Practice of Networked Content Self-regulation Amongst Malaysian Users

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Abstract. This study proposes a framework that aims to identify the degree and nature of self-regulation when assessing, consuming and sharing networked content and to determine the factors included by users when self-regulating, mediating or controlling the use of networked media contents. In addition, this study aims to examine the users’ awareness, readiness and expectation on being subject to the Content Code. Based on the Theory of Self-Regulation and Theory of Planned Behaviour, this study conceptualises that trust, subjective norms and emotion will contribute to networked content self-regulation and thereafter lead to intention to adopt the content code. In order to achieve the objectives of this study, a quantitative, cross-sectional research design will be applied by distributing questionnaire to the network users, aged 20 to 39 in rural and urban areas from 4 regions in Malaysia. The data collected will be analysed using Partial Least Square Structural Equation Modelling. It is expected this study will be beneficial specifically to the Content Regulation Consumer and Industry Affairs Division, Malaysian, Communication and Multimedia Commission on the public readiness to being subject to the Content Code. Generally, this study will be beneficial to the public in promoting awareness on self-regulation and content code.

Keywords: Networked content · Self-regulation · Content Code · Malaysian users

1 Introduction

With the development of communication technology, the world is facing a disaster of truth. This is because digital media permits broadcasting of almost limitless of unsubstantiated content. This impends the building of accurate thinking together with the development of decision-making in dire circumstances. The knowledge on how to assess media information is thus crucial. Social media imposes risks to the society by the dissemination distorted information spreading fake news or rumors personal attack and sexual harassment racism and hate speech antisocial comments crossing of personal-professional borders and unethical and privacy breaches. According to Bullo and Schulz (2022), media contents has advanced into an addition of the social environment to the
youth, which influence them along the way of their growing up. Their personality is not only influenced and formed by experiences and mentors in real life, but also virtually.

It is vital that some form of regulations is needed to ensure that media content is controlled. Since the digital environment allows the sharing of information on a global scale, it is difficult to govern its content. Thus, it is very important for the society to apply self-regulation when accessing, consuming and sharing of media content.

According to Price and Verhulst (2000), besides supporting the exposed and decentralised network manner of the Internet, self-regulation allows an elastic response to the dynamic and ever-changing of the sector and the developing technologies. Self-regulation could include monitoring of content, and an associated protective responsibility to appraise and to report. Hence, it is useful to have a set of guidelines for the public to perform the self-regulation of media content. The closest that we have in Malaysia which could be the solution to this, is the Content Code.

The Malaysian Communications and Multimedia Content Forum of Malaysia (Content Forum) established the Content Code as a voluntary industry code. Under the powers as a designated industry forum under the CMA – Act 588, the code is applied to content providers. Later, the Content Code has been included into the licensing conditions of all Content Application Services Provider Individual (CASP-I) and Content Service Providers (CSP) license holders.

Currently, only industry players use the Content Code, so the awareness of the code among the public has been weak. Thus, it would be beneficial to understand the public in making their decision in their content consumption. This research aims to provide insights on the scope and nature on how Malaysians in rural and urban settings exercise self-regulation when consuming content on various multiple screens and platforms. The information gain can contribute to the further development and updates to the Content Code together with accompanying awareness and communications plans.

The research objectives are as follows:

RO 1: Identifying the extent and nature of self-regulation when accessing, consuming and sharing networked content (broadcast, internet, Over-the-top (OTT), etc.) for oneself and for family members;
RO 2: Elements used by users when self-regulating, mediating or controlling use of networked media contents;
RO 3: Awareness and Use of Content Code;
RO 4: User readiness to learn about the Content Code; and
RO 5: User expectations, readiness, and views on being subject to the Content Code.

2 Literature Review

2.1 Networked Content

Network media is the various types of mass communication which “individuals and groups can actively contribute to sharing and shaping a universe of media content” (Sagsan and Medeni, 2011). The content can be communicated through the platforms such as broadcast, internet, and over the top (OTT).
2.2 Self-regulation in Networked Contents

2.2.1 Broadcast
In the US, self-regulation for the electronic media started in the 1920s with the National Association of Broadcasters’ (NAB) Code for Radio and Television. This was followed by other self-regulation of the broadcasting media such as video games, motion pictures, advertising and news (Campbell, 1998).

2.2.2 Internet
Self-regulation has been a challenging process in the Internet industry due to the massive cyberspace and the involvement of stakeholders spanning numerous countries. As the Internet technological landscape and public opinion evolve, the Internet industry regulation has come under close observation in recent years (Mubarak, 2020).

2.2.3 Over the Top (OTT)
OTT industry provide services such as Netflix and Amazon Prime and has become part of mainstream media, and thus influencing the consumers viewing behaviour worldwide. In India, the OTT industry is self-regulated (Kumari, 2020).

2.3 Trust
Trust suggests the inclination to believe in a person, which is established through positive anticipation from his or her previous behaviour (Mayer, Davis, & Schoorman, 1995). From the perspective of online setting, trust is formed from to effective exchange of useful information (Grabner-Kräuter & Bitter, 2013). From the angle of social dealings, trust formation is a gradual process, built when one perceives that the actions of another has credibility, implying that they are dependable (Moorman, Zaltman, & Deshpande, 1992).

According to the social media trust (SMT) model under the affective component of attitude, SMT is initially developed through consistent with anticipation, predictability, familiarity, monitor, and norms. Once the initial trust is formed, people are inclined to believe without questioning the information from the social media group (Shareef, Kapoor, Mukerji, Dwivedi, & Dwivedi, 2020).

2.4 Social Norm
Behavioural research such as Theory of Planned Behaviour and Theory of Reasoned Action suggests that social norm plays an important role in shaping individuals’ behaviour. It could affect the interpretation of the media content and the evaluation of its importance for sharing decision (Jeong & Bae, 2017). According to Scholz, Baek, O’Donnell, and Falk (2019), the decision on whether to share media content is affected by related social effect with consideration of perceived social norms or views voiced by peers.
Likewise, peer and parental norms can inspire or hinder their exposure to media content. For instance, peer norms that support violence could increase the probability of watching or sharing vicious media content. Youngsters may decide to watch the same vicious TV series as their peers so that they will not be left out from the group. On the other hand, parents who strongly dislike violence might set explicit rules forbidding their children from accessing violent media content.

2.5 Emotion

The emotional regulation framework suggests that emotions indirectly form behaviour through numerous constant feedback loops. The result of a choice made by a person could induce an emotional response in that person. He/she may adapt the behavioural if-then rules from the lesson obtained for a desired emotional outcome, which will help shape his/her new option when offered a similar choice again (Baumeister, Vohs, DeWall, & Liqing, 2007). Stsiampkouskaya, Joinson, Piwek, and Ahlbom (2021) noted from previous studies that emotion is a key determinant of promoting and sharing media content. Their findings showed that emotions mediate the impact of social media engagement on posting rate and content amendment.

2.6 Community Readiness for Adoption of Content Code

According to the Malaysian Content Code, the forum aims to create and develop public and users awareness on the benefits of the Content Code. The possible use of the extensive range of Content choices from technological innovation of multimedia is many. Because of this, the potential for abuse exists. Therefore, it is essential for some form of self-guard, self-censorship, and self-vigilance to ensure these checks and balances. The public and users shall be given timely information for the use and provision of multimedia and related services.

This study proposes to examine how self-regulation contributes to community’s awareness and readiness in the adoption of content code. The focus is on investigating the influence of self-regulation towards awareness and readiness which in turn encourage the behavior of voluntary adoption of the content code in the community. In this regard, community represents a large group of individual end-users who consumes information and content from internet. This study proposes to adopt the community readiness model (CRM) to investigate the extent of awareness and readiness of the Malaysian community for adopting the content codes in choosing multimedia contents. Awareness refers to knowledge on a situation or fact, while readiness refers to the extent an individual is willing to act on an issue (Ramnarine-Rieks, McKnight, Riina, & Gardeazabal, 2012). Based on the CRM model, the community’s readiness to adopt the content codes can be measured in nine stages, from the lowest level of no awareness to the highest state of taking ownership of the need to adopt the codes. Numerous past studies measured awareness and readiness with the use of Community Readiness Model (CRM). For example, CRM was applied in past researches regarding drug misuse behavior (Pena-Purcell, Rashid, Hong, Collins, & Johnson, 2021), social and emotional health of mothers and children (Islam et al., 2019), acceptance of health facility for child birth (Nigusie, Azale, Yitayal, & Derseh, 2021), acceptance of technologies in culture preservation (Ramnarine-Rieks et al., 2021).
et al., 2012), community readiness in the use of bicycle helmet (Kakefuda, Stallones, & Gibbs, 2008) and many more. Similarly, the model is likely to offer useful representation of community’s readiness for adoption of content codes in their choice of multimedia contents. According to Ramnarine-Rieks et al. (2012), when a community readiness is established, it leads to the next stage of community engagement. Based on CRM, this study has adapted the model to the context of Content Code implementation. Details of measurement are shown in Table 1.

3 Theoretical Considerations

3.1 Theory of Self-regulation and Theory of Planned Behaviour

The underlying theories for this study are the Theory of Self-Regulation and the Theory of Planned Behaviour. Self-regulation includes the self-efficacy mechanism, which influences the individual’s thought, affect, motivation, and action. The social cognitive

<table>
<thead>
<tr>
<th>Level</th>
<th>Phase</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>No awareness</td>
<td>In general, the community does not recognize the importance of Content Code implementation.</td>
</tr>
<tr>
<td>2</td>
<td>Denial/resistance</td>
<td>Some members of the community acknowledge that Content Code implementation is important. However, recognition is minimal on its role and usefulness.</td>
</tr>
<tr>
<td>3</td>
<td>Vague awareness</td>
<td>A majority of members of the community feel the need to implement the Content Code. However, there is no motivation to act on it.</td>
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<tr>
<td>4</td>
<td>Preplanning</td>
<td>The community recognizes the importance of implementing the Content Code. However, groups formed to address this, may lack focus.</td>
</tr>
<tr>
<td>5</td>
<td>Preparation</td>
<td>Active community leaders initiate earnest plans to implement the Content Code. Other members of the community offer modest support.</td>
</tr>
<tr>
<td>6</td>
<td>Initiation</td>
<td>Enough information is available to the community to support Content Code implementation and related activities are carried out.</td>
</tr>
<tr>
<td>7</td>
<td>Stabilization</td>
<td>Activities to implement the Content Code receive support from administrators or community decision-makers. Staff receive training and become experienced.</td>
</tr>
<tr>
<td>8</td>
<td>Confirmation</td>
<td>Efforts are made to implement Content Code. Members of the community are at ease with the implementation of Content Code and they support expansions.</td>
</tr>
<tr>
<td>9</td>
<td>Ownership</td>
<td>Community members have detailed and sophisticated knowledge about prevalence, cause and consequences of Content Code implementation.</td>
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Adapted from: Ramnarine-Rieks et al. (2012)
theory claims that social factors influence self-regulation which plays a major part in the causal processes, moderating the effects from external influences and is responsible for committed action. Thus, through self-regulation, the individual with forethought and self-beliefs, anticipates and plans likely outcomes of the actions. Their actions are thus guided by self-regulation in a proactive manner (Bandura, 1991). Theory of Self-Regulation highlighted that individuals are able to control their behaviour through self-regulation which involves the process of introspection, judgment and self-response. During introspection, the individual assesses his thoughts and feelings to motivate himself to set goals and is influenced by behavioral changes. In judgement, the individual makes a comparison of his performance against a set of standards. In self-response, the individual either rewards or punishes himself for meeting or not meeting the set standards (Bandura, 1991). Self-regulation is made up of setting standards of behaviour, the desire to meet those standards, monitoring of situations and the willpower to control urges (Sjåstad and Baumeister, 2018). In summary, self-regulation is the ability to develop, implement, and maintain premeditated behavior in order to meet one’s objective.

Meanwhile, the Theory of Planned Behaviour hypothesises that attitude, subjective norm and perceived behaviour control as the determinants for intention. In this study, we proposed that attitude represented by attitude which derived from behaviour belief while behavioural control represented by perceived emotion which denotes an individual’s perception of the degree of difficulty or ease in performing the behaviour. We then group these three constructs as networked content self-regulation before leading it to intention. Besides, intention is an indication of person’s awareness and readiness.

### 3.2 Hypothesis Development

Talwar, Dhir, Kaur, Zafar, and Alrasheedy (2019) noted that online trust has a negative correlation with validating news before sharing. The profound trust on the news will lead to the information received to be promoted on their social network without verifying the content. Likewise, the trust on online news is found to have positive correlation with online sharing of false news.

The information received from trusted peers will not be analyzed, inspected, verified of its authenticity, and/or validated on its source. Moreover, social group members may add opinions to the information and enthusiastically spread it to other members without self-regulation (Shareef, et al., 2020). Thus, we hypothesise that:

**H1: There is a positive significant relationship between trust and self-regulation of media content.**

Social media group members normally have compatible attitudes and share equal psychological sentiment (Schaik, Carel, & Burkart, 2011). They have developed harmonized kinship towards content created or shared by the group member (French, 2017); motivated to share views gained from content shared by other members (Lee & Chan, 2015) without validating each content (Shareef, et al., 2020). This could lead to the decrease in self-regulation of media content. Thus, we hypothesise that:
**H2: There is a positive significant relationship between social norm and self-regulation of media content.**

Online news articles were observed to be shared more frequently when the content is psychologically arousing or positive (Berger & Milkman, 2012). Likewise, Stieglitz and Dang-Xuan (2013) posited that emotional content on Twitter have higher chances to be reposted. To gain the attention of others, social media users may share dramatic content, while not considering its authenticity (Talwar et al., 2019).

Fear is one of the emotional feelings which has been identified that can lead to peoples’ protective behaviours to improve a situation (Zhang & Zhou, 2020). Boss, Galletta, Lowry, Moody, and Polak (2015) found that, in an online environment, fear could promote rumour spreading. For instance, when a person has accessed to rumours about COVID-19; due to fear, he/she may not cautiously read and evaluate the rumours and makes irrational choices derived from the partial or wrong information. Due to fear, a person is more inclined to believe and share media content of rumor (Luo, Wang, Guo, & Luo, 2021) and thus, could reduce the tendency of self-regulation of media content. Thus, we hypothesise that:

**H3: There is a positive significant relationship between emotion and self-regulation of media content.**

### 3.3 Self-regulation and Intention

Studies show that self-regulation predicts intention. In a study by Chen and Hwang (2019) on college students, results showed that students’ self-regulation explained the intention to use lessons provided online. Self-regulation was analysed in terms of metacognition and motivation. Xu and Qiu (2021) examined the intention of undergraduate students in China under the conservation of resource theory. They found an association between self-regulation and intention to reuse study resources and that collaboration with peers strengthened the effects of self-regulation. Thus, we hypothesise that:

**H4: There is a positive significant relationship between self-regulation of media and intention to adopt the Content Code.**

Following Muraven, Tice, and Baumeister (1998), knowledge is a necessary condition for people to exercise self-control; inability to self-regulate might be attributed to lack of information. Hence, individual in possess with a high level of self-regulation for access to multimedia contents are likely to seek information for evaluating suitability of contents. Due to these individuals are more likely to be critical of the validity of the contents they are reading, hence are more likely to seek for information that serve to inform on this aspect. For this reason, these individuals are likely in possess of a higher level of awareness and readiness of the content codes. For example, in a study conducted by He, Nutton, Graham, Hirschausen, and Su (2021), self-regulation is measured through individuals’ readiness to explore new things and readiness to learn. According to Tentama & Riskiyana (2020), self-regulation represents an important variable to positively influence work readiness among high school students. When one has good self-regulation, he or
she will achieve greater work readiness. Another study conducted by Jahromi, Umana-Taylor, Updegraff, Williams, and Kirkman (2020) focus on self-regulation and academic readiness in children. The study found that self-regulation was positively related to academic readiness. In sum, individuals that impose strong self-regulation are likely to have a higher degree of awareness of guidelines for evaluating multimedia contents. As such, community with a greater level of self-regulation are more likely to be aware of the presence of content codes to guide media contents. Accordingly, the following hypothesis is proposed:

**H5a: There is a positive significant relationship between self-regulation of media content and awareness for adoption of the Content Code.**

**H5b: There is a positive significant relationship between self-regulation of media content and readiness for adoption of the Content Code.**

Self-censorship is one of the key mechanisms in an individual action to read multimedia contents. Self-censorship has so far been based on individual judgemental processes. However, such decision can be very much objective when it is guided by principles offer within the content codes. Despite the presence of such content codes, it appears that the effectiveness of content codes in promoting self-censorship is very much depending on the community readiness in the use of content codes. Readiness could be measured in two separate levels: individual-level and community-level (Kakefuda et al., 2008). Studies show that readiness to learn is an important component to intention. Hergüner et al. (2021) studied the influence of learning attitudes and readiness of sports sciences students during the Covid19 pandemic. Results showed that learning attitude is positively and significantly related to learning readiness. As such, in sport sciences, a positive attitude created a basis for successful readiness to learn, an important element for self-efficacy. Likewise, in a study on internet self-efficacy, Alqurashi (2016) found that self-efficacy is related to learner’s confidence, and that it plays a significant part in learning. Results showed that internet self-efficacy is related to learner’s confidence in using the internet to seek for information. Furthermore, self-efficacy positively influences intention. In a study by Lee and Tanusia (2016), results show that self-efficacy influenced home energy conservation intention among university students. Lee and Tanusia (2016) suggested that education is important to create a positive attitude and that institutions and universities can develop suitable regulations and to instil the right attitude and intention towards energy saving. In the study conducted by Kakefuda et al. (2008), readiness of individual and community towards the use of bicycle helmet in United States were studied. The study concluded higher awareness on the importance of bicycle helmet do not influence the individual behavior to wear the bicycle helmet. On the other hand, the results of community readiness differ across groups in the use of bicycle helmets. Besides, awareness
and readiness are significant factors influencing technology acceptance. In that study, respondents’ readiness on QR code leads to the acceptance in mobile learning. Though these studies have been based on a different context, however, these studies provide empirical validation of the association between readiness for an initiative in the community and its eventual implementation. Consequentially, in the similar vein, this research posits that a community with a greater level of awareness and readiness for using content codes to guide media contents, is more likely to adopt the Content Code. Accordingly, the following hypothesis is proposed:

**H6a:** There is a positive significant relationship between awareness for content codes and intention to adopt the Content Code.

**H6b:** There is a positive significant relationship between readiness for content codes and intention to adopt the Content Code.

### 3.4 Conceptual Framework

The conceptual framework in Fig. 1 proposes that trust, social norm and emotion will have significant impact on networked content self-regulation and further the networked content self-regulation will lead to the intention to adopt content code. In addition, the networked content self-regulation will also contribute to awareness and readiness to learn the Content Code which finally will influence the intention to adopt the Content Code.

![Fig. 1. Research Model](image-url)
4 Research Methodology

4.1 Research Design

The motive of the research is to study the practice of networked content self-regulation amongst Malaysian users. The unit of inspection for this research is the network users age 20 to 39 in rural and urban areas of four region namely Central, North, South and East Coast. This study applied quantitative research and the primary data will be collected through self-administered questionnaire. Furthermore, the study uses cross-sectional study.

4.2 Target Population

The Internet User Survey (IUS) 2020 by Malaysian Communications and Multimedia Commission (MCMC) reported that the majority of internet users were adults. They were aged in their 20’s and 30’s, and made up 46.0% and 21.2% of the user population respectively. Thus, the target population in this study are individual from 20 to 39 years old from rural and urban area. Rural and urban area are selected to get insights on self-regulation and content code perspective from rural-urban internet users.

Department of Statistic Malaysia defines urban as “Gazetted areas with their adjoining built-up areas, which had a combined population of 10,000 or more at the time of the Census 2010 or the special development area that can be identified, which at least had a population of 10,000 with at least 60% of population (aged 15 years and above) were involved in non-agricultural activities.”

Department of Town and Country Planning define rural as areas other than urban locations. Rural areas consist of small towns, villages, and other settlements with population of less than 10,000. These areas possess agricultural characteristics and are abundant in natural resources.

4.3 Sample Location

The sample location will be divided into 4 regions which are Central (Selangor, Kuala Lumpur, Putrajaya, Negeri Sembilan), North (Perlis, Kedah, Pulau Pinang, Perak), East Coast (Kelantan, Terengganu, Pahang), South (Melaka, Johor). It divided into 4 regions to represents the internet users in Malaysia and to enable to generalise the result.

4.4 Sample Size

Sample size is 150–300 as suggested by Memom, Ting, Cheah, Ramayah and Cham (2020). They highlighted that a small sample size of 150 and above (not exceed 300) is more meaningful than a blindly large sample size of 300 and above. Thus, we expected to collect 75 respondents from each region (300/4 = 75). In view to have respondents from rural and urban, we further expected to divide 38 samples from rural and 38 samples from urban of the 4 regions.
4.5 Sampling Technique

A judgmental sampling technique with inclusion criteria of respondent from age 20 to 39 will be applied in this study.

4.6 Data Collection Procedures

Data will be collected by distributing the questionnaire to the target respondents face to face to brief them on the content code and self-regulation. Questionnaire will be printed in English and Bahasa Malaysia.

5 Data Analysis

Partial Least Square Structural Equation Modelling will be used to analyse the data. A measurement model, structural model and second order construct will be undertaken to fulfil the objective of this study.

6 Conclusion

The unlimited access to media social requires self-regulation to ensure that the assessing, consuming and sharing the media content is controlled. In Malaysia, the guideline to perform the self-regulation of media content is the Content Code, which currently is in use by industry players. Little is known on the public perception to adopt the Content Code. With this regard, this study proposes a conceptual framework in order to examine the public awareness, readiness and expectation on being subject to the Content Code. The conceptual framework was developed based on Theory of Self-Regulation and Theory of Planned Behaviour. The framework suggests that trust, subjective norms and emotion will contribute to networked content self-regulation and thereafter will lead to the intention to adopt the content code. The framework also suggests that networked content self-regulation will have significant impact on public awareness and readiness for Content Code. The framework is expected to contribute to the MCMC in identifying the public readiness on being subject to the Content Code.

Bibliography


