



# EXPLORING THE DIGITAL LANDSCAPE IN MALAYSIA

Access and use of digital technologies by children and adolescents



**CRC@25**  
CONVENTION ON THE RIGHTS OF THE CHILD



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UNICEF Malaysia  
Wisma UN, Block C, Level 2  
Kompleks Pejabat Damansara  
Jalan Dungun, Damansara Heights  
50490 Kuala Lumpur, Malaysia  
Tel: (6.03) 2095 9154  
Email: [kualalumpur@unicef.org](mailto:kualalumpur@unicef.org)

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# Foreword



As Malaysia moves towards its goal of becoming a developed nation by the year 2020, an increasing number of Malaysians have adopted the online or digital lifestyle and have joined other digital citizens of the world. The success of the Malaysian National Broadband Initiatives has seen the broadband household penetration rate reach new highs at 67.3 per cent as at the end of 1st Quarter 2014.

Whilst Malaysians are enjoying the benefits from online services everywhere across the country, the Malaysian Communications and Multimedia Commission (MCMC) is cognizant of the increasing need to safeguard them, especially children who are the most vulnerable, from threats and risks related to the Internet. Based on the Internet Users Survey 2012 conducted by MCMC, 37.9 per cent of the users in Malaysia are under 24 years old and the number of young children exposed to digital devices is also rising. As such there is a need to ensure these young children are taught to be safe, secure and responsible online users so that their experiences online are positive ones; and with this mind, the *Klik Dengan Bijak™ (KDB)*

or Click Wisely programme was launched in 2012. This programme incorporates the values enshrined in the Rukun Negara, and is also aligned with Malaysian values, ethics and morals, as well as the National Policy Objectives of the Communications and Multimedia Act 1998.

MCMC's approach in developing national policies and initiatives has always been substantiated by strong evidence-based studies. In this regard, in addition to its own survey on household Internet users, MCMC also collaborates with local institutions of higher learning through the Networked Media Research Collaboration Programme (NMRCP). The NMRCP is now in its sixth year and has conducted a number of studies on the social impact of Internet usage on individuals and the community in both quantitative and qualitative ways.

The desk review conducted by UNICEF and any subsequent studies from it could lead to better information and understanding of Internet access and use by the Malaysian public. We believe the desk review is a useful reference to prior studies that have been done on the state of children's online experience in Malaysia and will provide valuable insights into new research areas to be considered by all parties interested in advancing the digital citizenship project.

It is hoped that the data from the studies can be utilized to promote an informed civil society where online services will provide the basis of continuing enhancements to quality of work and life, especially for young people. Therefore, we encourage more parties to contribute to the knowledge on Malaysian youth digital experiences so that we can continuously enhance our efforts to keep our children safe from online abuses and threats.

**Mohamed Sharil Tarmizi**  
Chairman  
Malaysian Communications  
and Multimedia Commission

# Foreword



The children of the 21st century, often referred to as Generation Z, are those born after 1995, born into the digital age – a transformational generation living in a transformative time.

They are a huge group – 2 billion children worldwide. As members of Generation Z, they are described as digital natives, screenagers, wired from the crib; who don't just represent the future but are already actively involved in shaping and creating it.

Twenty-five years ago, when the Convention on the Rights of the Child (CRC) first came into force, many of the platforms and much of the digital technology that children readily use today didn't exist. As we commemorate 25 years of the CRC and, coincidentally the 25th anniversary of the World Wide Web, we live in a world transformed by the technology, tools, applications, platforms and channels available for those who have access to them, including children – especially children.

The technology of the digital age has changed how we communicate, how we see and interact with a world now at our fingertips, changing our social norms. The children

of Generation Z are growing up in a world where global social media, crowdsourcing, open platform-education and sharing, are giving them a chance for unprecedented engagement and civic influence, as agents of change in a changing world.

The CRC has always ensured a child's right to information and to participation. Authentic participation is the kind that empowers and engages children, the kind that acknowledges they are the best, most eloquent, spokespeople and interpreters of their world and of their experiences.

While there are huge numbers of children online, with a household Internet access rate of over 60 per cent (2011) in Malaysia, many girls and boys still do not have access to the creative, informative, interactive and participatory features of the digital environment. The digital divide affects the most vulnerable – whether by virtue of geography, economy, gender or disability. So our work is twofold – getting more children engaged online and ensuring they participate in their digital freedom in a safe and responsible manner.

This desk review was carried out under the Voices of Youth Citizens initiative by UNICEF to empower children and adolescents to use digital technologies for the realisation of their rights as enshrined in the CRC.

The report provides information to enable all stakeholders to further build

on the leadership Malaysia has already shown to create a safe and enabling Internet environment for children, and identifies knowledge gaps in the media practices and online safety of children and youth. The Review also recommends opportunities to leverage and strengthen existing initiatives to promote and deliver Digital Literacy for all children, adolescents and youth in the country.

Together with our partner, the Malaysian Communication and Multimedia Commission, as well as stakeholders in government, the private sector, NGOs and children themselves, we hope to encourage and empower children and youth in Malaysia to use ICT safely, responsibly, in a pro-social way to create positive change for themselves, their peers and their communities.

**Let's Klik  
Dengan Bijak!**

**Wivina Belmonte**  
UNICEF Representative to  
Malaysia

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- Muhammad Akif Rabbani bin Ab Rashid, 17
- Muhammad Khairul Nizam Bin Haris, 17
- Chooi Weng Hui, 14

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# ACRONYMS

<b>ASEAN</b>	Association of Southeast Asian Nations
<b>CBC</b>	Community Broadband Centres
<b>CIE</b>	Computers-in-Education
<b>CMA</b>	Communications and Multimedia Act 1998
<b>CNII</b>	Critical National Information Infrastructure
<b>CRC</b>	Convention on the Rights of the Child
<b>DSA</b>	Digital Signature Act 1997
<b>EPF</b>	Employees Provident Fund
<b>ICT</b>	Information, Communication Technology
<b>ICTL</b>	Information and Communication Technology Literacy
<b>ILO</b>	International Labour Organization
<b>ITU</b>	International Telecommunications Union
<b>LGBTIQ</b>	Lesbian/Gay/Bisexual/Transgender/Intersexed/Questioning
<b>MAMPU</b>	Modernisation and Management Planning Unit
<b>MCMC</b>	Malaysian Communications and Multimedia Commission
<b>MDG</b>	Millennium Development Goals
<b>MSC</b>	Multimedia Super Corridor
<b>MYC</b>	Malaysian Youth Council
<b>NCSP</b>	National Cyber Security Policy
<b>NITA</b>	National Information Technology Agenda
<b>NITC</b>	National Information Technology Council
<b>OIC</b>	Organisation of Islamic Cooperation
<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS
<b>USP</b>	Universal Service Provision
<b>YDI</b>	Commonwealth Youth Development Index



# CHILD RIGHTS IN A DIGITAL AGE

Worldwide, children's digital activities and opportunities are growing at an exponential rate. Yet many of the creative, informative, interactive and participatory features of the digital environment remain substantially underused, especially among the most marginalised children. Amidst this endless potential, the Internet can also compound offline risks and negative experiences such as bullying, harassment, unwanted sexual solicitation, and exposure to pornography and other potentially harmful materials.<sup>1</sup>

The Convention on the Rights of the Child (CRC), adopted by the UN General Assembly in 1989, provides an appropriate starting point for advancing online protection, provisions and participation within the framework of children's rights.

**Although formulated in the pre-digital era, the CRC establishes basic standards that apply without discrimination to all children, everywhere. These standards are also relevant to children in the digital age.**

The most pertinent of these are a child's right to:

- protection against all forms of discrimination (Article 2);
- express views and the right to be heard (Article 12);
- freedom of expression, including the freedom to seek, receive and impart information (Article 13);
- freedom of association and peaceful assembly (Article 15);
- privacy, family, home or correspondence and against unlawful attacks on honour and reputation (Article 16);
- information (Article 17);
- protection from all forms of violence and abuse (Article 19);
- health (Article 24);
- education (Article 28);
- participation in artistic and cultural activities (Article 31);
- protection from all forms of sexual exploitation and sexual abuse (Article 34);
- protection from sale, trafficking or abduction (Article 35).

# BACKGROUND, OBJECTIVES, METHODOLOGY

## Objectives and background

Since achieving independence in 1957, Malaysia has undergone rapid economic and social development, particularly in the past three decades. The Malaysian Government has made great strides in digital development and inclusion in its quest to achieve developed-nation status by 2020.<sup>2</sup> The Government's launch of the National Information Technology Agenda (NITA) in 1996 paved the way for the rapid expansion of the ICT industry in Malaysia. The 2014 national budget<sup>3</sup> allocation for the information technology industry is RM4.9 billion (US\$1.5 billion) and represents 10 per cent of the total amount allocated for Development Expenditure under the 2014 budget.<sup>4</sup>

In 2012, Malaysia ranked in 59th place on the ICT Development Index of the International Telecommunications Union (ITU), and the country has registered marked growth in recent years with improved access to computers and the Internet among its citizens.<sup>5</sup> The percentage of households with a computer more than doubled from 31.3 per cent to 64.1 per cent between 2005 and 2011, while the percentage of households with Internet access quadrupled from 15.2 per cent to 61.4 per cent.<sup>6</sup>

The Malaysian Communications and Multimedia Commission (MCMC), a government agency set up in 1998, is tasked with promoting and regulating the industry as well as enforcing ICT-related laws in the country. It is also Malaysia's lead agency for empowerment through digital connectivity and is tasked with growing and nurturing Malaysia's cultural representation online, as well as promoting the development of skilled labour and capital in the ICT industry.<sup>7</sup>

This desk review, led by the Social and Civic Media unit in the Division of Communication, UNICEF Headquarters, in partnership with the UNICEF Malaysia Country Office, aims to understand the use, access and impact of digital technologies and social media on adolescents and young people in Malaysia. It is part of a series, undertaken and issued by UNICEF Headquarters in partnerships with Country Offices, that examines the role of technology in the lives of adolescents and young people living in middle-income and developing nations; and is part of a wider programme of work examining issues of digital citizenship and safety through UNICEF's Voices of Youth Citizens project.

“(It is) impossible to imagine a world without digital media! It would be like the Stone Age, writing on the walls and hunting animals.”

**Chooi Weng Hui, 14**

In recent years, growing digital access globally has meant that the amount of research available for topics like digital adoption, cyberbullying, the pros and cons of social media, bridging digital divides, and the growth of digital literacy—and their impact on children—has led to richer datasets and qualitative analyses, particularly in the United States, Canada and Europe. The same, however, is not available in many countries belonging to what is termed as the ‘global South’.

While country-level data is available on penetration, popularity of certain digital platforms and trends, this data is often not disaggregated. Additionally, there is limited research available with regard to younger children, the motivations behind the use of technology among children and youth, and their specific online behaviour—including how they deal with online risk. The challenges related to research on children and the impact of digital tools on their lives is explored in more detail in a report commissioned by UNICEF’s Office of Research-Innocenti, co-authored by Professor Sonia Livingstone and Dr Monica Bulger, entitled: *A Global Agenda for Children’s Rights in the Digital Age: Recommendations for developing UNICEF’s research strategy*.<sup>8</sup>

For UNICEF Malaysia, participation in the Voices of Youth Citizens project is timely, given Malaysia’s growing Internet penetration rates and concerns regarding child online safety; as well as the increase in Government and corporate investment in ICT. As UNICEF and other organisations increasingly use ICT in their communication and advocacy work with adolescents and young people; and as access

to digital tools continues to grow, UNICEF Malaysia seeks to understand how best to empower adolescents and youth to use ICT safely and responsibly in a pro-social way.

One approach that has been identified has been to build the digital skills, and media and information literacy of young Malaysians through the education system via an approach underpinned by the concept of digital citizenship, and a balance between delivering a safe online environment and one that does not become so restrictive that it diminishes the obvious benefits. Fostering digital citizenship means giving young people the information and skills they need to use the technology responsibly, taking advantage of opportunities, managing their own safety and the safety of others, and being able to deal with any risks that occur. It seeks to build a culture of responsibility online, and teaches adolescents the ability to judge, navigate and create a range of media content and services while operating a system of selection, control and protection.

For UNICEF Malaysia, this desk review seeks to:

- provide an overview of the digital landscape in the country with a particular focus on children and young people; and with the objective of identifying what is known about the access to, and opportunities and risks of, digital usage in Malaysia;
- establish the gaps in knowledge to inform a research agenda; and
- inform the action plans of the Malaysia Country Office in this field of work for 2015 and beyond.



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## Methodology

This desk review represents a compilation of primary and secondary data sources on the ICT landscape in Malaysia, and the attendant opportunities and risks for children, adolescents and young people.

The data was acquired through a rigorous search for background information on the access to, and use of, the Internet in Malaysia, with a specific focus on ICT behaviour and safety risks faced by children and young people. The search was conducted in both English and Malay using the Internet, as well as academic databases.

Sources included academic journals, data collected by the MCMC, the International Telecommunications Union (ITU) and the World Bank; the laws of Malaysia; reports from NGOs; research conducted by ICT companies; web analytics websites; as well as news articles.

## Limitations

It was beyond the scope of the desk review to conduct further in-depth research on some of the issues discussed in the desk review, to help contextualise them further or to examine whether any changes have taken place since the research was conducted. The authors hope that this desk review will assist other stakeholders in shaping their research priorities relating to children and ICT. While research into children's use of ICT continues to attract more interest as access to the Internet and social media grows, most studies are not nationally representative.

**It is important to note that the main sources of data mentioned in the report employed various sampling methodologies, at different points in time, with respondents falling into different age categories and various geographical locations.**

Notably:

- Young people and New Media—Social uses, Social Shapings and Social consequences: data collected in 2010 involving 1,200 children aged 14–16.
- CyberSAFE in Schools National Survey 2013: data collected in 2013 involving 9,651 primary and secondary school students in Malaysia.

- Captivated by Facebook, MCMC study: based on 1,200 questionnaires distributed to users aged 18–22, and focus group discussions with 92 upper-secondary school and university students.
- 2012 Microsoft WorldWide Online Bullying Survey: data collection between January and February 2012 based on face-to-face questionnaires with 300 children in Malaysia aged between eight and 17.

This means that the findings from these different studies are not strictly comparable and where they are used in reference to the same issues, this has been with the intention of examining trends rather than for scientific comparison.

Every effort has been made to identify the most recent data or information available. However, it must be noted that some studies are one-offs, and more recent data is unavailable. Furthermore, data or research that evaluated the initiatives and programmes mentioned throughout the desk review was, in most cases, unavailable.





SITUATION OF **CHILDREN**  
AND **YOUTH** IN **MALAYSIA**

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## 1.1 Country profile

Malaysia is home to a multilingual population of 30 million that includes Malays, Chinese, Indians and more than 200 indigenous ethnic groups—and nearly half of the population is under the age of 24.<sup>9</sup> Eighty per cent of the people live in Peninsular Malaysia while the remaining 20 per cent live in Sabah and Sarawak on the island of Borneo.<sup>10</sup> More than two-thirds of the population live in urban areas.<sup>11</sup> Malaysia is a parliamentary democracy with elected federal and state governments. It is composed of 13 federated states and the three federal territories of Kuala Lumpur, Putrajaya and Labuan.<sup>12</sup>

The country's aspirations for development after its independence in 1957 resulted in a series of economic and social development programmes and policies that catalysed the nation's transformation from an agrarian economy into an upper-middle income economy with a 2012 Gross National Income per capita of US\$9,820.<sup>13</sup> After the Asian financial crisis of 1997–1998, Malaysia continued to post solid growth rates averaging 5.5 per cent per year from 2000–2008. By 2013, Malaysia's GDP was US\$312.5 billion. Its economy is highly open (exports comprise 100 per cent of GDP) and it is now a leading exporter of electrical appliances, electronic parts and components, palm oil and natural gas.<sup>14</sup>

**Malaysia is also externally competitive, ranking 12th (out of 135 economies) in the World Bank's 2013 Doing Business Survey.<sup>15</sup> Malaysia is placed 147 out of 180 countries on the 2014 World Press Freedom Index<sup>16</sup> and was ranked 53 out of 175 countries on the Transparency International Corruption Perception Index 2013.<sup>17</sup>**

The country is an active member of the Association of Southeast Asian Nations (ASEAN—of which it was a co-founder in 1967), the Organisation of Islamic Cooperation (OIC), the Commonwealth and the Non-Aligned Movement, and it is strongly committed to South-South cooperation in the region and beyond.<sup>18</sup>

## 1.2 Meeting the Millennium Development Goals



The country is on track to meet the targets of most of the Millennium Development Goals (MDGs), especially those related directly to children. Growth in the country has been accompanied by a dramatic reduction in poverty, from 12.3 per cent in 1984 to 2.3 per cent in 2009; and aggregate social indicators are approaching levels similar to those of fully developed countries. Children's economic standard of living improved dramatically between 1989 and 2007. Child poverty (for children under the age of 15 years) decreased threefold over the past 20 years from 29.3 per cent in 1989 to 9.4 per cent in 2007.<sup>19</sup>

However, recent evidence suggests that although national-level figures indicate that progress is on track, at a disaggregated level, gaps still exist along rural/urban, ethnic and geographic lines.<sup>20</sup> Pockets of poverty exist and income inequality remains high relative to developed countries.<sup>21</sup> In 2010, Malaysia launched the New Economic Model (NEM), which aims for the country to reach high-income status by 2020 while ensuring that growth is also sustainable and inclusive.<sup>22</sup>

Basic health services for children, particularly those living in urban environments, have also improved over the past couple of decades. Child mortality rates are well above global averages: the Infant Mortality Rate (IMR) was seven (the global average in 2012 was 35) and

the Under-Five Mortality Rate (U5MR) was nine per 1,000 live births in 2012 (the 2012 global average was 48).<sup>23</sup> Also, more than 90 per cent of the population has access to safe drinking water.<sup>24</sup>

In 2002, Malaysia's Education Act 1996 was amended to make primary education compulsory to partially conform with CRC Article 28(1)(a): "Make primary education compulsory and available free to all."<sup>25</sup> As a result, Malaysia is on target to realise universal primary education with enrolment in primary education at 94.54 per cent in 2012, and with complete gender parity.<sup>26</sup> However, enrolment in lower and upper secondary schools for the same year was lower at 86.18 per cent and 77.96 per cent respectively.<sup>27</sup>

The percentage of Malaysian citizens aged 20 years and over with higher education (i.e. post-secondary, college or university) increased from 16 per cent in 2000 to 21.6 per cent in 2010.<sup>28</sup> The literacy rate among Malaysian citizens aged 10–64 years in 2010 reached 97.3 per cent compared to 93.5 per cent in 2000.<sup>29</sup>



The country is on track to meet the targets of most of the Millennium Development Goals (MDGs), especially those related directly to children.

## 1.3

# Realising rights for children

Children and youth (0–24 years) make up 46 per cent of Malaysia's population of 29.9 million (2013). Of this total, 10.6 million are children below the age of 19. Males make up approximately 52 per cent of the total child and youth population, while 48 per cent are female.<sup>30</sup> The age of majority in Malaysia is 18<sup>31</sup> and the voting age is 21.

In line with its vision to become a fully developed country by 2020, Malaysia has put in place a legal, policy and institutional framework for developing and implementing social policies for children. Malaysia acceded to the Convention on the Rights of the Child (CRC) in 1995 and to the CRC Optional Protocol on the Sale of Children, Child Prostitution and Child Pornography, and the Optional Protocol on the Involvement of Children in Armed Conflict in 2012.

The Government's ratification of the CRC in 1995 contained reservations to 12 Articles on the grounds that these Articles were said to "not conform" to the country's Constitution, national laws and national policies, including Shariah law.<sup>32</sup> Seven of these reservations have since been withdrawn, including reservations to Article 13 (which protects a child's freedom to express his or her views, to obtain information and to make information and ideas known to others) and Article 15 (freedom of assembly and participation). Malaysia currently has five remaining reservations to the CRC, namely: Article 2 on non-discrimination; Article 7 on name and nationality; Article 14 on freedom of thought, conscience and religion; Article 28(1)(a) on free and compulsory education at primary level; and Article 37 on torture and deprivation of liberty.<sup>33</sup>

Malaysia enacted the Child Act (Act 611) in 2001 to fulfil its obligation under the CRC. The Act forms part of the protective legal environment for children in the country and has introduced several initiatives to safeguard children from violence, abuse, neglect and exploitation.

The provisions of the Child Act 2001 are based on the four core principles of the CRC: non-discrimination; the best interests of the child; the right to life, survival and development; and respect for the views of the child.<sup>34</sup> Other policies that are in place to safeguard children's interests are the National Policy on Children and its Plan of Action (which focus on the thrusts of development relating to children's survival, protection, development and participation as provided for in the CRC), and the National Child Protection Policy and its Plan of Action (which aim to ensure that children are protected from all forms of neglect, abuse, violence, and exploitation).<sup>35</sup>

The Child Protection Policy focuses on aspects of prevention, advocacy, intervention, reporting and giving support services in protecting children. It also provides standard guidelines and procedures in areas related to child protection.<sup>36</sup>

In 2001, the Child Act 2001 established the National Council for the Protection of Children, which advises the Government on child protection issues, as well as a National Advisory and Consultative Council for Children to act as a national focal point for children's wellbeing and development. Act 611 also required the setting up of Child Protection Teams and Child Activity Centres at both state and district levels. Aimed at mobilising community participation in the implementation of preventive and rehabilitative programmes, these initiatives are targeted at children at risk or children vulnerable to all forms of abuse and exploitation.<sup>37</sup>

### 1.3.1 Challenges and emerging threats

The Child Rights Coalition Malaysia, in its 2012 Status Report on Children's Rights in Malaysia, identified: discrimination faced by marginalised children; abuse and maltreatment of children; corporal punishment; and lack of monitoring and reporting on children's rights as some of the challenges facing children in the country.<sup>38</sup>

According to the report, Malaysian children most at risk were: children from indigenous and minority communities; refugee, stateless, street, and migrant children; children living among the rural and urban poor; and LGBTIQ children.

In 2011, the Ministry of Women, Family and Community Development recorded 3,428 child abuse cases involving neglect, physical and sexual abuse.<sup>39</sup> It is recognised that there is a need for holistic reforms of the juvenile justice, and child and family welfare systems in Malaysia to conform with international standards and practices, and to achieve a more coordinated and systematic response to the protection of children. Additionally, against the backdrop of the growing use of ICT, there is concern about children and adolescents being exposed to bullying, harmful content and predators online.<sup>40</sup>

According to the 2012 Global School Based Student Health Survey, 19.1 per cent of students aged 13–17 in Malaysia were overweight while 7.9 per cent were obese. The same survey revealed that among the students who had used drugs, 73 per cent had first done so before the age of 14; while 50.4 per cent of those who had sexual intercourse had first done so before the age of 14.<sup>41</sup>

According to UNAIDS, the estimated HIV prevalence among adults aged 15–49 was 0.4 in 2012, with an estimated 82,000 people of all ages living with HIV in 2012.<sup>42</sup> The percentage of young people (aged 15–24) estimated to be living with HIV in 2012 was less than 0.1 for females and 0.1 for males.<sup>43</sup>

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The provisions of the Child Act 2001 are based on the four core principles of the CRC: non-discrimination, the best interests of the child, the right to life, survival and development, and respect for the views of the child.<sup>34</sup>



## 1.4 Youth in Malaysia

In 1997, Malaysia introduced a National Youth Development Policy “to establish a holistic and harmonious Malaysian youth force imbued with strong spiritual and moral values, who are responsible, independent and patriotic thus serving as a stimulus to the development and prosperity of the nation in consonance with the vision 2020.”<sup>44</sup> While the Policy defined youth as those aged from 15–40, it specified that youth development programmes and activities would be focused on youth aged 18–25.<sup>45</sup> In 2011, the Government announced that the Policy would be reviewed to revise the definition of youth to those aged 18–25 in line with international standards.<sup>46</sup>

The Youth Societies and Youth Development Act 2007 (Act 668) provided for a National Youth Consultative Council to be chaired by the Minister of Youth and Sports, and made up of state representatives, ministries and major national youth societies. The Council is a forum for both the Government and NGOs to meet and discuss issues relating to youth development.<sup>47</sup> The Act also lists provisions applicable to registered youth societies as well as the framework for the Malaysian Institute for Research in Youth Development, including its functions, powers, and funding. The Malaysian Youth Council (MYC), a non-governmental organisation formed in 1948, is the sole coordinating body for youth and student organisations. It participates in the National Youth Consultative Council and plays an active role in the implementation and monitoring of the national youth policy.<sup>48</sup>





“The biggest challenge is that adults don't trust us.”

**Muhammad Akif Rabbani bin Ab Rashid, 17**

The Government's 10th Malaysia Plan (2011–2015) aims to “better prepare its youth to undertake their roles in contributing towards national development, through instilling the right skills set, values and positive mindset to help them succeed.”<sup>49</sup> A Cabinet Committee on Youth Development, chaired by the Deputy Prime Minister, has been established to coordinate and update the delivery system for youth development programmes as well as to streamline the roles and responsibilities of the ministries involved.<sup>50</sup>

In 2009, the unemployment rate for males and females in Malaysia aged 15–19 was 18 per cent and for those aged 20–24, 10.1 per cent.<sup>51</sup> According to 2012 figures from the ILO,<sup>52</sup> the rates decreased for both age categories to 15.5 per cent (15–19 age cohort) and 8.8 per cent (20–24 age cohort). Overall, unemployment in the country decreased from 3.7 per cent to 3.1 per cent from 2009 to 2012.<sup>53</sup>

The Government of Malaysia has introduced a number of initiatives to address youth unemployment, such as the ‘Second Chance’ initiative (for young people who have dropped out of school) to complete their schooling or to start skills training.<sup>54</sup>

**Malaysia ranked in 52nd place on the 2013 Commonwealth Youth Development Index (YDI), which assesses the well-being of youth in 170 countries globally. The index is based on 15 indicators in five key areas: health and wellbeing, education, employment, political participation and civic participation.<sup>55</sup>**

With a score of one representing the highest possible level of youth development and zero representing virtually no youth development, Malaysia scored 0.7 and fell into the ‘medium’ category alongside countries such as Italy and Estonia.<sup>56</sup>

The country ranked on the higher end of the scale for education, health and wellbeing, and employment but on the middle to lower end of the scale for civic and political participation.<sup>57</sup> It should be noted that the Commonwealth YDI includes young people between the ages of 15 and 29 years.

# ONLINE AND DIGITAL CONTEXT

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# 2



## 2.1 Overview of the online and digital context

In 2012, Malaysia ranked in 59th place on the International Telecommunications Union's (ITU) ICT Development Index, and the country has registered marked growth in recent years with improved access to computers and the Internet among its citizens.<sup>58</sup>

According to the World Bank and ITU, the percentage of households with a computer more than doubled from 31.3 per cent in 2005 to 64.1 per cent in 2011 while the percentage of households with access to the Internet quadrupled from 15.2 per cent to 61.4 per cent over the same period.<sup>59</sup> Information pertaining to computer literacy was first collected during the 2010 Census, which found that the literacy rate for Malaysian citizens aged 5–69 years reached more than 45 per cent in every state. The computer literacy rates in urban and rural areas were 68.6 per cent and 42.1 per cent, respectively.<sup>60</sup>

There are numerous national ICT policies, key ICT initiatives, technology roadmaps as well as special funds designed to drive ICT development in Malaysia. Since the early 1990s, the Malaysian Government has placed considerable emphasis on the development of ICT in the country. In

1996, the National Information Technology Agenda (NITA) was launched in Malaysia by the National Information Technology Council (NITC)—a body composed of representatives from public, private and community interest sectors—whose role is to counsel the Government on ICT strategy.<sup>61</sup> NITA serves to guide the strategic use of ICT in the country and to contribute to advancing Vision 2020.<sup>62</sup>

The National Strategic ICT Roadmap in Malaysia provides a framework for growing the productivity of the most important sectors of the economy and to promote the emergence and growth of new industries that are ICT-based and knowledge-intensive.<sup>63</sup> According to the Ministry of Science, Technology and Innovation (MOSTI), the National Cyber Security Policy (NCSP)—comprising legislative and regulatory, technology, public-private cooperation, institutional, and international aspects—was designed and implemented to support Malaysia's advancement towards a knowledge-based economy.

The NCSP seeks to address identified risks to the country's Critical National Information Infrastructure (CNII), which comprises the networked information

“ I was 13 years old when I first accessed the Internet. I was so excited. A whole new world opened up to me. There was all this information out there for me to learn.”

**Kher Nawawi Amin Bin Noranizam, 17**

systems of the 10 critical sectors of national defence and security, banking and finance, information and communications, energy, transportation, water, health services, government, emergency services, and food and agriculture. Within the NCSP are eight policy thrusts with various Government bodies responsible for advancing priorities within these thrusts.<sup>64</sup>

### 2.1.1 Multimedia Super Corridor (MSC) Malaysia

One of the Government's key ICT initiatives is MSC Malaysia, formerly known as the Multimedia Super Corridor, which is an initiative to attract national and international technology companies. 'MSC Malaysia status' is the recognition given by the Malaysian Government to "ICT and ICT-facilitated businesses that develop or use multimedia technologies to produce and enhance their products and services"<sup>65</sup> in four clusters: InfoTech, Creative Multimedia, Shared Services and Outsourcing, and Institutions of Higher Learning. The majority (around three-quarters) of companies with MSC Malaysia status fall into the InfoTech cluster.

At the end of 2012, MSC Malaysia boasted 2,397 active companies, many of which were international technology giants such as Siemens, Motorola, Oracle, IBM, and Reuters.<sup>66</sup> However, 76 per cent of MSC companies were Malaysian-owned. MSC Malaysia companies have recorded year-on-year growth in total sales of 5.7 per cent between 2008 and 2012; and at the end of 2012, total sales were valued at RM33.53 billion (approximately US\$10.3 billion).<sup>67</sup>

The Multimedia Development Corporation (MDeC) is a Government-funded and owned agency which is tasked with overseeing various investment programmes and initiatives related to ICT including MSC Malaysia.<sup>68</sup> Another prominent initiative which falls under MDeC is Digital Malaysia, which seeks to ensure that the country has a fully developed digital economy by 2020.<sup>69</sup>

### 2.1.2 e-Government

The e-Government initiative in Malaysia began its framework development in the 1980s with the aim of improving internal government operations as well as increasing efficiency between the government and

citizens. E-Government was one of eight MSC flagship applications launched in 1997 and was introduced in line with the Vision 2020 plan.<sup>70</sup> Malaysia was ranked in 52nd place on the global e-Government Index and 31st for online service delivery in 2014 in the United Nations E-Government Survey.<sup>71</sup> According to a 2011 McKinsey survey of 311 small-medium enterprises (SMEs), filing of taxes was the most popular e-Government service followed by accessing of information about government, contacting government officials, researching official statistics or reports, and registering for official documents.<sup>72</sup>

### 2.1.3 e-Commerce

E-Commerce is a growing part of the Malaysian economy and shows increasing potential, as both foreign and local companies expand their online services in Malaysia. Some of the significant developments between 2011 and 2013 include online coupon-giant Groupon entering the Malaysian market, payment portal PayPal opening a global operations centre in Malaysia and the introduction of new regulations in the country to protect online shoppers.<sup>73</sup>

In 2012, 72 per cent of SMEs reported that they were not doing e-Commerce yet while 48 per cent reported they were in the process of planning its implementation, which suggests impressive growth potential.<sup>74</sup> To further encourage e-Commerce, the Malaysian Communication and Multimedia Commission (MCMC) launched a programme for micro-industries to register for broadband accounts and to create websites for their products. Called Get Malaysian Business Online (GMBO), the programme provides a cash grant of RM1,000 (approximately US\$311) until 31 December 2013 to every entrepreneur who was admitted into the programme to help them broaden their commercial scope.<sup>75</sup>



## 2.2 Legal Framework and Policies relating to ICT in Malaysia

Malaysia has a comprehensive legal framework relating to the use of the Internet and digital technology.

This section provides a brief overview of key legislation and policy in the country.

### 2.2.1 Digital Signature Act 1997

The Digital Signature Act 1997 came into effect in 1998 to provide for and regulate the use of Digital Certificates as a means of performing secure Internet-based commercial transactions.<sup>76</sup> In November 2001, the MCMC took over the role as the Controller of Certification Authorities under the Act and, as such, can exercise and perform the various duties and functions ascribed to that authority.<sup>77</sup>

### 2.2.2 Copyright (Amendment) Act 1997

The Copyright (Amendment) Act 1997 (in force from 1999) updated the Malaysian Copyright Act to protect individuals' creative and professional expressions of thought. Additionally, it expanded coverage of authorship to include audio, visual and verbal forms of electronically transmitted information.<sup>78</sup>

### 2.2.3 Computer Crimes Act 1997

Under the Computer Crimes Act 1997, it is an offence to enter or attempt to enter a computer system without authorisation, to damage or modify data in a computer, or to aid in the unauthorised use of a computer system. Activities such as hacking, sending a virus or cracking someone's password are unlawful. However, this Act has come under criticism as several of its provisions lack clarity and are perceived to have multiple interpretations.<sup>79</sup> It was recommended that the authorities clarify the statutory language used in the Act and adopt provisions that would provide a more progressive solution to crimes of this nature.<sup>80</sup>

### 2.2.4 Telemedicine Act 1997

To manage the quality of healthcare received through the Internet and to keep abreast of developments in electronic medicine, the Telemedicine Act 1997 provides for telemedicine licensing and informed consent so that registered doctors can provide medical services from distant locations using electronic medical data.<sup>81</sup> The Act also prescribes the medical prescription standards to be adhered to, as well as regulations for how telemedicine may be practised in Malaysia.

### 2.2.5 The Communications and Multimedia Act 1998

The Communications and Multimedia Act 1998 provides a mechanism to protect industry interests and regulate communications and multimedia activity in Malaysia. This Act regulates three distinct industries: broadcasting, telecommunications and on-line activities,<sup>82</sup> and provides a framework for the MCMC to act as a single advisory body in advancing its cause for the industry. Among the many objectives of the Act are: to establish Malaysia as a global hub for the industry; to promote information-based services; to encourage the growth of national information resources (and thus to increase cultural representation); to develop a sense of self-regulation among industry players; to build human capital capacity in ICT; and to ensure greater security and reliability of ICT resources. Under the Act, the main functions of the MCMC are licensing, economic regulation, technical regulation, consumer protection and social regulation.<sup>83</sup>

### 2.2.6 The Electronic Government Activities Act 2007

The administration of the Electronic Government Activities Act 2007 comes under the purview of the Malaysian Government's Modernisation and Management Planning Unit (MAMPU). The Act provides the legal framework for the planning, implementation and monitoring of all e-Government projects.<sup>84</sup>

“ Digital media has made my life easier... not harder. I use it to search for knowledge and information; and to do my homework. I also use it to listen to music, watch videos, relax and for social networking.”

**Cathryn Anila, 13**

Under the Act, all electronic messages between citizens and the government are recognised to fulfil legal requirements.<sup>85</sup> The Act also authorises a variety of e-business transactions by the public through the portal *www.malaysia.gov.my*, such as submitting income tax returns and paying bills, as well as applying for national registration cards, immigration documents and university admission. However, the Act has been criticised for being redundant as there are sufficient laws to deal with electronic communications in the country.<sup>86</sup>

### **2.2.7 Evidence (Amendment) (No 2) Act 2012**

The Evidence (Amendment) (No 2) Act 2012 updates the Evidence Act 1950 to include the Internet. Section 114A of the amendment identifies persons accountable for illicit (i.e. defamatory, seditious, or libellous) content published on the Internet. The Section states that “a person whose name, photograph,

or pseudonym appears on any publication depicting himself as the owner, host, administrator, editor, or sub-editor, or who in any manner facilitates to publish or republish the publication is presumed to have published or republished the contents of the publication, unless the contrary is proved.”<sup>87</sup>

The extension to the Evidence Act has broad implications for any material published on the Internet. The Act reduces the power of the individual to use the Internet by curbing dissemination of information. Individuals and organisations are held accountable for any information such as third-party opinions or feedback that is disseminated through their blogs or websites. It thus does not protect the interests of bloggers and tweeters against imposters. Upon implementation in 2012, the Act came under severe public criticism and served as the focus of the 2012 Internet Blackout Day in Malaysia.<sup>88</sup>

Although the Government provides resources for Internet access, there are several limits to this provision. Noteworthy is the lack of a comprehensive data protection law that covers the right to privacy as far as personal information is concerned.<sup>89</sup> The Government keeps detailed records of each of its citizens, such as demographic data with the National Registration Department as well as employment and financial data with the Inland Revenue Board. This is despite Malaysia being a signatory to the United Nations Declaration of Human Rights, which makes provisions for the right to privacy.<sup>90</sup>



## 2.3 Digital growth and access in Malaysia

### 2.3.1 Computer and Internet use

MCMC data from 2012 show that, overall, 46.3 per cent of households in Malaysia have access to a laptop, 21 per cent have access to a personal computer and 15.3 per cent have access to a tablet. Tablet access is the highest in the Federal Territories of Putrajaya and Kuala Lumpur and in the state of Selangor. While laptop access is the highest of the three devices even in states with the lowest access levels, it is also the device registering the greatest variation in access (72.4 per cent household access in Putrajaya compared to 29.4 per cent in Kelantan).<sup>91</sup>

Fixed (wired) broadband subscriptions in Malaysia increased from 19,302 in 2002 to 2,443,100 in 2013.<sup>92</sup> The overall broadband penetration per 100 households for Q1 2014 was 67.3 per cent but there are significant differences among states: for example, Kuala Lumpur reached 115.7 per cent penetration while Kelantan reached only 41.2 per cent.<sup>93</sup> While an 8.4 fixed (wired) broadband penetration per 100 inhabitants (based on 2012 figures) places Malaysia above many other ASEAN countries, this figure is lower than many of the country's 10 biggest trading partners.<sup>94</sup>

There are more than 31,121 hotspot locations in the country, enabling easy public access to the Internet from personal devices including mobiles and tablets.<sup>95</sup>

The latest available demographic data from the MCMC with regard to Internet use is based on 2012 figures and covers only users from private households. The data indicate that there are more male Internet users than female (56.4 per cent and 43.6 per cent respectively) and that 20–24-year-olds make up the biggest proportion of Internet users in Malaysia (at 21.4 per cent), followed by the 25–29 age group, the 15–19 age group and the 30–34 age group.<sup>96</sup> According to global technology company ComScore, the average duration of Internet use by the

under-35 age group was higher than that of the over-35, but by a much smaller margin than other countries in the region such as Vietnam or Thailand.<sup>97</sup>

According to web analytics provider Alexa.com, the most popular websites in Malaysia in 2013 were: Google.com, Facebook, YouTube, Blogspot, Google.com.my, Yahoo.com, Wikipedia.org, maybank2u.com.my, blogger.com and mudah.my.<sup>98</sup>

### 2.3.2 Cellular phones, smartphones and mobile Internet

Following a similar pattern to that of many countries around the world, cellular telephone subscriptions have grown each year over the past 10 years in Malaysia while fixed-line telephone subscriptions have decreased.<sup>99</sup> Similarly, the number of public payphones decreased between 2012 and 2013. According to MCMC data for Q1 2014, the cellular penetration rate per 100 inhabitants was 143.7.<sup>100</sup> Prepaid subscriptions far outweighed post-paid subscriptions by approximately 35.2 million against 7.8 million.<sup>101</sup> The country's main telecommunications service providers are Telekom Malaysia, Celcom, Maxis, DiGi, and UMobile.

Based on 2012 data, cellular penetration per 100 inhabitants was over 100 in all but the state of Sabah and the Federal Territory of Putrajaya.<sup>102</sup> There are significantly higher percentages of cellular telephone users in urban areas (68.8 per cent against 31.2 per cent rural) but between 2007 and 2012, the gap between cellular telephone users in urban and rural areas decreased slightly.<sup>103</sup> According to the MCMC's Handphone User Survey 2012, the share of cellular telephones per state largely mirrored the distribution of people per state with the exception of the states of Selangor, Sabah, Sarawak and the Federal Territory of Kuala Lumpur.<sup>104</sup>





The Handphone User Survey 2012 also explored some of the habits and knowledge levels of cellular phone users, finding that:

- young people were more likely to be users of cellular telephones and smartphones—the age cohort of 15 to 24 made up 28.7 per cent of all cellular telephone users but only 19.7 per cent of the total population of the country;<sup>105</sup>
- nearly 30 per cent of users had two handsets;
- around three-quarters of users left their phones on all the time, even when they were asleep; and
- around 40 per cent of users were not aware at all of the terms and conditions of their cellular service providers.<sup>106</sup>

The MCMC's Handphone User Survey 2012 revealed that smartphones had gained massive ground in Malaysia in recent years: 12 per cent in 2011 to 26 per cent in 2012.<sup>107</sup> Research collected by Google as part of the Our Mobile Planet initiative in Malaysia showed similar trends to those noted in the MCMC survey. According to Google, smartphone penetration grew from nine per cent in 2011 to 35 per cent in 2013 (the survey did not provide penetration data for 2012) and was highest among the 18–24 and 25–34 age groups.<sup>108</sup>

According to a report by market research company GfK, during the first three quarters of 2013, the value of smartphone sales in Malaysia was RM7.4 million (US\$2.3 million)—which amounts to about 6.4 million smartphone

devices purchased.<sup>109</sup> The most popular smartphone operating system in the country is Android, accounting for 83 per cent of smartphones sold. Apple's iPhones are less popular in the region given their higher prices.<sup>110</sup> 'Phablets'—mobile phones with large screens—are also gaining in popularity: the proportion of phablets among total mobile phone sales increased from 7.5 per cent in September 2013 to 20 per cent in October 2013.<sup>111</sup> Tablets also continued to gain in popularity among Malaysians in 2013, with sales valued at over US\$352 million that year.<sup>112</sup>

Data from Google shows that, while smartphone penetration does not differ by much on average between males and females, there are significant differences within certain age groups. For example, within the 35–44 age group, the penetration rate is higher among males, while within the 45–54 age group, it is significantly higher among females.<sup>113</sup> However, according to data gathered by the MCMC, among the sample, 15.5 per cent of males surveyed reported smartphone use, compared to 10.6 per cent of females.<sup>114</sup>

The Google study also looked at the behaviour and habits of smartphone users, noting that in 2013, among smartphone users aged 18–55 and over, 86 per cent browsed the Internet, 78.8 per cent accessed a social network, 63.7 per cent read news on newspaper or magazine portals, and 74.4 per cent played games. Smartphones are also highly valued by their owners: in the study, 41 per cent of smartphone users said that they would rather give up their TV than their smartphone, and 62 per cent do not leave home without their smartphone.<sup>115</sup>

Mobile Internet is also driving media consumption in Malaysia: mobile Internet users in the country spend more minutes per day consuming digital media than other Internet users, spending some 558 minutes per day consuming traditional, mobile voice and digital media.<sup>116</sup>

### 2.3.3 Social Media use

Following a regional trend, social networking makes up approximately one-third of PC 'screen time' in Malaysia and almost 92 per cent of web users in the country visit a social networking site.<sup>117</sup> Malaysia also ranks in the top 15 countries with the highest Facebook penetration at 82.3 per cent, behind the Philippines (92 per cent) and Thailand (89 per cent) in the region.<sup>118</sup> Facebook is the most popular social networking platform in Malaysia, reaching around 82 per cent of Internet users.<sup>119</sup> The largest age group using Facebook in Malaysia is the 18–24 age group, followed by users aged 25–34.<sup>120</sup> Children and young people (aged 13–24) make up nearly half of Facebook users in the country. The ratio of male to female users of Facebook is 55:45.<sup>121</sup>

According to ComScore, following Facebook with much lower penetration rates among Internet users in Malaysia are Twitter (15.9 per cent), LinkedIn (13.9 per cent), Tumblr (5.7 per cent) and Tagged Inc. (5.3 per cent).<sup>122</sup> The country has also seen a significant growth of 23.57 per cent in Twitter use between Q1 and Q2 in 2013.<sup>123</sup> According to website analytics company Alexa, 0.6 per cent of global Twitter users are from Malaysia.<sup>124</sup>

In 2012, Malaysians set a world record for tweeting one million tweets within one hour for the 55th Merdeka celebration in the country.<sup>125</sup> Malaysia's current Prime Minister—Dato' Sri Najib Razak—is one of the country's most popular figures on social media. In July 2014, his Facebook page was ranked in the top 10 with over 2.6 million Facebook page likes<sup>126</sup> and 2.07 million Twitter followers.<sup>127</sup>

### 2.3.4 Other popular social and digital platforms and services

#### a) Blogs

It is difficult to find statistics which reveal the exact number of users of various blogging platforms in Malaysia. However, according to Alexa.com, Malaysia accounts for 2.9 per cent of global users of Blogspot (a free domain service provider), while Blogspot is one of the top 10 most visited websites in the country. Also making the top 10 is Blogger (a free web publishing service), with Malaysians accounting for 2.7 per cent of its users.<sup>128</sup> Both Blogspot and Blogger are owned by Google. Another popular blogging service in Malaysia's list of top 20 most visited websites is Wordpress, with users from Malaysia constituting one per cent of its users.<sup>129</sup> It must be noted that the Alexa ranking has been criticised for being heavily skewed towards websites with a large audience.<sup>130</sup>

As Malaysians increasingly engage in virtual communities and online interactions<sup>131</sup>, political leaders have also begun using social media to engage with their constituents.<sup>132</sup> In the run-up to the 2008 General Election, opposition leaders such as Lim Kit Siang developed their own blogs to engage with the general public.<sup>133</sup> Prime Minister Najib Razak has his own website and blog <http://www.1malaysia.com.my>.<sup>134</sup> Former Prime Minister Tun Dr Mahathir Mohamad, who has over 2.4 million Facebook fans, is also a household name in the Malaysian blogosphere with over 12 million visitors to his blog <http://chedet.cc/> since 2008<sup>135</sup> and more than 35 million hits.<sup>136</sup>

The popularity of blogging in the country has raised concerns about national security, however, prompting legal measures and changes to laws (as described earlier in Section 2.2).

#### b) Online video popularity

According to online video technology company Ooyala's Q1 of 2013 Global Video Index, the viewing of long-form videos (i.e. videos that are more than 10 minutes long) accounted for 45 per cent of the total time spent watching online video content in Malaysia in Q1 of 2013.<sup>137</sup>

Furthermore, Malaysia, along with Hong Kong, Japan, New Zealand and the Philippines, had the highest levels of engagement in the region based on the average level of completion for videos played.<sup>138</sup> According to website analytics company Alexa, 0.9 per cent of YouTube users come from Malaysia and it is the third most popular website visited by Malaysians after Google and Facebook. While data for 2013 detailing the number of users is not publicly available, data from the 2011 ComScore Video Metrix showed that YouTube accounted for around two-thirds of all videos viewed online in Malaysia.<sup>139</sup> In 2012, YouTube launched a localised version in Malaysia, optimised for visitors from the country, which can be accessed at [youtube.com.my](http://youtube.com.my).<sup>140</sup>



### c) WeChat

Developed by Chinese Internet company Tencent, the popular chat app has gained massive popularity in Malaysia since 2012. In May 2013, the company stated that by March 2013 the app had reached a 70 per cent penetration rate among smartphones users in Malaysia<sup>141</sup> and it was announced that the company would be opening an office in the country.<sup>142</sup>



### d) Instagram

Although it is difficult to find a precise figure for the number of Instagram users in Malaysia, this photo-focused social network is gaining popularity in the country. According to Alexa.com, Instagram is number 21 on the list of the most visited sites in Malaysia. According to the official Instagramers of Malaysia website page, Instagramers of Malaysia was formed in 2011 and held its first 'instameet' (a meet-up during which Instagram users in that particular community take photos in a group) in 2012.

The membership of Instagramers Malaysia has grown from 200 in early 2013 to over 1,000.<sup>143</sup> The number of images tagged #igersmalaysia stood at nearly 489,500 in June 2014.<sup>144</sup> However, hashtags combining the term "igers" (short for instagramers) and a location are not necessarily used exclusively by the official instagramers of that particular location, or even permanent inhabitants.

In April 2013, *The New Straits Times* newspaper in Malaysia published an article profiling some of the most popular Malaysian instagramers including: artist Hong Yi (@redhongyi) who has just over 108,000 followers; air steward Jimmy Khoo (@jimmykhoo) who has some 14,400 followers; and event party planner Samantha Lee (@leesamantha) who has 383,000 followers.<sup>145</sup> Malaysia's Prime Minister has just over 34,300 followers.<sup>146</sup>



### e) LinkedIn

According to SocialBakers, there are some 1.5 million LinkedIn users in Malaysia, representing a 9.4 per cent penetration rate among Internet users.



### f) Waze

Waze is the world's largest community-based traffic and navigation app for iOS, Android and Windows phones. Malaysia has nearly 1.5 million users, making it the biggest Waze community in the Asia-Pacific region and one of the top 15 largest Waze communities out of nearly 200 countries.<sup>147</sup> In November 2013, Waze announced a partnership with Astro Awani, a 24-hour news and information TV station, to provide daily community-based traffic reports that were to start rolling out in early 2014.<sup>148</sup>

## 2.4 The digital divide

The 'digital divide' is a term used to refer to differences between those who have access to digital technology and those who do not. Digital divides can manifest themselves based on geography, gender, socioeconomic status and race/ethnicity. In many countries, geography, in particular, emerges as a predictor of access, with people living in rural areas typically having less access and lower usage levels of digital technologies than those living in urban areas. In addition to issues of physical access and connectivity, divides also manifest themselves in the types of technologies and tools people use to connect—facilitating very different types of user experiences—as well as in levels of digital literacy.<sup>149</sup>

Available data from Malaysia suggests that in spite of the massive growth in ICT access in recent years, certain parts of the country lag behind others in terms of access and use. Some of the significant differences in access to hardware as well as broadband penetration among states have already been highlighted in this report:

- While 72.4 per cent of households in Putrajaya have access to laptops, in Kelantan it is only 29.4 per cent.<sup>150</sup>
- While the overall broadband penetration for the country for Q1 of 2014 is 67.3 per cent; Kuala Lumpur registers a 115.7 per cent penetration rate, while Kelantan registers only a 41.2 per cent broadband penetration.<sup>151</sup>
- While in Putrajaya and Kuala Lumpur, 42.3 per cent and 37.4 per cent of households have access to a tablet respectively, in Negeri Sembilan and Kelantan only 6.7 per cent and 4.9 per cent of households do, respectively.<sup>152</sup>

Furthermore, based on 2012 data collected by the MCMC, rural households constituted only 24.2 per cent of Internet users<sup>153</sup>, yet the rural population of Malaysia is approximately 30 per cent of the country's total population<sup>154</sup> — suggesting lower access levels in rural areas. Interestingly, looking at data collected by the MCMC on cellular telephone penetration by 100 inhabitants, in spite of significant differences among states with the highest and lowest penetration levels, even states with the lowest penetration rates—Putrajaya and Sabah—have penetration of 87 per cent and 87.6 per cent, respectively.<sup>155</sup>

The 2012 survey of Malaysian youth by the Asia Foundation suggests that, among the youth surveyed, there did not appear to be a major digital divide; however, the youth from rural areas rely more on their peers for information.<sup>156</sup> There appears to be little



information available on gender differences in access and use of ICT; however, based on 2012 data collected by the MCMC, males comprised 56.4 per cent of Internet users and females 43.6 per cent.<sup>157</sup>

### 2.4.1 Addressing the digital divide

**Governments, NGOs and the private sector all play key roles in helping to reduce the digital divide; for example, by funding projects that provide Internet connectivity or by providing ICT training to isolated regions and populations.**

The Government of Malaysia has developed key strategies and created several initiatives to reduce the existence of digital divides in the country.

Some of the measures that have been taken by the Malaysian Government to widen public accessibility to ICT include: a tax rebate of RM400 (approximately US\$124) with the purchase of a family computer, which is allowed once every five years; a loan facility for Government servants to purchase a computer, given once during their tenure of service; and the Employees Provident Fund (EPF) where contributors are eligible to withdraw their contributions to purchase a computer for their children aged 10 years and above.<sup>158</sup> Under the Eighth Malaysia Plan, the Government allocated RM401 million (approximately US\$125 million) for the development of ICT in schools.<sup>159</sup>

The National Broadband Initiative is a national strategy aimed at bringing broadband to the entire country, to encourage the growth of a knowledge-based society and the development of all Internet-based services.<sup>160</sup> To support the attainment of this target, in March 2010, five initiatives were introduced in Malaysia: Rakyat Internet Centres (Pusat Internet Rakyat) and Mini Community Broadband Centres (CBC); the 1 Million Netbook Initiative; E-Kiosks; 'CBC to the Home'; and expansion of cellular coverage.<sup>161</sup>

The Universal Service Provision (USP) programme, operated by the MCMC, has made great strides in bringing Internet access to underprivileged and rural populations in Malaysia. The USP programme's goals are twofold: to provide Internet access as well as educate the target populations in its use. The USP programme targets areas which the MCMC has identified as having Public Switched Telephone Network penetration rates below 20 per cent or anywhere they believe services are insufficiently available.<sup>162</sup>

Within the USP there are several projects such as:

- 1Malaysia Internet Centre—each centre provides IT equipment including Internet-enabled computers in rural communities.
- Mini Community Broadband Centre (CBC)—each mini CBC has five computers with broadband access located within offices of the Information Department.
- 1Malaysia Community Broadband Library—equips libraries with broadband Internet and seeks to expand the role that libraries play in the 21st century.
- 1Malaysia Wireless Village—provides WiFi in strategic locations in target areas.<sup>163</sup>

The 'Communications & Multimedia Pocketbook of Statistics Q1 2014' produced by the MCMC states that there are 426 1Malaysia Internet Centres in the country, serving just over 398,000 members; 120 Mini Community Broadband Centres; 99 1Malaysia Community Broadband Libraries; and 4,709 1Malaysia Wireless Villages.<sup>164</sup>

#### a) School-based initiatives

To address both the dimensions of physical infrastructure and connectivity, as well as digital literacy and skills, several initiatives and programmes have been implemented in Malaysia since the early 1990s.

Information and Computer Technology has been part of the Malaysian public school curriculum since the 1980s<sup>165</sup>; and the implementation of formal school-based computer literacy programmes by the Government began in 1992.<sup>166</sup> During the first phase, 60 secondary schools were equipped with computers. This pilot programme targeted children aged 13 to 14 through a subject called Computer Literacy (*Mata Pelajaran Literasi Komputer*). It was also the beginning of the Computers-in-Education (CIE) programme for

all Malaysian schoolchildren.<sup>167</sup> The programme included a syllabus, teacher development in the subject and allocation of teaching periods in the school timetable. Teachers were afforded some flexibility to adapt the goals and contents of the syllabus commensurate with students' capabilities.<sup>168</sup> A decade later, the CIE programme was expanded to more than 4,000 schools nationwide.

By 2007, the CIE programme evolved into the Information and Communication Technology Literacy (ICTL) programme, which became a compulsory subject in 2007 in all schools that the Government had equipped with a computer lab.<sup>169</sup> This directive was applicable to lower secondary schoolchildren, i.e. those aged 13 to 14, and the objectives were to acquire and apply ICT knowledge in daily life; to share ideas and information from out-of-school contexts; and to demonstrate a responsible and accountable attitude toward the use of ICT and its infrastructure.<sup>170</sup>

With the goal of transforming Malaysian schools into facilitators of technology, the SmartSchool Initiative was conceived as part of the Multimedia Super Corridor (MSC) initiative. Implemented by the Ministry of Education (MOE), the programme was piloted between 1999 and 2002 at 87 schools around the country, at a cost of RM300 million (US\$78 million at the time).<sup>171</sup> The pilot was evaluated by a variety of internal and external entities, and it was determined as being successful in boosting both student and teacher efficiency, improving student self-improvement and self-learning, improving ICT literacy, and making learning more enjoyable, among many other benefits.<sup>172</sup>

However, schools involved in the pilot study also raised concerns about the reliability of software, hardware and the Internet, as well as issues related to availability of electricity.<sup>173</sup> Based on the pilot and subsequent stakeholder workshops, a roadmap was developed to expand the SmartSchool programme to 10,000 schools by 2010.<sup>174</sup> Unfortunately, there does not appear to be much analysis on the impact or progress of the SmartSchool Initiative since the mid-2000s. Even more recent research like 'The Process of Malaysian Smart School Policy Cycle: A Qualitative Analysis' by Ghavifekr and Hussin et al (2011) does not cite any material more recent than 2008.

The SchoolNet Project is another government initiative to provide broadband infrastructure





and Internet access to schools. The project has provided ICT infrastructure to around 10,000 Malaysian schools.<sup>175</sup> In 2008, 88 smart schools began receiving upgrades to their bandwidth as part of the SchoolNet project. Besides providing Internet access, the project has also installed solar panels at schools lacking sufficient electricity.<sup>176</sup>

In 2013, over 90 per cent of all government primary and secondary schools were connected with broadband through the 1BestariNet project<sup>177</sup>—an MOE initiative in partnership with telecommunications company YTL Communications.<sup>178</sup> Schools participating in 1BestariNet are equipped with high-speed 4G Internet access and are connected to a virtual learning platform, Frog Virtual Learning Environment (VLE).<sup>179</sup>

Other state and private initiated projects that have sought to connect schools and communities to the Internet over the years include:

- In 1997, the Penang State Government began the Penang E-learning Community project, which creates a web presence, tools and services. In 2001, the project boasted that 300 participating teachers from 157 schools had been trained in web page development and 100 schools had uploaded their webpages to the E-Learning Website.<sup>180</sup>
- In 2001, the Government introduced a new smart school project called the Electronic Book Project. Thirty-five schools were provided with 2,491 Internet accessible e-books installed with electronic textbooks.<sup>181</sup>
- The Chinese Smart Schools project aimed to develop computer laboratories in more than 100 Chinese primary schools in Malaysia in the hope of boosting ICT literacy of teachers and students.<sup>182</sup>
- In 2004, ViaStat, under a US\$5 million contract, supplied a LinkStar broadband satellite communications network to provide high-speed Internet access to upwards of 1,500 Malaysian schools.<sup>183</sup>

In March 2008, the MoE launched EduWebTV.com. Its eight channels of instructional and non-instructional videos can be accessed for free by students and teachers from rural and urban schools.<sup>184</sup> EduWebTV.com has registered 22 million hits between March 2008, when it was launched, and 2010.<sup>185</sup>



**USE OF INFORMATION  
& COMMUNICATION  
TECHNOLOGY (ICT) BY  
ADOLESCENTS AND YOUTH**

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**3**



## 3.1 ACCESS AND USE OF DIGITAL TECHNOLOGY AMONG CHILDREN AND YOUNG PEOPLE

### 3.1.1 Devices, access points and time spent online

According to the International Telecommunication Union's (ITU's) *Measuring the Information Society 2013* report, Malaysia stands out as having the fourth-highest proportion of 'digital natives' in the world, despite ranking much lower globally in information and communication technology development.<sup>186</sup>

The report defines 'digital natives' as youths aged 15 to 24 with at least five years of active Internet use. The study, jointly conducted with the Georgia Institute of Technology, counted 13.4 per cent or more than 3.9 million Malaysians as digital natives, accounting for nearly three-quarters of the country's youths. Neighbouring Singapore was ranked 12th in the study at 12.2 per cent of the population or 643,589 youths, followed by Brunei Darussalam in 13th place with 12.1 per cent or 50,049 people from its total population being digital natives.<sup>187</sup>

A collaboration between the Malaysian Communication and Multimedia Commission (MCMC) and Institutions of Higher Learning in Malaysia in recent years has resulted in research on issues such as Internet and social media use, habits as well as experience of risk among adolescents in Malaysia. One study based on data collected in 2010 and entitled *Young people and New Media—Social uses, Social shapings and Social consequences* (from here on referred to as the *Young People and New Media study*), found that 50.5 per cent of the respondents aged 14–16 spent four or more hours a week phoning and texting, social networking and playing new media games using a variety of tools.<sup>188</sup>

About 17 per cent of them spent more than 12 hours a week on such activities. Respondents who reported sending and receiving over 80 text messages a week were significant: 29.8 per cent received in excess of 80 text messages a week, while 27.8 per cent sent in excess of 80 messages a week. More than a third (35.6 per cent) of respondents spent between one and 12 hours a week in cyber cafes; of these, 2.9 per cent spent 12 hours a week in cyber cafes.<sup>189</sup>

“We need to have more education for children. Because today, children are savvy about all things Internet.”

**Muhammad Khairul Nizam Bin Haris, 17**

The CyberSAFE in Schools National Survey 2013, conducted with 9,651 primary and secondary school students in Malaysia, also reveals a wealth of information about digital access and use among children and young people in the country.<sup>190</sup> More than half of those surveyed reported that they learnt how to use the Internet from family members (32 per cent from siblings/relatives, 26 per cent from parents). There are multiple locations where students access the Internet but the home is the main location for a majority of them: 75 per cent of respondents stated that the home is the place where they access the Internet most often and only 7 per cent said that they use Internet cafes “most often.”<sup>191</sup>

Most students use multiple devices to connect to the Internet, with desktops being the most common device used. On average, only 29 per cent reported using a smartphone and 23 per cent reported using a mobile phone to connect to the Internet, although this was higher among older respondents aged between 16–18 and over 18 years. Almost half of the students spend eight hours or less per week on the Internet; however, nearly 16 per cent of students spend 28 hours or more per week online.<sup>192</sup>

### 3.1.2 The popularity of social media and online gaming

Overall, 68 per cent of participants in the CyberSAFE in Schools National Survey 2013 reported using the Internet for social media and 44 per cent use the Internet to do research for school. Social media use was higher among the older age groups (16–18 and 18+), with more than three-quarters in these age cohorts reporting that they use social media.<sup>193</sup>

#### a) Facebook

Young Malaysians are active users of social media, and children and young people (aged 13–24) make up nearly half of the Facebook users in the country.<sup>194</sup> Given the popularity of Facebook in the country, the MCMC commissioned a study to better understand young people’s use and experiences of the social networking platform, based on 1,200 questionnaires distributed to users aged 18–22, and focus group discussions with 92 upper secondary school and university students.<sup>195</sup>

The survey showed that the reason cited by the most respondents as to why young people use Facebook is for communication—with existing friends, new friends, classmates and family members—with the added value that Facebook communication is often cheaper than other modes of communicating.<sup>196</sup> The other motivations for using Facebook included: escapism (31.6 per cent), politics (22.5 per cent), and news and information seeking (14.3 per cent).<sup>197</sup>

“The most important thing is...knowing your limits.”  
Cathryn Anila, 13



The MCMC Facebook study also asked specific questions relating to common practices and behaviours on Facebook as well as attitudes to certain occurrences which take place on Facebook. Notably:

38.5 per cent of respondents “sometimes” share photos, videos and links on Facebook, while 16 per cent do so “often” and 12.3 per cent do so “always”.

45 per cent agreed or strongly agreed that they feel upset when their contacts misrepresent what they post on Facebook.

67.8 per cent agreed or strongly agreed that sensitive issues in Malaysia cannot be discussed on Facebook.

74.1 per cent agreed or strongly agreed that people should be charged for posting dangerous comments on Facebook.<sup>198</sup>

Interestingly, recent reports in the media indicate that chat applications such as WhatsApp, WeChat, LINE and KakaoTalk are cutting into Facebook’s customer base in Malaysia as youths seek new levels of privacy.<sup>199</sup>

## b) Online gaming

The Young People and New Media<sup>200</sup> study asked a number of questions related to online gaming. It was found that, among the 1,200 study participants (aged 14–16), 80 per cent indicated that they use new media to play games and that time spent playing games increased during the weekends.<sup>201</sup> The study found the most popular games revolved around racing, adventure and fighting, while educational games were less popular. In the more recent CyberSAFE in Schools National Survey 2013, around half the participants (51 per cent) reported playing games online.

Data from global market research firm Lucintel indicates that mobile and online segments are likely to see significant growth in the coming years and “strong economic growth in the emerging markets, such as India, China, Indonesia and Malaysia will result in high disposable income for entertainment. Young population in the emerging markets is likely to increase which will prove to be a sales booster for the gaming software industry.”<sup>202</sup>

The influence of online gaming in Malaysia is evident in other ways: the Facebook fan page for the hugely popular game Candy Crush Saga has over 1.2 million fans from Malaysia; and in 2014, a theme park based on the hugely popular Angry Birds game will open in Kuala Lumpur.<sup>203</sup>



## 3.2 Keeping safe online

### 3.2.1 Exposure to online risk

Access to the Internet and to social media offers children and young people many opportunities for growing existing and new friendships, for exploring their identities, for entertainment, and for education and learning. At the same time, using social media or the Internet more broadly can also expose children and young people to risks, which can have an adverse effect on their emotional and physical well-being. These include a range of risks and crimes such as cyberbullying, grooming, stalking, inappropriate self-exposure, exposure to harmful content, breach of privacy, targeted advertising and gambling, in which children can assume the role of participant, recipient or actor.

Researchers Staksrud and Livingstone, in their article 'Children and Online Risk: Powerless Victims or Resourceful Participants', point out that there are no easy solutions to reducing the potential for harm online and that restricting access, even if it is for the protection of youth, has the detrimental effect of limiting access to the numerous opportunities that the online world offers.<sup>204</sup>

While recent studies in Malaysia have helped to shed light on the experiences of online risk among children and young people, there remain gaps in knowledge and a lack of data, in particular about issues such as online grooming, sexting or exposure to pornographic and other types of potentially harmful content. Available data also does not necessarily provide insight into the level of harm that results from exposure to risk, nor does it delve into the way in which children negotiate risk and develop resilience. The available data does, however, provide a solid basis from which to design a future local research agenda that can help in the design of interventions and other responses.

The CyberSAFE in Schools National Survey 2013 is an important resource for understanding the extent of exposure to online risk among children and young people in Malaysia, their knowledge of online safety as well as the measures they take to protect

themselves.<sup>205</sup> While nearly 90 per cent of participants in the study reported that they view learning about Internet safety as important or very important, only 26 per cent reported that they definitely know how to keep safe online. Over 30 per cent say they either do not know or barely know.<sup>206</sup> Nearly one-fifth of children and adolescents who participated in the study expressed concern about not knowing who was on the other end—with more of the younger participants expressing this (26 per cent)—and 17 per cent expressed concern about invasion of privacy.<sup>207</sup>

The CyberSAFE in Schools: A National Survey Report 2014<sup>208</sup> report gives deeper insight into some of the findings of the 2013 report, and more information about how children in Malaysia consider issues of online safety. The report reveals that:

- There was little difference among male and female children when it came to the number of 'actions' they took to protect themselves on the internet. The 'actions' included the following: "set my privacy settings"; "scan all my downloaded files"; "not add strangers as friends"; "not reveal my personal information"; "log off everytime when using a public computer", and others.<sup>209</sup>
- Older children were found to take more actions than younger children.<sup>210</sup>
- Overall, it was found that only half of all children felt they were safe while they were on the Internet.<sup>211</sup>
- Concerns about being bullied were raised by 9 per cent of children, in contrast to 25 per cent of children who stated "work not being done on time because [of] spending too much time on the internet" as a concern.<sup>212</sup>
- Children overwhelmingly reported parents, siblings or friends as those who they would turn to for support when feeling unsafe online. Very few said that they would talk to school staff, government organisations or hotlines.<sup>213</sup>

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Access to the Internet and to social media offers children and young people many opportunities for growing existing and new friendships, for exploring their identities, for entertainment, and for education and learning. At the same time, using social media or the Internet more broadly can also expose children and young people to risks, which can have an adverse effect on their emotional and physical well-being.



### a) Cyberbullying and harassment

The massive growth of social networking and online gaming in recent years has been accompanied by concerns about the growth in bullying, harassment and anti-social behaviour among children and young people on the Internet. There are numerous challenges associated with research in this area, including: differences in definition among studies; the terminology used in research instruments; as well as broader questions of the relationship between offline and online bullying.<sup>214</sup>

Malaysia was one of the countries that formed part of the 25-country 2012 Microsoft WorldWide Online Bullying Survey, which reveals additional information about online bullying in the country. In this study, 33 per cent of the surveyed children (aged between eight and 17) reported that they had had negative online experiences such as being called names, being made fun of or being treated in a mean or unfriendly way.<sup>215</sup> This was slightly lower than the country average of 37 per cent, and was significantly lower than the percentage of children who reported that they had experienced offline bullying (69 per cent).<sup>216</sup>

The Microsoft study also found that those who bullied other children online were twice as likely to be bullied themselves, and they were also more likely to be bullied if they spent in excess of 10 hours a week on the Internet.<sup>217</sup> In examining gender differences, the Microsoft study found that in Malaysia, girls and boys were equally likely to be bullied online and offline. This is in contrast to the study's country average, where girls were more likely to be victims of bullying. Although girls and boys emerged as having the same level of knowledge about online bullying, girls were more worried about it than boys.<sup>218</sup>

In the CyberSAFE in Schools National Survey 2013, one-quarter of the students said that they had been bullied online at some point. Half of them said they had never been bullied and others were unsure. When the same question was posed with reference to their current experience, the majority—69 per cent—stated that they are not currently being bullied online and 18 per cent were unsure.<sup>219</sup> While many of the participants have not personally experienced it, half of them knew at least one person being bullied online. Common forms of cyberbullying included someone being rude or sending nasty messages, being left out or ignored. Cyberbullying using Facebook and blogs is the most common, followed by SMS.<sup>220</sup>

The CyberSAFE in Schools: A National Survey Report 2014 also revealed further important information about the issue of cyberbullying in Malaysia, including:

- There were marked differences in what is perceived as 'cyber-bullying' between children who reported having been bullied online, and those who stated that they had not been bullied. Children who had been bullied classified fewer of the given examples in the survey as examples of bullying, in comparison to children who had not been bullied.<sup>221</sup>
- More male children than female children say they have been bullied at least once: 30 per cent versus 23 per cent.<sup>222</sup>

### b) Excessive use and addiction

With the rise in access to the Internet, one of the prominent concerns expressed by parents, educators and policymakers around the world has been that of excessive use by children. Given this concern, excessive Internet use by children was one of the issues explored as

part of the EU Kids Online study, the findings of which are captured in a paper entitled 'Excessive Internet Use among European Children'.<sup>223</sup>

Based on responses from nearly 20,000 children (aged 11 to 16 years old), the study examined five components, or areas, of excessive use, and their prevalence among children.<sup>224</sup> These five components were: unsuccessfully trying to spend less time on the Internet; decreased time spent with friends or family or on doing homework because of the Internet; surfing the Internet when not really interested; being bothered when unable to be on the Internet; and going without sleep or food because of the Internet.

The EU Kids Online study found that while 29 per cent of all children surveyed had experienced one or more of the five components, only one per cent reported experiencing all five components.<sup>225</sup> The most commonly reported behaviour was surfing the Internet when not really interested, but the authors of the paper state that this does not mean that the children are at risk of more pathological use. The authors also found that vulnerability to excessive Internet use was more likely among children who were older, had emotional problems and who showed high levels of sensation-seeking.<sup>226</sup>

The paper also situates the findings in the context of different theories and arguments around the issue, highlighting that excessive

Internet use is more complicated than simply the amount of time spent online; that it is not always clear whether excessive Internet use is the cause of certain problems in a child's life, or whether it is a symptom of other issues; and that there is no consensus among researchers about the degree to which excessive Internet use can be considered an addiction.<sup>227</sup>

While there is no single comprehensive study looking at excessive Internet use in Malaysia based on a similar framework to the one used by the EU Kids Online study, several studies in Malaysia have asked questions of children and young people about the amount of time they spend on the Internet and about the effects of this on other parts of their lives:

- In the Young People and New Media study, less than half of the participants indicated that they spent between four and 12 hours a week on gaming.<sup>228</sup>
- In the CyberSAFE in Schools National Survey 2013, nearly 16 per cent of students reported spending 28 hours or more online; 16 per cent expressed concern about "becoming addicted"; and 23 per cent expressed concern about not getting their work done due to too much time spent on the Internet.<sup>229</sup>
- In the CyberSAFE in Schools: A National Survey Report 2014, 20 per cent of children were found to have expressed concern about "becoming addicted", while 25 per cent stated they were concerned about not getting their work done. *(These findings are*

“ Everyone is talking to a screen today. I worry. I think teenagers, as a result, are growing up without communication skills.”

**Mohammad Hanafi Bin Yabiran, 16**



*not based on a new data collection, but a new analysis of data collected for the 2013 report).*

- The MCMC study on Facebook use found that 33.5 per cent of respondents felt their school or work productivity was “sometimes” affected by their use of Facebook and 21.7 per cent of respondents agreed or strongly agreed that they feel depressed, moody or nervous when they are offline.<sup>230</sup>

### **c) Exposure to scams, viruses, spam and malware**

In their 2013 report on security threats, Internet security company Sophos listed Malaysia in fifth place in the top 10 riskiest countries for exposure to malware while using a personal computer.<sup>231</sup> While little data is available about the percentage of children in Malaysia who have been victim of online scams, viruses, spam or malware, they are likely to be exposed to these risks given their high rate of Internet use. In the 2010 Young People and New Media<sup>232</sup> study, it was found that respondents rarely refer to cyber security websites for issues on online safety and risks. Respondents expressed little knowledge of phishing scams; malware; stolen passwords or identities; cyberbullying; and privacy features for online games.<sup>233</sup> Furthermore, the study found that few respondents appeared to be able to evaluate the quality, relevance and accuracy of online sources of information.<sup>234</sup>

## **3.2.2 Responding to online risks for children and young people**

### **a) Young people’s responses to risk**

In addition to exploring use and exposure to risk, the CyberSAFE in Schools National Survey 2013 also sought to understand who children and young people turn to for support when experiencing negative online experiences. Among the respondents, 65 per cent reported that they would tell their parents if they were being bullied online; 46 per cent would tell

their siblings; and 45 per cent would tell their friends. Only six per cent stated that they would not tell anyone. Only about four in 10 survey participants were aware of the Childline 15999 number that they could call for help if they were bullied online.<sup>235</sup>

Passwords are considered an important protective tool for online users, and weak passwords or the sharing of passwords can increase the likelihood of security breaches and potentially lead to negative consequences. In the CyberSAFE in Schools National Survey 2013, only half of the participants said that they do not share their passwords with anyone. Among those that do, the people they share their passwords with are typically parents, other family members and close friends.<sup>236</sup> One-third of participants use the same password for multiple accounts, while another third use two or three passwords for all of their accounts. Changing passwords for security reasons is not a common practice—one-third have the same password they have always had, while another third have only changed their password because they forgot their original one.<sup>237</sup>

### **b) Policies and laws relevant to protection of children online**

To date, Malaysia has not introduced specific legislation targeting crimes against children or adolescents as they interact with others through the Internet. However, in 2013, the Government announced plans to develop a policy on child online protection which is expected to be passed by end-2014.

Notwithstanding, there are numerous existing policies and laws which are designed to protect children’s rights which, while they may not address the specificities of the online environment, remain applicable and relevant. These include the Child Act 2001 [Act 611], the Criminal Procedure Code 1976, the Domestic Violence Act 1994, the Anti-Trafficking in Persons Act 2007, and the Printing Presses and Publications Act 1984.

“Children know what they want, but do they know what they need?”  
**Haziqah, 14, on digital media & children**



Laws under the Malaysian Criminal Procedure Code (also referred to as the Penal Code) cover all forms of criminal activity involving children, such as sexual offence, intimidation, ill-treatment, neglect, abandonment, as well as the unlawful possession, custody or control of a child.<sup>238</sup> According to the Criminal Procedure Code, children under the age of 10 are considered not to have criminal capacity while children aged between 10 and 12 cannot be found guilty of an offence if he or she “has not attained sufficient maturity of understanding to judge the nature and consequence of his conduct on that occasion.”<sup>239</sup> Although there are special provisions for young offenders (age 10–18) under the Criminal Procedure Code,<sup>240</sup> it is noted that, in Malaysia, corporal punishment of children is lawful in all settings.<sup>241</sup> The crime of violence against children within a family is covered by the Domestic Violence Act 1994, which protects children against an instance of “wilful placing of a child in fear of physical injury, causing physical injury, compelling the victim by force or threat to engage in any conduct or act, sexual or otherwise, from which the victim has a right to abstain, and harassment or psychological harm so as to cause ill health.”<sup>242</sup>

The role of the Internet in facilitating child and human trafficking is well documented, and one of the key online risks for children is contact with, and grooming by, traffickers. In 2012, Malaysia acceded to the Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography.<sup>243</sup> According to the Laws of Malaysia Anti-Trafficking in Persons Act 2007, “any person, who traffics in persons being a child, for the purpose of exploitation, commits an offence and shall, on conviction, be punished with imprisonment for a term not less than three years but not exceeding twenty years, and shall also be liable to fine.”<sup>244</sup>

Under the Child Act 2001, a child is defined as being sexually abused if he or she “has taken part, whether as a participant or an observer, in any activity which is sexual in nature for the purposes of (1) any pornographic, obscene or indecent material, photograph, recording, film, videotape or performance; (2) sexual exploitation by any person for that person’s or another person’s sexual gratification.”<sup>245</sup> While the law in Malaysia does not specify Internet pornography, sexual and pornographic material qualifies as prohibited material under the Printing Presses and Publications Act 1984.<sup>246</sup>

## CyberSAFE in Schools: A National Survey Report 2014

In 2014, a second analysis of the CyberSAFE in Schools 2013 Survey data was undertaken, resulting in a follow up report – CyberSAFE in Schools: A National Survey Report 2014.

The survey reveals that:

- More than 90 per cent of children aged 7 to 12 reported that they do not undertake a broad range of actions to protect themselves on the Internet.
- 45 per cent of all schoolchildren exercise low levels of online safety. Despite this, 52 per cent of all children say that they feel safe on the Internet. Further, 38 per cent of all children are not aware of the need for multiple steps that can be taken to safeguard themselves on the Internet.
- While more than 80 per cent of those surveyed view online safety as important, a large percentage of children do not know how to protect themselves on the Internet. Comparisons between age groups show that children aged 15 or less are more vulnerable to risk than those in the 16–19 age bracket.
- There is not necessarily a higher level of awareness or protective action taken by children from urban areas as compared to those in rural areas.
- Children’s awareness of online dangers does not necessarily translate into action: more than 40 per cent of children who said that “online safety is important”, continued to exercise *low levels* of online protection.
- Children have genuine concerns about using the Internet, including - “anonymity or unknown identity of people they are interacting with”, “school work not being done, becoming addicted”, and “invasion of their privacy”.
- All age groups reported incidences of cyber-bullying, with a quarter of all children reporting that they have been bullied at least once.

*The results of the 2014 report are based on inferential analysis using chi-square statistics. It should be noted that this follow-up analysis was also done based on a larger sample of 13,845 responses from children. Due to time constraints with data analysis, the CyberSAFE in Schools 2013 Survey was based on a sample of 9,651 survey responses. With the additional time permitted, CyberSAFE in Schools: A National Survey Report 2014 is based on the complete number of useable respondents – 13,845 out of 15,000.*

SOURCE: Digi Telecommunications, CyberSAFE in Schools: A National Survey Report 2014, 2014. The full report can be accessed at: [https://digi.cybersafe.my/files/article/CyberSAFE\\_Survey\\_Report\\_2014.pdf](https://digi.cybersafe.my/files/article/CyberSAFE_Survey_Report_2014.pdf)



Additionally, the policies covering overall ICT governance described in Section 2 of this report also apply to children and young people in so far as they are designed to ensure a safer and better experience and use of ICT in the country.

Although there are a number of laws providing for the rights of the child in Malaysia, there is a need for appropriate mechanisms for the implementation, monitoring and reporting of child protection in the country, and improved coordination among the various government agencies entrusted with child protection laws and policies.<sup>247</sup> It has been noted that there is an urgent need to address cyberbullying, extortion and child pornography over the Internet.<sup>248</sup> Furthermore, although there are a number of school-based ICT programmes, Internet safety is not central to the curricula, demonstrating the need for a concerted effort toward child protection.<sup>249</sup>

### **c) The role of parents**

In seeking to understand the use of ICT by children and young people in Malaysia, the CyberSAFE in Schools National Survey 2013 contained several questions related to the role of parents in their children's use of digital tools. Two-thirds of participants reported that their parents impose rules for using the Internet and 40 per cent have parents who have talked to them many times about Internet safety.<sup>250</sup>

"Having rules imposed" was reported more by the younger participants in the survey and the most commonly reported types of rules imposed by parents were: limiting the time spent on the Internet, being careful about what to post, and only using the Internet after completing their homework. However, less than half of the participants could recall the specific rules set by their parents. Slightly less than half of participants have computers located in a common area at home and less than half have computers with parental controls.<sup>251</sup>

Similarly, the study on young people's use of new media commissioned by MCMC<sup>252</sup> found that parents and teachers pay little heed to issues of Internet security. The study reported that 71 per cent of teachers and 63 per cent of parents never or rarely talk about violence on new media. Additionally, it was found that most parents exercised little control over their children's use of mobile telephones, nor did they impose stringent conditions for use of the Internet. In return, children did not inform parents or teachers about threats or violence experienced online.<sup>253</sup>

The 2012 Microsoft WorldWide Online Bullying Survey also explored the involvement of parents, and found that only around one-quarter of parents talk to their children about online risk, while slightly less than one-third monitor their children's use of the computer.<sup>254</sup> The study also found that in Malaysia, only 18 per cent of parents teach their children online manners and only 13 per cent ask their children if they have been bullied online. The involvement of parents in Malaysia ranked much lower than global averages in this particular study.<sup>255</sup>

### **d) Noteworthy digital citizenship and safety initiatives—public and private**

In line with the growing access of ICT by children and young people, Government agencies have introduced several initiatives in partnership with NGOs and private companies to develop digital citizenship and safety awareness among children and young people. These include:



### Klik Dengan Bijak (Click Wisely)

In 2012, MCMC launched a national campaign called *Klik dengan Bijak* ('Click wisely') aimed at raising public awareness about Internet safety and responsibility.<sup>256</sup> The core message delivered through the campaign is centred on the five national principles of citizenship called *Rukun Negara*.<sup>257</sup> Much of this information is disseminated through print and digital literature, giving details of ethical and responsible online behaviour. The *Klik dengan Bijak* campaign targets schools and rural communities throughout the country, and each year dozens of digital safety awareness programmes are used to reach out to schoolchildren.

The 'Creative Youth League' competition encourages students to demonstrate their creativity using multimedia applications, while the *Klik dengan Bijak* Challenge focuses children's attention on risks associated with Internet use and provides guidelines for ensuring Internet safety. The 'League of Creative Teens 2013' competition was aimed at showcasing local talent in the use of broadband in the context of a united Malaysia. These projects have been augmented by other MCMC initiatives launched through television, and in collaboration with other government agencies and Internet service providers.<sup>258</sup>

Noteworthy is the incorporation of *Klik dengan Bijak* in the Character Building module in Malaysia's National Service training (PLKN) programme. From January 2014, more than 80,000 youths (18-year-olds) will benefit from Internet safety education each year.<sup>259</sup>

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# CyberSAFE

## CyberSAFE

In 2009, the Ministry of Education launched the CyberSAFE programme in collaboration with CyberSecurity, an agency of the Ministry of Science, Technology and Innovation. The aim of the programme was to raise awareness of secure Internet-related interaction for children and adolescents, as well as to advocate a safe and family-friendly Internet experience for all communities.<sup>260</sup> Subsequently, in 2011 mobile service provider DiGi Telecommunications joined this initiative as part of a wider educational and research effort to assess the effects of Internet access and use among Malaysian schoolchildren.

Since its launch, the programme has reached out to schoolchildren, teachers and administrators through the Ambassador Programme to sensitise individuals on responsible ways of using the Internet and to educate them about online safety. Cyber999 also provides response and management services for security-related incidents, as well as through teacher education workshops and user training for all communities.<sup>261</sup>



## The Star—R-AGE Against Bullying

The aim of R-AGE is to make news and current affairs accessible to, and interesting for, young people. It uses Malaysia's most widely circulated newspaper *The Star* as a platform to disseminate information on issues significant to the youth. Information on anti-bullying is shared on several platforms: Facebook, stories in the newspaper, school visits, radio and an online 'drop-a-pin' page which children can use to indicate the geographical location where an incidence of bullying might have taken place. While there is no specific data on cyberbullying, R-AGE continues to engage the public in an ongoing campaign to raise awareness about, and to show the extent of, online and off-line bullying in Malaysia.<sup>262</sup>

# Observations

Since 2010, there have been a number of significant research undertakings by public and private organisations in Malaysia which have provided important insights into digital trends and the impact of ICT on children's rights and children's well-being in the country. In spite of this, data that is gathered is often not disaggregated or does not focus specifically on children. Thus there are knowledge gaps in a number of areas, gaps which are important to address if the data is to influence national responses, strategies and programmes by various stakeholders.

It is the recommendation of the authors of this desk review that the observations detailed below serve as the basis for discussions, planning and partnership by key stakeholders from the Government, the development community, the non-profit sector and industry. Gaps in research should be prioritised according to the planned results of existing and planned programmes, projects and collaborations.

Specifically, observations pertain to the following:

## 1

### Younger children

A lot of research is focused on adolescents and youth, and not much is known about the use and impact of the Internet among younger children.

## 2

### Vulnerable and marginalised children

Most of the research examined in this desk review did not look specifically at children from marginalised and vulnerable settings to examine their experiences of ICT. Research from other countries has shown that children who are vulnerable in offline settings are more likely to be exposed to risk— which may result in harm—in the online context. Research from other countries—in particular research that focuses on bullying—has also shown that there are links between offline and online experiences of risk and harm for children, and that it is important not to view the online world as completely separate from the offline one.

## 3

### Resilience

Studies from other countries show that most children and young people develop their own systems and strategies for dealing with online risk. More information, both quantitative and qualitative, on how Malaysian children and youth approach and deal with online risk will help in designing responses that take these into account and help to strengthen resilience. Responses need to focus on creating an environment where young people can build resilience, acquire appropriate responses to online risks and advance the ability to use ICT in a pro-social way, as advocated by the concept of digital citizenship—rather than on restricting and controlling use or online behaviour. Appropriate responses should build on the resources that children themselves possess, and that are available through their own peer networks.

# 4

## Opportunities

There is little available information that looks in-depth at the opportunities of ICT—and specifically social media—for developing skills, knowledge and learning, and engaging young people as active citizens. Furthermore, there is a lack of knowledge about how young people themselves view the opportunities provided by digital media for their development.

# 5

## Other risks, including data privacy

The report *A Global Agenda for Children's Rights in the Digital Age: Recommendations for developing UNICEF's research strategy*<sup>263</sup> points out that most existing research focuses on familiar or known risks for children, and less on emerging risks. One such area that is gaining more attention is data privacy. As more children and young people use social media and other online services, many of which collect data about users for commercial purposes, research should also consider what the resulting risks are for younger users.

# 6

## Parents and caregivers

Most available sources consulted for this report regarding parents and caregivers was from the perspective of the children, and not from the parents and caregivers themselves. Little appears to be available about the views of parents and caregivers in Malaysia, the challenges and enabling factors that surround their children's use of digital tools, and the support they are or are not able to provide.

# 7

## The impact of existing awareness and educational programmes and initiatives

Little information is available about the effectiveness and impact of past and present initiatives. This is a challenge that extends beyond Malaysia. For many initiatives in other countries, there is also a lack of data that speaks to the efficacy of various projects/approaches beyond their reach. Such knowledge is crucial for informing evidence-based design of programmes and initiatives to build the digital literacy skills of children and young people.

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United Nations Children's Fund  
Malaysia Country Office  
Wisma UN, Block C, Level 2  
Kompleks Pejabat Damansara  
Jalan Dungun, Damansara Heights  
50490 Kuala Lumpur, Malaysia.

Tel: (+6.03) 2095 9154  
Fax: (+6.03) 2093 0582  
Email: [kualalumpur@unicef.org](mailto:kualalumpur@unicef.org)



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