

THE DEVELOPMENT OF DIGITAL SOCIETY CONCEPT IN MALAYSIA: AN ANALYSIS OF CHALLENGES AND IMPLICATIONS

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Abstract: The development of information and communications technology created the phenomenon where people connected to the various positive and negative implications. Statistics show that the issue of Internet abuse is a serious issue either globally or locally, precisely in Malaysia and would have implications for the formation of this connected society. Since more and more Malaysians becoming 'netizens', particularly those involving children and adolescents, the higher the need to educate them to be cautious, sensitive and concerned when sharing information through online. Children and adolescents are the two groups most vulnerable to the threats and risks associated with the Internet as cyber-crime can happen at any time, regardless of where they are, including at their own home. Parents as a 'first institutions' for children to receive initial training on how to be 'netizens' who is responsible for himself and digital community. Accordingly, this paper discusses the analysis of policy documents and related digital communities within and outside the country aims to identify concepts, issues and challenges of digital society. Based on the results of the study it can be concluded that Malaysia also faced with the issue of abuse of the Internet is increasingly alarming. In addition, there are also related acts adopted in the event of misconduct and crimes related to the use of social media. The analysis also identified three key elements to be taken into account in establishing guidelines for the creation of digital communities. This study implies that the formation of the digital society is a new challenge that needs to be handled carefully by various parties, including the public and policy makers. These findings may explain the reality of the current digital world in Malaysia and provide input to the policy formation to educate the public to be able to behave appropriately in line with technological developments, especially parents in educating their children.

Keywords: Digital society, parenting role, netizen, social media.

INTRODUCTION

Today, new media technology has dominated almost the entire population of the world, including Malaysia. Internet and various technological equipment has become an important component part in the life of the community for a variety of purposes and functions. People's lifestyles have changed tremendously, especially in a way to communicate with each other is no longer in distance and time limit. Malaysians

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now live in a well “connected” environment. Now the social media and the advent of advanced technology equipment is also dominated almost every aspect of people's lives. When more and more Malaysians becoming 'netizens', the higher the need to educate them to be cautious, sensitive and caring online. Unfortunately there are a handful of netizens who use social media as a tool for negative purposes such as offending other people, deceive and incite.

According to reports by the International Telecommunication Union's (ITU's) Measuring the Information Society 2013 (UNICEF 2014), Malaysia is ranked fourth highest in the world where people who are 'digital natives' even though globally Malaysia is ranked bottom in terms of the development of information and communication technology . 'Digital natives' refers to young people aged 15 to 24 years at least 5 years of active use of the Internet. The data show that 13.4 percent or more than 3.9 million Malaysians are digital natives. Compared with neighboring countries, such as Singapore was ranked 12 or 12.2 per cent of the population, followed by Brunei was ranked 13th with 12.1 percent of the total population.

UNICEF Malaysia (2014) reported that nearly 92 percent of web users in Malaysia visit social networking sites where it makes Malaysia ranked in the top 15 for Facebook users with a penetration rate of 82.3 percent. Highest user is made up of children and young people aged between 13-24 years. Studies suggest that the use of Facebook is for communication purposes, namely in touch with friends, new acquaintances and family members. The rest of the respondents use Facebook for escapism (31.6%), politics (22.5%) and information (14.3%). Based on studies conducted by the Malaysian Communications and Multimedia Commission (MCMC) and Higher Institutions in 2010 to 1200 respondents, found that 50.5 per cent of respondents aged between 14-16 years allocated their time of 4 hours or more a week for the purpose of communicating by phone, texting, social networking and gaming by using various new media equipment. About 17 percent respondents allocated more than 17 hours a week on such activities. The study found 80 percent of respondents use new media to play the game and the most popular games are racing, adventure and warfare games while educational games are less popular.

The ability to access the internet and social media provides an opportunity for children and young people to develop social partners, to explore their identity, to use if for entertainment and education as well as to improve learning methods. However, at the same time, the use of social media can also expose them to the risks affecting the emotions and physical well-being. This includes cyber bullying, grooming, stalking, improper exposure, exposure to harmful content, violation of privacy rights, targeted advertising and gambling in which children will be involved (UNICEF 2014). The misuse of technology by individuals has reached

epidemic levels in schools, including in everyday life (Ribble & Bailey, 2004). This is supported by Lenhart et. al., (2011) where he conducted a study of 800 students aged 12-17 years in the US and the result show that 88% of adolescents to be unjust or cruel online.

DEFINITION AND CONCEPT OF DIGITAL SOCIETY

Changes in lifestyle that comes with a variety of equipment technology and the internet has created a new community of digital society. The digital society can be defined as the norms of appropriate and responsible behavior related to the use of technology (Ribble & Bailey, 2007). According to Ribble (2008) digital society characteristic are able to understand human being, their culture, the social issues related to technology and legal practice, ethical behavior; responsible for information and technology, and demonstrate a positive attitude towards the use of technology. Isman & Gungoren (2014) also provides a similar definition in which digital society intends to use technology competently; interpret and understand the credibility of digital content; creating, researching and communicating with the appropriate tools; think critically about ethical opportunities and challenges of the digital world; making it safe, responsible and respectful when you're online.

Referring to the definition of UNICEF Malaysia (2014), Malaysian context represent the digital society that provide the information and skills needed for young people to ensure they are responsible in the use of technology, taking advantage of existing opportunities, taking care of their own safety and other people, and be able to deal with the risks that may occur. It aims to build a culture of responsible online, and educate young people to be able to evaluate the content and media services. In summary, the digital society aims to establish a responsible society, mutual respect and the practice of moral values as the value to be available while in the real society and the world of reality.

Another term used by the Malaysian Communications and Multimedia Commission, to reflect the lifestyle of today's society is a digital lifestyle. It is considered as a new challenge for the Commission because digital media channels are rapidly developing. In this case the Commission has succeeded in promoting access to communications and multimedia services, ensure people enjoy the choice and level of satisfactory service at a reasonable price. Digital lifestyle is a new landscape to generate growth to meet economic and social needs of Malaysia (Annual Report 2013). In preparation for the country to face the future and increasingly connected, the Commission has set up the Department of Digital and Internet Lifestyle Matter in 2013. The Department is responsible for introducing the digital lifestyle to the community where every electronic devices and services will be provided with the internet facilities thus changing the aspects of society's life, work and leisure.

ISSUES AND CHALLENGES OF DIGITAL SOCIETY IN MALAYSIA

Malaysia also faced with many issues and challenges in line with the rapid development of digital technology. According to the Malaysian Communications and Multimedia, one of the main challenges of today's cyber world is increasing cyber-crime in which increasingly evident in Malaysia (Annual Report 2014). Referring to the number of complaints received in relation to offenses committed via new media also showed an increase in the total of 2189 cases in 2013 and rose to 2536 cases in 2014. This type of offense committed are as shown in Table 1. Categories of complaints is the highest offence in a form of threats and ugly words as shown in Table 2.

TABLE 1: TYPES OF OFFENSES COMMITTED THROUGH NEW MEDIA

<i>Spreading false or incorrect content</i>	<i>Stalking</i>
Upload and disseminate statements or defamatory images or video	Scams (fraud/scam)
Upload and distribute content offensive to racial and religious sensitivities	Physical intimidation or extortion of money
Impersonation and misuse or forgery of identity theft	Online selling of stolen goods
Pornographic or obscene or indecent content	Fraud online purchase

Source: Annual Report 2014, the Malaysian Communications and Multimedia Commission.

TABLE 2: BREAKDOWN OF COMPLAINTS BY TYPE OF OFFENSE

	<i>2013</i>	<i>2014</i>
Threatening	648	730
Obscene/indecent	416	565
Bogus (fake)	627	730
Fraud scheme	180	139
Other	318	459

Source: Annual Report 2014, the Malaysian Communications and Multimedia Commission.

From the aspect of internet security, by DigiTelecommunications study in 2014 found that more than 90 percent of children aged 7 to 12 years said they did not take any action to protect themselves on the internet. 45 percent of respondents practicing low level of security online. In addition, the study also indicated that 26 percent of respondents said they were bullied online. From the aspect of parent involvement, parent and teacher survey found less focused on the issue of internet safety. Studies show that 71 percent of teachers and 63 per cent of parents never or rarely talk about violence in the new media. Most parents just practicing some control over their children in terms of mobile phone use, nor does it impose any rules

in terms of Internet usage. On the other hand, children do not tell their parents or teachers about threats or violence they experience online. Studies have also shown the involvement of Malaysian parents on Internet use of their children is lower than the global average. These findings show that children in Malaysia are in a risky situation while online, and this requires immediate action from all parties to deal with it. Based on Social Cognitive Theory by Bandura (1977), the behavior and thinking of individuals affected by what they see in their environment. In today's digital world, social media is very close to the teenager's life, so it is seen to affect the lives of young people, especially the way they communicate, socialize and ultimately determine who they are.

The issue of Internet abuse is recognized as a serious issue by the Malaysian Communications and Multimedia Commission where 2014 was a year of considerable challenge for the Commission in its role in the investigation and enforcement. Malaysia has seen a higher rate of cases in relation to alleged Internet abuse in the court under Section 233 of the Communications and Multimedia Act 1998 as compared with previous years. According to the Commission, the incidents that occurred at national and international levels have contributed to an increase in the number of cases relating to misuse of the Internet, the spread of false news is more widespread and rude attitude of Internet users. To address this situation, the Commission has established cooperation and information sharing with the Office of the Attorney General and the Royal Malaysian Police (RMP) to address these issues effectively.

Among the measures taken was to organize a variety of activities and programs aimed at raising awareness about internet safety. MCMC has organized a Digital Lifestyle Expo 2013 to provide a platform to promote the application and related services to digital lifestyle; to promote the development of communication and multimedia content and applications as the engine of growth of the digital economy; and to catalyze the development of connected culture. Throughout 2014, the Commission held a program *Klik Dengan Bijak (KDB)*, which focuses on four main issues to improve and enhance public consciousness about responsibility when using the internet, namely: Dissemination of false information; cyber bullying; the habit of sharing information redundantly (oversharing); and financial fraud internet (Internet financial scam). The Commission said again, these issues are major issues that need attention for being associated with Internet users in Malaysia. In 2014, the focus of involvement and activities of KDB focused on key target groups; especially young people aged between 13-18 years old and their parents or guardians. Accordingly, KDB has developed the website and social media sites such as Facebook, Instagram and YouTube to reach out to these groups.

A workshop entitled 'New Approaches in Child Online Protection' was organized by the Commission on 7-8 July 2014 aimed at creating awareness among

Government officials, public or non-governmental organizations and academician on the importance of promoting a secure online experience to the children. MCMC has also partnered with UNICEF Malaysia for the purpose of research, and has produced a report titled 'Exploring the Digital Landscape in Ireland: Access and Use of Digital Technologies by Children and Adolescents'. This report aims to provide an overview of the use, access and impact of digital technology and social media to teenagers and young people in Malaysia. The Ministry of Women, Family and Community Development (the ministry) has launched the safety of children in schools at the national level, known as the 'Wise Kid's Zone: Safe & Protect' aims to equip school children with the knowledge to protect themselves from all the threats and dangers, either physically or online.

In addition to the programs and activities to raise awareness about internet safety, the Commission has established the Department of Digital Forensics and Network Intelligence Department for investigation and law enforcement related to cyber crime in Malaysia. There is also the related acts in which new media content that meets the elements of offenses such as indecent, obscene, false, menacing or offensive action under Section 211 and 233 of the Communications and Multimedia Act 1998 (CMA 1998). If convicted, the individual may be fined not more than RM50,000 or imprisonment for a term not exceeding one year or both. However, until today, Malaysia has yet to allocate a special law pertaining to Internet crimes, especially to children and adolescents (UNICEF, 2014).

THE ROLE OF PARENT IN DIGITAL SOCIETY DEVELOPMENT

Education is the foundation for the development of knowledge generation. Although there are laws and strict enforcement is carried out, a problem can only be addressed if the country has a knowledgeable society. Thus, the role of parents to educate children in particular how to be a proper digital society. Technology is growing rapidly, especially in education, but education is related to methods of using it wisely to keep pace with the development of the technology itself. Children and adolescents should be educated and protected because they are the two groups most vulnerable to the threats and risks related to the Internet.

The involvement of parents in ensuring the safety of children in the use of technology as early as the child began to engage with technology and it is a critical part of ensuring that young people have a sense of responsibility and use technology safely (Robinson, 2013). Lyons study (2012) found decreased parent involvement increases the risk of cyber bullying and abuse of the digital society. In order to face the digital world, it is not only the technology skills that to be a priority, but the thing needed is to empower young people with the skills to handle online risks such as cyber bullying and online self-destructive behavior (O'Brien, 2010). It is about how to use the Internet positively. The rules remain the same, namely, obey the law,

respect for others, and act polite and sensitive to others. If you do not know how to use technology appropriately, then comes the misuse of technology. Students need to understand and be trained on how to use the technology appropriately. A study in the US on 800 adolescents aged 12-17 years found that those who have a parent who uses the internet was found to have a considerable influence on the children's behaviour towards online usage as compared to the parents who do not use it (Lenhart et. al., 2011).

Ribble (2008) has listed nine elements that form the basis of the formation of the concept of digital communities that can serve as a guide to parents to educate children who will be dealing with the development of technology in the future. According to Ribble and Bailey (2007) digital society among students can be categorized into three namely: a) learning and academic achievement that includes: digital access; Digital communications; and digital literacy, b) Behavioral and student environment that includes: safety and protection of digital, digital ethics, digital rights and responsibilities; c) student outside the school environment which includes: legal digital, digital health and wellness, online business.

1. *Digital Access*: Full electronic participation in society.

Technology users need to be aware that not everyone has the same opportunities when it comes to technology. Working toward equal digital rights and supporting electronic access is the starting point of Digital Citizenship. Digital exclusion makes it difficult to grow as a society increasingly using these tools. Helping to provide and expand access to technology should be a goal of all digital citizens. Users need to keep in mind that there are some that may have limited access, so other resources may need to be provided. To become productive citizens, we need to be committed to make sure that no one is denied digital access.

2. *Digital Commerce*: Electronic buying and selling of goods.

Technology users need to understand that a large share of market economy is being done electronically. Legitimate and legal exchanges are occurring, but the buyer or seller needs to be aware of the issues associated with it. The mainstream availability of Internet purchases of toys, clothing, cars, food, etc. has become commonplace to many users. At the same time, an equal amount of goods and services which are in conflict with the laws or morals of some countries are surfacing (which might include activities such as illegal downloading, pornography, and gambling). Users need to learn about how to be effective consumers in a new digital economy.

3. *Digital Communication*: Electronic exchange of information.

One of the significant changes within the digital revolution is a person's ability to communicate with other people. In the 19th century, forms of communication were limited. In the 21st century, communication options

have exploded to offer a wide variety of choices (e.g., e-mail, cellular phones, instant messaging). The expanding digital communication options have changed everything because people are able to keep in constant communication with anyone else. Now everyone has the opportunity to communicate and collaborate with anyone from anywhere and anytime. Unfortunately, many users have not been taught how to make appropriate decisions when faced with so many different digital communication options.

4. *Digital Literacy*: Process of teaching and learning about technology and the use of technology.

While schools have made great progress in the area of technology infusion, much remains to be done. A renewed focus must be made on what technologies must be taught as well as how it should be used. New technologies are finding their way into the work place that are not being used in schools (e.g., Videoconferencing, online sharing spaces such as wikis). In addition, workers in many different occupations need immediate information (just-in-time information). This process requires sophisticated searching and processing skills (i.e., information literacy). Learners must be taught how to learn in a digital society. In other words, learners must be taught to learn anything, anytime, anywhere. Business, military, and medicine are excellent examples of how technology is being used differently in the 21st century. As new technologies emerge, learners need to learn how to use that technology quickly and appropriately. Digital Citizenship involves educating people in a new way— these individuals need a high degree of information literacy skills.

5. *Digital Etiquette*: Electronic standards of conduct or procedure.

Technology users often see this area as one of the most pressing problems when dealing with Digital Citizenship. We recognize inappropriate behavior when we see it, but before people use technology they do not learn digital etiquette (i.e., appropriate conduct). Many people feel uncomfortable talking to others about their digital etiquette. Often rules and regulations are created or the technology is simply banned to stop inappropriate use. It is not enough to create rules and policy, we must teach everyone to become responsible digital citizens in this new society.

6. *Digital Law*: Electronic responsibility for actions and deeds

Digital law deals with the ethics of technology within a society. Unethical use manifests itself in form of theft and/or crime. Ethical use manifests itself in the form of abiding by the laws of society. Users need to understand that stealing or causing damage to other people's work, identity, or property online is a crime. There are certain rules of society that users need to be

aware in an ethical society. These laws apply to anyone who works or plays online. Hacking into others' information, downloading illegal music, plagiarizing, creating destructive worms, viruses or creating Trojan Horses, sending spam, or stealing anyone's identity or property is unethical.

7. *Digital Rights & Responsibilities*: Those freedoms extended to everyone in a digital world.

Just as in the American Constitution where there is a Bill of Rights, there is a basic set of rights extended to every digital citizen. Digital citizens have the right to privacy, free speech, etc. Basic digital rights must be addressed, discussed, and understood in the digital world. With these rights also come responsibilities as well. Users must help define how the technology is to be used in an appropriate manner. In a digital society these two areas must work together for everyone to be productive.

8. *Digital Health & Wellness*: Physical and psychological well-being in a digital technology world.

Eye safety, repetitive stress syndrome, and sound ergonomic practices are issues that need to be addressed in a new technological world. Beyond the physical issues are those of the psychological issues that are becoming more prevalent such as Internet addiction. Users need to be taught that there are inherent dangers of technology. Digital Citizenship includes a culture where technology users are taught how to protect themselves through education and training.

9. *Digital Security (self-protection)*: Electronic precautions to guarantee safety.

In any society, there are individuals who steal, deface, or disrupt other people. The same is true for the digital community. It is not enough to trust other members in the community for our own safety. In our own homes, we put locks on our doors and fire alarms in our houses to provide some level of protection. The same must be true for the digital security. We need to have virus protection, backups of data, and surge control of our equipment. As responsible citizens, we must protect our information from outside forces that might cause disruption or harm.

Based on the proposal by the government to draft and develop policies to protect children online, this paper proposes nine elements listed by Ribble and Bailey (2007) were also included in the policy. Looking at the current phenomenon and the reports issued by the Malaysian Communications and Multimedia Commission, among the critical elements that are need to be emphasized, particularly to consumers in Malaysia are: (a) digital commerce, (b) digital communications, (c) etiquette digital, (d) rights and obligations of digital, (e) health and well-being digital and (f) digital security. All of these elements are very significant to provide guidance

and education to consumers about Internet safety and risks, that they may be encountered especially when you are online.

CONCLUSION

Overall, Malaysia also faced with issues of serious abuse of the internet, which also affects children and adolescents. Various measures, activities and programs have been and are being undertaken by the relevant authorities in addressing this issue. If the country wishes to establish a digital society in the 21st century that has knowledge of any right or wrong, appropriate or inappropriate, then education should be given priority. It is an obligation on all parties to provide digital environment that is safe and suitable for children facing challenging life in the 21st century. According to a UNICEF report of 2014, the study has been made to give an initial overview of the situation related to online risks, especially to children, but according to the report, there are still knowledge gaps and lack of data specifically related to online grooming, sexting, or exposure to pornography and other types of the contents of which could potentially lead to disaster. DigiTelecommunication 2014 reported that, although there are various ICT programs in schools, internet security has not been a focus on the existing curriculum.

Based on large-scale studies that have been conducted by various parties, has highlighted several shortcomings and weaknesses of aspects such as monitoring by teachers and parents, especially related to Internet use among children and adolescents. This study is expected to provide important information that will have implications for the proposal methods and practical strategies for parents and teachers to deal with the challenges of next-generation web and mobile in the era of digital culture as to create an atmosphere of an online environment that is safe for children. Strategic thinking can be used as a reference model to address the threat of the Internet in digital culture, and as a guide for security professionals to develop and implement a security awareness program to parents who are concerned. As a result, parents are concerned about the empowerment of appropriate knowledge and skills in cyber parenting. The government also advised to take into account the elements suggested in this study in developing the policies related to the protection of children and youth by creating a protected online environment.

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