several main reasons such as updated information searching, job related activities, studies, leisure time activities.

There are 5 categories of content (Figure 4) that are mostly searched in the Internet, namely social media updates, entertainment, news, education and commercial (APJII, 2017).

One of the most interesting findings of the survey is that the majority of the Indonesian Internet users (76.4% of 2000 respondents) admit that the Internet is not safe for children (Figure 5).

Mark McCrindle, et all. in "The ABC of XYZ: Understanding the Global Generation" (2014) describes three kinds of generation: Generation X, Y and Z.

Generation X are those who were born between 1960 and 1980. The term generation X was popularized by Robert Capa (early 1950) and Douglas Coupland (1991) in his novel entitled Generation X: Tales for an Accelerated Culture (Wikipedia, 2015). They belong to a generation that is educated, active and have high family orientation (McCrindle, 2014: 11).



Fig.4. The Categories of the Most Accessed Content (2017, apjii.or.id)

Generation Y or Millennials are those who were born between 1980 and 1994. The term was popularized by William Strauss and Neil Howe in their book entitled Generations: The History of America's Future, 1584 to 2069 (Wikipedia, 2015).

Bolton (2013: 245) referred to them as 'Digital Natives', a first community to spend much of their time in the digital environment accompanied by the emergence of various communication media. They digitally publish their own images, stories, diaries, video recordings, and music. They fond of using digital technology networks and have the skills to operate the Internet-based technologies (APJII, 2015: 4).

Richard Beach, et all (Freda Briggs, 2011) adds that the children born in the mid-1990s to grow together with the emergence of online devices such as cellular phones, computers and gadgets.

Generation Z are those who were born between 1995 and 2009. They are considered as the New Silent Generation. Generation Z has a high ability to access information and more reliant on technology to communicate and socialize. Their main characteristics are, first, their interest in the digital gadget has emerged at a very young age. Second, they mostly communicate through the use of social media. They are increasingly conversant with the virtual world.

Michael Hauben in his research in 1995 names this generation as "Netizen" because they are happy to communicate and seek information through a digital network (IEEE Computer Society Press, 1997). Generation Z tend not loyal to the company and pleased with the community (Ari Margono, 2012).



Fig.3. Main Motivations to access the internet (2017, apjii.or.id)

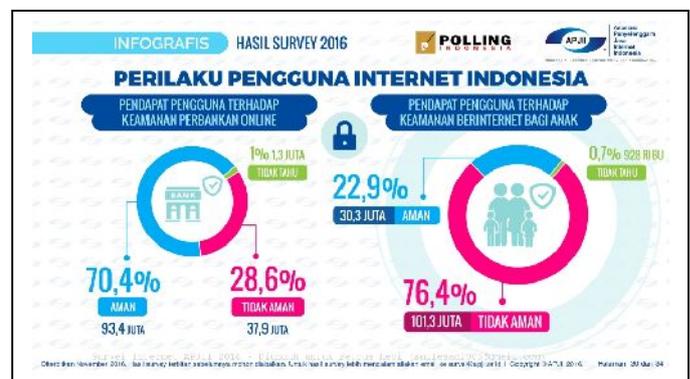


Fig.5. The Opinion of the Users about Children Safety in Using the Internet (2017, apjii.or.id)

Based on the research from APJII, the majority of those who were born in 1989 to 1996 belong to generation Y group. They started the momentum of the birth of the “digital literate generation” of information technology in 2014. They are actively using digital technology, love to share stories and have the ability to operate internet-based technologies.

Generation Y increasingly interacts with the visual world. They like new challenges and dare to explore the world and get immersed to the real life. They are interested in gaining greater insights and expand their mindset. On the other hand, they have individualistic attitude. On the contrary, Generation X are still focused on education and more oriented to family. Generation X still tend communicate verbally, have better listening skills and more attentive to personal talk.

Psychologist Elizabeth Santosa in her book "Raising Children in the Digital Area" concluded about negative impact from the internet that many children spend hours in the rooms or internet cafes, their academic grades dropped, and many children do not respond to their parent's call because they are more preoccupied with gadget (CNN Indonesia, March 25, 2015).

Bolton (2013: 254) warned that this young generation, especially Generation Y are prone to Internet addiction. This addiction can be very disruptive during school time or bedtime. In his research, he found that the negative effects of internet addiction lead to depression, loneliness and social anxiety.

Some other negative effects arising from the influence of the Internet are that children and teenagers are incapable of communicating in the real world. They become more selfish, and having less empathy to the real world.

On the other hand, however, the internet has contributed positively to the younger generation. They can adapt and manage a network of friendships, develop themselves online, and open to new insights (ICT 2010: 32).

V. CONCLUSION

Indonesia is one of the countries that has great enthusiasm for the development of electro-digital gadgets and the internet. The use of internet technology has changed the pattern of life and culture in learning, communication, and interaction patterns.

The young people of Generation Y in Indonesia (born in 1989-1996) has initiated the birth of the “Awakening Generation” of information technology in 2014. They are referred to as “Digital Natives”. They are capable adapt in expanding their online network. Generation Y has an ambitious attitude with the new challenge. It has now become a challenge for parents and the government to supervise children in their online activity and motivated to take advantage of digital technology for their educations.

The Government needs to keep encouraging socialization program INSAN (Healthy and Safe) in various ways through seminars on Internet, mobile phone, internet, television, radio, and print media. Internet presence needs to be disseminated to parents and teachers. Socialization Program INSAN needs to

be done in many schools, considering the majority of generation Y aged 18-25 years are still active students.

On the other hand, parents and educators have some important duties to carry out:

Firstly, to accompany them. The digital generation still need assistance. They still need parent's presence and guidance.

Secondly, to create new strategies teaching and learning which are relevant to this generation who mostly prefer the visual presentation and technology. Parents and educators as much as possible should use the Internet to hone their character and skills early on.

Third, the parents and educators should dare to limit their Internet play time. They need to explore and befriend the real world as well.

Fourth, the parents and educators should help them on how to use the Internet in proper and good way. They need to know the ethical principles and ways of using the Internet and how to productively make use of digital technology.

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REFERENCES

- [1] Asosiasi Penyelenggara Jasa Internet Indonesia (2015, January). Profil Pengguna Internet Indonesia 2014. APJII. Retrieved April 2nd, 2017 from <http://www.apjii.or.id>
- [2] Asosiasi Penyelenggara Jasa Internet Indonesia (2016, November). Penetrasi dan Perilaku Pengguna Internet Indonesia 2016. APJII. Retrieved April 2nd, 2017 from <http://www.apjii.or.id>
- [3] Briggs, Freda (2011). Smart Parenting for Safer Kids, Australia: Jojo Publishing.
- [4] Broto, Gatot S. Dewa. (2014). Siaran Pers Tentang Riset Kominfo dan UNICEF Mengenai Perilaku Anak dan Remaja Dalam Menggunakan Internet. SIARAN PERS NO. 17/PIH/KOMINFO/2/2014. Retrieved April 2nd, 2017 from <http://kominfo.go.id>
- [5] Bolton, Ruth N. et all. (2013). Understanding Generation Y and their use of social media: a review and research agenda. Emerald Group Publishing Limited. Journal of Service Management, Vol. 24. No.3, 2013. ISSN: 1757-5818 (pp. 245-267).
- [6] Burhanuddin, Tony, (2015, May). New Consumer Behaviour, 05/XV/Mei 2015. Retrieved April 2nd, 2017 from <https://www.majalahmarketing.com>
- [7] Fajrina, Hani Nur. (2015, April 6th). Orang Indonesia pilih internet daripada Mandi. CNN Indonesia. Retrieved April 2nd, 2017 from <https://www.cnnindonesia.com>
- [8] Garcia, C., et all. (2014). Engaged Youth in the Internet. The Role of Social Network in Social Active Participation. Comunicar, 43. XXII. ISSN: 1134-3478. (pp.36-42). USA:Media Education Research Journal.
- [9] Hauben, Michael. (1997). Netizens: On the History and Impact of Usenet and the Internet, IEEE Computer Society Press. Retrieved April 2nd, 2017 from <http://www.columbia.edu>
- [10] Hastyadi Widiartanto, Yoga. (2015, April 2nd). Empat panel pemblokir Situs Bermuatan Negatif. Retrieved April 2nd, 2017 from <http://www.tekno.kompas.com>
- [11] ICT Watch. (2010). Internet Sehat. Pedoman Ber-internet yang Aman, Nyaman dan Bertanggungjawab. Retrieved April 2nd, 2017 from <http://internetsihat.id/materi/>

- [12] Kominfo. (2015, May 15th). Sekjen Kemkominfo: Kemajuan TI Semestinya Memberi Nilai Tambah Bagi Masyarakat. Retrieved April 2nd, 2017 from <http://www.kominfo.go.id>.
- [13] Kominfo. (2013, November 7th). Pengguna internet di Indonesia 63 Juta orang. Retrieved April 2nd, 2017 from <http://Kominfo.go.id>
- [14] Kominfo, (2014, November 24th). Pengguna Internet Indonesia Nomor Enam Dunia. Retrieved April 2nd, 2017 from <http://Kominfo.go.id>
- [15] Margiono, Ari. (2012, August 5th). Investasi bersama Generasi 'C'. (pp.13), Edisi Minggu Bisnis Indonesia.
- [16] Magdirila, Phoebe. (2014). How's Southeast Asia performing in the internet speed race? (Infographic). Retrieved April 2nd, 2017 from <https://www.techinasia.com>
- [17] McCrindle, Mark (2014). The ABC of XYZ: Understanding the Global Generation, Third Edition (pp. 8-14). Australia: McCrindle Research Publication. mccrindle.com.au
- [18] Unicef. (2014). Kominfo Presentasi Laporan Hasil Penelitian (Survey Report). Retrieved April 2nd, 2017 from <http://web.kominfo.go.id>
- [19] Panji, Aditya. (2015, March 26th). 10 Negara dengan koneksi internet tercepat. CNNIndonesia. Retrieved April 22nd, 2016 from <http://www.cnnindonesia.com>
- [20] Panji, Aditya. (2015, April 7th). Kriteria Situs Bermuatan Negatif Bakal Diperjelas. CNN Indonesia. Retrieved April 12th, 2015 from <http://www.cnnindonesia.com>
- [21] Wikipedia. (2015). History of The World Wide Web, Wikipedia.org.