

Future Trends Written Report

Group 10-23

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Community Chosen: Social Media
users, especially Teenagers

Potential Problems:

Potential Problem 1: Illegal/offensive data

Observation:

63% of our respondents expressed that they feel uncomfortable when they see offensive / illegal content on social media.

Why it poses a problem:

In this digitally evolving society, the number of social media users are increasing rapidly, which means that more people are interacting with each other thus creating more content and materials online. As users, it is hard to control what we look at especially when such content pops up on your feed all of a sudden, causing adolescents to be vulnerable to offensive / illegal content, such as pornography, violence, extremist behaviour, content advocating criminal and anti-social behaviour, texts, photos and videos of offensive content such as racism, discrimination, harassment and more. Such examples can be videos criticizing religious beliefs, or uploading pictures or photos of someone getting bullied. Despite seeing this content, most of them do not report it. When exposed to such content for long periods, it can lead to addiction, trauma, and bad influence. For example, when exposed to pornography for a long period, it can lead to a change in values as one starts to feel that it is not wrong watching women being objectified. Such content can also influence them and cause them to even start to carry out such immoral acts. Another example is being exposed to terrorism content. This content can influence one's values such that they would think that being a terrorist is something that is holy as it is for a "good cause" when it involves the killing of people's lives.

Research:

Half of teenagers exposed to harmful content on social media. (2019b, June 14). Deeside.Com.

<http://www.deeside.com/half-of-teenagers-exposed-to-harmful-content-on-social-media/>

Potential Problem 2: Invasion of privacy

Observation:

28.7% of our respondents expressed that they were surprised at how the things they were talking about to their friends in real-life appeared on their Social Media feed as advertisements even though they did not specifically search for it online.

Why it poses a problem:

The fact that one receives ads for something they did not search up on the internet about suggests that someone has been “eavesdropping” on them, possibly even stalked, causing people to feel insecure. While stalking is most improbable, it is actually our devices that are keeping track of what we are doing. Despite companies having claimed that they have tight customer privacy policies, they are actually making use of programs such as Alphonso, which are hidden in mobile game apps, which allows companies to track what you are doing. For example, when the mic function is enabled on the mobile game, such programs can make use of this function to access what you are talking about. They can also use the camera function to see your current location and what you are doing. And surprisingly, this program is legalised. This shows that our privacy is being invaded without our knowledge of it, and what we speak and do is constantly being tracked by algorithms, stripping us of the freewill (freedom) to decide what information we want other people to know or not.

Research:

Aonso, C. (2018, January 5). *There's A Reason Why You Keep Getting Ads For Things You've Talked About But Haven't Actually Searched Up Online*. Narcity.

<https://www.narcity.com/news/theres-a-reason-why-you-keep-getting-ads-for-things-youve-talked-about-but-havent-actually-searched-up-online>

Potential problem 3: Digital footprint

Observation:

52% of respondents felt that their digital footprint online was too large, causing them to feel insecure about whether their personal information is safe

Why it poses a problem?:

A potential problem of large Digital Footprint is identity theft. Any photo, be it a family photo or a photo of yourself that is publicly shared is fair game for identity thieves, causing one's identity to be stolen by these thieves. Posting personal information is a serious liability, especially those that reveal one's home address, ID or workplace. Identity theft is on the rise and is a serious problem with very damaging implications, such as the exposure to sexual predators, cyberbullying and deepfake videos. Since other users online are able to see these photos, whether be it your family members or yourself, they can use these faces and put it on deepfake videos, severely affecting one's image and reputation not only online but also in real life. This can also lead to cyberbullying as people can make fun of one's image online, especially when an embarrassing photo or video of the target is posted online, potentially resulting in significant emotional and mental harm. Sexual predators are also able to pinpoint one's exact location, posing a threat to one's safety. Another potential problem is difficulties in school admissions, job applications, scholarship applications etc. Nowadays, many employers search up the social media accounts of job-applicants or students. If one's reputation online is poor, like for example: traces of the applicant bullying someone online, harassing someone online, or posting immature and controversial content, employers might not choose these applicants, causing these people to have difficulty searching for jobs or scholarships that they need. These people might potentially be jobless, affecting their livelihood. This shows how one's digital footprint can affect one's safety, reputation and livelihood. If other users also follow online users that have such habits of posting much of their personal information online, it may cause more people to become vulnerable to these problems.

Research:

Harmful Digital Footprint Impacts That Parents Should Know About. (n.d.). Harmful Digital Footprint Impacts That

Parents Should

Know. <https://www.fosi.org/good-digital-parenting/harmful-digital-footprint-impacts-teens/>

A messy digital footprint can cost you a job. (n.d.). Financial Times.

<https://www.ft.com/content/87cfe2ee-bfeb-11e8-84cd-9e601db069b8>

Potential Problem 4: FOMO

Observation:

56% of the respondents felt that FOMO was a prominent threat and felt vulnerable to it.

Why it poses a problem?:

Most were also worried about the problems that FOMO poses,(a negative impact on our mental health) such as depression, addiction, boredom and loneliness etc., which shows that most teens are aware of FOMO and are cautious about its effects, such as suicide, mood swings, loneliness, feelings of inferiority, reduced self-esteem, extreme social anxiety, and increased levels of negativity and depression.

Although teens may be cautious about FOMO and are aware of it, there is still no way of ensuring that they don't suffer from it. It may not be as prominent as other effects of a curated society such as the consequences of digital footprint and fake news, but it is still a problem since it is a psychological, stress disorder. Companies can still make use of it to effect.

FOMO can be used by influencers to start movements or sell products. Movements started can be life threatening and can cause unnecessary physical injuries. It can also be used by companies to persuade naive customers into buying unnecessary products

Research

Heineken® Launches "Sunrise" Campaign to Support Responsible Consumption. (n.d.).

Businesswire <https://rb.gy/8nc8lm>

What's the Psychology Behind the Fear of Missing Out? (n.d.). SLATE.

<https://slate.com/human-interest/2015/09/fomo-whats-the-psychology-behind-the-fear-of-missing-out.html>

Potential Problem 5: Fake News

Observation:

75% of respondents had encountered fake news and 62.8% of respondents put it as one of their bigger concerns of using social media

Why it poses a problem?:

Fake news poses a relatively serious issue for multiple reasons. Through our survey, it has come to our attention that fake news is extremely commonplace and though many were concerned about it, they did not really do anything when they saw the fake news. With the presence of social media and our interconnected world, fake news can be spread quickly from different parties, creating an unnecessary panic or misunderstandings among people, even leading to civil unrest in the case of Ukraine.

Also, fake news can be harnessed by private or government agencies to meddle in external affairs like elections, which can change the opinions of the population and sway the vote in favour or against a certain party in the case of the election, destroying the democratic systems in the western world.

Research:

Retrieved from *The Danger of Fake News in Inflaming or Suppressing Social Conflict*. (n.d.). CITS.

<https://www.cits.ucsb.edu/fake-news/danger-social>

Underlying Problem:

With the advancement of technology in our current era, teenagers are increasingly being exposed to different genres and categories of content such as fake news and offensive & illegal content on social media.

(Condition and FSP) How can we protect the safety and privacy of the younger generation (KVP) when they surf content on social media such that they would not fall into potential pitfalls and endanger their social - psychological wellbeing? (Purpose)

Solutions:

Solution 1: Kampung_Comm

What?:

- Heavily censored, Singapore-specific Social Media platform that targets families with young children to inculcate good habits and the right values in them when they use social media, thus protecting the safety of the younger generation on social media.
- Children of any age can sign up with their families as long as their parents are chaperoning them.

How?:

- Interesting animated tutorials will be provided in the social media platform such that learning is fun and engaging, thus leaving a deep impression in the child.
- When the child posts something, there will be a two-step authentication to check the content the child is attempting to post. Firstly, the algorithm in the platform will scan whether there is inappropriate content or personal information such as vulgarities and bank account numbers respectively through a thorough scan. Secondly, the initial content of the child will then be sent to parents with notes made by the algorithm on the key mistakes. Parents can edit and send it back to the child, who will have no editing function. Since it is the child who is posting, the child will be able to spot the differences from the content sent to his parents and the content he received, thus he is able to learn from his mistakes. Parents can have conversations with their child to re-emphasise that what he wrote was wrong and should not be posted as it is inappropriate. Through this process of self-directed learning as well as parent's guidance, the child will be able to learn from his mistakes and become a more cyber-savvy
- Parents can also link their child's existing social media accounts with Kampung_Comm's two-step authentication program such that parents will be able to monitor what their child is posting and teach them the correct habits. This allows the cultivation of good netiquette, especially when they are using world-wide social media platforms such as Instagram and Twitter where people from all over the world can view their content.

Why?:

- The current generation of social media users, especially teenagers, are obstinate towards the methods used to help them lead a healthy social media life such as assembly talks. It is also inevitable that children of tender age would be using social media in the future as 2-year old children can be seen in looking at YouTube videos of their favourite cartoons. Thus, we have decided that this solution would be used as a training ground for younger children to inculcate good habits and the right values in them while they use social media with the guidance of their parents. The parents are also able to hold the hands of their children and guide them through this process of learning, allowing for better learning of the child. The child can make mistakes in this safe platform without facing the real consequences

When?:

- Pilot testing can be done in mid-late 2021, and can be rolled out latest by 2022

Who?:

- This app will be set up by the government if our proposal to the government is successful. The MCI, also known as the Ministry of Communications and Information, and their agencies, such as the CSA (Cyber Security Agency) and the IMDA (Infocomm Media Development Authority) will aid us in the cybersecurity and censorship of the platform.

Where?:

- N.A. (Online)

Solution 2: SM (Social Media) Omni-Experience

What?:

- A collaboration with Singapore Science Centre as well as MOE, a VR exhibition called "SM Omni-Experience".
- Aims to allow students to have an immersive experience on how the adverse effects of social media and cyber crimes can affect one's life

How?:

- Bring Cyber Wellness learning objectives to life such as:
 - Online identity
 - Cyberbullying
 - Handling online content and behaviour
 - Cybercrimes
 - Etc.
- Through this journey, students will be able to achieve these learning objectives with the immersive experience provided.
- E.g.: Cyber Bullying
 - We will simulate how it is like to be cyberbullied and educate them on how to manage these situations psychologically and physically, such as learning how to cope with cyberbullying, how to avoid it, and how to report it.

Why?:

- The more immersive an experience is, it will leave a deeper impression on the teenagers. The personalised experience of this exhibition also allows students to be able to understand the key objectives of the whole exhibition in their own unique way of understanding, allowing students to feel a sense of accomplishment after having understood the exhibition's learning outcomes.

When?:

- The exhibition can be fully built by mid-2022 and can be fully rolled out to the public in early 2023

Who?:

- Singapore Science Centre as the venue of the exhibition. MOE will also be able to help us spread awareness of this exhibition to all schools

Where?:

- Singapore Science Centre, the venue of the exhibition

Solution 3: Enrich, not Glitch

What?;

- This solution is a proposed project with MCCY (Ministry of Culture, Community and Youth) by creating a new initiative under the Youth sector called "Enrich, not Glitch" which aims to help students take time off their social media accounts to do something more productive and new whilst cultivating new hobbies and having fun with their friends

How?;

- These sessions act as samplers to help students discover new interests to take time off social media. One key example of such sessions can be volunteering. Students are able to sample what it is like to be a social worker. By tagging along with a social worker, students are able to have a hands-on experience on volunteering by learning from these social workers. As stated in our potential problems, FOMO is a huge problem that social media users face as they fear that they are missing out in the things other people are doing in life. Through these volunteering experiences, students may make use of this FOMO phenomenon to share about their volunteering experiences and even challenge their friends and family to do the same, turning this FOMO phenomenon into a means of spreading positive change in people. Of course, these courses will not be conducted every single day. Such sessions can be conducted weekly during school holidays since students still need to revise and unwind. A whole-week crash course can be given during post-EOY periods since students are finally free from their busy and stressful school lives.

Why?;

- According to our survey results, 30% of the respondents who were social media users spent >3 hours on social media every day, and this result shocked us. As social media users, my team and I felt that as students, we should not be using social media too excessively as shown in our survey results, therefore we have decided to attempt to help students to take time off their social media life by using this time to take part in fun and enriching activities that not only allow students to be able to learn something new, but also be able to spend more time with their friends and have a fun time together.

When?;

- These programs can be fully pushed out to the public by the June Holidays of 2021

Who?;

- We will be working with MCCY for this project as MCCY has been recognised by many citizens in the country for pushing out many initiatives to help enrich the lives of youths through various courses, whether be it to help youths chase their dreams

or just to teach them life skills. We would also like to work with MOE to help us bring these courses to the doorsteps of the schools in Singapore and making it accessible to as many students as possible through subsidies. These courses are meant to help students learn and develop holistically by equipping them with life skills while having huge exposure to many different experiences

Where?:

- Courses can be conducted in schools or at designated places for corresponding courses (e.g. Football field, Digital Art Studio etc.)

Solution 4: Lion_Life

What?:

- A social media account called "Lion_Life" to raise awareness and give tips on how to be safe on social media.
- We mainly specialize in spreading awareness, and will make use of appropriate activities designed to do so. Our aim is not to discourage social media, but to encourage the proper and healthy use of it, thus, it does not go against our goals to use a social media account to spread awareness.

How?:

- We will post regularly on social media regarding:
- Daily tips on how to be safe on social media (Do not post something without thinking twice)
- Meditation Routines (Take one's mind off social media and their busy day-to-day lives)
- Fitness Routines (Keep fit)
- Promoting new hobbies
- Weekly quizzes and challenges based on the tips we shared, and winners will be able to walk away with gifts
- Fitness challenges (Promote working out and exercising)
- FOMO Poster Challenge
- Real-life examples on how social media affects one's life:
 - Weekly episodes of interviewing people such as:
 - Students (Primary School to University)
 - Post-graduates
 - Interviews with PDPC (Personal Data Protection Commission), NYC (National Youth Council) and MCCY (Ministry of Culture, Community and Youth) and MCI (Ministry of Communications and Information)

Why?:

- We would like to use a social media account to raise awareness as it is easily accessible to teenagers who are currently using social media. This solution also cultivates good habits in teenagers when they use social media as well as a good healthy lifestyle, developing them to become a more active person

When?:

- Lion_Life can be fully rolled out by the March Holidays of 2021 after content planning which can be done by late 2020

Who?:

- The PDPC will be able to help us with some of our resources, including daily tips.

- MCCY as we will be able to promote “Enrich, not Glitch” through this social media account
- NYC and MCI (as an interviewees)

Where?:

- N.A. (Online)

Solution 5: Cyber Proficiency Badge Test

What?:

- A badge test for Uniform Groups (National Cadet Corps, National Police Cadet Corps, Scouts, etc.) to raise awareness of cyber crimes existence in our world and to teach those in the UGs how to manage cyber crimes. We have come up with this idea through the sixth pillar of Total Defence in Singapore: Digital Defense

How?:

- This badge test will be conducted in the UG CCAs, and the curriculum of content taught for this badge test will be about:
 - What are the different cyber crimes existent?
 - How to spot these cyber crimes?
 - How to stop these cyber crimes?
- Written Test with questions that the cadets must answer to emphasise the seriousness of learning these content
- Cadets will also be required to teach what they have learnt to their peers

Why?:

- We need to raise awareness of such crimes to teenagers and emphasise that these crimes are becoming more and more prevalent as we transit into a more technologically advanced world. Peer learning is also a good method of learning as it involves a friend teaching something, therefore allows for a more intimate and impressionable experience that students will enjoy and have a deeper impression of.

When?:

- Curriculum can be formed by mid-2021 and can be pushed out by early 2022, considering that this badge test will add on to the stress of the cadets in UGs especially in the latter half of the year when students have to spend more time studying for their EOYs.

Who?:

- MOE will help us implement this curriculum in the corresponding Uniformed Groups
- Mindef (Ministry of Defense) can help set curriculum as they have specialists on Cyber Defence

Where?:

- In schools or in the SAF Cyber Defence School

Full Action Plan:

Selection of solutions:

- For the full action plan, **Solution 1 (Kampung_Comm)**, **Solution 2 (SM Omni-Experience)** and **Solution 3 (Enrich not Glitch)**

Criteria:

- Feasibility (Weightage:4)
Reason - The narrowed down solution will have to be realistic if we want to implement it in the future
- Originality(Weightage: 1)
Reason - Our solution has to be something that has not really been done before in order to ensure that it is able to solve the problem and to make sure it will not be a repeat of a solution that did not work
- Impact (Weightage: 5)
Reason - Our solution has to be effective in solving the problem
- Efficiency (Weightage: 2)
Reason - Our solution has to be able to solve the problem as quick as possible while using as little resources as possible as we still require the support of other parties
- Sustainability(Weightage: 3)
Reason - This solution has to be one that can last years at end and has to be a long time solution

Decision making Matrix

	Feasibility (Weightage : 4)	Originality (Weightage : 1)	Efficiency (Weightage : 2)	Impact (Weightage : 5)	Sustainability (Weightage: 3)	Total (upon 25):
Solution A: Kampung_Comm	4	3.5	3	4	3.5	18 / 25
Solution B: Omni-Experience	3	4	4	4	4	19 / 25
Solution C: Enrich, not Glitch	4	3	4	4	3	18 / 25
Solution D: Lion_Life	4	2	2.5	3	3.5	15 / 25
Solution E: Cyber Proficiency Badge Test	4	3	3	3	3	16 / 25

Full Action Plan

- In order to solve our underlying problem, a combination of the *Kampung_Comm*, *SM Omni- Experience* and *Enrich not Glitch* will be used to form the final solution: **Cyber Defense Education (CDE)**

Description of the Cyber Defense Education(CDE)

- Why?:
 - As of now Cyber Wellness has not really impacted many students, and they are not very aware of what is beyond common crimes such as scandals, cyberbullying as well as illegal & offensive content. This could be attributed to

the fact that most of the time these lessons are rather dry. This course is able to educate youths on the topic about not just the prominent problems that social media pose, but also what kind of cyber crimes that exist, raising awareness and amplifying the seriousness of these problems such that youths will take them into consideration and be aware of it, thus protecting their privacy and safety online. It aims to provide immersive, hands-on experience and personalised learning which allow students to find their own unique way to understand the learning objectives. This will also give them a sense of accomplishment, thus leaving a deeper impression which enable them to learn.

- What?:
 - CDE is an education scheme that aims to educate students about not only the adverse effects of social media, but also about the different Cyber Crimes that are existent in the world. Both these topics are interlinked with each other, with the example of digital footprint. One effect of over-using social media is the fact that one would leave huge traces of data as they surf the internet. This can thus lead to crimes such as identity theft.
- How?:
 - Kampung_Comm will teach the younger generation how to use social media properly. The Science Center SM Omni-Experience will teach students the different pitfalls of Social Media, its adverse effects, and how to overcome it. Enrich, not Glitch will help students to take part in more positive and productive activities that can help the community to grow. The use of social media in this stage by these students will be able to influence others to follow their lead and make our society a better place to live in. With such an intensive learning scheme, youths are bound to learn about the dangers of Social Media and how to avoid it.
- Who?:
 - The parties that will be involved in this project in the role of an organiser will be the Ministry of education, the Ministry of Communication and Information, and the Ministry of Culture, Communications and Youth as they are able to bring the CDE all the students in Singapore..

- When?:
 - The action plan will be split into 3 main phases

Phase 1:

- Enrich, not Glitch will be rolled out after seeking resources for courses in 2021

Phase 2:

- Kampung_Comm can be ready by early 2022 after third-party security checks, pilot testing and content censorship testing, which can be done by mid-late 2021

Phase 3:

- Science Centre SM Omni-Experience can be built by mid-2022, and after multiple trial runs and troubleshooting, it can be fully rolled out to the public by the start of 2023

- Why?:
 - By educating the young, we can ensure their safety while using social media platforms in the future as we will be inculcating good habits in them from young. Raising awareness will help to magnify problems regarding the adverse effects of social media and cyber crimes, thus emphasising that these are potential pitfalls that the younger generation should not fall into. Hands-on learning and personalised learning in the CDE will also be heavily emphasised. These types of learning allow for an immersive experience that will deepen the impression of teenagers of this programme, allowing them to be able to recollect about this experience, which shows our success in this action plan.

Evaluation of Full Action Plan:

- Effectiveness and feasibility of the CDE:
 - Kampung_Comm:
 - Although there are many social media platforms out there in the world, they do not have a 2-step authentication like what Kampung_Comm offers, therefore it will be able to attract families with young children to sign up an account to teach their children. Since it is something that has not been implemented in social media platforms before, it will be an effective and feasible one
 - SM Omni-Experience:
 - This exhibition involves the use of Virtual Reality (VR) equipment, and since these technologies have already been implemented and used, it will be very feasible to carry out. The VR experience also allows for a more immersive and interactive experience, thus being effective in helping to educate the students.
 - Enrich, not Glitch:
 - Not considering that COVID-19 is a potential obstacle for this project, this part of the CDE will be feasible as this program will be accessible to all students in Singapore with the help of MOE, and MCCY will be able to reach out to other teenagers too since they are well-known for coming up with enriching initiatives that can help improve the lives of teenagers.
 - CDE as a whole:
 - Immersive experience provided by these initiatives can effectively convey our message of trying to protect the safety and privacy of teenagers when using social media. It is also highly feasible as these initiatives are easily accessible.

Analysis of consequences and effects:

- Kampung_Comm:
 - Self-directed learning
 - According to psychologicalscience.org, self-directed learning allows us “to focus effort on useful information that we don’t already possess and exposing us to information that we don’t have access to through passive observation”.
 - The fact that the child is able to compare the initial content he was about to post and the edited content he received from his parents allows a comparison between the two, allowing the child to spot the differences and be able to recognize in the long run that posting offensive and illegal content is not right
 - Family guidance
 - According to childencyclopedia.com, parents play an important role in educating their children especially when they are young.
 - With the accompaniment of parents when the child is using Kampung_Comm, the child will be able to feel a sense of security as he/she is comfortable being with his parents. With his parents being there to protect him, the child will be able to learn without worries and thus be able to learn effectively
- Omni-Experience:
 - VR
 - According to mbryonic.com, VR education enhances learning and memory recall, therefore students are more likely to be able to recall the content and experience of the Omni-experience
 - Immersing in these virtual environments also help students to organise and remember information spatially
 - Personalised experience
 - According to rand.org, personalised learning refers to practices that are tailored to the needs and goals of students.
 - This personalised learning experience allows students to learn about the learning objectives of the experience in their own unique way, therefore giving them a sense of accomplishment, thus engaging them better

- Enrich, not Glitch:
 - Hands-on learning
 - According to friendscentral.org, hands-on learning is a form of education in which children learn by doing
 - According to byf.org, hands-on learning is effective as it helps children to grasp what they are taught. Through this program, students are able to learn or cultivate different hobbies through experiencing them first-hand. For example, volunteering. They will be able to have a first hand experience on how it is like to be a volunteer, thus giving them the chance to grasp what they are being taught, allowing them to learn something new and take their mind off social media

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