TALLINN UNIVERSITY OF TECHNOLOGY

School of Information Technologies

Anh Hung Tran 184061IVSB

A Cyber Hygiene Training Module for Vietnamese Internet Users

Bachelor's thesis

Supervisor: Kaido Kikkas, PhD

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Infotehnoloogia teaduskond

Anh Hung Tran 184061IVSB

Küberhügieeni õppemoodul Vietnami internetikasutajatele

bakalaureusetöö

Juhendaja: Kaido Kikkas,

tehnikateaduste doktor

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Author's declaration of originality

I declare that this thesis is my own original work. I have properly acknowledged and cited all sources of information and ideas used. This document has not been submitted for any degree or purpose at any other institution, and it does not contain any previously published material, except where appropriately acknowledged.

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Abstract

Information technology has emerged as a vital element in various industries and occupations over the past few decades, and its integration into human life is expected to grow even further in the coming years. As digital technologies have become more prevalent, governments and nations have recognized the need to establish and implement regulations regarding internet and cyber security. Vietnam is among the countries that have taken steps to address this issue. However, as a one-party controlled country, the law introduction has also been using as a tool of surveillance and apply control one Vietnamese Internet users.

The author predicts a hypothesis of relation between the level of Cyber Security Law violation and the awareness on human rights on Internet. Using video interviews and surveys, a detailed examination is carried out to confirm the hypothesis and thoroughly understand the challenges faced by users in the current context. The objective of this thesis is to propose a solution that enhances the level of human rights protection and reduces law violations among Vietnamese Internet users, utilizing the insights gained from the analysis.

A hygiene training module is specifically designed and developed, drawing upon fundamental knowledge of Vietnam's Cybersecurity laws and real-life examples. This module aims to provide an additional layer of protection for Internet users, helping them avoid avoidable law violations and safeguard their human rights.

List of abbreviations and terms

UN   United Nations

UNICEF   United Nations International Children's Emergency Fund

URL   Uniformed Resource Locator

VCSL   Vietnam Cyber Security Law

VN   Vietnam

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1   Introduction

Information technology has been becoming a crucial aspect of every industry and profession for a few decades and will continue to be even more integrated into human life in the future. Along with the spreading of digitals, Internet and Cyber security regulations have also been built and introduced by many governments and countries. Vietnam is one of them.

Vietnam has inspected a humongous increase in Information technology and Internet usage among all countries in the world, yet authorities has not paid enough attention on how well-aware on Cyber security law of their citizens in general or Internet users in particular. Unsatisfactory knowledge on how Cyber security law impacts on every performed action on the Internet would eventually entangle Internet users in lawbreaking matters. Awareness-raising initiatives must be accessible and appropriate for users at distinct levels of IT expertise.

Through video interviews and surveys, a thorough analysis is conducted on the current practical situation in order to gain a comprehensive understanding of the obstacles that users have encountered. This thesis specially targets at a solution to boost human right protection level as well as a reduction of law violation for Vietnamese Internet users based on the analyzed results. The hygiene training module is designed and developed from basic Vietnam Cyber security law knowledge and practical examples, gives extra layer of protection for Internet users from preventable law violation and human right issues.

2   Background

Human rights have always been a foremost factor of every legislative action in every country. In an intellectually rigorous discipline focused on the acquisition and analysis of information, cyber security law affects significantly human rights on the Internet.

2.1   Southeast Asian countries situation

The issue of how human rights on the internet intersect with regulations and laws related to cybersecurity is not exclusive to Vietnam but is also a matter that concerns numerous other countries and governments globally.

With the most geographical similarities to Vietnam, plenty of Southeast Asian countries are also considered either as having "Not free" or "Partly free" Internet freedom by Freedom House's latest Freedom net report [1]. In the case of Indonesia and Myanmar, their governments even have privilege to execute Internet shutdown as a form of censorship according to the report [1] which inevitably violate the freedom of information access. In Indonesia in particular, their government has been working on Protection of Personal Data Law for many years and it can be considered as more detailed and well-defined in term of Internet user's privacy and data protection according to this article [2].

2.2   Human rights concerns and Cyber security law violation in Vietnam

With the approval and implementation of the VCSL, there were plenty of areas on the Internet have been put under control and surveillance. Therefore, many aspects which are unfamiliar with various types of Internet users are easily violated especially for non-IT background users or who did not have access to up-to-date information regarding the law.

2.2.1   The Cyber security law

Vietnam has an increasing growth of internet users with about 70% [3] of its whole population having internet access by 2020. In the meantime, Vietnam is a single-party state country, which understandably lead to the fact that their government would often prioritize society stability and

order over individual rights and freedoms. In the era of digitals, Vietnamese government understood that it is inevitable for the Internet to involve in many distinct aspects of the society and economy, and as the consequence, the more integrated Internet into those critical dimensions the more economic, political, and social instability created to them. Therefore, they introduced the new Cyber security law in 2018 [4]. The law was approved by a large majority of Vietnam's National Assembly on June 12 and was set to take effect on January 1, 2019.

Article 8 of this Law [4] stipulates many prohibited behaviors on the Internet environment. Specifically, it prohibits the use of cyberspace to carry out activities such as: organizing, operating, colluding, inciting bribery, fraud, enticing people to resist the State, distorting history, spreading false information causing confusion, engaging in prostitution, social evils, producing, introducing software that disrupts the operations of telecommunications networks, the Internet... In addition, the act of exploiting or abusing activities to protect network security to infringe upon the sovereignty, interests, national security, order, social safety, legal rights, and interests of agencies, organizations, individuals or to take advantage of them is also a prohibited behavior.

2.2.2   Human rights concerns

There has been controversy over the approvement and enforcement of the law since 2018. One of the initiatives against the Vietnam's National Assembly was a petition [5] signed by more than 63.000 people to urge Vietnam's Parliament for the disapproval of the VCSL. UN's Committee on Economic, Social, and Cultural Rights also suggested that Vietnam revise its Law on Cybersecurity to guarantee an independent judicial review and comply fully with their human rights obligations, specifically in regard to freedom of expression, peaceful assembly, and the right to privacy [6].

The rights of freedom of accessing information have been commonly violated to a certain extent by the government according to Freedom House's report [1]. It also stated that widely used platforms like Facebook, Google were required to store personal information of Vietnamese Internet users. Throughout 2021, journalists and bloggers continued to be targeted with arrests, physical attacks, and criminal charges. For instance, in January, three journalists were found guilty of "making and disseminating propaganda" and received sentences of more than 10 years each. Similarly, in April, a journalist was sentenced to eight years in prison for posting content that was deemed "anti-state" [7].

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Article by Trung Nguyen [8] proposes recommendations based on evaluation and comments of the VCSL by international organizations as well as categorization of the three human rights concerns. In an event mentioned in journal article by Nguyen Thu [9], there were generally the control of Vietnamese government over media and the Internet users reactions were adaptive but still unpredictable.

2.3   Related works

There have been many research on awareness raising training modules on the digital space [10], however there are still little works which focus on boosting human rights awareness by providing knowledge on Cyber Security law and regulation. However, there were different initiatives organized by Vietnamese government agencies [11] to encourage students and public employees to study VCSL and most of them are in form of writing contest. This approach requires participants to invest huge amount of time and research as well as a certain level of writing skill and academic knowledge which would limit its accessibility to other types of participants.

This article [12] underscored the importance of providing security awareness training to regular users. Often, non-technical individuals are overlooked or not given due attention compared to the resources dedicated to security professionals. Consequently, the lack of education has enabled cybercriminals to exploit the human vulnerabilities of everyday users. The study proposes that multiple entities need to be engaged in educating regular users. Each entity has distinct roles and responsibilities in staying current with security measures. The study also suggest the effectiveness of different instructional strategies employed in e-learning environments, highlighting the significance of learner engagement and interactive components for optimal learning outcomes.

2.4   Current challenges

There have not been many research and reports conducted on evaluation of human rights awareness of Vietnamese Internet users. However, from implications of Internet freedom reports [1], and the "grey area" introduction in VCSL [4], it is understood that users have been facing human rights related problems when producing and consuming information on the Internet. Another challenge is that despite of the highly growing percentage of access to the Internet in Vietnam population [3], the average level of completion rate of Upper Secondary school is low with 58.1% according

to survey of UNICEF [13] which introduce difficulties when accessing foreign languages as well as academic materials.

In conclusion, in order to raise Vietnamese Internet users' awareness on human rights, education of VCSL at the basic level is necessary. Therefore, a user-friendly easy-to-access training module needed to be developed and introduced to different categories of users. Content and knowledge require to be demonstrative and straightforward so that users from different levels of IT backgrounds can fully understand. The outcome of this research will not be limited by the training module itself but also the feedback and suggestions from users could also be analyzed in the future to serve for further research.

3   Research methodology

To get for insightful understanding and the relation between human rights awareness and VCSL violation, the author conduct research with the objective of answering four questions listed below:

- How do cyber security law violations impact human rights, specifically in terms of privacy, freedom of expression, and access to information?
- What are the key challenges in effectively addressing and preventing cyber security law violations while safeguarding human rights?
- To what extent do existing cyber security laws and regulations adequately protect human rights in the digital realm?
- What are the ethical implications and dilemmas associated with balancing cyber security measures and human rights protection in the context of law enforcement and surveillance?

The author follows collectively and adaptively guidance from UN's A Manual On Human Rights Training Methodology [14], and based on the goal of designing and developing mentioned in [12], the concluded steps of the process are as follows:

1. Collect practical situation data

2. Assess and analyze collected data

3. Design, conduct documentation for the training module

4. Split tasks and subtasks needed to accomplish for the development

5. Develop, evaluate, and deploy training module

6. Collect user experience and feedback

7. Suggest future improvements

In the 1st and 6th step, the author uses questionnaire survey with combinations of single answer questions, multiple answer questions, linear scale questions, free text questions to collect user data. For the 1st step specifically, the author decides to conduct additional qualitative research since there are limitation of previous research and data on this topic particularly in Vietnam. The scope of this research is aiming at Internet users so that online questionnaires were chosen by the author as the delivery method and Google Forms as the tool since its graphical interface is familiar and easy to use for most Internet users in Vietnam. The online questionnaires are distributed by the authors and the author's social connections through social media platforms. Technical supports and explanations during accessing and filling questionnaires were also provided by the authors for exceptional cases where the participants struggled. The design and conduct of documentation for the training are based on numerous factors including delivery timeframe, user's need and requirements, availability of technologies. Before development, technical tasks and expected outcome are specified by the author in form of Atlassian Jira project and tickets. Development, evaluation, deployment tasks are performed in linear order which follow standard principles of software development. The training module is finalized as a web application which is considered the most convenient for accessing which does not required installation.

There are two surveys serving for purposes of collecting current situation data and user feedback after experience the training module.

The analysis survey is constructed from 19 questions vary from questions of identifying participants profile and background, training motivations to questions of learning expectations and user's preferred features. The author received questionnaire responses from 60 Vietnamese Internet users through online Google Form from 23rd to 27th of March 2023.

The other survey or feedback survey is conducted by the author after users fully finish their session of the training module. The feedback survey is constructed from 12 questions mainly aiming at exploring user's assessment on the content of the training module and their experience of using training module website with some expected features from technical perspective.

4   Research process

Based on the need to understand the current situation, the relation between the level of VCSL violation and the level human-rights on the Internet needs to be thoroughly assessed. The case study is conducted to serve for the purpose of confirmation of the hypothesis of relation between the level of Cyber Security Law violation and the awareness on human rights on Internet. Afterward, questionnaire surveys are conducted and distributed to give insight understanding of user attitudes and knowledge.

4.1   Collect current situation data

The current situation in Vietnam online space is under impact and control of their government, so it is understandable that reports and statistic about human rights violations and VCSL are limited or not well published. That motivates the author to conduct research to understand the practical impact of the introduction of the VCSL and how it relates to human right violation cases. Due to the limit of time of the thesis, large scale quantitative research cannot be conducted, instead the author decided to perform case study on three different cases in which the victims had experienced human right violation issues on the Internet. In each case, the author has private online video call to the victim in a duration of approximately 15 minutes through Zalo [16] application due to geographical distance and the application is familiar to all interviewees. During the interview, questions about interviewee profiles and technical background were asked by the author, followed by questions about their understanding and knowledge level on VCSL. After that interviewees were asked about what and how violations happened, and what are the consequences and their reactions. The victims in all 3 study cases eventually asked the interviewer to not publish his/her personal identity as well as detail residential locations.

4.1.1 Case study 1

This case was known by the author from one report in local newspaper news and the author approached the victim first by phone call. The victim was a 30-year-old farmer who live in a rural area in Nghe An, a province locates in the middle region of Vietnam. He used his phone to access Facebook social media daily. He does not have any technical background other than learning to

use the smartphone and Facebook application by himself. Normally he only looked for news and entertainment contents on the social media application. After using the platform for a period, he found out that he can create posts on his personal profile page. At the beginning, his posts were mainly about personal updates of his farm and agriculture products. One day, he posted one post onto his Facebook profile page to complain about his local authority which neglected or had not taken any action against environmentally harmful chemicals to be used by his neighbor farmer. After that, he totally forgot about his post until it was shared by another user who was in his friend list and later it was known by the local authority. The victim was contacted by an agent who works for local authority and then asked to remove or hidden his complaining post on the platform within a month with a reason of violating Vietnam Cyber Security Law but not specified exact details and follow with a warning that he would be fined for 5 million VND (200 EUR). After getting the warning, the victim removed the post from his profile page since he believed that he might violated the law or a community standard and to certain extent and another reason is that he was scared by the aggressiveness of the agent.

It is the case in which the victim got abused by a person who he considered to have more knowledge on VCSL. The low awareness of human rights of the victim made him vulnerable to the dishonest official. Fortunately, in this situation, the victim only had to remove the post but not pay the penalty which obviously is a worse consequence. This scenario is preventable effectively by raising the victim's awareness on human rights of expression on the Internet as well as the provision of basic knowledge on VCSL.

4.1.2 Case study 2

The victim is an 18-year-old high school student living in Hanoi, capital city of Vietnam. He has an intermediate background in IT and has been using the Internet for approximately 10 years.

He joined an online discussion forum - Voz forum [17] provided by a Vietnamese software company. There is no requirement to register an account to access information from the forum but once the user wants to comment on any topic or other user's post a registered account is required. In order to register an account, the user must provide an email address and an optional phone number. The victim provided both details when he was registering the account.

This forum is by far the biggest discussion platform in Vietnam, in which its users can have discussions on diverse topics and there are spaces where users can post online articles, newspaper,

magazines as starting point of the discussions. Based on that, users can have their own opinions and evaluations on such topics. The victim had been using this forum for 6 months and had commented on different topics, usually they are topics related to scientific knowledge or asking for technical help about his casual need on his computer. On a day at the end of December 2022, he was curious about a political topic started by another user's post attached with an online article in the forum. The article mentioned about the fraud of a Vietnamese politician and punishments. Based on what he read from the article, he decided to leave comment on the post which showed a negative attitude and doubts toward a group of Vietnamese politicians which are not included in the article. One day, the victim was contacted by an officer who works in Digital Information Police Department of the city to the number he provided when registering the account, asking him to come to his local police station and confronted him to show that he violated one point in the VCSL about depreciation leaders or politicians. Later the victim was asked to remove the comment and his parents had to pay a 12 million (500 EUR) penalty.

In this case, the victim also had issues related to the governmental authorities, which could be prevented by having knowledge on VCSL. One other crucial issue is that the human right of data privacy on the Internet is violated by the forum owner when they expose the victim's phone number to police officer without any consent. This is preventable by raising the issue to the forum owner and an additional reaction the victim could perform is reporting such issue to human rights organization.

During the interview, the author also found that the victim also had experienced a campaign of raising awareness on VCSL organized by his high school in the form of writing report based on self-learn information about the law. What he had accomplished with the report writing was purely by copying from his friend's work.

4.1.3 Case study 3

The victim is a 63-year-old retired teacher, who joined an online campaign on a Vietnamese social media platform in which participants share knowledge on their profession. In order to participate in this platform, users need to register an account and then join a group consisting of five members. The victim's account had been created 4 months before the interview was conducted. There was a feature of this platform to give the user virtual level of badge based on how long that user had been registered his/her account and the credits for each comment or post the user made to the platform.

By the time the victim participated in the campaign, she had not gained any worth-noticing badge since she did not know about such feature, and she did not use the platform for any other purposes. She later joined a campaign group with other members and one of them who created the group has privilege of a moderator who can discard or remove other member's comment and post. One day, after finishing an essay on her teaching profession, she decided to publish her work on the platform but unfortunately the moderator underestimate her content and decided to remove the victim's post from the group result with a reason of "member does not meet badge level requirement." The victim does not know how to react and if she was on the right side or not since she does not have knowledge on human right of freedom of expression on the Internet against discrimination as well as technical knowledge of how and where to ask for technical support.

This case is avoidable from both sides. The moderator could have been taught about the community standard to respect other user's freedom of expression and speech on the Internet and any action of discrimination is punishable by law. The victim could also learn about when her freedom of expression on the Internet is violated and where to report such issues.

4.2   Assessment and analysis of collected data

The analysis survey was conducted on 60 Vietnamese online users.

On the one hand, surprisingly almost all of them have used social media (Figure 1).
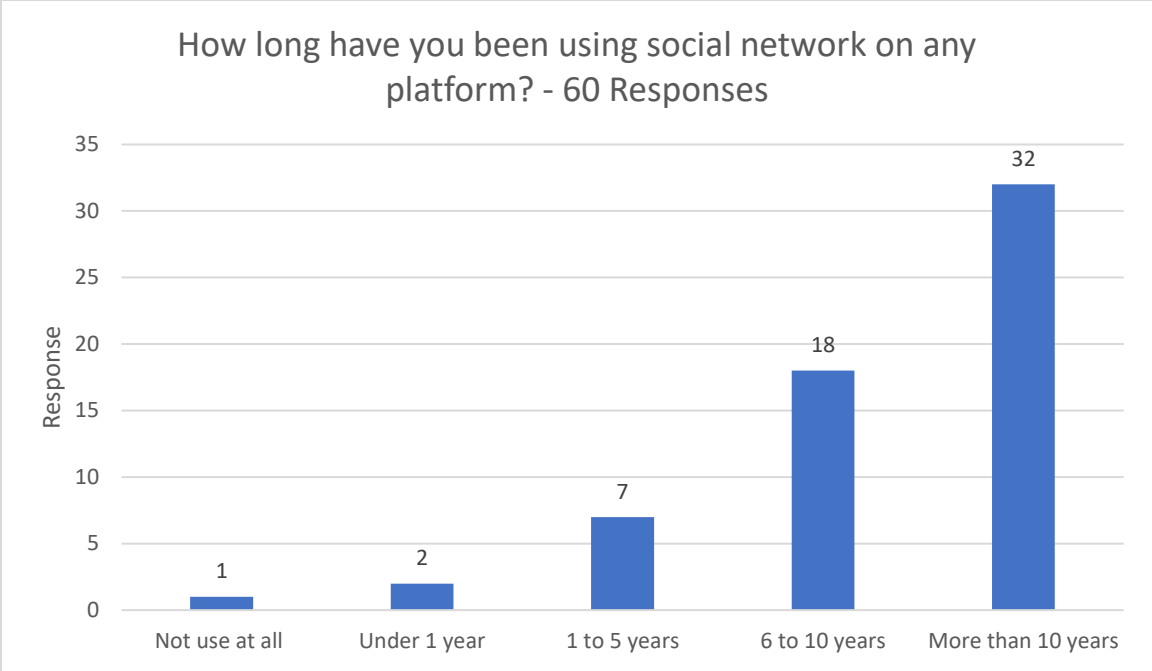
Figure 1. Question "How long have you been using social network on any platform"

In contrast, the level of interest of Vietnamese users on human rights on the Internet is low (Figure 2) despite majority of them or 83.3% of 60 responses have been using the Internet for at least a decade.
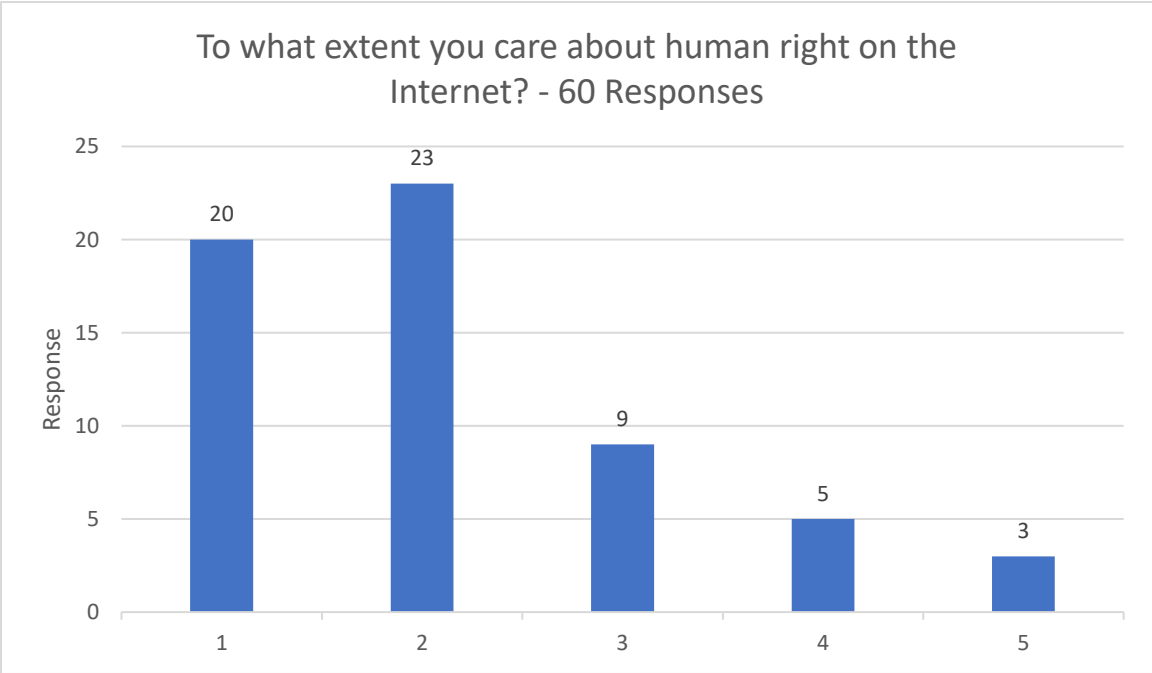

Figure 2. Question "To what extent you care about human right on the Internet"

After analyzing the trend and relation of the percentage of responders who has taken previous training and their training format, about 46.6% responders have taken a training and most of those, 89.2% were in the form of writing report, the author considers this method not effective since it is shown by the below average level of confidence of responders on VCSL and human rights on the Internet (Figure 3)
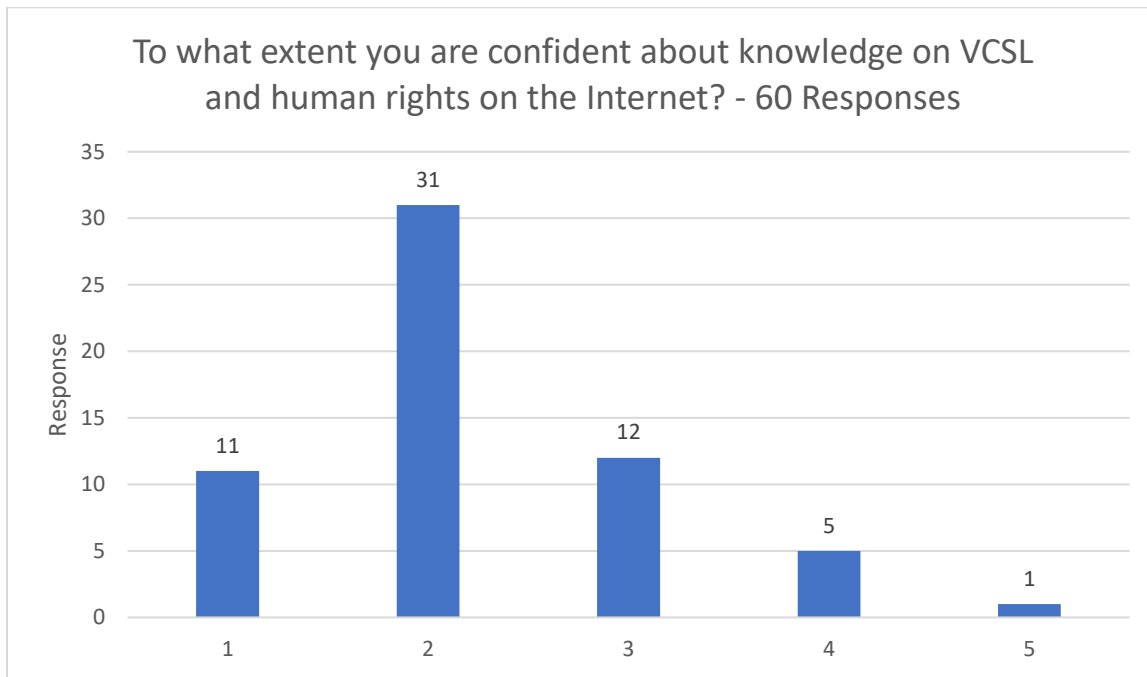

Figure 3. Question "To what extent you are confident about knowledge on VCSL and human rights on the Internet"

The author also spots the proportional relation between extent of confidence and extent of interest on VCSL and human rights on the Internet topics. Another worth mentioning find is that despite 46.6% of responders have taken training previously, 71,6% of those are still having low level of interest which emphasizes the importance of understanding of benefits when gaining knowledge on VCSL and human on the Internet for the design and development of the training module.

4.3   Design of training module

The author designs the training and conducts documentation based on technical and content aspects from the guideline of standard principles in training module design [11].

4.3.1 Technical aspect

Based on data collected from analysis survey, there were previous trainings completely developed and distributed by Vietnamese governmental authorities to schools and agencies. It showed that their main format of training was report writing with 89.2% of all taken trainings by responders, but eventually did not result in a positive impact on the responder's confidence level knowledge on VCSL and human rights. So, the author concludes that report writing would not be the format of the training module.

From the technical perspective, based on the collected data about expected properties of the module, with 78.3% responders expected the training to be quizzes-type and 80% want it to be available online mostly for the convenient accessibility, the author decides quiz to be the format of the training and it will be organized through an online platform and it will be compatible to both mobile and PC devices.

Since there are 88.3% of responders who would like the training to be free cost and 76.6% of the responders want the training to last less than 1 hour, the author will organize the training to be short and simple to meet the requirement of cost and easier to lower developing cost in regard of training content.

4.3.2 Content aspect

The topics of the training will be picked up from points and chapters in VCSL [4] based on their relation to human rights on the Internet and followed by derivational questions prepared by the author according to practical case studies. Principles from this research [18] which are used to extract human-rights-oriented questions and construct into quiz questions.

4.4   Management and Development of training module

The outcomes of the design are separated and processed as inputs for the management and development of training module. The management step is performed first and will manipulate and receive feedback from development.

4.4.1 Management

Management is organized by the author following standard principles of Project Management in a software development lifecycle, starting by defining requirements and expectation of the project. Later, the project is divided into tasks which will be assigned to the author in either linear order or asynchronous strategy based on the dependent extent of each task to others. After the assignment of the task, evaluation and development are performed followed by testing sub-task to guarantee delivery quality of each step in the process.

Management tool chosen by the author is Atlassian Jira [19], as this platform is easy to use with convenient integration tools to keep track of practical progress in real time.

4.4.2 Development

Before development, the author from perspective of a Project Owner decides technology stack and integration methods for the whole development. Due to the limitation of delivery time and estimation of workload need to be done, the author chooses strategically technologies which considered as simple for development and testing with the trade to potential future heavier maintenance time. The platform is also defined to be a web application which delivers single website in order to reduce architectural complexity and lighter for low-profile device users. The list of technologies is mentioned below:

- JavaScript [20]
- VueJS [21]
- 000webhost [22]

The backbone of the application is VueJS which is convenient technology used to build and run applications commonly by many software enterprises. The UI for the website is kept as simple and straightforward as possible since the training module is aiming not only at high-tech but also low

technical-background users. Less distracting UI helps the wide range of types of user easier focus on experiencing the training modules. JavaScript was chosen to be the main programming language since the development can utilize flexibility interaction of it to VueJS and the combination of simple architecture and JavaScript will reduce delivery time significantly.

On the task specified outcomes, the website will be provided under single URL with 3 sub-sections serving 3 pages: main page which consists of quiz questions, redirect button to the other 2 pages; information page which shows knowledge on human rights on the Internet, VCSL at basic-level for users and guidelines to help prevent them from getting violated or abused, and avoid potential consequences; acknowledgement and about page which show contribution and description of development and potentially future community contributors.

The deployed web application then later got promoted initially through author's social connections and social media sharing.

4.5   Collect and analysis user feedback

After 9 days of user experience from 4th to 13th of April 2023, the feedback survey was distributed by the same approach as the analysis survey to 23 participants who finished the training, and the author gets 14 returning responses. After analyzing collected data, the author finds out despite that the participant overall evaluate the training to be harder than their average expectation with approximately 78% find the quiz was having an intermediate or above difficulty, their overall results are, in contrast, considered as 'fair' or 'good' in the classification scale of the final result. On top of that, it is also recorded the regular usage of the hint during the training time (Figure 4)
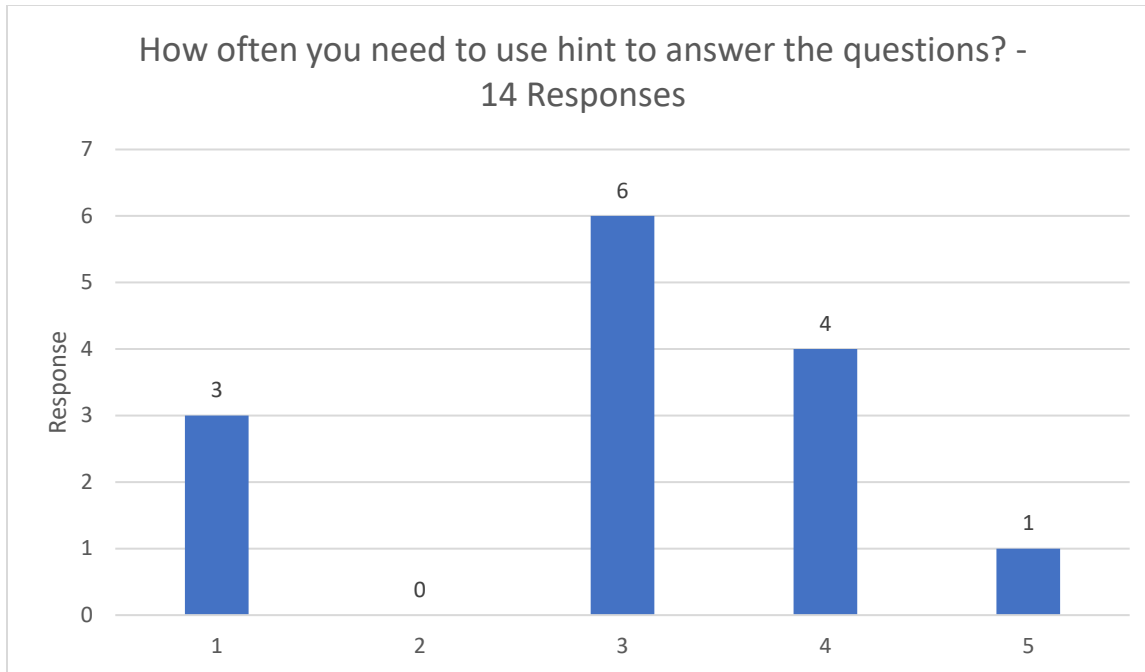
Figure 4. Question "How often you need to use hint to answer the questions"

Which emphasizes the value of hints in training module. By comparing the difference before and after taking the training module, the author finds the increase of participant confidence level from below to intermediate level which could imply the first stage success of the training. Another positive outcome of the project could be indicated by the ratio of the participants numbers who want to take future training to the refusing counterpart is 10/4. This result could help future research to benefit from preferred features.

In the meantime, as the author mentioned in the development description, it is understandable about the trade of UI simplification to user friendliness and delivery time, which is shown in 4 responses about "Simple/Boring UI" out of 6 "NOT like features" question responses.

5   Future works

There have been experienced many distinct obstacles during research conduct and training module design and development. From the author's self-assessment of the process and feedback from participants, there are improvements that could be accomplished in the future.

5.1   Improvement in UI design

Participants feedback shows that boring or over simplified UI make it hard to identify crucial sections of the training, hard to focus during long session of training or navigate between sections and questions. In order to overcome this obstacle, the author suggests conducting more research on user's need and appropriation of UI design, especially on user's behaviors.

5.2   Encouragement of starting

Even though the training was well distributed and easy to access, there were still users who were not willing to participate in the training due to lack of motivation. A suggestion was made that there should be easy-to-notice benefit statements on the front page of the training website or noticeable advertisements sent to users before the distribution of the training.

5.3   Contribution of the community

There have been inspected messages sent to the author with the willing of contributing to both content and maintenance of the training module. The suggestion is to create an additional donation method so that maintainers who take over the responsibility of maintaining website or contributing to the content could be encouraged. In the meantime, additional subpage should be created to receive and review content contribution of the community and after the review content could be added either manually by maintainer or automatically by developed automation tool.

5.4   Improvement in hints

The current hint system was appreciated by participants, however, there were percentage of users who did not like it, the main reason is users found that hints sometimes considered by them irrelevant example of the corresponding questions. Suggestion by the author is to add more details, explanations, clarification to the hint according to this research [12] and this framework [11]. In better scenario, developers can develop feature of adding multimedia types of hints.

6   Summary

Throughout this thesis, the research shown the practical picture of human rights in Vietnam digital space and how it is related and affected by the introduction of the VCSL. The violations of such rights exist but, in the meantime, they are preventable and detectable by letting Vietnamese Internet users participate in the training module. By conducting and analyzing surveys before and after the training module deployment and operation, it is understood that boosting user's awareness on human rights on the Internet and learning basics of the VCSL require not only a well-designed and developed training module, but also an appropriate strategy of promotion and motivation on user's experience.

The subjects, topics, questions of the training were combination of extracted knowledge from the VCSL with the relation to human rights and practical example from detailed study cases. Chosen technologies were carefully evaluated and experimented with to find out the most appropriate tools which could fit project workload into a tight delivery timeframe and still guarantee the development and maintenance reliability.

Based on the accurate analysis of data and efficiency of the implementation, the author successfully delivers the training module to Vietnamese Internet users while still maintains prominent level of user friendly for the web application and motivates those who participated to keep on the willing to raise awareness and spread or share their knowledge to the community. However, there still plenty of rooms where the author could improve and adapt such as an enhancement in user experience serving disabilities or provide the training module as an integrated package so that it could be embedded into more popular platforms and reach more users. Or the sourcing of the training module could be transformed into an open-source public project where community can contribute, monitor, and update information to keep the training fresh.

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Appendix 2 - Analysis survey

Table 1. Analysis survey

Question	Question type	Answers detail and result • Answer option (count)
How old are you?	Single answer question	• Under 18 (11) • 18 to 30 (27) • 31 to 40 (10) • 41 to 50 (5) • 51 to 60 (5) • 61 and over (2)
What is your gender identity?	Single answer question	• Male (33) • Female (27) • Other (5)
How long have you been using the Internet?	Single answer question	• Under 1 year (0) • 1 to 5 years (3) • 6 to 10 years (7) • 11 to 15 years (19) • 16 to 20 years (25) • More than 20 years (6)
How often do you use the Internet daily?	Linear scale	Scale from 1 to 5 3, 9, 14, 23, 11
To what extent you are confident about knowledge on VCSL and human rights on the Internet?	Linear scale	Scale from 1 to 5 11, 31, 12, 5, 1
How long have you been using social network on any platform?	Single answer question	• Not use at all (1) • Under 1 year (2) • 1 to 5 years (7) • 6 to 10 years (18)

		• More than 10 years (32)
To what extent you care about human right on the Internet?	Linear scale	Scale from 1 to 5 20, 23, 9, 5, 3
Do you know about Cyber security law?	Single answer question	• Yes (46) • No (14)
Have you ever had any form of training/studying on Cyber security law?	Single answer question	• Yes (28) • No (32)
If yes, please provide where have you taken the training? And the form of the training?	Free text answer	Summary Place • University/School (20) • Government agency (8) Form • Quiz (3) • Report writing (25)
Have you ever experienced violation(s) of one's human rights on the Internet?	Single answer question	• Yes (3) • No (55)
If yes, please provide details of the violation(s)?	Free text answer	Summary • Violation of free speech and expression (2) • Violation of data privacy and protection (1)
To what extent you would respond if your human rights were violated?	Linear scale	Scale from 1 to 5 12 - 24 - 18 - 5 - 1
To what extent you are interested in training for	Linear scale	Scale from 1 to 5 7 - 21 - 20 - 9 - 3

Cyber security law and human right on the Internet?		
What motivate you to take a Cyber security law and human right on the Internet training?	Multiple answer question	• Prevent potential violation (54) • For studying (34) • For working (32)
What format of training you would like to take?	Multiple answer question	• Online (48) • Text based (20) • Speech coaching (16) • Private training (5)
What budget you would like to pay for the training?	Multiple answer question	• Free cost (53) • Up to 100.000 VND ~ 4 EUR (7) • Up to 500.000 VND ~ 20 EUR (5) • More than 500.000 VND ~ 20 EUR (2)
What duration of the training you prefer?	Multiple answer question	• Less than 1 hour (46) • From 1 to 2 hours (17) • From 2 to 3 hours (13) • From 3 to 5 hours (2) • From 5 to 10 hours (0) • More than 10 hours (0)
What properties/features you expect from the training?	Multiple answer question	Summary • Easy to read and understand (39) • Printable/Exportable into text based (23) • Convenience to access (45)

		• Ask for help/support/hint during training time (27)
		• Quizzes-typed training module (47)
		• Sharable through social network (10)
		• Result delivery instantly (5)
		• Discussion forum (18)

Appendix 3 - Feedback survey

Table 2. Feedback survey

Question	Question type	Answers detail and result
		• Answer option (count)
How old are you?	Single answer question	• Under 18 (5)
		• 18 to 30 (2)
		• 31 to 40 (0)
		• 41 to 50 (3)
		• 51 to 60 (4)
		• 61 and over (0)
What is your gender identity?	Single answer question	• Male (8)
		• Female (4)
		• Other (2)
What is your result?	Single answer question	• Poor or 0-5 (1)
		• Fair or 6-10 (7)
		• Good or 11-15 (5)
		• Excellent or 15-20 (1)
How often you need to use hint to answer the questions?	Linear scale	Scale from 1 to 5 3 - 0 - 6 - 4 - 1

How difficult you feel about the training?	Linear scale	Scale from 1 to 5 2 - 1 - 6 - 5 - 0
How valuable you consider the training?	Linear scale	Scale from 1 to 5 0 - 2 - 3 - 8 - 1
How confident are you about Cyber security law and human rights on Internet after training?	Linear scale	Scale from 1 to 5 1 - 4 - 5 - 3 - 1
Would you like to take more training in Cyber security law and human rights on Internet in the future?	Single answer question	• Yes (10) • No (4)
What are the features/properties you like after experience the training?	Free text questions	Summary • Readability (5) • Understandability (6) • Printable (4) • Sharable (4) • Easy to access (8)
What are the features/properties you do NOT like after experience the training?	Free text questions	Summary • Simple/Boring UI (4) • Result display not detailed enough (2)
If possible, would you recommend any expected feature?	Free text questions	Summary • Save my progress and continue later (1) • Contribute to the training content (2) • Every question, especially abstract questions should come with example (2)

To what extent you would recommend the training to others?	Linear scale	Scale from 1 to 5 2 - 0 - 9 - 1 - 2
What would you do if you want to express negative attitude toward political subjects/topics?	Free text question	Summary • Using alternative foreign platforms which are not under government surveillance (5) • Using unconventional common knowledge (1)