MEDIA MATTERS

NETWORKED MEDIA CONTENT
RESEARCH REPORT

VOL.1

SKMM
MCMC

Content

About the Research Collaboration between MCMC and Institutions of Higher Learning on Networked Media Content

The Research Collaboration between MCMC and Institutions of Higher Learning on Networked Media Content was established in April 2008 with the aim of strengthening relevant knowledge, research and development in relation to networked media content that will inform future policy and regulatory decisions related to sustainable media regulatory practices and media literacy initiatives. The programme stems from MCMC's commitment in working towards the realisation of the national policy objectives for the communications and multimedia industry.

About the Malaysian Communications and Multimedia Commission (MCMC)

The primary role of MCMC is to implement and promote the Government's national policy objectives for the communications and multimedia sector. MCMC is also charged with overseeing the new regulatory framework for the converging industries of Telecommunications, Broadcasting and online activities, in accordance with the national policy objectives set out in the Communications and Multimedia Act 1998 as well as postal services and digital certifications.

Message from the Chairman

In the past decade or so, the country has witnessed tremendous advancements in communications technology. We are still seeing significant strides in communications today particularly in access and services deployment. Communications devices have become increasingly affordable on the back of increased Internet access and take up which have led to significant inroads into households and into consumers' lifestyles the world over. We have also witnessed the rise of the consumer emboldened and empowered by social media, a breed of consumers who are more discerning, technology aware and innovative than ever before.

While we embrace its benefits and advantages of the advanced communications that we enjoy today, vigilance and circumspection are necessary as we strive to manage the undesirable aspects and shortcomings that continue to challenge regulators everywhere.

The Commission views the Research Collaboration between MCMC and Institutions of Higher Learning on Networked Media Content as a strategic step towards developing sustainable regulatory practices and have committed considerable resources to increasing research capacity in cognizance of the value of inputs that can be gained through research. From the completed studies funded under this programme, the Commission is indeed pleased to present The Networked Media Content Research Report Vol. 1. The Report contains findings pertaining to children and young adults and their use of social media, the influence of weblogs as well as the effectiveness of the self-regulatory framework in the Malaysian media environment.

It is envisaged that through such information, we all may expand our understanding and gain insights into the social impact of networked media content in our own daily lives and the society at large. Detailed information about the programme can be accessed from our website at *http://www.skmm.gov.my/Networked-Media-Content-Research/Overview.aspx*

I would like to thank the researchers and give due recognition to the contribution and commitment of the members of National Research Committee on Networked Media Content as well as the many others who have lent their support in this ongoing endeavour, without which this could not be achieved.

Thank you.

Dato' Mohamed Sharil Tarmizi
Chairman
Malaysian Communications and Multimedia Commission

Executive Summary

The studies on networked media content were conducted primarily to study the impact of such content on our society from social and regulatory perspectives. The studies sought to ascertain trends among certain demographics and society as a whole, to gain insights and perspectives into concerns that have emerged or evolved around networked media content.

In a global context, the networked media landscape has seen tremendous developments. The Internet and in particular, social media, have made significant inroads into the lifestyle of the consumer.

From this perspective, the four studies conducted by Universiti Utara Malaysia (UUM), Universiti Sains Malaysia (USM), Universiti Tunku Abdul Rahman (UTAR) and Universiti Putra Malaysia (UPM) have garnered relevant data and information to gauge our standing in relation to other countries in as far as our society's attitudes and the use of networked media are concerned. Employing quantitative and qualitative research methods, the studies have produced findings and insights from which a number of applications may be taken up for regulatory and policy considerations, as well as becoming a source of information for stakeholders and members of the public.

Media Literacy and Digital Skills

USM's study was conducted to gain a picture of the ways young people use rapidly-developing new media and how important new media is in their everyday lives. It is found that young people readily embrace new media and the various ways that it enables them to communicate and be entertained. The study revealed however, that not all respondents profess to be able to evaluate the quality, relevance and accuracy of information online.

Also of concern is that the young people in the study possess minimal knowledge of online risks and opportunities and claim to have received very minimal information or education in school about online security, risks and challenges and media violence. Not surprisingly, the studies revealed that there is much uncertainty in the ways young people view privacy and moral perspectives as pertaining to new media.

These situations highlight the importance and value of the promotion of greater media literacy, both in enhancing young people's engagement with electronic media, communications and services, and with addressing concerns about the potentially harmful impact of the media on the young.

Influences of Blogs and Blogging

While USM's study inform us that young people are adept at using new media and keen users of social networking sites, the studies conducted by UTAR and UUM delve into the realm of social media, focusing on blogging in particular. Their findings provide a picture of the impact of blogging on individual opinions and actions and the blogs that are influential in the Malaysian blogosphere.

The factors important to their respondents in making judgments on credibility, and in deciding whether a blogger was trustworthy, include the appearance and format of a blog, the accuracy of information and whether the discussion is presented in a balanced manner. In their bid to find the most influential blogs, the researchers find that entertainment blogs are among the most popular websites, making up five of the ten most influential blogs on the list.

This finding is in consonance with UTAR's study, in which respondents admit that the blogs and topics that are of most interest to them are those relating to their personal lives, lifestyle, entertainment and travel. In addition, the research by UUM resulted in the formulation of a Blog Influence Index as well as a Blog Influence Analyser, a tool for measuring influence that was developed based on the same blog measurement formula.

Promoting The Responsible Provision of Content

The study by UPM seeks to provide a picture of industry practices in implementing the Malaysian Communications and Multimedia Content Code and self-regulatory framework among media practitioners in Malaysia. Essentially, the researchers looked at the adoption and implementation of The Content Code, the code of practice for the self-regulation of service providers in the communications and multimedia industry.

It is found that a large section of media practitioners are in agreement that a form of control is important and necessary to filter objectionable and offensive content. Moreover, respondents have expressed confidence in the Code as an effective means of ensuring that media content is suitable for children. In addition to being readily accepted as a reference for guidelines and procedures of good practice and standards for the dissemination of content, media practitioners agreed that the preservation of Malaysian identity, culture and values through compliance to the Code is one of its main strengths. These were encouraging indications that the Code has achieved much of its primary objective, which is essentially to promote responsible approach towards the provision of content.

Based on the survey results and in-depth interviews conducted with media practitioners, the researchers concluded that the Code and self-regulatory framework is understood and readily adopted by the majority of media practitioners and that the main purposes and aims of the Code are met.

Nevertheless, the researchers did uncover that as many as a third of respondents belonging to organisations that are members of the Communications and Multimedia Content Forum who are not aware of the Code. The findings highlighted that with further improvement to the Code and an awareness drive among the industry and public, wider implementation and adherence to best practices and standards can be achieved.

Building the Knowledge Base

The challenges and potential risks highlighted in the studies' findings raise a number of issues for regulators and policymakers. These include how best to educate young people on issues like opportunities, safety, dangers, risks and negative experiences linked to new media use; by extension this would also apply to young adults, parents and teachers. However, additional research is needed to fill in the gaps before we are able to paint a comprehensive picture and enhance our understanding of consumer practices in relation to the consumption of networked media content and the social impact thereof.

Given the rapid pace of development in the Communications and Multimedia landscape, a robust knowledge resource combined with continued research output would strengthen and underpin the capacity for effective, timely and sustainable regulatory and policy formulation and implementation. The research outputs will provide many of the metrics needed to measure progress toward delivering a wide range of national initiatives - not least of all, the increased digital participation by citizens across the country and the improvement of media literacy among Malaysians.

Measuring the Social Influences of Weblogs in the Malaysian Blogosphere

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Abstract

Weblogs or popularly known as blogs have become popular means of communication online. However, their impact on Malaysian society remains unclear. This study investigates the influence of blogs and their user-created content in the Malaysian blogging community. This was determined by identifying criteria and developing a tool for blog influence measurement.

It is found that there are at least three properties that are critical for measuring blog influence: recognition, activity generation and novelty. These form the basis for the development of the Blog Influence Index and the Blog Influence Analyser tools. A total of 186 blogs are analysed in this study and top influential bogs are identified. The study also further examine people's motivations for blogging, as well as the factors that affect the credibility of blogs. The study contributes to the knowledge area with the development of the index and influence analyser and may be used as a community resource.

Introduction

A blog allows users to post comments, images, video clips or links to other Web pages (Herring et al., 2004; Trammel & Gasser, 2004; Bausch et al., 2002; Blood, 2002; Mortensen & Walker, 2002). Entries in a blog are normally arranged in reverse chronological order.

Blogging is a popular means for bloggers to create special interest groups, share opinions, debate certain issues, collaborate, and influence people's thoughts (Agarwal, Liu, Tang, & Yu, 2008; Akritidis, Katsaros, & Bozanis, 2009). The influence of blogging should not be underestimated, as studies have shown that it has become one of the most popular new media (Gillmore, 2006; Keller & Berry, 2003).

The Merriam-Webster dictionary and the free dictionary by Farlex define 'influence' as 'the power to sway or affect'. In the context of this study, 'influence' refers to the ability of a blog (either individual or community) to attract participants and sway people's opinions on certain issues, especially those that affect national interests.

Problem Statement

On one hand, the blogging phenomenon is a good development for Malaysia as its government encourages the full utilisation of information technology towards realising a knowledge-based society by 2020. On the other, however, studies that investigate the impact and influence of the blogosphere on the community and government are still lacking (Gillmore, 2006). Such studies are very important, especially to the government, as they can help reshape and realign policies related to new media.

Therefore, this study attempts to assess the social influences of blogs in the blogosphere community of Malaysia. In order to achieve this, several research questions were formed:

- What types of blogs can be considered as very influential in the Malaysian blogosphere?
- How do these blogs influence the community?
- How can the influence level of a blog be measured?

Research Objectives

In regard to the above-stated problem statement and research questions, the main aim of this study is to ascertain the influences of blogs and their user-created content (UCC) in the blogosphere community of Malaysia. The specific objectives are:

a) To formulate the Blog Influence Index (BII),

b) To apply BII criteria on different categories of blogs in Malaysia,

c) To identify the most influential blogs in the Malaysian blogosphere using a newly-developed tool, the Blog Influence Analyser (BIA),

d) To ascertain the social influences of identified blogs and their UCC on the community.

Literature Review

Measuring the Influence of Blogs

Traditionally, a form of new media such as blog is considered a success or influential through inbound links or the number of people subscribed to it. This criterion is, however, no longer credible and can be misleading as it is not just about blogging. In fact, new media form channels through which people 'connect', collaborate, participate, discuss, and make friends. As such, more criteria should be used to measure their success and influence levels.

Several studies that have investigated measurements of blog success can be found. Edelman, for example, produced a social media index which proposes five criteria that can be used to measure any social media (Bentwood, 2007). The criteria are blog ranking (e.g. Google rank, Alexa rank, inbound links, number of subscribers), multi format (e.g. analysis of the number of friends on Facebook), mini updates (e.g. analysis of Twitter, including number of friends, followers and updates), business cards (e.g. number of contacts on LinkedIn), visual (e.g. analysis of number of uploaded photos on Flickr), and favourites (e.g. analysis of Digg, del.icio.us). Edelmen's social index and criteria are very useful and used as a reference in this study.

Another interesting study was conducted by Agarwal et al. (2008) who attempted to propose a model for identifying influential bloggers. In that study, four criteria were used to measure the influence of a social medium namely number of comments, number of inlinks, length of blog post and number of outlinks. Those blogs that score highly in all of these aspects are considered active and influential. Since the model has been tested and applied widely, it will also be referred to for the purpose of this study. Further details on how this model is adapted will be presented further down in this report.

Another related study is by Seung et al. (2009) who studied the influence of Content Power Users (CPUs) on other blog users. CPUs refer to bloggers or users who can induce and convince other users to actively participate in blog services. It was found that CPUs can play a key role in determining the success of a blog. In order to measure and determine the CPUs, a new method was proposed which is based on the analysis of blog posts or documents. The main criterion used is the exposure time of a blog post, which refers to how long it has been published in the blog. Although this study focuses only on determining influential bloggers or power users, it reveals the importance of blog posts as one of the determinants in measuring blog influence. As such, blog posts have been used by the researchers as one of the criteria to measure blog influence in the blogosphere community of Malaysia.

Current State of Blogging in Malaysia

In the Household Use of Internet Survey 2008 (MCMC, 2008) conducted by the Malaysian Communications and Multimedia Commission (MCMC) among 4,925 Internet users in households, several Internet usage trends were gathered.

Among the Internet usage trends studied was blog usage; it is shown that the awareness of blogs is at 63.5%, as in the percentage of survey participants who frequently visited blogging communities and directories. Also, 47% frequently visited media blogs and 42.8% frequently used blog search engines (MCMC, 2008).

Among the existing blog directories is blogmalaysia.com, which is currently hosting 3,314 blogs and which uses PageRank, an algorithm used by Google, to indicate the position of its registered blogs in search engine results. Another Malaysian blog directory is mycen.com.my. Both blog directories are used as samples in this study for blog categorisation purposes.

Current Blog Evaluation and Influence Tools

There are several tools that can be used to assess blog influence, which are discussed in this section. However, these tools have some weaknesses for various reasons, including the use of inadequate measuring criteria. Furthermore, most of these tools are being used merely to rank blogs rather than measure their influence. From our observation, there are two major blog assessment tools that are worth mentioning - Technorati and Alexa.

Technorati *(see http://en.wikipedia.org/wiki/Technorati)* ranks blogs based on authority. Technorati 'authority' refers to the number of blogs linking to a website in the last six months. This means that the higher the number of other blogs linking to a particular blog, the more Technorati 'authority' the blog has.

Alexa, on the other hand *(see http://en.wikipedia. org/wiki/Alexa_Internet)* is known for its toolbar, which collects data on browsing behaviour. Alexa analyses this data and it forms the basis for the company's web traffic reporting. The toolbar gives Internet users suggestions on where to go next, based on the traffic patterns of its user community. It also offers context for each site visited: to whom it was registered, how many pages it had, how many other sites pointed to it, and how frequently it was updated (Dawson, 1997). Alexa ranks sites based on tracking information of users of its Alexa Toolbar for Internet Explorer and from integrated sidebars in Mozilla and Netscape.

To date, Alexa.com uses at least three metrics to rank blogs - page views per user, bounce rate and time on site (Awis.blogspot, 2009).

The major problem with the Alexa ranking is the fact that it is heavily skewed towards websites which have a large webmaster/tech audience. This is because webmasters or web-savvy audiences are much more likely to have the Alexa toolbar installed than websites whose visitors are unaware of Alexa. Table 1 compares Technorati with Alexa in terms of the ranking methods used, strengths and weaknesses.

Methodology

Both qualitative and quantitative methods are selected in this research to support the primary objective of probing issues related to the social influences of new media. Because this research is exploratory in nature, the investigative, elicitative and deductive approach is adopted.

The main aim of this study is to ascertain the influences of blogs and their user-created content (UCC) in the blogosphere community of Malaysia. Four specific objectives were formulated. All the objectives were accomplished through the following four main phases:

Phase 1: Categorising, identifying, and listing of Malaysia-related blogs

	Method/Way of Ranking	Strengths	Weaknesses
Technorati *(www.technorati.com)*	Ranking is based on authority. The higher the authority, the closer the rank to the top. Authority refers to the number of blogs linking to a website in the last six months.	Does not count multiple links in a blog/site. Only counts blogs i.e. multiple links in a blog is considered one authority.	Blog owner can manipulate the authority by creating many blogs of his own.
Alexa *(www.alexa.com)*	Ranking is measured based on the combination of average daily visitors and page views over the past three months. The site with the highest combination of visitors and page views is ranked number one.	Considered more reliable than Technorati because it combines two types of data i.e. average daily visitors and page views.	Can also be manipulated if traffic generator software is used.

Table 1: Technorati versus Alexa
The analysis of these two examples of well-known blog measuring tools clearly shows that there is a need for a more robust and reliable tool that can effectively measure the influence of a blog, which is one of the main objectives of this study.

Phase 2: Developing BII and BIA. This phase involved analysing blog influence criteria, constructing BII, developing BIA, determining the top 10 influential blogs and validating BII and BIA

Phase 3: Surveying of randomly-selected bloggers to ascertain the social influences of blogs and UCC. This involves the process of developing and piloting instruments and analysing data

Phase 4: Reported findings

Research Findings

Categorisation and Identification of Blogs

Blogs in Malaysia or Malaysia-related blogs can be grouped into many categories. Some current categories of blogs have been identified, such as those provided by Technorati, Blogcatalog.com and Mycen Blog Directory. In Technorati, blogs are categorised according to common themes such as entertainment, lifestyle, sports, business, politics, and technology. Categorising blogs in this way is easily understood and meaningful.

Blogcatalog.com however, categorises blogs according to keywords and arranges them alphabetically, for example, A for 'academics', 'adventure', 'animals' and so on. As a result, the number of blog categories is huge and redundant.
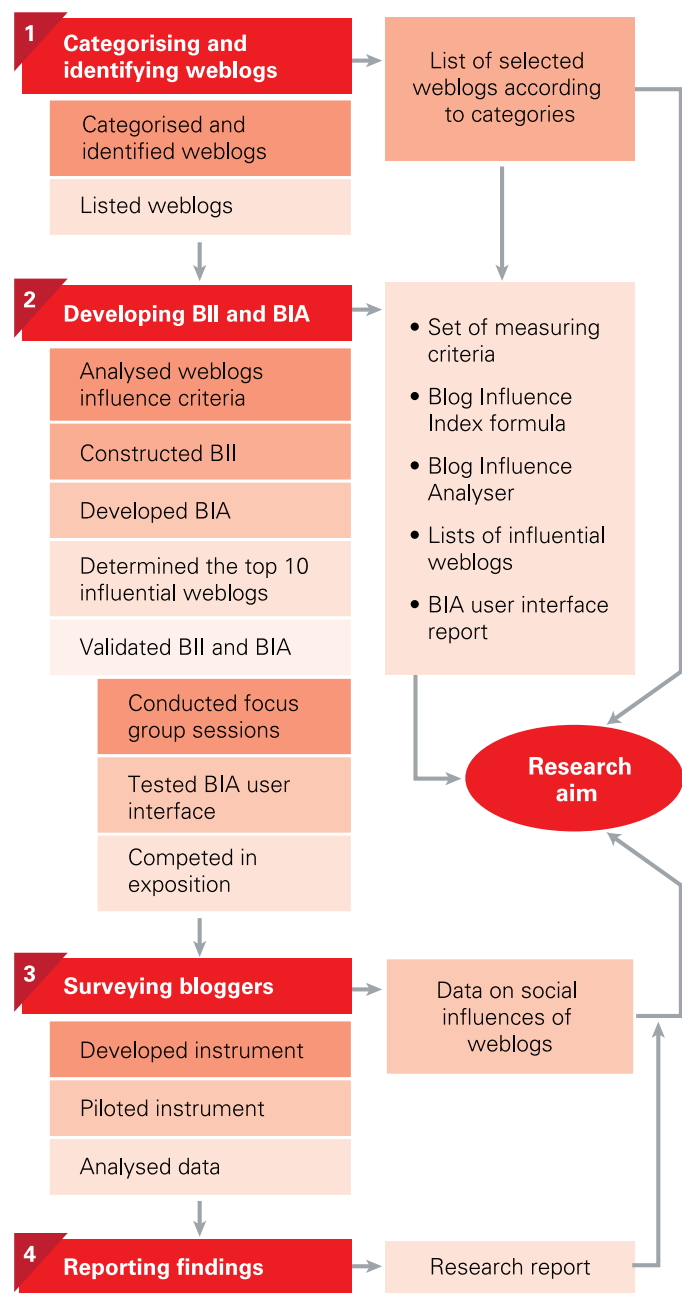
Figure 1: Illustration of Phases Together with their Outcomes

Blog Directory Service	Categories	Assessment
Technorati	6 categories (entertainment, lifestyle, sports, business, politics and technology)	Easy to understand.
Blogcatalog.com	Blogs are organised according to alphabetical themes.	Too many redundant categories and can be confusing.
Mycen	27 categories of blogs	Arbitrary choice of words for blog categorisation and some redundancies.

Table 2: Blog Directory Service

Category	No. of Blogs
Business	9
Entertainment	25
Lifestyles	47
Sports	60
Politics	38
Technology	7
Total	**186**

Table 3: Number of Blogs per Category

The Mycen Blog Directory also provides a list of blogs in Malaysia according to 27 predefined categories (see www.mycen.com.my). However, the categories are confusing as there are some redundancies, missing categories and inappropriate choices of words for certain categories. For example, the category of 'members of Parliament' is separate from the socio-political category, although logically the former should be a sub-category of the latter. It also has a 'party' category, even though an 'entertainment' category exists. Even more confusing, Mycen includes 'Rants' as one of the blog categories, although the blogs under it have contents of different themes and interests. Table 2 is a summary of blog directory service analysis.

Based on the analysis in Table 2, this research adopted the six categorisation scheme as proposed by Technorati. The list of blogs in the Malaysian blogosphere that has been identified are grouped according to these categories as shown in Table 3.

List of Identified Blogs in Malaysia

In this study, a number of blog search engines such as Technorati and Yahoo are used to identify blogs in the Malaysian blogosphere. In addition, a few blog directory services such as MyCen and Blogcatalog. com are also analysed and referred to. The list of outlinks in some popular blogs are also studied.

A total of 186 blogs are identified; these are then grouped into the six pre-determined categories. The sports category has the highest number of blogs followed by lifestyle, politics, entertainment, business, and technology respectively.

Blog Influence Criteria and the BII

In identifying the influence of blogs, we identified several studies which focus on the criteria of ranking the blogs. The existing algorithms used in webpage ranking, like PageRank and Hits, are not suitable for application to blogs due to sparseness and temporal aspects (Agarwal and Liu, 2008). This is because blogs are sparsely linked compared to web pages. Influence of blog posts and bloggers decrease faster over time than webpages.

The ranking in Technorati is based on authority. However, a blog can only be ranked using this technique if it is registered with Technorati. Alexa, on the other hand uses its own mechanism to measure websites' popularity, which is calculated using an average of the daily visitors and page views over the past three months. These two criteria are inadequate and can be manipulated as they are heavily skewed towards websites which have a large webmaster/ tech audience.

In his study, Agarwal (2008) proposed a preliminary model of identifying influential bloggers. He identified several properties to describe influential bloggers: recognition, activity generation, novelty and eloquence. Recognition is described through inlink to a post; inlinks refers to any external posts, articles or URLs, the address of a worldwide Web page that refer to a particular blog (Agarwal, 2008). Activity generation is measured based on how many comments a blog post receives. Novelty can be indicated by the number of outlinks (which refer to any posts, articles or URLs (address of a Worldwide Web page) that the blog owners used in one blog (Agarwal, 2008). Therefore, a novel idea will have a smaller number of outlinks, as fresh issues which have never been discussed or raised by other bloggers will have less links to other blog posts. Eloquence is measured based on the length of a blog post, with a longer blog post indicating the higher confidence of the blog owner when sharing an idea with others.

In this study, the researchers adopt Agarwal's (2008) influential bloggers' properties and include two additional variables. The first variable is Alexa's number of average daily visitors over the past three months. The second is the number of blog posts. However, the property of eloquence as proposed by Agarwal is excluded, because this property describes the characteristics of the blog authors purely through his or her ability in writing lengthy posts, rather than describing the blogs. The proposed criteria of measuring blog influence are summarised in Table 4.

Influential Properties	Criteria
Recognition (R)	Number of inlinks to a post (il) (Agarwal, 2008) and total visitors (v) to the blog (http://alexa.com; Patt, 2005)
Activity generation (A)	Number of comments received for blog posts (c) (Agarwal, 2008) + number of posts (p)
Novelty (N)	Number of outlinks (ol) (Agarwal, 2008)

Table 4: Proposed Criteria for Measuring Blog Influence

The recognition property as proposed by Agarwal (2008) is modified in this study by considering the total number of visitors to a blog as an additional variable that influences the degree of recognition. The definition of the number of total visitors is adopted from Patt (2005). The visitor percentage value obtained from Alexa cannot be solely depended on, as this value is obtained by those who are registered with Alexa. Most of Alexa's users are webmasters and marketers (Patt, 2005).

The following is the formula used to obtain the number of total visitors: Total visitor = visitor percentage * (0.036 * global Internet users)

The value of visitor percentage is obtained from the Alexa webpage based on a particular blog. The value '0.036' refers to the population of blogs registered with Alexa. The value of global Internet Users is obtained from Internet World Stats *(http://www.Internetworldstats.com/stats.htm).* In brief, higher values for inlinks and higher number of visitors to a blog indicate that the blog is more recognised than the others.

Activity generation property as proposed by Agarwal (2008) is also modified by including the number of blog posts, together with the number of comments. This is because in measuring the activities in a blog, activities should come from both readers and owner. In brief, higher values for both of these variables indicate higher degree of activity generation within a blog.

The 'novelty' property as proposed by Agarwal (2008) is adopted without any modification as the researchers heavily agree on this aspect.

From these three identified criteria, weighted values are given to these criteria in order to form an index for measuring influence of blogs. This index is called the Blog Influence Index (BII). Based on these properties and variables described earlier, the following is the explanation of the BII formulation.

$$BII = 0.4R + 0.4A - 0.2N \qquad (4.0)$$
$$= (0.3il + 0.1v) + (0.3c + 0.1p) - 0.2ol \qquad (4.1)$$
$$= (0.3(il + c) + 0.1(v+p)) - 0.2\ ol \qquad (4.2)$$

The weighted value for three of these properties is shown in Equation (4.0). Variables (R) and (A) are commonly used in other studies relating to the measuring of blog influence and can be considered tested and recognised as indicators for measuring blog influences. They are therefore given equally weighted values which are higher than the novelty (N) property. N is given a slightly lower weighted value as this property describes the attractiveness of the blog content in gaining influence over one blog. The detailed computation for each property is elaborated in Equation (4.1), where new variables – v and p – are given a lower weighted value, which is 0.1, than il and c, which are the original variables proposed by Agarwal (2008).

Blog Influence Analyser (BIA)

BIA is a web tool used to measure the influence of blogs. It consists of three main processes as shown. The processes are:

a) Crawl blogs to compute number of posts, comments and outlinks,

b) Make an inquiry of the Yahoo search engine to get the number of inlinks,

c) Analyse all the raw data from above to compute blog recognition, activity generation and novelty.

The main functions of BIA are Login, Compute Blog Influence, Modify Blog Information, Display Blog Details, and Blog Ranks (Figure 2 shows screenshots of these). Login is used by web administrators or authorised users to access the system. The Compute function allows the user to enter the URL of a blog that one is interested in and to choose its category. The user then presses the 'start analysis' button to obtain detailed information of the chosen blog.

Figure 2: BIA Sample Screenshots

The Update Blogs Information function allows users to update the existing blog's URL and its category. Blog Detail displays the details of the pages in the blog, where for each page, the number of post, outlinks and comments are derived by the tool. These values are later used in the computation of BII for ranking purposes. The Blog Ranking report provides two types of ranking reports: overall ranking and categorised ranking. The overall ranking can also be displayed in different categories such as those based on the BII or its sub-categories which are recognition, activity and novelty.

BIA User Interface Test

The BIA user interface was tested with two different focus groups consisting of 25 and 26 respondents respectively. The BIA user interface instrument was adapted from the Questionnaire for User Interface Satisfaction (QUIS) by Chin, et al. (1988). It was modified to contain 19 items, asking for respondents' views on the screen design, terminology and system information, system capabilities and overall reaction of the tool. From these four dimensions, a fifth one, called BIA Overall, was computed.

The overall reaction to the BIA tool measures the user experience as to whether it is terrible or wonderful, difficult or easy, frustrating or satisfying and so on. Screen dimension focuses on characters onscreen, highlights, organisation of information and sequence of screens. Terminology and system information measure use of terms and related terminology, position of messages, prompts for input, progress and error messages.

Finally, the system capabilities rate the BIA speed, its reliability, quietness, difficulty in correcting mistakes and whether it is designed for all levels of users.

Response was given on a semantic scale from 0 to 9

(with 9 being the most positive feedback). Sri (1991) suggested that responses should be classified for better interpretation. Brace (2004) proposed that a minimum of 6 is considered high and ratings of 3 or below are considered low. From the data analysis, the overall mean score is 6.72, indicating a high level of usability as perceived by the respondents. Figure 3 clearly indicates that all the BIA user interface dimensions are classified as high (the minimum value is 6.55), indicating that the respondents view the tool as wonderful, easy, satisfying, stimulating and flexible.

They are also satisfied with the screen design, terminology used and the capabilities of the tool. These findings are further supported by the scatter plot in Figure 4, where it is again clearly seen that plots are concentrated on the right-hand side of scale 6 (i.e. high to extremely high values).
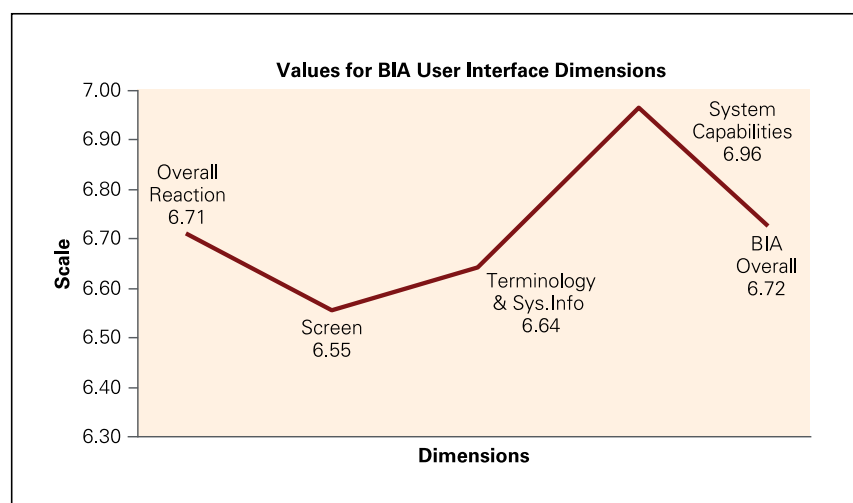
Figure 3: BIA User Interface Dimensions
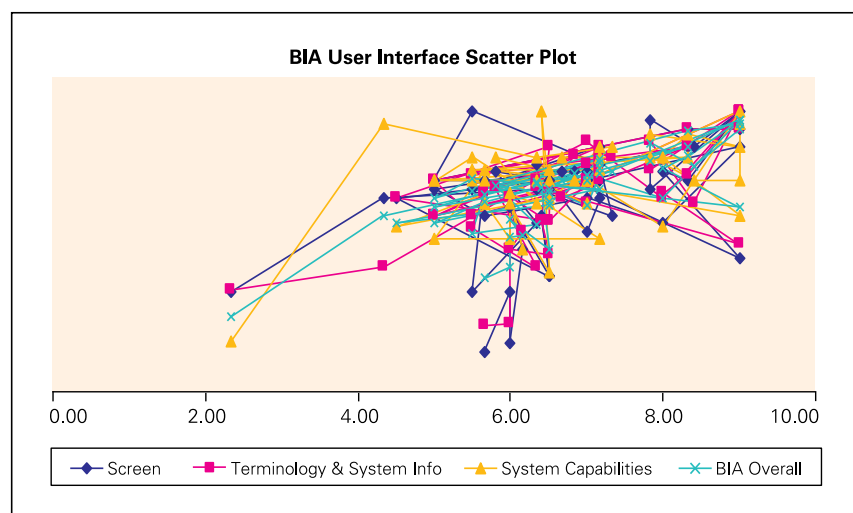
Figure 4: BIA User Interface Scatter Plot

Overall BII Ranking	Blog Name and URL	Recognition	Activity	Novelty	BII	Rank
Politics	http://lhakim-suarahati.blogspot.com/	7,756,038	49	80	7,756,007	1
Lifestyle	http://www.lembaranutama.blogspot.com/	3,102,415	4	5	3,102,415	2
Sports	http://skbbsarchery.blogspot.com/	2,843,880	4	21	2,843,863	3
Entertainment	http://afdlinshauki.blogspot.com/	2,745,600	399	612	2,745,387	4
	http://yasminthestoryteller.blogspot.com/	1,107,540	70	142	1,107,467	5
	http://buacakmp3.blogspot.com/	310,080	45,753	4,632	351,201	6
Lifestyle	http://noorhalim.blogspot.com/	129,267	0	0	129,267	7
Entertainment	http://krsuicide.com/	91,233	443	212	91,464	8
	http://syndromania.blogspot.com/	97,848	222	6,752	91,318	9
Technology	http://www.raymond.cc/blog/	76,611	13,385	55	89,941	10

Table 5: Top 10 Most Influential Blogs (between November 2009 and February 2010)

Influential Blogs in Malaysia

a) Top 10 Overall Most Influential Blogs

The overall analysis lists the top 10 most influential blogs from all 186 blogs analysed between November 2009 and February 2010, without separating them into categories. The lhakim-suarahati blog under the politics category occupies the top rank with a 7,756,007 BII value, followed by lembaranutama, skbbsarchery and the others, as shown in Table 5. One interesting fact here is that five out of the 10 blogs belong in the entertainment category, followed by lifestyle (2), politics (1), sports (1), and technology (1).

b) Top 10 Most Recognised Blogs (Recognition)

As mentioned earlier, blog recognition is determined by the number of inlinks and visitors. The higher the total number of inlinks and visitors, the higher the recognition value and rank. The top 10 most recognised blogs out of 186 crawled blogs are already presented in Table 5 and the result is exactly the same - lhakim-suarahati blog is ranked number 1 followed by lembaranutama, skbbsarchery and others, in exactly the same sequence as the overall top 10 blogs.

c) Top 10 Most Active Blogs (Activity Generation)

The number of posts and comments on a blog show how active the blog is or rather, how active the blog owner and visitors are. Buacakmp3 is the most active blog, with an activity value of 45,753, followed by chedet, and others as shown in Table 6. Note that political blogs which occupy only one spot in the overall top 10 (see Table 5), now have 4 representatives, indicating that these type of blogs are very active in generating posts and comments.

d) Top 10 Most Novel Blogs (Novelty)

Novelty refers to the number of outlinks available in a blog. The higher the novelty number, the lower the rank. The results as displayed in Table 7 show that 2 blogs were ranked number 1 with the same novelty value of 1 which are ellebakery and lucialai, followed by lincah taiping, zog, ckinnikc, and others.

Social Influence of Blogs in Malaysia

In phase 3 of this study, a survey was conducted to ascertain bloggers' and blog users' perception of blogs and their UCC, particularly pertaining to blogs' credibility as a new medium. Demographic

Overall Activity Ranking	Blog Name & URL	Activity	Rank
Entertainment	http://buacakmp3.blogspot.com/	45,753	1
Politics	http://chedet.co.cc/chedetblog/	23,498	2
Technology	http://www.raymond.cc/blog/	13,385	3
Politics	http://quaintly.net/ http://teresakok.blogsome.com/	8,574 5,308	4 5
Technology	http://www.mobileworld.com.my/hotspot/	5,013	6
Lifestyle	http://www.midnitelily.com/	2,353	7
Politics	http://www.thoughtsintangents.blogspot.com/ http://elizabethwong.wordpress.com/	1,814 1,803	8 9
Entertainment	http://socolatapicturegalleries.blogspot.com/	1,656	10

Table 6: Top 10 Overall Activity Generation Ranking

Overall Novelty Ranking	Blog Name & URL	Novelty	Rank
Lifestyle	http://www.ellebakery.blogspot.com/	1	1
Politics	http://www.lucialai.org/	1	1
Sports	http://lincahtaiping.wordpress.com/	2	3
Lifestyle	http://zog.typepad.com/malaysia/	2	3
Unspecified	http://ckinnikc.blogspot.com/	3	5
Business	http://my-zue.blogspot.com/	3	5
Politics	http://www.kadirjasin.blogspot.com/ http://www.aisehman.org/	3 3	5 5
Lifestyle	http://www.petertan.com/blog/ http://www.lembaranutama.blogspot.com/	4 5	9 10
Politics	http://www.prabaganesan.wordpress.com/	5	10
Lifestyle	http://foodaholic.wordpress.com/ http://eatfirstthinklater.blogspot.com/	5 5	10 10
Politics	http://chow.blogsome.com/	5	10

Table 7: Top 10 Overall Novelty Ranking

information, blogging habits and preference of the respondents are also gathered.

In this study, the respondents' perceived credibility of the many elements of blogs such as content type, presentation forms, accuracy, believability, depth, and fairness regardless of whether they blogged or not are identified. Consequently, factors that would affect blog credibility and reasons which motivate respondents to blog and interact with blogs are also ascertained.

Additionally, the study also look at the relationship between respondents' time spent with blogs and other media. Moreover, it compares respondents' perceptions of the credibility of blogs and other media and try to apply the factors that affect newspaper credibility to blogs.

Specifically, the survey attempt to address eight research questions as follows:

a) How many respondents blog?

b) Why do respondents create and maintain their blogs?

c) What is the frequency of reading blogs?

d) Do respondents read blogs with specific topics?

e) Why do respondents read other people's blogs?

f) How do respondents perceive blog UCC with more than one type of presentation media?

g) What is the relationship between the time respondents spend on blogs and the time they spent on other media?

h) What blog UCC factors are correlated with respondents' perceptions of blogs' credibility?

The analysis of this phase began by determining the socio-demographic profiles of the respondents (Table 8). It is found that a majority of respondents (77%) were below 25 years old. Female respondents (60.5%) outnumber their male counterparts. Most of the respondents for this research are Malays (85.9). Of the total respondents, the majority of respondents' have Bachelor degrees (58.99%).

Item		Frequency	Percent
Gender	Male	321	39.5
	Female	491	60.5
Age	Below 25	625	77.0
	25 and above	187	23.0
Education	Postgraduate	34	4.2
	Bachelor	479	58.9
	Diploma	106	13.1
	STPM	113	13.9
	SPM	43	5.3
	Others	37	4.6
Race	Malay	698	85.9
	Chinese	70	8.6
	Indian	11	1.4
	Others	33	4.1

Table 8: Socio-demographic Profiles of Respondents
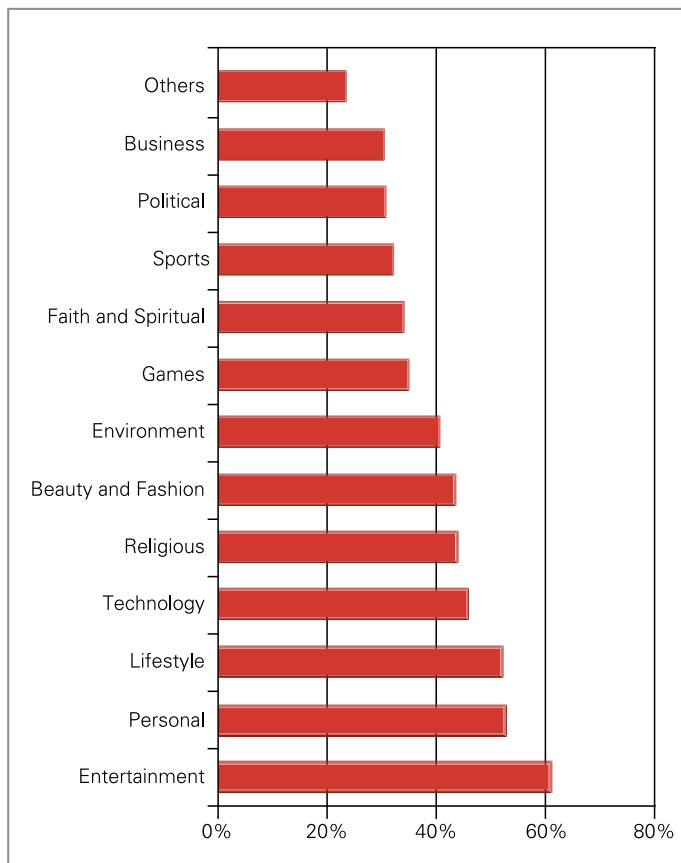
Figure 5: Blog Topics Read by Respondents

Item	Frequency	Percent
To document your personal experiences and share them with others	302	37.2
To stay in touch with friends and family	266	32.8
To share practical knowledge or skills with others	263	32.4
To obtain information	184	22.7
To express yourself creatively	173	21.3
To network or to meet new people	173	21.3
Need to articulate ideas	161	19.8
Need to channel creativity	107	13.2
To influence the way other people think	81	10.0
To motivate other people to action	68	8.4
To make money	65	8.0
To explore your own beliefs	57	7.0
To get feedback on service and product	42	5.2
Others	25	3.1
To get recognition	20	2.5

Table 9: Reasons for Blogging

a) Number of respondents participating in blogging

Among the 812 respondents, 463 (57%) have their own blogs of which 172 (37.1%) were male and 291 (62.9%) were female. Of these 87% were Malay; the rest are made up of 6.3% Chinese; 1.3% Indian and 5.6% of other ethnicity. Furthermore, 78.6% were below the age of 25 and are degree holders.

b) Reasons for blogging

The reasons respondents want to have their own blogs are summarised in Table 9. Mostly these are for personal purposes, such as sharing experiences, entertainment, to kill time, or get in touch with friends and family. Of the 463 respondents who have blogs, 37.2% said they document their personal experiences or share them with others; 32.8% think that they can stay in touch with friends and family. 32.4% believe that they could share practical knowledge or skills with others while 22.7% created their blogs to get information.

About 21.3% of the respondents agreed that having blogs enabled them to express themselves creatively; 21.3% said that having a blog allows them to network or meet new people and 19.8% believe that blogs can be used to articulate ideas. In addition, 13.2% state that blogs can channel creativity and 10% agreed that a blog could influence the way other people think. Only 8.0% of the respondents think that blogging could possibly make money. Other reasons for having blogs are getting recognition, exploring one's own beliefs, and getting feedback on services and products.

c) Blog reading frequency

Most respondents (96.1%) read other people's blogs. A higher percentage of female respondents read blogs compared to male respondents. Among all the respondents who read blogs, 23.6% read blogs more than once a day, 25.8% read other people's blogs once a week and 4.2% read blogs once in two weeks. 11.7% of the respondents read blogs once in three weeks, while 18.2% read blogs once a month. Male

Item	Strongly disagree (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Strongly agree (%)
Text only	15.4	29.5	27.0	22.2	2.2
Text and photographs	2.7	9.9	17.3	56.8	13.3
Text and video clips	1.9	7.0	15.9	55.4	19.8
Video with textual information	1.7	6.5	17.6	26.1	48.1
Text and audio	2.5	8.9	27.8	48.3	12.5
Text, photographs and video	1.3	3.4	9.7	50.6	35.0
Text, photographs and audio	1.3	4.2	11.6	52.6	30.3
Text, photographs, video and audio	1.6	4.1	10.6	34.8	48.9

Table 10: Perceived Credibility and Blog Presentation Forms

Respondents basically tended to agree that the use of these presentation forms in blogs made them more likely to trust the information. Using more than one type of blog presentation form was effective in generating this trust, as were visual forms such as videos, photographs, and links to other websites. Using only text to present the information in blogs tended to reduce the trust among the respondents.
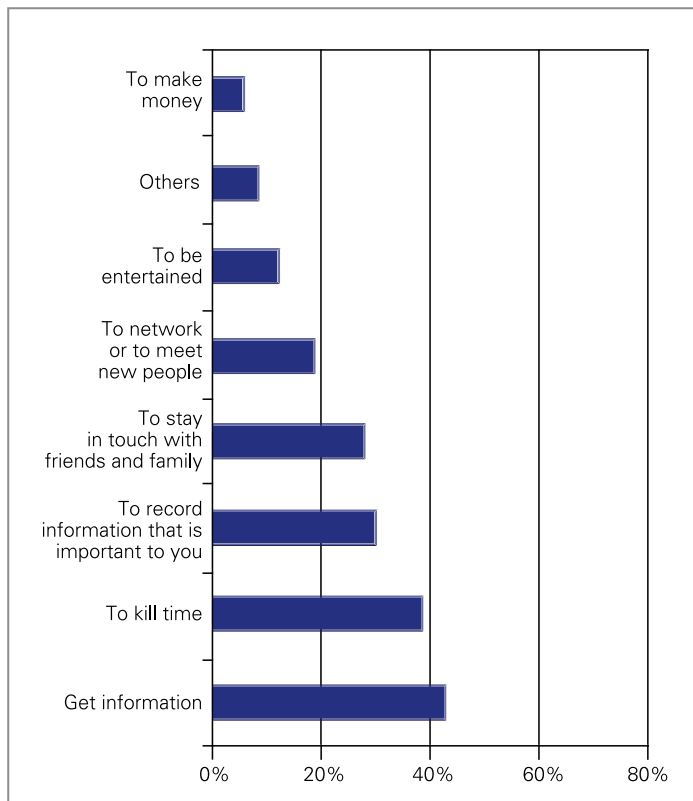
Figure 6: Reasons Respondents Read Other People's Weblogs

and female respondents do not differ in how often they read blogs.

d) Blog topics respondents read

Survey conducted found that respondents read entertainment topics, personal, lifestyle, technology and beauty and fashion topics on blogs (Figure 5).

A majority (62%) read entertainment topics while other significant topics are personal topics, lifestyle, technology, beauty and fashion. Some respondents pay attention to political, business, spiritual and religious topics in blogs. Others said they get access to photos, music and travel topics.

e) Reasons for reading and following other peoples' blogs

Reasons why respondents read other people's blogs are shown in Figure 6. Among the 782 respondents who

Item		Blogs	Newspapers	Televisions	Magazines	Radio
Blogs	Pearson Correlation Sig. (2-tailed) N	1	.153 (**) .004 762	.105 (**) .004 762	.028 .450 757	.093 (*) .011 756
Newspapers	Pearson Correlation Sig. (2-tailed) N		1	.109 (**) .022 774	.138 (**) .000 762	.119 (**) .001 761
Television	Pearson Correlation Sig. (2-tailed) N			1	.764 (**) .000 758	.196 (**) .000 757
Magazines	Pearson Correlation Sig. (2-tailed) N				1	.097 (**) .008 751
Radio	Pearson Correlation Sig. (2-tailed) N					1 764

Table 11: Correlation of Respondents' Time Spent on Different Media

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

read other people's blogs, 61.2% read to get information while 54.8% do so to kill time. Other reasons include to record important information, to keep in touch with friends or family, and to network or to meet new people. Only 6.8% read other people's blogs to make money.

f) Perception of blog UCC with more than one type of presentation media

Table 10 shows the perceived credibility of different blog presentation forms. They have moderate effects on the blog credibility perceptions of respondents. Generally, using more than one type of presentation form in a blog make respondents more likely to trust the information. Information is also more likely to be trusted when video clips, photographs, audio files, or links to other websites are used in blogs.

On the question of whether the use of text in a blog make them more likely to trust the information, almost equal numbers said 'yes', 'no' and 'neither'. That is to say, about one third of the respondents agree, one third neither agree nor disagree, and the other third disagree.

Nearly 56.8% 'slightly agree' that the use of photographs in blogs make them more likely to trust the information. While more than half of the respondents agree, 17.3% neither agreed nor disagreed and 9.9% of respondents disagreed. The majority of the respondents agreed that the use of videos, audio files, and links to other websites in blogs make them more likely to trust the information. 90% of the respondents slightly agree, agree, or strongly agree that using more than one type of presentation forms in blogs would make them more likely to trust the information. Only 10.6% of respondents neither agree nor disagree and 4.1% of respondents disagree. To sum up, there are moderate but no major variations of respondents' perceptions of credibility of different blog presentation forms.

g) The relationship between the time respondents spent on blogs and the time spent on other media

In this study, other media include newspapers, TV, magazines and radio.

On average, respondents spent 1.72 hours on blogs per day, 1.17 hours reading newspapers,

2.5 hours watching television, 1.14 hours reading magazines and 1.89 hours listening to the radio. The results show that respondents spend more time on TV and other media. Data in Table 11 shows that for respondents, the relationships between the time they spend on blogs and the time they spend on other media are not strong. Most of the relationships between each media are slightly positive or negative. Time spent on blogs has a positive correlation with time spent on television, newspapers and radios. The scores of the three correlations are .153, .105, and .093, respectively.

Time spent reading the newspapers is slightly correlated with time spent on blogs (r =.153), television (r =.109), magazines (r =.138) and radio (r =.119). Time spent watching television has a positive correlation with time spent on blogs (r =.105). It also has a positive correlation with time spent reading the newspapers (r =.109). Furthermore, it has a positive correlation with time spent reading magazines (r =.764), and time spent listening to the radio (r =.196).

Time spent on reading magazines is positively correlated with time spent on newspapers (r =.138), televisions (r =.764) and radio (r =.097). Time spent on radio has moderate and positive correlations with time spent on blogs (r =.093), newspaper (r =.119), televisions (r =.196) and magazines (r =.097). Basically, all the correlations are weak but it has shown that the time spent on blogs has positive correlations with other media; most of the time spent on different media is positively correlated to each other.

h) Correlation between blog UCC factors with respondents' perceptions of blogs' credibility

Another research question relates to the factors that correlate with respondents' perceptions of blogs' credibility. The results in Table 12 show that the types and presentation forms have a greater effect than bloggers' backgrounds and information.

Respondents have lower trust if blogs contain spelling or grammar mistakes; results show that 35.1% of respondents feel slightly less trust for blogs and 17.8% have greatly decreased trust levels for blogs with spelling or grammar mistakes. Around 39.3% of respondents do not think that spelling or grammar mistakes in blogs would affect their perceived credibility.

Blogs with factual errors lower respondents' credibility. Of the total respondents, 46.3% said it would decrease their trust greatly, and 34.0% believe it would decrease their trust slightly. Slightly more than 11.3% of respondents say it does not matter, and only 5.0% of respondents say it would increase their trust. 28% of the respondents report that blogs with corrections of previous mistakes would increase their trust slightly, and about 1.3% of respondents thought it would increase their trust greatly. Nevertheless 34.3% think it would decrease their trust slightly, 27% of respondents said it does not matter and 9% said it would decrease their trust greatly.

43.2% of respondents believed blogs that use unnamed sources will decrease their trust slightly while only 30.6% say such blogs decrease their trust greatly. 17.1% of respondents believe it does not matter, and only 4.9% of respondents state it would increase their trust.

Close to half (45.3%) of the respondents stressed that blogs with advertisements on them do not affect their trust levels. However, 19.5% of respondents think it would decrease their trust slightly, and 7.3% think it would decrease their trust greatly. Only 21.7% believe it would increase their trust.

Forty six percent of respondents said that blogs that give only one side of a controversy would decrease their trust slightly, and another 11.1% of respondents said it would decrease their trust greatly. 28% of respondents think it did not matter, and only 10.9% of respondents think it would increase their trust.

Contrary, if the blogs have in-depth information, 53.7% of respondents said it would increase their trust slightly, and 28.2% of respondents said it would increase their trust greatly. Still 11.8% of respondents said it does not affect their trust of blogs. Only 1.1 % of respondents believe it would decrease their trust.

Thirty two percent of respondents said bloggers who want to change their opinions about something does not affect their trust in the information found on those blogs. However, 10.2% thought it would decrease their trust compared to 46.8 % who thought it would increase their trust.

Nearly half of the respondents report that bloggers who published using nicknames would not affect their trust. However, 27.9% of respondents thought bloggers with nicknames

Blog UCC	Decreases my trust greatly (%)	Decreases my trust slightly (%)	Doesn't matter (%)	Increases my trust slightly (%)	Increases my trust greatly (%)
Blogs that have spelling/grammar mistakes	17.8	35.1	39.3	3.9	0.6
Blogs that have factual errors	46.3	34.0	11.3	5.0	0.5
Blogs that have corrections of previous mistakes	9.0	34.3	27.2	28.2	1.3
Blogs that use unnamed sources	30.6	43.2	17.1	4.9	1.0
Blogs that have advertisements on them	7.3	19.5	45.3	21.7	2.7
Blogs that give only one side of a controversy	11.1	46.6	28.7	10.7	2.9
Blogs that have in-depth information	1.1	5.2	11.8	53.7	28.2
Bloggers who want to change my opinion about something	0.9	10.2	32.4	46.7	9.8
Bloggers who publish under nicknames	9.6	27.9	47.0	11.5	4.0
The political background of a blogger	2.2	12.8	31.4	38.8	14.8

Table 12: Factors that Affect Respondents' Perceived Blog Credibility

would decrease their trust compared to only 11.5% of respondents who thought it would increase their trust.

When it comes to the political backgrounds of bloggers, 31.4% of respondents said that it does not affect their trust to blogs, 12.8% believe it would decrease their trust, and 38.8% of respondents think it would increase their trust.

In general, the factors that are correlated with respondents' perceived blog credibility are consistent with the previous newspaper credibility study. Blogs containing spelling and grammar mistakes, having factual errors, exhibiting corrections of previous mistakes, using unnamed sources, showing one side of a controversy and having in-depth content are factors which would affect trust toward the blogs.

Most of the respondents believed that blogs with advertisements on them, bloggers who want to change their opinions, who publish under nicknames and the political backgrounds of bloggers would not affect their trust. However, still some respondents thought the above factors would decrease their trust. The result indicated that respondents cared more about the factual presentation and the precision of the UCC rather than bloggers' political backgrounds or celebrity status, or blogs' exterior elements such as advertisements.

Implications of Study on Theory, Practice and Policy

The implications of this study can be categorised into the following areas of significance: knowledge area, society and the MCMC, as depicted in Figure 7.
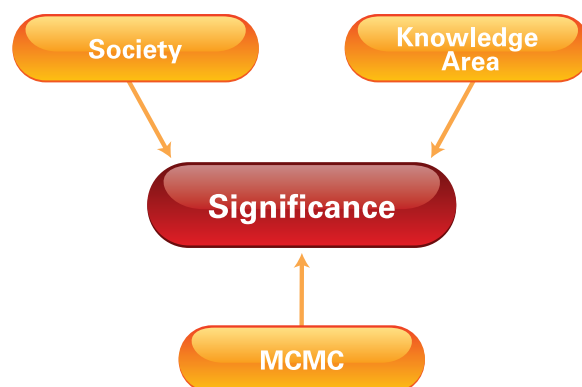

Figure 7: Areas of Significance

MCMC would be able to utilise the BIA to identify the most influential blogs in Malaysia's blogosphere. Additionally, the influence index (i.e. BII) and criteria used to determine these influential blogs can be applied further to anticipate the influences of new and upcoming blogs. The BII formula and criteria also contribute to the knowledge area of this field.

Moreover, ascertaining the social influences of these blogs and their UCC would provide knowledge resources in terms of the influences of blogs on attitudes, relationships and views between family, friends, employers and colleagues on topics such as education, business, politics and entertainment. Table 13 summarises the implications of this study.

Areas	Significance of study
MCMC	• Provide essential monitoring information • Assist in anticipating the influences of upcoming weblogs • Provide monitoring eTool
Knowledge Area	• Identification of weblogs influential criteria • Construction of Blog Influence Index (BII) formula
Society	• Provide essential monitoring information for MCMC • Assist MCMC in anticipating the influences of upcoming weblogs • Provide monitoring eTool for MCMC
Business	• Provide blog ranking services to bloggers • Provide resources in terms of the influences of weblogs on attitudes, relationships and views between family, friends, employers and professional colleagues on topics such as education, business, politics and entertainment

Table 13: Implications of Study

Conclusions

Overall Research Achievements

Despite a few obstacles that the researchers had to overcome, the research phases were finally executed and all research objectives were met successfully. The criteria for measuring blog influence were identified and grouped into three properties: recognition, activity generation, and novelty.

These criteria form the backbone for the development of the BII and the formula used to measure blog influence. The tool for measuring blog influence (BIA) was also successfully developed and applied.

The top blogs in the blogosphere community of Malaysia were identified as planned. Finally, the researchers managed to conduct a social influence survey of selected blogs and their UCC.

Discussions

The lack of credible criteria used in current blog measuring tools has partly motivated the researchers to develop the BIA tool. The main strength of BIA is that the criteria used in the blog measurement formula which is more reliable and comprehensive. Its weakness would be the fact that the criteria does not take into account the textual content of a blog (i.e. blog post). Embedding an Artificial Intelligence element into BIA to analyse textual content would be a potential research project in the near future.

Apart from measuring blog influence, the BIA also allows its users to rank blogs accordingly (i.e. overall ranking or by categories). Surprisingly, the findings showed that the top 10 overall ranking of blog influence is occupied by entertainment blogs, indicating that such entertainment blogs are very influential in the Malaysian blogosphere. Consequently, the entertainment industry and all players involved should now turn to blogs as an alternative marketing and promotional tool.

Also worth mentioning is the way the identified blogs were categorised. Although blogs can be categorised in several different ways, this study adopted the grouping concept used by Technorati: business, entertainment, lifestyle, sports, politics and technology. Further study is needed to determine the accurate sub-groupings for each of the categories.

Despite many types of media which are readily available, this study shows that new media, such as

blogs, has gained tremendous popularity and is widely accepted as an alternative communication medium. In fact, blogging has become part of many people's lives nowadays, probably due to its unique ability to present and share information. However, it was found that people tend to be selective in visiting and reading blogs' UCC. Their involvement in blogging depends heavily on and is correlated to their perception of a blog's credibility and trustworthiness.

In general, people normally have certain perceptions of the media, particularly pertaining to media credibility. Many studies have been conducted to address the issue of the credibility of both printed and online media. However, very few place emphasis on the issue of blogs' credibility. In this study, it was found that bloggers' and users' perceptions of blogs' credibility were consistent with the previous printed media credibility studies. This means that the UCC of blogs might affect users' perceived trusts and credibility. Factors such as language and writing quality, blog writers or contributors, and writers' ideological stands will have an impact on blogs' credibility.

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Young People and New Media:
Social Uses, Social Shaping and Social Consequences

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Abstract

New media technology and its applications are an integral part of young people's lives. This study explores the ways young people understand and use new media, as well as their perception of the opportunities and risks of their experiences with new media.

Using both qualitative and quantitative methods, baseline data was obtained on new media usage and experiences, and the attitudes of young people towards it. The findings indicate that the main uses of new media include communication, education, entertainment and play.

Few young people could say that they could evaluate the quality and gauge the accuracy of information gained via new media. Results have shown that there seemed to be little knowledge of online risks and opportunities. Several recommendations for regulation and awareness-raising have been put forth in this report.

Introduction

New media technology and applications form an important part of young people's lives and it is crucial for us all to understand the needs of young people and the ways new media is appropriated in their lives (Livingstone, 2002, Osgerby, 2004).

Many young people in Malaysia are growing up with regular access to a television, DVD player, radio, CD player, video games, mobile phones, computers and iPods. Young people use these media tools because they find them to be fun, exciting and conducive to the imagination.

They are often fascinated by new media technology and applications that offer them thrilling encounters and an understanding of the social, cultural and moral facets of the adult world. With this new media, they produce texts and images that help shape their views of the world; they contribute to patterns of interaction and present practices, behaviours and lifestyles that are deemed as desirable or undesirable and actions that bring rewards or penalties.

New media technologies form an important part of young people's lives and it is crucial to understand the needs of young people and the ways new media is appropriated in their growing lives.

Young People and New Media - Social Uses, Social Shaping and Social Consequences

Research on young people and the media is essential to steer insight on the uses of such, as well as the opportunities and risks experienced by users.

This research records the ways young people use new media and how important these new media are for their social development and the building of social relationships. It also explores the shaping of opportunities and risks that should be helpful to policy makers, creative industries, youth activists, parents and child welfare experts and educators.

The study examines the uses and consequences of new media on personal lives, learning activities and social activities.

Problem of Study

There is currently little knowledge – with hardly any empirical information – of the use young Malaysians make of new media, the meanings and consequences that may be generated, and how important these new media are in their everyday lives.

This study was aimed at studying young people's engagement with new media and how they appropriated the media in their everyday lives; their awareness of safety issues and views on regulation; the potential dangers and risks and negative media experiences.

The specific aims of the study are as follows:

- To chart young people's current access to and use of new media,

- To examine the usage and consequences of new media in relation to young people's personal lives, learning activities and social activities,

- To derive young people's perception of issues on opportunities, safety, dangers, risks and negative experiences linked to new media use,

- To provide a baseline data and information of young people's media use that can be used to measure future changes and to determine implications for regulation.

Literature Review

The presence of increasing visual media is often linked with intense hopes and fears (Livingstone, 2002). The new changing communications environment holds out a promise of a brighter future, especially its enormous potential for learning (Gee, 2002).

Yet at the same time, it also maintains that the media may harm and manipulate young people where it promotes concentration on the individual self and wasteful consumption (Budd, Craig Steinmann, 1999).

According to Alvermann (1999), popular consumption of new media products evokes different responses from different people. For some people, the media manipulates popular culture so that the existing hierarchies are sustained; for others it allows subordinated groups to create messages that subvert mass culture's attempts to dominate their lives (Price, 1993).

This study will build upon new media studies and audience-centric theories in developing a framework for studying young people's patterns of engagement with new media. Drawing on the insights of projects conducted by Livingstone (2002), Osgerby (2004) and The Appropriation of New Media by Youth Project (2006), this study will reveal how young people appropriate new media in their everyday lives and explore the embedding of new media within the temporal and social dimensions of young people's world, as well as their perception of new media regulation and risks.

Methodology

The research methods adopted for the present study exist within the broad methodology of quantitative and qualitative research inquiry as follows:

Quantitative Phase

Questionnaire surveys were implemented to examine patterns of new media usage among young people in a face-to-face, random location quota sample of 1,200 young people, aged 14 and 16, across urban areas in Malaysia. The surveys were conducted from February to May 2010. The study population was divided into six regions, as follows:

Northern (Perlis, Kedah, Penang)
Central (Perak, Selangor, Federal Territory)
Southern (Negeri Sembilan, Melaka, Johor)
East Coast (Kelantan, Terengganu, Pahang)
East Malaysia (Sabah)
East Malaysia (Sarawak)

The data obtained from the assessment was analysed using the SPSS, a statistics software programme, to quantify young people's access and media practices as well as their perception towards safety and risks.

Qualitative Phase

Focus group discussions were used to examine narrative accounts, critical opinions, media consumption practices and cultural experiences with regard to selected issues, to provide a rich understanding and documentation of the changing practices in the new media environment experienced by young Malaysians today.

The selected issues focused on were communication practices, new gaming practices and learning activities and experiences. In addition, the perception of safety and danger issues with regards to new media was also addressed.

Focus group interviews were conducted with 152 youths in twelve groups of 14-year-olds and twelve groups of 16-year-olds from each of the regions listed above.

A moderator posed questions to each group and students were encouraged to state their experiences with new media. The same set of question-guides was presented to all groups of students. The findings of the focus group discussion is summarised according to specific themes.

This report attempts to provide baseline data on the media uses, views, experiences and attitudes of young people. It describes key findings on quantitative

data first - who has what, how and when they use it, for what purposes and the forms of social impact. This is followed by a qualitative interpretation of young people's voices and views on the awareness of dangers and risks as well as literacy skills with new media.

Phoning friends/text messages/
social networking sites (Facebook, MSN, YM, etc)

Playing computer/PSP/media games

At cyber cafe

■ None		■ 7-9 hours	
■ <1 hour		■ 10-12 hours	
■ 1-3 hours		■ >12 hours	
■ 4-6 hours			
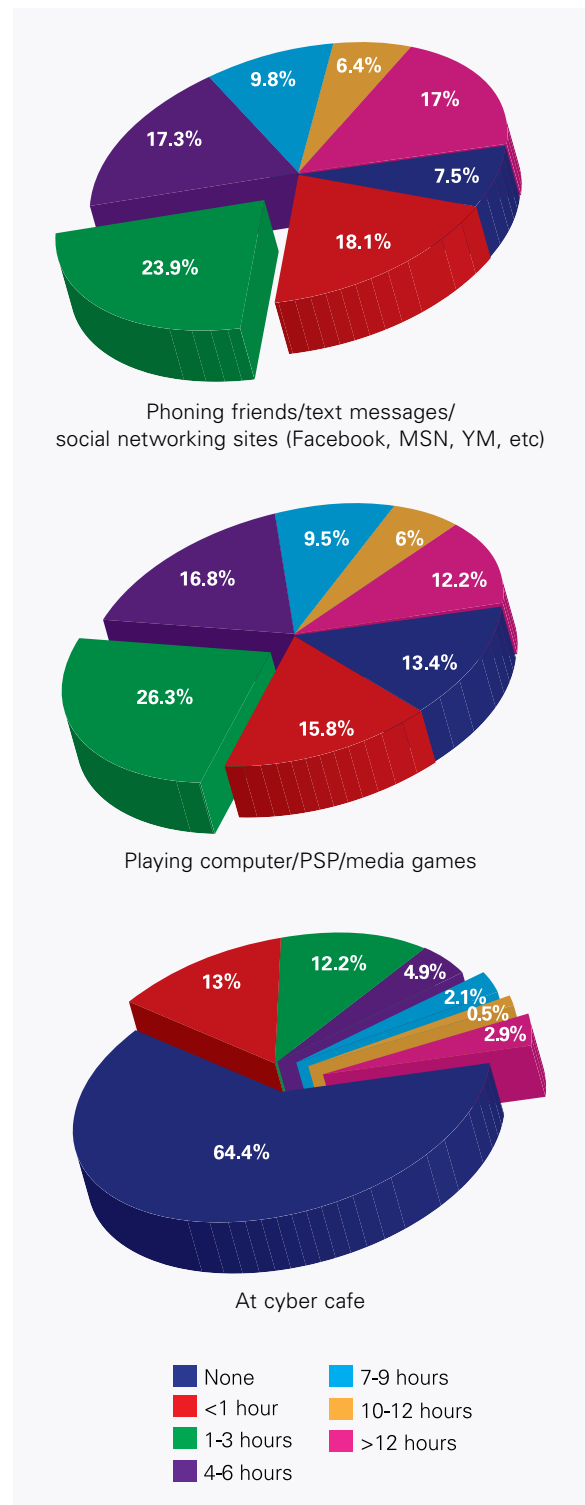
Figure 1: Hours Spent in a Week for New Media Activities
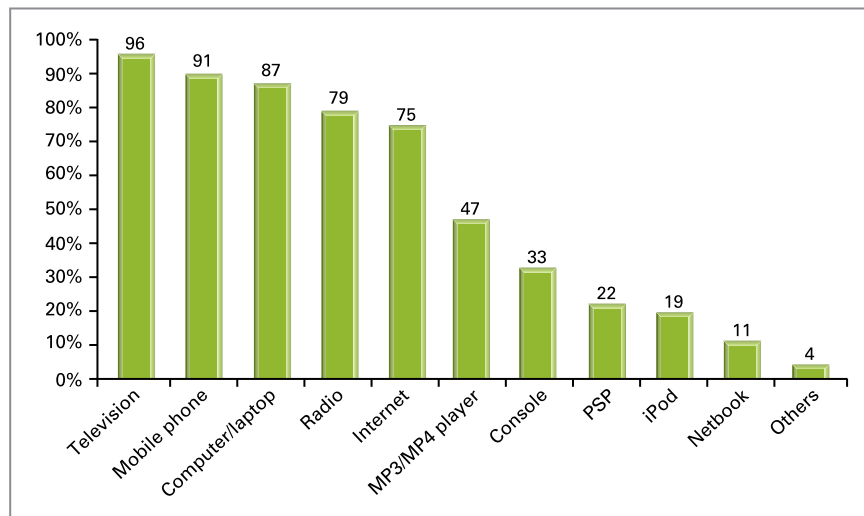
Figure 2: Media Tools in the Home

Not Relevant refers to the respondents in the sample who stated that they have not used the media tools. For eg., 17.8% of the respondents have not played media games and so on.
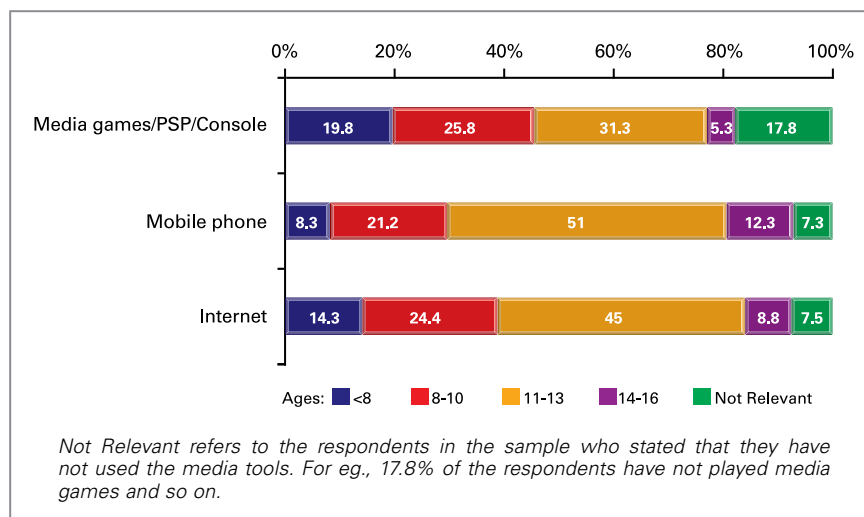
Figure 3: Starting Age for Using Media Tools

Findings and Analysis

Social Context - Daily Activities of Young People

- **Few outdoor activities:** The respondents do not spend a lot of time on outdoor activities. The more popular outdoor activities include sports, with 27.3% who give it less than an hour and 31.5% who spent one to three hours a week on sporting activities. In today's urban lifestyle, many young people (37.8%) spent about one to three hours a week at shopping malls.

- **A lot of time spent on study-related activities:** Respondents are students who spent more than 12 hours (54.6%) in a week in school for study-

related activities and mostly within one to three hours for homework or revision (31.9%) and on tuition (25.8%). Another 19.8% of the respondents spent four to six hours a week for homework or revision and as for tuition, 17.0% of respondents spend four to six hours of their time in a week for this activity.

- **Watching television and listening to music are top leisure activities:** On average, respondents spent one to three hours (28.3%) and four to six hours (22.8%) per week watching television. Respondents give one to three hours per week (31.2%) to listening to music. Reading for leisure purposes is less popular, as 35.5% of respondents spend less than an hour per week reading.

- **Talking to parents and friends is important in building relationships:** About 23.2% of respondents spent more than 12 hours in a week talking to parents, while 21.9% respondents spent more than 12 hours a week talking to friends. While respondents spent a lot of time at school, they do not seem to spend more time on building relationships with teachers; 37.6% respondents indicate that they only spent less than an hour talking to their teachers in a week of school life.

- **Popular media activities** include talking on the phone and texting, social networking and playing new media games: About 23.9% of the respondents spent one to three hours on calling or texting and social networking while 26.3% of the respondents spent one to three hours per week on media games. The percentage of respondents who spent more than 12 hours for both these activities is also quite high, at 17.0% who engage in calling/texting/social networking and 12.2% on playing media games.

Social Uses - Patterns of New Media Use

- **Media tools that can be found in most of the respondents' homes are the TV, mobile phone & computer/laptops:** The top three new media tools found at home are the television (96.2%), mobile phone (90.8%) and computer/laptop (87.4%). The television set is found in almost every respondent's home.

- **High percentage of access to the Internet:** Almost 75.2% of the respondents have access to the Internet at home, and can therefore take part easily in online activities.

- **The mobile phone is seen as the most important tool in a young person's life:** About 36.8% of respondents consider the mobile phone the most important media tool. The second and third most important media tools are the computer or laptop (29.5%) and the Internet (13.2%) respectively. While most of the respondents have a television set a home, it is not considered the most important media tool to them when given a variety of other choices.

- **First use of new media games, mobile phones and the Internet is between the ages of 11 and 13 years old:** More than half (51.0%) of the respondents started using mobile phones from the age of 11 to 13 years old; 14.3% of respondents

started using the Internet before they reached eight years old, closely followed by initial use of media games between the ages of eight and ten; 31.3% of respondents started using game consoles between the ages of 11 and 13 and 19.8% respondents started using games/PSP/consoles before they were eight years old. The data shows that most of the respondents had been exposed to new media tools before the age of 13.

- **Time spent on media games increases during weekends, while Internet and mobile phone usage is higher during weekdays:** Most of the respondents spend one to three hours per week on the Internet on weekdays (34.3%) with a slight decrease during the weekend (33.5%).

  In the case of the mobile phone, 33.4% of the respondents spend less than one hour on weekdays, compared to 26.8% of respondents who do the same during weekends. On the other hand, the respondents who spent more than 12 hours on a weekday (10.5%) are fewer than those who spend more than 12 hours on a weekend (15.5%).

  As far as games are concerned, 23.7% of the respondents spend one to three hours on them during weekdays, compared to 29.4% on weekends.

> *Most Internet, gaming and mobile phone usage takes place at home.*

- **Parents/guardians are more likely to pay the bills for new media use:** Parents/guardians are more likely to pay the bills for Internet expenses (66.1%), mobile phones (39.5%) and media games (32.3%). For mobile phones usage, nearly half of the respondents (47.9%) spend not more than RM30 in a week.

- **Most Internet use, gaming and mobile phone usage takes place at home:** About 74.8% of respondents use the Internet, 85.6% use the mobile phone and 64.7% play media games at

home. The school appears to be detached from new media activities in the present day.

- **Self-learning is the most popular way of learning to use new media tools:** The respondents noted that self learning happens with mobile phones (63.8%), with media games (49.1%) and with the Internet (46.8%). Friends and siblings are also significant when it comes to learning to use new media tools.

Social Shaping - Internet Usage and Experiences

- **Internet usage among young people is closely related to interests in education, social networking, self-expression and creative work:** The Internet is used mainly for educational purposes (64.2%), social networking (61.8%), self-expression (53.9%) and creative work (57.2%). Respondents rarely use the Internet for community building and political interests.

- **Frequent usage of Internet are for watching videos, using search engines for finding new knowledge and information, and downloading or uploading music or videos:** The most frequent usage of the Internet indicated by the respondents are watching videos (73.6%), followed by surfing (using search engines) for finding new knowledge and information (68.7%), and downloading or uploading music or videos (62.2%) for personal entertainment.

- **Working on their own websites or blogs, designing creative content and reading online news for participation in social and civic issues are less popular:** The least popular usage of the Internet indicated by the respondents are working on their own websites/blogs (48.5%) and designing creative content (46.7%). The study indicates that 33.3% of the respondents seldom use the Internet for reading online news or for exchanges among social and civic groups.

- **Working on exchanges among social and civic groups and participation in online discussion on civic action in communities do not emerge as top concerns of young people:** A large number of respondents never work on exchanges among social and civic groups (57.1%) and never participate in online discussion on civic action in communities (63.7%). This indicates that civic and social consciousness may not be very high at this stage of their lives.

- **Respondents are not experiencing online gambling or receiving violent/harmful content:** About 84.4% do not engage in online gambling while 69.1% note that they never receive violent/harmful content.

- **Being bullied, harassed or stalked is not an issue:** About 83.4% of them never see this as an issue that they face in their everyday lives. At the same time, 81.0% never bully or harass any other Internet users.

- **Playing games that involve forms of violence; receiving information, jokes and advice that appear biased or racist and receiving promotions, advertisements and spam are some of the experiences that young people encounter in their online activities:** A significant number of respondents appear to play games that involve killing/shooting/destroying/bombing (47.2%) while 34.5% never play such games. Some respondents receive promotions, adverts and spam (27.2%) while 47.7% never receive any promotions; and 26.5% have received information, jokes and advice that appear biased or racist whereas 51.4% never receive any information that seems biased/racist. This shows that while violent games may emerge as a concern, bias or racist issues are not so significant in relation to new media experiences.

- **The respondents work on the Internet and computer-related activities, including playing media games, mostly at home:** The home emerges as the place where most media related activities take place, followed by cyber cafes. The respondents (75.6%) suggest that they prefer surfing or using search engines for finding new information or knowledge at home.

- **Most of the respondents indicate that they belong to Facebook, making it the most popular cyber community, followed by Friendster:** About 78.3% of the respondents are on Facebook and 43.3% on Friendster; whereas less respondents are on MySpace (27.8%), Tagged (13.3%), Buzz (3.5%) and Twitter (20.4%).

- **Most favourite websites suggested by respondents are related to music, games, video clip sharing/YouTube and chatting:** The top websites favoured by respondents are music websites with 74.6%, games websites with 68.3% and video clip sharing/YouTube with 60.8%, followed by chat (58.8%) and entertainment (53.5%) sites.

- **Respondents rarely refer to cyber security websites for issues on online safety and risks:** Only 24.1% have visited Microsoft security. Even fewer visited the websites of MCMC - 6%, CyberSAFE, Malaysia - 6.3% and CyberSecurity, Malaysia - 4%.

Social Shaping - Mobile Phone Uses and Experiences

- **High ownership of mobile phones among respondents:** A full 88.4% of the respondents own mobile phones.

- **A camera and Bluetooth are important features in the use of mobile phone:** The two most important features found in respondents' mobile phones are a camera function (73.6%) and Bluetooth at 76.1%. In addition, respondents also have other features in mobile phones such as 3G (41.2%), GPS (25.8%), WAP (42%), MMS (60.4%) and Wi-Fi capabilities (31%). The data indicates that the mobile phones owned by respondents come with most of the basic features found on mobile phones.

- **Mobile phone usage is linked closely to purposes of keeping in touch and making arrangements with friends, for entertainment and for recording, sharing and data storage:** Nearly 82.0% of respondents own a mobile phone to keep in touch and make arrangements with friends. This is followed by 78.3% who use mobile phones for entertainment purposes such as listening to music/radio and playing games, while almost 77% respondents use mobile phones to record, share and keep images, music, video and contact details.

- **Mobile phones are important for respondents to allow parents to know about their whereabouts:** About 75.6% of the respondents use mobile phones to allow parents to know their whereabouts at all times.

- **Respondents send and receive more than 80 SMS a week:** About 29.8% respondents receive and about 27.8% send over 80 SMS in a week.

- **Subscribing to games and caller ringtones is popular among respondents:** About 36% of the respondents subscribe to games on their mobile phones; 28.6% of the respondents subscribe to caller ringtones on their mobile phones while some respondents (28.3%) do not subscribe to anything.

- **Respondents who have access to mobile Internet use it for entertainment and social networking and for searching for information:** The most popular category of webpage that the respondents spend time on is entertainment with 44.4%, followed by social networking (33.2%) and for searching for information (23.9%).

Social Shaping - Media Gaming Uses and Experiences

- **Media games are popular among respondents:** About 80.1% of the respondents play media games. Out of this 80.1%, a high percentage of respondents (79.4%) say that they play online games. However, only 23.2% of them pay to play online games, indicating that these online games players are more likely to engage in free online games.

- **Computer games most popular among respondents:** The most popular game device among respondents is the computer with 83.7%. The mobile phone is the second important device used for playing media games. When it comes to game consoles, video game consoles (35.3%) are used more than hand-held game consoles (21.9%).

Nearly half of respondents said that they never learn about online security, risks and challenges at home as their parents hardly talk about it.

- **Popular media games include racing, adventure and fighting:** The three most popular types of games played by the respondents are racing games at 64.4%, adventure games at 62.2% and fight simulation games at 61.3%. Media games which are less attractive to respondents are: Games related to Fashion (21.7%), Board (24.7%), Jigsaw (22.8%), Life Simulation (29.8%), Design (19.5%),

Vehicle Simulation (28.3%), Word (28.8%), and Construction and management simulation (18%).

- **Playing games for educational purposes is not popular:** Nearly 87.0% of respondents do not play games for education purposes.

Social Consequences - Media Literacy and Digital Skills

- **Have basic multimedia skills:** About 79.3% respondents said that they are able to use CD-ROM and multimedia applications and 64.6% said they are able to put charts and tables in their school reports.

- **Able to send and receive email:** A high percentage of respondents (81.5%) stated that they are able to use email.

- **Able to prepare a basic spreadsheet using Microsoft Excel:** About 74.1% of the respondents knew how to collect and retrieve information and 59.4% said they are able to prepare a basic spreadsheet using MS Excel.

- **Not all can create blog posts but most are able to use social media to interact with others:** Only 55.9% of respondents said that they are able to post on blogs. However, most respondents (73.8%) are able to use social media to interact with others. More than half of the respondents said that they are able to use Skype to communicate with friends and family.

- **Have acquired file sharing abilities:** Most of the respondents (79.1%) are able to upload pictures and videos. The majority of the respondents (83.9%) are also able to download music, songs and movies.

- **Only a moderate number of the respondents say that they can evaluate the quality, relevance and accuracy of information:** About 55.5% of respondents said they are able to judge the quality, relevance and accuracy of information. However, 65.4% of respondents stated that they know the ways to interpret and present the information they get from the Internet. Apart from that, 52.9% are also able to apply and design information for own purposes and positions.

- **Not able to use spam alert:** About 52.9% of respondents said that they are not able to use spam alert. And only 57.2% of respondents indicated that they are able to block another user who behaves badly or makes them feel uncomfortable.

- **Little knowledge of online security, cyber bullying and online privacy:** More than half of the respondents (53.4%) did not know that receiving an email that asks to update information is known as a phishing scam. Only 28.8% know that phishing scams happen via email. Nearly 46.6% respondents said that they don't know if a password or an ID can be stolen using malware, while 40.1% are aware of this.

- **Lack of knowledge of information posted in terms of its permanence and the possibility of it being used for other purposes:** Nearly 51.5% of respondents reported 'false' to the following statement - that once information is posted online, it is permanent and cannot be recalled from cyberspace. Another 31.6% of respondents indicated that they 'don't know' about this feature. Only a small number of respondents (16.9%) said it is 'true' that once information is posted online, it is permanent and cannot be recalled from cyberspace.

- **Little knowledge of the role of the MCMC.** Most of the respondents (63.1%) said that they do not know that complaints on Communication and Multimedia issues can be sent to MCMC.

Social Consequences - Security and Privacy Issues

- **Never or rarely change their passwords regularly:** Most of the respondents said that they never (32.9%) or rarely (39.3%) change their passwords regularly. The number of respondents who change their passwords regularly is extremely low at only 3.3%.

- **Always or often protect their computer with firewalls:** Almost 37.2% of the respondents always protect their computer with firewalls, and 12% often do so. Interestingly, nearly 29.3% of respondents never protect their computer. The data indicates that a large number of the respondents know firewalls are needed to protect their computers.

- **Go offline when not using Internet:** Most of the respondents (38.3%) disconnect from the Internet when they are not accessing it. However, the percentage of respondents who do not disconnect from the Internet when not in use is also moderately high at 30.1%.

- **Respondents tend to post party pictures in Facebook and other social media sites:** About

20.8% said they do this sometimes, 7.4% said they do it often and 17.8% always post party pictures on Facebook and other social media sites.

- **Keeping home and phone details private:** It appears that most of the respondents (66.8%) said that they will never put their home address and phone number in their personal websites. Only a small number of respondents claimed that they will disclose their contact details on Facebook and other social media sites.

- **Many respondents are cautious when it comes to meeting online contacts:** About 64.8% of the respondents stated that they will not meet online contacts whom they don't know in real life, but have become cyber friends with.

- **Most respondents have not been victims of online scams:** A majority of respondents (81.4%) said they never have been the victim of an online scam and 10.5% rarely face the potential problem of online scams. 4.8% have been the victims of online scams 'sometimes' and another 1.2% said that it happens 'often'. A further 2.1% of the respondents say that they have 'always' been the victim of online scams.

- **Respondents often encounter sexual images online:** About 34.2% never close pages with sexual content that they encounter online. 9.8% of the respondents said that they rarely close pages of that nature, while 8.5% of the respondents stated that they do close the pages sometimes.

- **Most avoid websites that contain horror and porn:** Most of the respondents (75.9%) said that they never or seldom (11.5%) visit websites that contain elements of horror and porn.

- **Reporting online threats and bullying to parents or teachers:** Slightly more than half of the respondents (57.3%) said they will never report threatening online content or behaviour to their parents or teachers and a similar percentage (54.8%) will not make a report when they receive hateful content online or when someone threatens them in a chat room.

- **Guidance by parents on online risks and harmful content:** About 45.2% of the respondents said that they never learn about online security, risks and challenges at home as their parents hardly talk about it, while 45.9% of respondents hardly talk about media violence with parents. Only 17.8% of respondents always discuss online security, risks and challenges at home with their parents.

- **Parental control of children's use of Internet and mobile phones:** Most parents of respondents (49.0%) never control the use of their children's mobile phones and 36.5% of the respondents say that their parents never give them rules and conditions for using the Internet. The study shows that the percentage of parents who often control the use of their children's mobile phone usage is low (7.4%).

- **Most do not add parents to their social networking sites:** About 57.3% respondents never invited their parents to join their social networking sites. Only 8.1% parents are always invited by the respondents to join them in their social networking sites.

- **Young people do not play media games with their parents:** According to 72.8% of the respondents, they never play media games with their parents. Only 2.3% of the respondents spent time playing media games with their parents. 2.9% say 'often' and 9.8% say 'sometimes'. The percentage of respondents who claimed that they rarely spend time playing media games with their parents is about 12.2%.

- **Teachers do not always talk about online security, risks and challenges and media violence at school:** According to most respondents (55%), teachers never talk to them about media risks and violence in their class. Only 4.8% get the chance to learn about online security, risks and challenges in school, as their teachers always talk about it and around the same percentage (4.4%) claim that their teachers always talk to them about media violence in their classroom.

Social Consequences - Addiction to New Media

- **Facebook deprivation:** About 27.9% of the respondents are not sure, 18.9% of the respondents agree and 14.2% strongly agree that they would feel like a 'freak' if they cannot Facebook or log on to other social media.

- **Mobile phone essential in their lives:** Nearly 24.9% of the respondents are not sure, 20.9% of them agree and 18.3% of respondents strongly agree that they would find it difficult to do everyday activities without a mobile phone.

- **New media does not affect quality time with the family:** Most of the respondents (30.7%) are

not sure, 21.8% of respondents strongly disagree and 20.3% also disagreed that the presence of the Internet and media games affects quality time with their family.

- **Most not addicted to online gambling:** The majority of the respondents (68.7%) said that they strongly disagree, 10.1% disagree and 17.2% of the respondents are not sure whether they are addicted to online gambling.

Key Findings in Focus Group Discussions with Young People

The qualitative data shows that nearly all the respondents between the ages of 14 and 16 are using the Internet and the mobile phone. Both the Internet and mobile phones are deemed important, especially for learning, communication, entertainment and play purposes.

Young people are very excited and eager to connect with new media technologies today. The respondents find it very important to have both the Internet and mobile phone in their everyday lives.

Social Uses of New Media

Young people are very excited and eager to connect with new media technologies today. The respondents find it very important to have both the Internet and mobile phone in their everyday lives. These new media tools assist them with their schoolwork, especially in retrieving information and new knowledge.

These tools are also helpful to maintain safe contact with their parents and to connect with friends to discuss everyday routines and matters. Quite a proportion of them play electronic media games for fun, leisure and to relieve stress. The main uses

of new media are in the areas of communication, education, entertainment and play, which are seen as integral parts of life today.

Learning

The respondents stated that new media tools are helpful for doing school work and socialising. The respondents engage with the Internet when they want to look for information to help them finish their schoolwork. The Internet, according to them, provides them with a lot of information which they can use for schoolwork or for increasing their general knowledge; searching for information is a lot easier on the Internet than in more traditional sources like books.

Communication

Social networking and downloading material from the Internet is done extensively. Respondents also use Internet social platforms to connect with their friends from school, relatives or new acquaintances. Facebook is the most popular among them, used to chat with their friends and express themselves. The mobile phone is used largely for texting messages and images, sometimes to flirt and to gossip.

Entertainment and Play

Downloading music and videos are very popular among young people. Internet games add to the popularity of its usage. Apart from filling up free time, electronic media games are also cited as stress relievers.

Safety Issues

Most of the young people access the Internet more frequently at home than in school or cyber cafes; it is within the home that the respondents conduct most of their activity with new media. The home is also the place where many young people feel free to learn about the Internet.

Privacy, Bullying and Harassment

The study reveals that there is much uncertainty in the ways young people view privacy and moral perspectives. Many respondents put pictures of themselves and of other people on a blog, social networking site or a personal page without the permission of the relevant persons.

In the interviews, it appears that young people do not see posting pictures of themselves in different contexts and poses as problematic. The dangers of bullying and harassment through voice, text and image messages are prevalent in the lives of young people, but many respondents do not see this as a serious problem.

Interestingly, the perception of risk is not really deep among the young people of the study; in fact many appear unsure or confused.

Addiction to New Media

While the Internet, mobile phones and games are popular among respondents, they do not come without their own set of problems. Most of the respondents interviewed express concern with the addictive nature of the Internet, especially games. The addiction is seen as parallel to drug addiction, which could affect their studies. While parents tend to impose reasonable control on their children's new media activities, they usually do that by monitoring the number of hours their children spend on the Internet, social networking sites and playing electronic games. According to the respondents, many parents do not know the types of content and materials that young people work with or the type of games they play. Parents also don't know the personalities of the online game players and acquaintances that come into contact with their children. Clearly, the young people noted that a new media gap looms between them and their parents.

Unwanted Sexual Comments and Pornography

A number of respondents are also uncomfortable with the Internet, especially when pornographic materials pop up unexpectedly on the screen. Spam materials and virus transmission over the Internet are among those aspects of new media that really annoy the respondents.

The respondents further added that phone calls from strangers and unwanted sexual comments are equally disturbing. Some said they allowed the older siblings or parents to handle such calls while others will play along and don't see this as dangerous.

New Media Literacy

Young people of Malaysia felt moderately competent to face the opportunities and challenges offered by the new media. Yet the study also notes that they are not too aware of the opportunities for meaningful participation or mindful of the potential dangers and risks present in the new media world. While they do not approach new media cautiously, many of them have not confronted any untoward or unpleasant incidents that are criminal in nature. They note that the Internet is a powerful tool that allows them to learn things quickly and easily.

They also acknowledged that they use new media more at home than at school and that there is a big gap between learning in school and real-life learning. The respondents felt that the school should teach them more about new media, such as creative work, so that they can participate more productively in matters relevant to them. The respondents felt they need a lot more digital and new media literacy skills and user-friendly platforms. The study also found that respondents believe many things they see on the Internet and there is a lack of critical thinking and critical judgement when working with new media.

Summary of Policy Recommendations

The report emphasises that we cannot expect regulation to do everything and that the reality of new technologies is such that a partnership approach among all stakeholders is not only welcomed, but necessary. Clearly a revitalised agenda on new media literacy that enables young people to create their own media and that encourages the development of critical inquiry and skills is crucial to help them understand the consequences of their online actions.

Recommendations in relation to parents

Organise talks, discussion and training sessions for parents and young people through residential associations, parent associations and community groups. Raise the awareness of parents of new media practices and encourage parents to share online activities with their children.

Recommendations in relation to schools and teachers

Media literacy programmes must be developed to engage teachers and students in a more extensive

and productive ways. It is recommended that an educator's/teacher's guide and online resources about new media usage, with specific attention to its potential risks and challenges, are cultivated. These sites and portals should present related activities for media literacy in fun, engaging and critical ways for different levels of youth groups. Focus must also be given to issues on new media laws, rights, responsibilities and ethics.

The focus on safety, risks and ethics will have to form a core component of a broad programme that will enable young people of Malaysia to engage productively in creative expression, critical judgment and civic participation in the new media environment.

Recommendations in relation to Internet providers, media/creative industries and commissions

Develop collaborations and networking among media/creative industries, media commissions, NGOs, ministries and schools to develop media literacy projects, talks and activities. Encourage industries and educational interest groups to converge commercial interests with pedagogical and educational interests.

Work towards connected partnerships between industries and institutions of higher learning to develop collaborative programmes that will improve levels of Internet literacy and critical media literacy skills. Continue efforts to raise awareness of online safety and threats as well as risky behaviours that may harm young people.

Recommendations in relation to politicians

Young people's new media usage, especially when it comes to the aspects of threats and risks, is highly complex. It is vital not to focus only on negative aspects and neglect the positive features of new media and online experience. It is important that the research and action agenda be seen in a more holistic manner rather than be led by the agenda of negative aspects that may lead to moral and media panic.

It is suggested that political leaders support the promotion of better Internet access in public places. Political leaders ought to develop policies that promote media literacy programmes at different levels in schools, residential areas, libraries and community centres. The programmes should encompass creative, critical, ethical and educational aspects.

Recommendations in relation to future research in new media

Develop more collaborative partnerships between content and creative industries with institutions of higher learning to examine new media practices of different age groups. Promote research into media literacy and digital cultures in rural and urban areas. Engage more organisations to research networking and action plans to enhance understanding of new media practices.

Conclusion

The findings of this study revealed that young people in urban areas were exposed to various types of media and engage in a diverse range of activities in their everyday lives. Media tools that can be found in most of the respondents' homes are televisions, mobile phones and computers/laptops.

Most of the respondents first started using new media games, mobile phones and the Internet at the age of 11 to 13 years. Very frequently, Internet usage, gaming and mobile phone usage take place at home, where young people engaged in a number of activities through self-learning.

Internet usage among young people is closely related to interests in education, social networking, self-expression and creative work. Frequent usage of Internet are for watching videos, using search engines for finding new knowledge and information as well as

downloading or uploading music or videos. Most of the respondents indicated that they belong to Facebook, making it the most popular cyber community, followed by Friendster. Most favourite websites suggested by respondents are related to music, games, video clips/ YouTube and chatting. Respondents rarely refer to cyber security websites for issues on online safety and risks.

There is a high incidence of ownership of mobile phones among respondents. Mobile phone usage is linked closely to purposes of keeping in touch and making arrangements with friends; for entertainment such as listening to music/ radio and playing games and for recording, sharing and keeping images, music, video and contact details.

Media games are very popular among respondents and these include games centred on racing, adventure and fighting. Playing games is mostly for fun. Most of the respondents have not been victims of an online scam but do often encounter sexual images online. Even when they do, it is highly unlikely that they will report these matters to parents or teachers.

The study here calls attention to policy making that promotes media literacy in the Malaysian context. Much public debate on young people and media revolves around the negative consequences of media consumption and it is here that the agenda on media literacy is imperative, to ensure that media encounters are integrated into rich learning experiences.

The focus on safety, risks and ethics will have to form a core component of a broad programme that will enable young people in Malaysia to engage productively in creative expression, critical judgment and civic participation in a new media environment.

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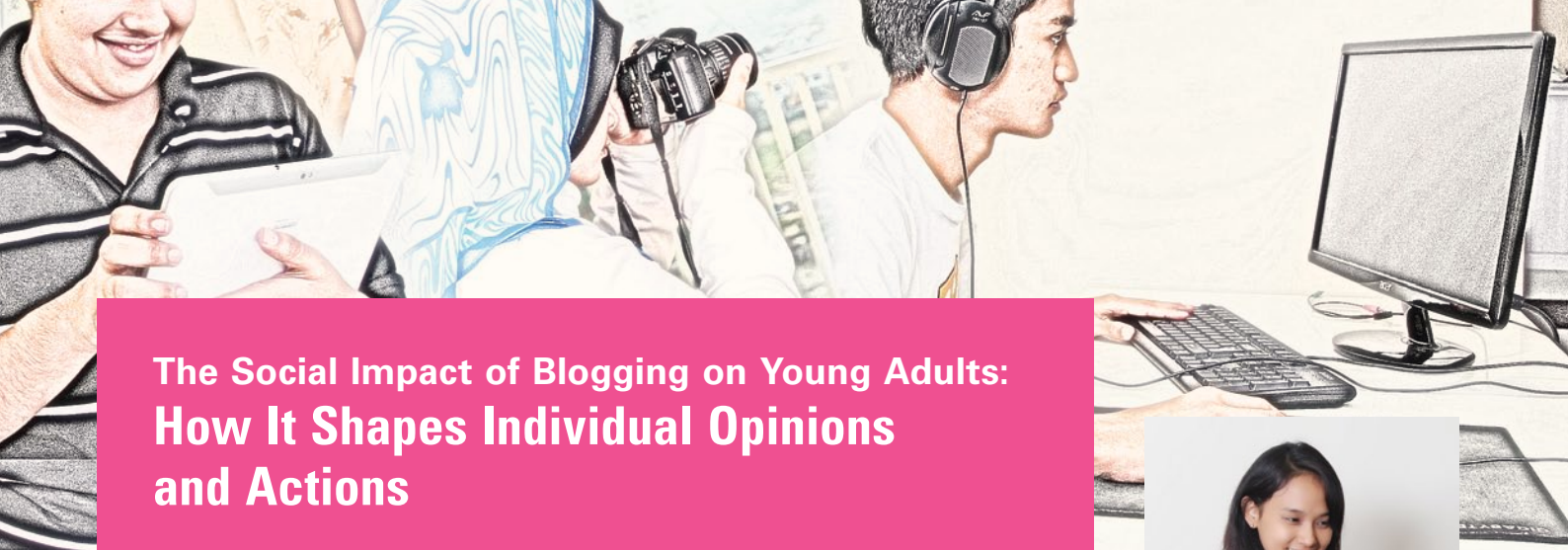
The Social Impact of Blogging on Young Adults:
How It Shapes Individual Opinions and Actions

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Abstract

Blogging not only has emerged as a formidable phenomenon that not only draws a massive daily following but also shifts the paradigm of human communication and interactions. Such a shift has implications which can affect bloggers' opinions and actions. This project intends to understand these implications by studying how blogging affects the opinions and actions of young adult bloggers in Malaysia, specifically the link to the perceived credibility of blogposts and the reputation of information sources.

Survey data was collected from 576 students, aged between 17 and 25, in five premier public universities in Malaysia, all of whom own personal blogs. The results revealed that bloggers' perceived credibility of blog information and the reputation of blog sources impact on bloggers' opinions and actions. Bloggers tend to use blogs as a main source of information, follow suggestions found on blogs, and adjust viewpoints to fit the information gathered from blogs if they have confidence in the credibility of the blog posts.

The results also indicated that these bloggers have strong intentions to continue blogging in the future and this is determined by bloggers' attitudes towards blogging and subjective norms. Bloggers' attitudes towards blogging are in turn affected by the perceived ease of use of blogging tools and perceived usefulness of blogging itself.

Introduction

The advent of the Internet has created new avenues for communication and social exchanges. One prominent avenue is blogging. A blog is "a website that contains an online personal journal with reflections, comments, and often hyperlinks" (Merriam-Webster dictionary).

The number of blogs in existence has grown exponentially over the years. In 1998, the number of blogs was a mere 23 (technorati.com). By June 2008, the number had leaped to 113 million sites (technorati.com). Over 175,000 new blogs are being created every day, with blog posts being added at a rate of 18 per second (technorati.com). This adds up to over 1.6 million posts per day (technorati.com).

Consulting company Nielsen (2011), in its recent study of the state of social media, reported that nearly four in five active Internet users visit social networks and blogs and their visits account for nearly a quarter of the total time spent on the Internet. All these statistics point to the fact that blogging is indeed becoming one of the most popular social networking tools.

Blogs enable effortless sharing and publishing of ideas, opinions, and thoughts. Everyone can assume the role of writers as well as that of listeners, freely expressing, communicating, sharing, collaborating, debating, analyzing and reflecting ideas, opinions, emotions and thoughts online. The particular style of writing and publishing in blogs has also created a new form of communication genre that is shifting the paradigm of human communication and interactions (Schmidt 2007, Silva et al 2008).

Blogs are different from other communication media such as web pages or chat rooms. The communication genre of blogs is asynchronous and asymmetrical (Herring et al 2005, Silva et al 2008). It is asynchronous because communications do not occur in real time, as with instant messaging and in chat rooms. It is asymmetrical because communications do not occur in dyads, as in instant messaging, but among two or more individuals. This new communication genre is bound to have an impact on bloggers.

According to Reader Response Theory (Davis and Womack, 2002, Lewis, 1992), readers are not passive recipients of a content; rather they engage in an active process of interpretation as they read texts. When bloggers read blog posts and when they perform blogging activities such as commenting, linking, tagging, and trackbacks, a level of interaction with both the texts and the authors of the blogs take place (Baumer et al., 2008). With blogs gaining popularity in their role as channels to disseminate ideas and garner feedback (Kavanaugh et al., 1996), there is a need to understand the impact of these interactions on bloggers.

When readers trust a medium, they tend to rely on that medium as a main source of information.

A review of the literature shows that a considerable body of research has been conducted on the usage of blogs (Hsu and Lin, 2008, Lenhart and Fox, 2006, Schmidt, 2007, Herring et al., 2005, Fullwood et al., 2009), motivations (Lenhart and Fox, 2006, Schmidt, 2007, Herring et al., 2005), formation of blog communities (Silva et al., 2009), blog credibility (Johnson et al., 2008), and blog influence (Agarwal, 2008, Miura and Yamashita, 2007).

However, few have focused on the impact of blogging on individual opinions and actions. This project intends to address this gap by studying how blogging affects the opinions and actions of Malaysian

bloggers. Closely linked to this goal are three other questions that will also be answered in this project: (1) 'factors that influence bloggers' reliance on blogs', (2) 'impacts of source reputation on the opinions and actions of bloggers', and (3) 'factors that lead to bloggers' intention to blog in the future'.

The project will focus its attention on young adults. Previous research pointed out that young adults are more likely than other age groups to have blogs (Huffaker and Calvert, 2005).

Literature Review

Reputation and Blogging

The reputation of sources influences the effect new information has on attitude and behaviour change (Hovland and Weiss, 1951). These sources are persuasive in swaying public opinions. In an experiment to test the role of opinion leaders as agent of change, Lam and Schaubroeck (2000) found that opinion leaders can effectively promote positive attitudes toward a service-quality initiative and increase service quality effectiveness Kavanaugh et al. (2006). Influential impact of reputable sources often takes place informally through word of mouth (Keller and Berry, 2003) and through online media such as emails and listservs (Kavanaugh et al., 2006). In the case of blogging, the effect takes place via texts written on blog posts. Since reputable sources can instil a certain level of effect on the followers, it is hypothesised that:

H1:	The better a blogger perceives the reputation of a source to be, the more likely he or she is to rely on blogs as a main source of information.

H2:	The better a blogger perceives the reputation of a source to be, the more likely he or she is to adjust his or her viewpoints to fit the information gathered from blogs.

H3:	The better a blogger perceives the reputation of a source to be, the more likely he or she is to follow the suggestions posted on blogs.

Credibility and Blogging

The credibility of a medium is dependent on the perceptions of receivers (Metzger et al., 2003, Berlo et al., 1969). When they do not perceive a medium as credible, they are less likely to pay attention to that

particular medium (Johnson and Kaye, 2004). In the case of blogging, research found that even though readers understand that bloggers are opinionated, they still trust information posted on blogs (Banning and Trammell, 2006, August, Johnson and Kaye, 2004).

Similarly, Johnson and Kaye (2004), in surveying blog users, found that three-quarters of respondents deemed blogs to be moderately to very credible. In fact, politically-interested Internet users judged blogs as more credible than either portal or mainstream news sites (Kim, 2006, Johnson and Kaye, 2007, August). When readers trust a medium, they tend to rely on that medium as a main source of information. Thus, it is hypothesised that:

H4: The higher a blogger perceives the credibility of blog post information to be, the more likely he or she is to rely on blogs as a main source of information.

H5: The higher a blogger perceives the credibility of blog post information to be, the more likely he or she is to follow the suggestions posted on blogs.

Attitudes and Intentions for Future Blogging

An attitude reflects a person's overall evaluation of performing a behaviour. It reflects "the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question" (Ajzen, 1991). When bloggers blog, they will form an overall evaluative appraisal of the act of blogging. A positive attitude is formed when the benefits outweigh the risks, while a negative attitude results when the perceived risks dominate. Bloggers with a favourable attitude toward blogging will likely continue to blog in the future. Two potential benefits that might influence attitude are perceived ease of usage and perceived usefulness of the technology (Davis, 1989). Perceived ease of usage is the degree to which a blogger believes that using a blog is free of effort while perceived usefulness is the degree to which a blogger believes using blogs enhances his/ her performance (Hsu and Lin, 2008). Previous studies have shown that perceived ease of usage and perceived usefulness have significant effects on attitude. Accordingly, it is hypothesised that:

H6: The more positive the perceived ease of usage of blogging tools, the better the attitude a blogger has towards blogging.

H7: The more positive the perceived usefulness of blogging, the better the attitude a blogger has toward blogging.

H8: The more positive the attitude a blogger has towards blogging, the more likely that he/ she will continue to blog in the future.

Subjective Norm and Future Blogging Intention

Subjective norms refers to "the perceived social pressure to perform or not perform the behaviour" (Ajzen, 1991). It reflects bloggers' perceptions of whether the act of blogging is accepted and encouraged by important referent targets such as family members, friends, and lecturers. Empirical work has shown that subjective norm influences one's intention to blog (Hsu and Lin, 2008). Hence:

H9: The stronger the level of subjective norms supportive of blogging, the more likely that a blogger will continue to blog in the future.

Methodology

Survey Instruments

Impact of blogging

The impact of blogging was measured using three questions that focus on 'using blogs as the main source of information', 'changing viewpoints to fit information on blogs' and 'following suggestions on blogs'. A seven-point Likert scale, with '1' being 'Strongly Disagree' and '7' being 'Strongly Agree', was used.

Credibility of information posted on blogs

Following past studies (Johnson et al., 2008, Johnson and Kaye, 2004, Gaziano and McGrath, 1986, Meyer, 1988, Newhagen and Nass, 1989), the credibility of information posted on blogs was measured as a multi-dimensional construct consisting of four dimensions (believable, fair, accurate and in-depth information). These four measures were combined into a credibility index. The alpha reliability for the four-item scale was 0.70.

Reputation of sources

Reputation of sources was measured using three items on a seven-point Likert scale. The alpha reliability for the construct was 0.85.

Intention to continue blogging

Based on the Theory of Reasoned Action (Fishbein and Ajzen, 1975), the intention to continue blogging is measured with three items on a seven-point Likert scale ranging from 'Strongly Disagree' to 'Strongly Agree'. Cronbach's alpha for this construct is 0.958.

Attitude towards blogging

Previous studies based on (Fishbein and Ajzen, 1975) were used to guide the selection of items to measure one's attitude toward blogging. Specifically, four items measured on a seven-point semantic differential scale were used. Cronbach's alpha for this construct is 0.883.

Subjective norm

Previous studies based on (Fishbein and Ajzen, 1975) were used to guide the selection of items to measure one's subjective norm. Two items with a Cronbach's alpha of 0.827 were used.

Perceived ease of use

Previous studies based on the Technology Acceptance Model (Davis, 1989) were used to guide the selection of items to measure perceived ease of use. Three items with a Cronbach's alpha of 0.835 were used.

Perceived usefulness

Previous studies based on Technology Acceptance Model (Davis, 1989) were used to guide the selection of items to measure perceived usefulness. Three items with a Cronbach's alpha of 0.842 were used.

Survey Administration

The target population for this study was university students who (1) are aged between 17 and 25, and (2)

own and maintain a personal blog page. A total of 576 usable data was collected from students in five public universities in Peninsular Malaysia, namely: University of Malaya (UM), Universiti Kebangsaan Malaysia (UKM), Universiti Putra Malaysia (UPM), Universiti Teknologi Malaysia (UTM) and Universiti Sains Malaysia (USM). These universities were selected as they are premier public universities in Malaysia, where the students will have good exposure to technology and awareness of the blogging phenomenon.

Temporary assistants were hired to assist in the data collection process. These assistants were placed in different common areas in each university such as the library, the entrance gate and the canteen. They approached students who were passing by, conveyed the objective of the project, ensured students met the requirements of targeted participants, and solicited students' willingness to participate in the study.

Results

Descriptive Information

The average age of respondents was 21.68. A large majority of the respondents (78%) were females. The Chinese ethnic group make up 50.17% of the respondents, the Malay ethnic group, 44.10%, the Indian ethnic group constitute 2.43% and while other ethnic groups, 3.30%. Close to 70% of respondents had between six months to three years of blogging experience (Figure 1). Considering the average age of 21.68 among the respondents, it implies that most of them were introduced to the activity of blogging when they entered universities. Only about 11% had exposure to blogging in their high school days.
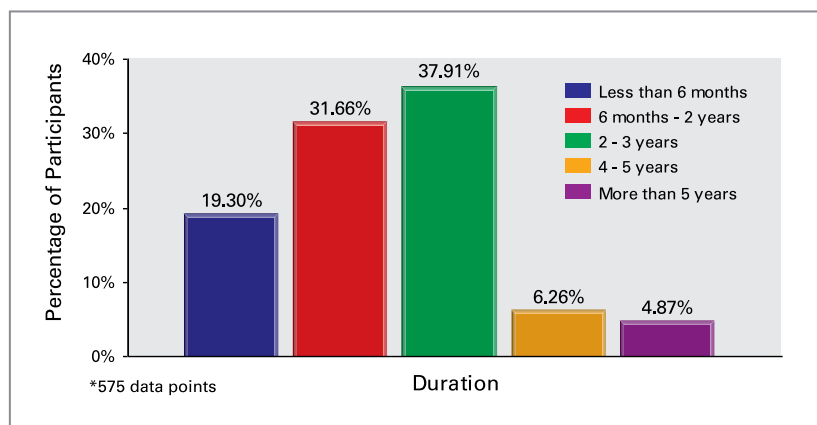
Figure 1: Length of Blogging Experience

(a) Number of Times Per Week Spent on Updating Personal Blogs

*574 data points

(b) Number of Hours Spent Each Time Respondents Updating Their Personal Blogs
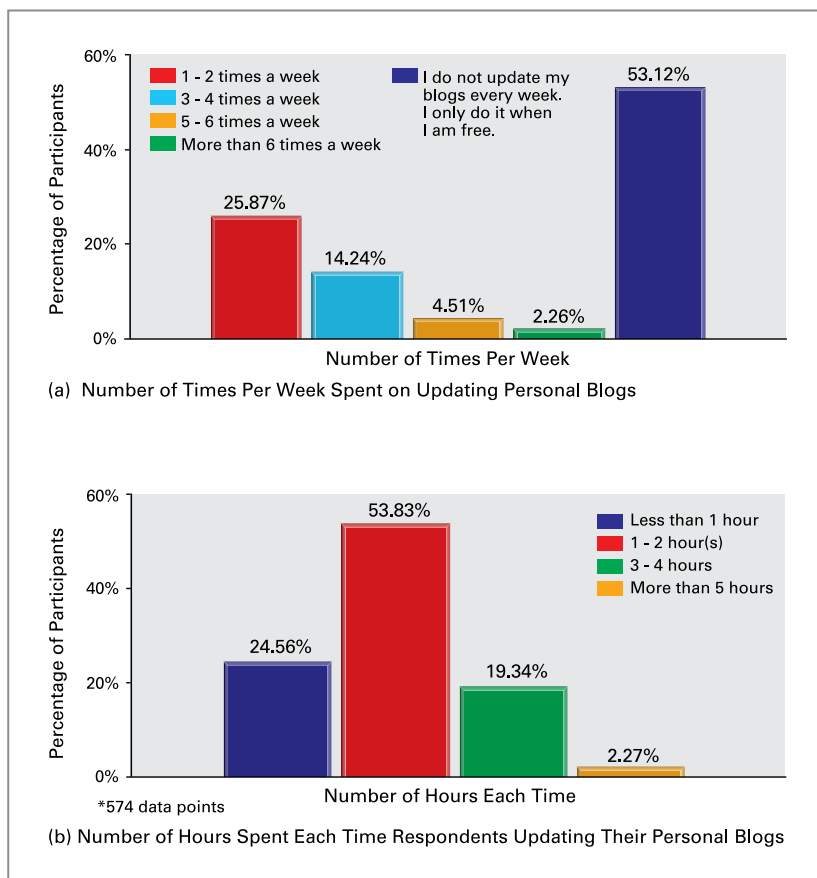
Figure 2: Amount of Time Spent on Updating Personal Blogs

(a) Number of Times Per Week Respondents Visit Others' Blogs

(b) Number of Hours Spent Each Time Respondents Visit Others' Blogs
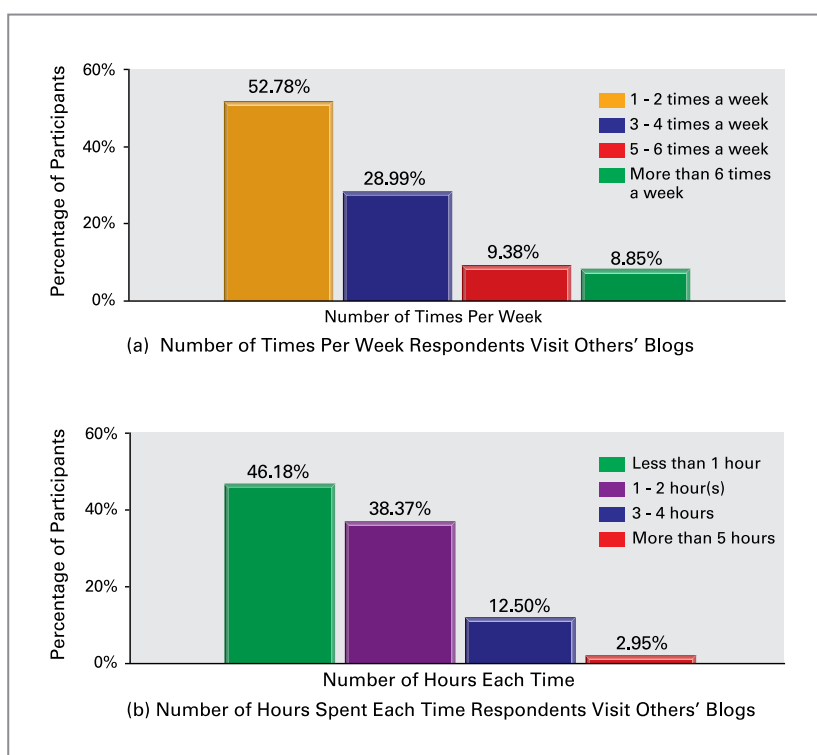
Figure 3: Amount of Time Spent on Visiting Others' Blogs

When it comes to the weekly updates of personal blogs, the respondents were equally divided into two groups – those who update every week and those who update only when they are free (Figure 2a). Irrespective of frequencies of updates, the respondents tend to spend between one to two hours on the activity every time they update their blogs (Figure 2b).

The respondents spent large amounts of time visiting other blogs. More than half of them browse through other blogs between once and twice a week (Figure 3a). About 85% of them spent up to two hours each time they visit other blog sites (Figure 3b).

Close to 95% of the respondents visit at least one blog every week (see Figure 4).

When it comes to reading and commenting on others' blogs, the respondents tend to focus on blogs that are owned by their friends and relatives (Figure 5). They are not active in community blogs. This implies that respondents treat blogs as more of a personal thing.

Respondents tend to focus on topics that are related to their personal life, general lifestyle, entertainment, and travelling (Figure 6). Only very few respondents pay attention to political-type blogs.

The majority of the respondents treat blogs as an electronic diary to document their life (i.e., an alternative to traditional diary writing using hard copy journals) (Figure 7). They also treat blogging as an avenue to release stress and as a way to learn about others' viewpoints. Blogs are also being used as a social networking tool; about 38% of the respondents stay connected with friends via blogs.
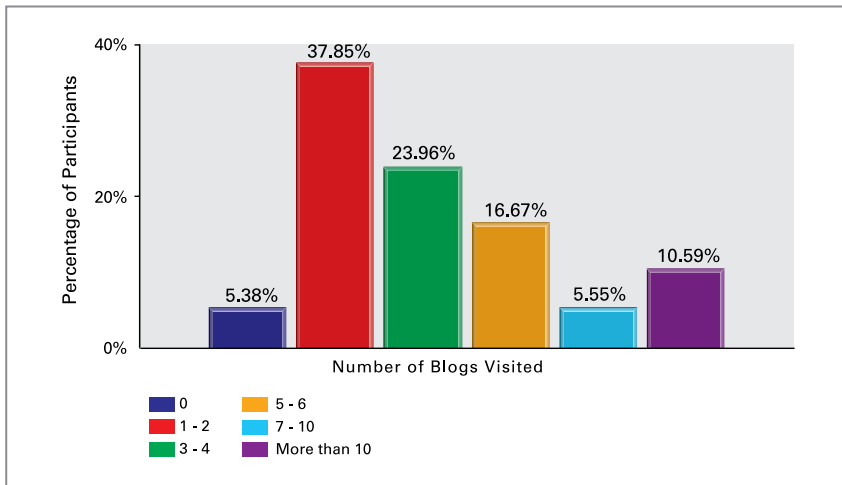
Figure 4: Number of Blogs Visited Each Week
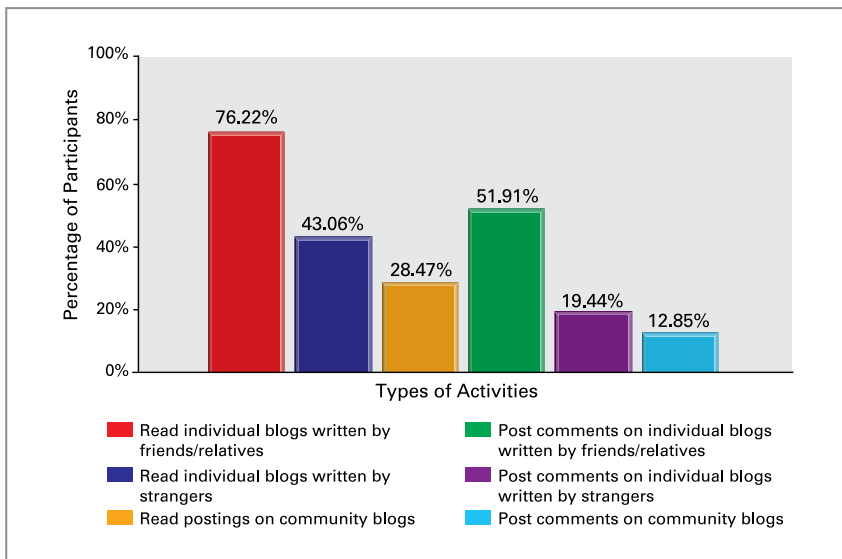
Figure 5: Types of Blogging Activities
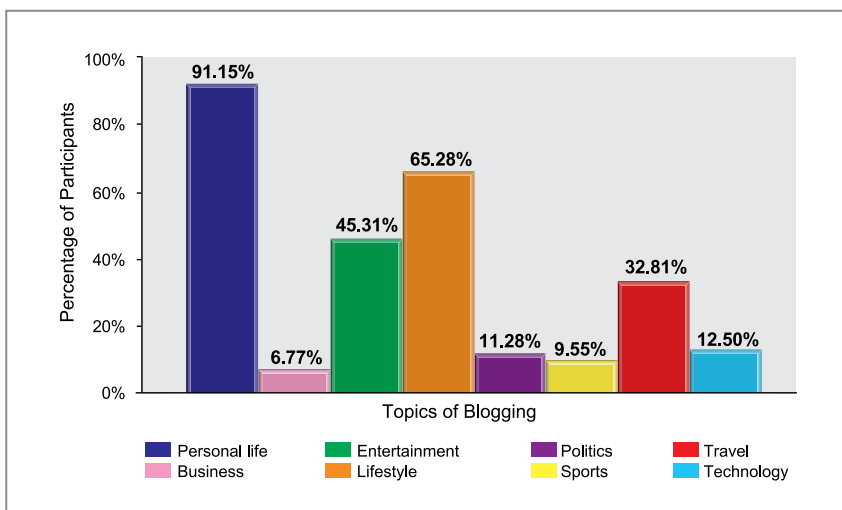
Figure 6: Blog Topic

Hypotheses and Model Testing

The results also show that the reputation of the source and bloggers' perception of the credibility of the information explain 42.7% (p<0.001) of the variance in bloggers' reliance on blogs as a main source of information.

Perceived credibility has slightly higher weightage compared to the reputation of the source. This means that when respondents perceive the information posted on blogs as accurate, believable, fair and in-depth, they tend to use this information as their main information source.

...bloggers trust their peers.

When it comes to sources of information, respondents tend to perceive the information that is posted by friends/ relatives (mean = 5.41) and authoritative organisations such as universities or hospitals (mean = 5.15) as more credible. However, they show slight mistrust towards the credibility of information posted by politicians (mean = 3.98).

The reputation of the source and bloggers' perception of the credibility of the information also explain 40.1% (p<0.001) of the variance in bloggers' action of adjusting viewpoints to fit the information gathered from blogs, and 32.1% (p<0.001) of bloggers' likelihood of following the suggestions posted on blogs.

Here, however, the reputation of the source has slightly higher weightage compared to perceived credibility. The implication is that respondents focus more on the reputation of the source when it comes to acting on something, but when it is just information gathering, it is the perceived credibility of blog post information that dominates.

Respondents tend to stay on neutral ground when their following of the suggestions requires only online responses (e.g., supporting an activity online, emailing product promotions to friends (Figure 9). When following the suggestions requires actions beyond the online realm, respondents show some levels of reluctance to comply with these suggestions (e.g., casting votes on an election day, join an offline gathering). However, there is one exception to their willingness in following the suggestions - when the offline activity is organised by individuals the respondents know personally, respondents have a higher tendency to join the activity.

Respondents' attitude towards blogging are influenced by their perceived ease of usage of blogging tools and their perceived usefulness of blogging. They see blogging as useful in helping them to improve the effectiveness

Figure 7: Goals of Blogging
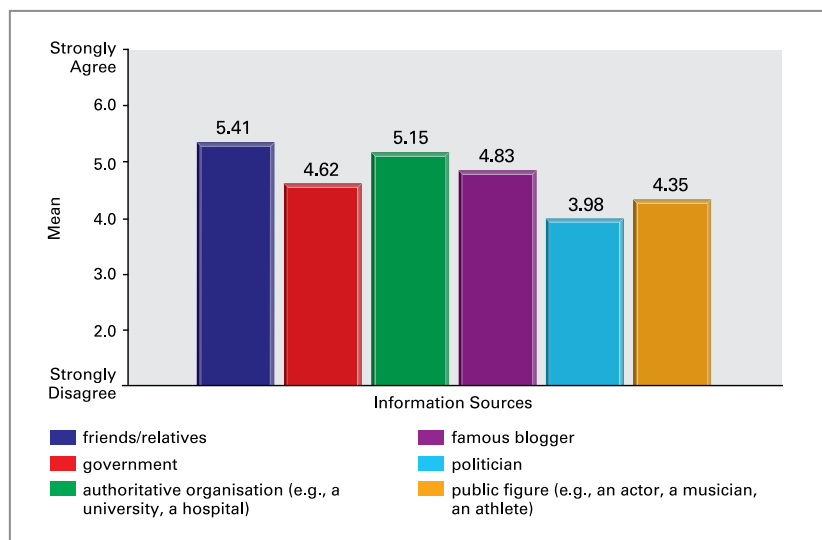
Figure 8: Credibility of Information Sources
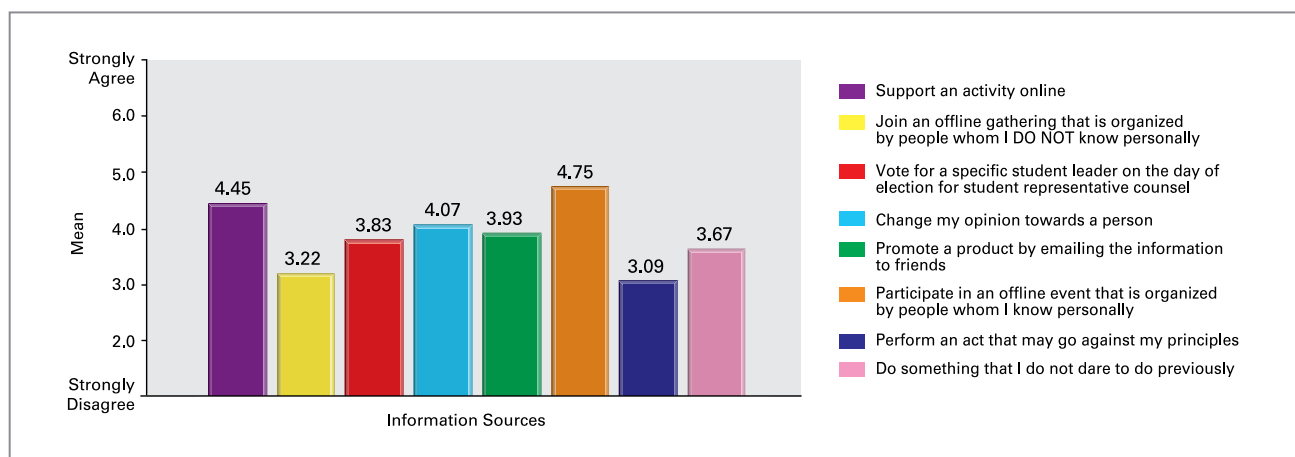
Figure 9: Potential Actions Taken as a Result of Readings Suggestions on Blogs

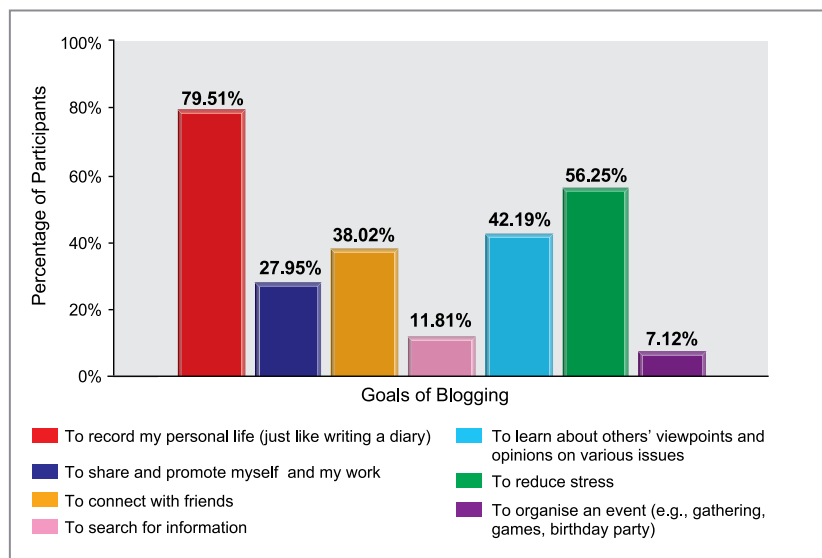| Hypotheses	Result	
H1	Supported (r = 0.326, df = 574, p<0.001).	There is a significant relationship between the reputation of blog source and bloggers' reliance on blogs as the main source of information.
H2	Supported (r = 0.348, df = 574, p<0.001).	The better a blogger perceives the reputation of a source to be, the more likely he/she is to adjust his/her viewpoints to fit the information gathered from blogs.
H3	Supported (r = 0.284, df = 574, p<0.001).	The better a blogger perceives the reputation of a source to be, the more likely he/she is to follow the suggestions posted on blogs.
H4	Supported (r = 0.334, df = 574, p<0.001).	There is a significant relationship between the perceived credibility of information posted on blogs and bloggers' reliance on blogs as the main source of information.
H5	Supported (r = 0.348, df = 574, p<0.001)	The higher a blogger perceives the credibility of blog post information to be, the more likely he/she is to follow the suggestions posted on blogs.
H6	Supported (r = 0.403, df = 574, p<0.001)	There is a significant relationship between the perceived ease of use of blogging tools and the attitude toward blogging.
H7	Supported (r = 0.387, df = 574, p<0.001)	There is a significant relationship between the perceived usefulness of blogging and the attitude toward blogging.
H8	Supported (r = 0.479, df = 574, p<0.001)	There is a significant relationship between the attitude toward blogging and intentions to blog in the future.
H9	Supported (r = 0.302, df = 574, p<0.001)	There is a significant relationship between subjective norms and intentions to blog in the future.

Table 1: Results of Hypotheses Tests.

of schoolwork and increasing their chances of meeting people with similar interests ($r2 = 0.47$, p<0.001).

Respondents' intentions to blog in the future are determined by their attitude towards blogging and subjective norms ($r2 = 0.51$, p<0.001). Specifically, they find blogging to be entertaining, interesting, good and fun. They also perceive that their important referents support their involvement in blogging activities.

Recommendations

The findings from this project highlighted a few important points:

1) Respondents were comfortable with their inner circle of friends and tend to stay within this circle

when they blog. They also placed a higher level of credibility on information posted by their inner circle and are willing to adopt the opinions and suggestions provided by this group of people. This finding is useful. It points to the fact that bloggers trust their peers. Governing agencies should launch programmes that will leverage such influence effects in an effort to establish connections with new audiences. They should work with blog influencers to create credible contents for readers. Activities such as blogger outreach programmes could be organised to reach out to young adults and to bring positive messages across to them. The focus of these programmes should be on establishing long-term relationships with young adult bloggers so that a healthy, active and positive community can be formed.

(2) Once respondents establish positive perception towards the credibility of blog post information

and the reputation of information sources, they tend to rely on these sources as a main source of information and tend to follow the suggestions provided on these sites. Thus, it is important for governing agencies to use credible and reputable sources when they want to launch any programme via blogs.

(3) Respondents use blogs as an alternative to traditional diaries and they tend to write about their personal life. They also use blogs as a way to release stress. This means a lot of information about their daily activities which include their inner thoughts, their experiences, things that happen to them and some information regarding their friends is documented on blogs. Parents and teachers can use blogs as an avenue to understand children and their activities. If necessary, intervention to avoid the many social problems that can arise as a result of a lack of knowledge of children's activities can be initiated.

(4) Authoritative institutions, especially the ones that are closely related to the respondents, such as universities and hospitals, are still regarded as important and respondents place a lot of trust in them. In other words, according to the perception of the respondents, these institutions have not yet been influenced by politically-motivated elements. The implication is that we have to keep these kinds of institutions as free as possible from any form of political influence as respondents tend not to ascribe high credibility to information relayed by politically-motivated sources.

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Self-regulatory Framework and Mechanisms in the Malaysian Media Environment

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Abstract

Malaysia has a self-regulatory mechanism in place for local media practitioners. This study examines the extent to which the self-regulatory mechanism benefits the industry. A survey was carried out on two groups of media practitioners; members of the Content Forum and non-members of the Content Forum, from print and electronic media and telecommunications organisations in the Klang Valley area. There is high awareness of the Content Code among members of the Content Forum, while non-members are less familiar with it.

Content Forum members have largely implemented it in their workplaces; most non-member organisations have yet to do so. The Content Code was found to be moderately effective, mostly as a means of ensuring appropriate media content for families and children. At the same time it is not seen as encouraging innovation, flexibility or creativity. While those surveyed agree that the Content Code was useful and important, there are suggestions to make it more practical and easier to understand.

More exposure is needed in local media too, so that the public is aware of its purposes and aims. In general, it was discovered that the code could be made more comprehensive and that perhaps there should even be a different forum and code for each type of media. It should also be included in formal media education.

Introduction

The term 'self-regulation' means that the industry or profession, rather than the government, is doing the regulation (Campbell, 1999). Thus, the term would best reflect the ways media organisations perform practices by involving legislation stages by developing a code of practice, but the government may mandate that an industry adopt and enforce a code of self-regulation and even monitor or guide them to impose those regulations (Ayres & Braithwaite, 1992).

The Content Forum was established in February 2001 to govern content and address content-related issues. The Malaysian Communications and Multimedia Commission (MCMC) designated this forum on 29 March 2001. Under Section 94 of the Communications and Multimedia Act, 1998 (CMA '98), the Content Forum is made up of six 'Ordinary' member categories, namely Advertisers, Audio Text Hosting Service Providers, Broadcasters, Civic Groups, Content Creators/Distributors and Internet Access Service Providers.

The Content Forum was established with the following objectives:

1. To establish Malaysia as a major global center and hub for Communications and Multimedia Information and Content Services,

2. To promote national policy objectives,

3. To enable a balanced representation of the relevant sectors of the industry and society to ensure that the Content Code developed reflects the views of the community at large,

4. To develop, prepare and adopt a Content Code to set out guidelines which may include model procedures for classifying and dealing with indecent or offensive content disseminated by way

of networked media and from time to time amend, develop, modify, review and update the Code,

5. To provide an avenue and channel for complaints in relation to content.

6. To administer sanctions for breaches of the Content Code.

The milestone of ten years (2001-2010) of self regulation has proven the efforts of the Communication and Multimedia Content Forum of Malaysia (Content Forum) to uphold government policies.

The Content Forum is responsible for the preparation of a Content Code, or codes, as the need may arise. The Content Code demonstrates a commitment toward self-regulation; its objective is to encourage the development of the Communications and Multimedia industry, while protecting the end user. Content as defined in Section 6 of the CMA '98 is 'sound, text, still picture, moving picture, audio-visual or tactile representation, which can be created, manipulated, stored, retrieved or communicated'.

Primary objective of the Content Code is to encourage development of the communications and multimedia industry while protecting the end user.

This Content Code sets guidelines for good practice and standards of content disseminated for public consumption by service providers in the Communications and Multimedia industry in Malaysia. This comprehensive Code seeks to identify what is regarded as offensive and objectionable, while spelling out the obligations of content providers within the context of social values in this country.

For instance, Section 211 of the CMA '98 states that no content applications service provider shall provide content which is indecent, obscene, false, menacing or offensive in character with intent to annoy, abuse or harass any person. If the public finds some inappropriate or unsuitable content within the

Malaysian media environment, they can lodge a report to the Complaint Bureau under Content Forum.

This study identifies to what extent the self-regulatory mechanism for local media players benefited media practitioners in the industry and the promotion of growth of future media technologies in this country. This research paper also examines the key issues and problems faced by the Malaysian media practitioners in its attempt to proactively respond to the winds of change breezing through media convergence technology, policies and legislation.

In addition, the findings from the study shed information on the relevance and usefulness of local legislation and policies to local media practitioners and the industry, how the media and the public in turn respond and interact with the implementation of Malaysian media legislations and policies, and create a framework for the improvement of local media 'self-regulation' mechanism and practices.

Research Objectives

The study has four central objectives:

1. To determine the mechanism, concept and implementation of self-regulation by Malaysian media practitioners.

2. To identify the issues, challenges, strengths, and weaknesses of self-regulation practices in local media content.

3. To determine the effectiveness of the self-regulatory mechanism and practices in the local media regulations environment.

4. To make appropriate recommendations, solutions and strategies improvement with regards to the self regulatory mechanism and framework in terms of practices and enforcements.

Scope of the Study

This study was conducted based on the following scope and limitations:

1. The primary regulatory reference of the study will be the CMA '98.

2. The media practitioners referred to in this study are the media organisations governed by the CMA '98.

3. The focus of the study will be based on the Content Code.

Research Methods

This study utilised both qualitative and quantitative research methods. The qualitative method was used to clarify the knowledge of both members and management of the Content Forum pertaining to the Content Code. Two sets of interview protocols were developed for this purpose.

The survey technique was used under the quantitative method. A set of questionnaires were developed based on the study objectives. There were seven sections in the questionnaire.

The study was conducted in several media and telecommunication organisations around the Klang Valley area. The respondents were broken down into three categories: print media, electronic and new media and telecommunications.

For the qualitative study, a total of 12 members of the Content Forum were involved as respondents, along with two members of the Content Forum management team. For the quantitative study, a total of 138 respondents were involved in the survey.

Research findings

Qualitative Research

This section presents the results gathered from the in-depth interviews with 12 members of the Content Forum registered as media and telecommunications organisations. Two groups of respondents participated in this study: electronic and new media (9 companies) and telecommunications organisations (3 companies). Seven key themes are highlighted regarding the self-regulatory framework and the scenario in the Malaysian media industry.

Key Theme 1: The Meaning and Understanding of Self-Regulatory Framework

More than half of the members interpreted and understood that self-regulation is basically about understanding the Content Code in setting out their own policy in accordance with the organisations' requirements as well as the national agenda. The members also believed that self-regulation is about applying and implementing what is right and wrong regarding media laws and regulations as well as ethical issues.

On the other hand, some members understood self-regulation as abiding by strict guidelines and codes set by the commission or the authority.

Key Theme 2: The Mechanisms Used to Implement the Content Code

The majority of the members believed that they use suitable mechanisms to communicate messages about the Content Code to their staff through staff training (including compliance training, internal training, technical training, in-depth training and journalism training), regular briefings, Content Code distribution, seminars and workshops.

A few others affirm that the suitable mechanism is through close collaboration with MCMC and the Malaysian Censorship Board (LPF), as well as other related agencies. Only one respondent believes that the distribution of actual copies of the CMA '98 is the suitable mechanism to implement the Content Code.

Key Theme 3: Enforcement and Monitoring Mechanism of Content Code

The outcome of the findings was that two thirds of the members consider using guidelines and the Content Code itself as the appropriate enforcement and monitoring mechanism for the Content Code.

A few members think that related laws and regulations, censorship, licenses, policies, evaluations, feedback and edited content (programmes, articles or documents) are the suitable methods used to enforce and monitor the Content Code implementation. Finally, two respondents believed that an avenue for complaints is the fitting mechanism to enforce and monitor the Content Code.

Key Theme 4: Issues with and Complaints Against the Content Forum/Content Code

Based on the findings, more than half of the members have issues with or complaints against the CMCF Content Code and most of the issues or complaints are related to advertisements, religious issues and technical terms as well as inappropriate content.

However, the total number of complaints or issues is very small. One third of the members stated that they have no issues with the CMCF and Content Code.

Key Theme 5: Evaluation of Content Code

As obtained from the in-depth interview, almost all of the members have conducted evaluation of the Content Code and concluded that the Content Code is strict and quite detailed but does not comprehensively cover every aspect of each related media field.

A few of the members have not conducted any evaluation of the Content Code and therefore have no comments on the matter.

Almost all members had evaluated the Content Code and concluded that the Content Code was strict and quite detailed.

Key Theme 6: Advantages and Disadvantages of the Content Code

All the members interviewed agreed that the Content Code has its advantages; among these are that it allows more creativity, acts as a reference and as a guideline.

It is the viewpoint of respondents that the Code also has its disadvantages. The main disadvantages are that media players are not given much power or authority to act on certain things and that it limits creativity. They also feel that the Content Code needs to be more 'visible' to media players.

Key Theme 7: Suggestions on How to Improve the Content Code

There are several propositions put forward by members and respondents on improving the Content Code. Among the major suggestions are improvement of the language used in the Code. Also, repetition in the Code needs to be minimised. They also suggested that the Content Code needs to be more accessible to the industry, and there is a need for a lot of open dialogue sessions with all media players and agencies involved with the media industry.

CMCF Management Perspective

This section presents the results or findings gathered from the in-depth interviews conducted with CMCF management. The respondents are the Chairman of the Complaint Bureau, Content Forum and the Chief Executive Officer of Content Forum. Each interview was organised around six topics covering self-regulatory practices, implementation and enforcement of Content Code practices.

1. **Perspective on the relevance of the Content Code**

   Both respondents agreed on the important roles of the Content Code and the need to implement the self-regulation mechanism by using the Content Code as guidance, in accordance with the National Communication Policy. Both are in agreement on the importance of the Content Code as a means for self-regulation in accordance with the Communications and Multimedia Act 1998.

   The respondents agreed that the implementation of the Content Code practices is general in nature, in that it allows some flexibility. It means that everyone can use the Content Code as it is applicable to everybody; this makes the regulations relevant at this time. The respondents believed that the application of the self-regulation mechanism in the Content Code would aid people to better understand the importance of adopting and implementing these regulations in their life.

2. **Mechanism used to implement the Content Code**

   Complaints from the public or members of the Content Forum are handled by the Complaint Bureau. There will be an informal hearing if the Content Forum Executive Council and the Chairman of Complaint Bureau feel that the complaint is a prima facie case. The Complaint Bureau will then call upon both parties and give instructions on how to file documents etc. The other party has to reply to the statement of complaint. If possible, both parties are required to

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                                    │    CHAIRMAN      │
   STEP 2: RESPONSES                └──────────────────┘
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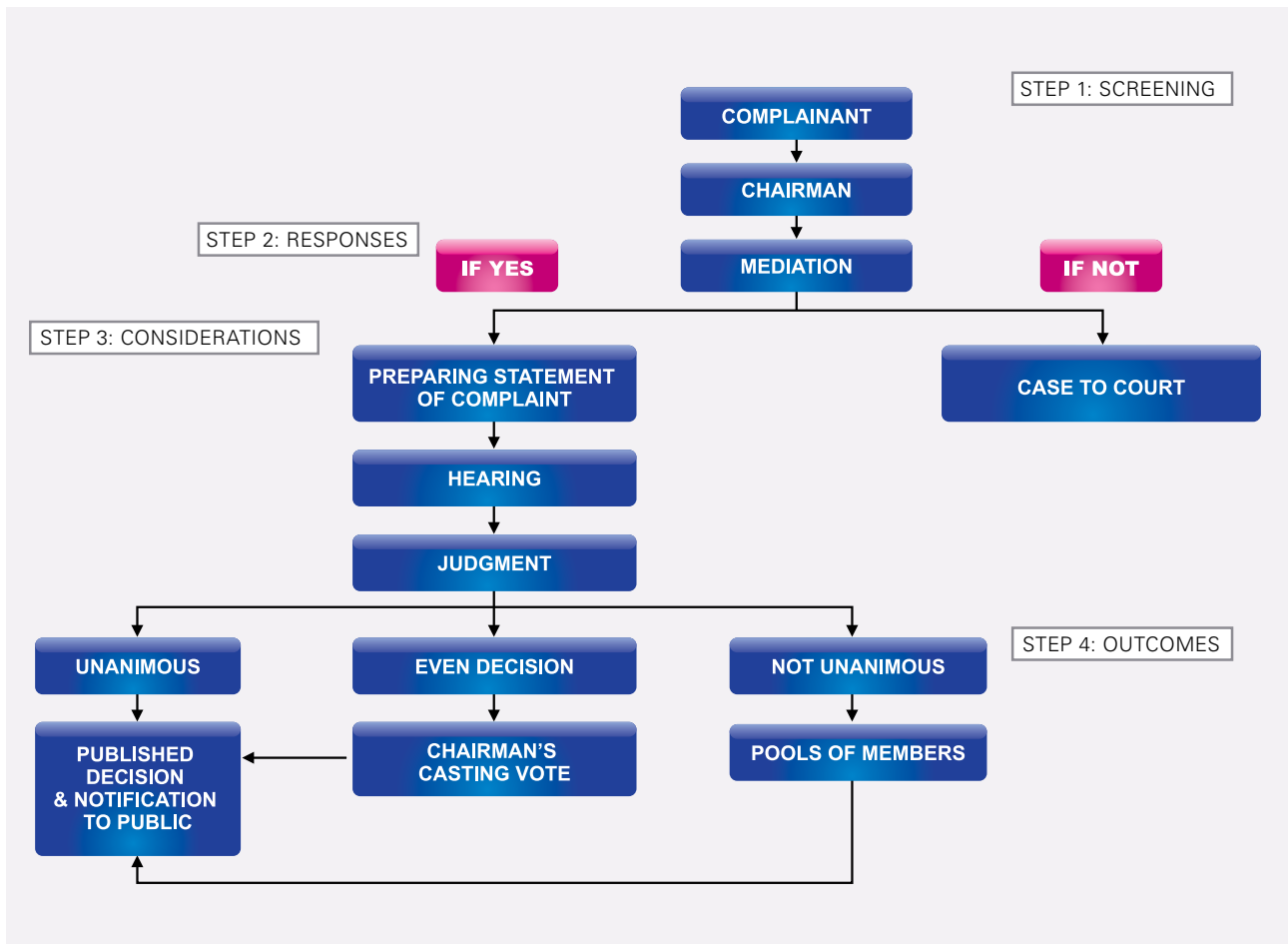
Figure 1: The Complaints Mechanism of Content Forum

attach statements of various witnesses, because sometimes a complaint involves technical issues which must be supported by expert opinions from professionals or scientists.

The Complaint Bureau will decide on appropriate action. In accordance with the Content Code regulations, it could involve a fine, issuance of a warning, or a removal of the published content in the relevant media channels. All these decisions must be publicly published so that they are transparent to the industry and public. Figure 1 illustrates the complaints mechanism.

3. Problems and obstacles faced in handling complaints

The main problems and obstacles when it comes to handling complaints involve the content itself. Some of the parties claimed that they published

their content according to their understanding of the content classification. For example, some bloggers manipulated content classifications of Islamic blogs when in reality their blog content was twisted into becoming an anti-Islamic blog.

Another obstacle encountered has to do with membership in CMCF. As members, they have no choice but to submit to jurisdiction. The problem arises when one party may agree to submit for jurisdiction, but the other party (a non-member) may not do so.

The third issue involves Malaysian culture itself. It appears that many problems exist due to a lack of control in our society. Parents may not know much about the impact of new technology and new media, so they do not realise when their children become victims of media exploitation.

Furthermore, the public is not aware of the safeguards in place with regards to using new media, especially the Internet.

4. Enforcement and monitoring of mechanism use and the effectiveness of the Content Code

The findings showed that the respondents agreed that the tabulation of complaints and complaint issues solved throughout the year will be the indicator of the self-regulation mechanism's efficiency. The respondents also indicated that there was a need for conducting self-regulation practices training for media professionals and public so that they would be aware of the mechanism.

5. Awareness and acceptance level of The Content Code among industry players

According to the data collected from respondents, members of the Content Forum have some understanding of the Content Code, but are not necessarily experts. Both members and non-members should be educated about the Content Code so that they will better understand the regulation of media practices and make it a part of their regulation resources.

6. Suggestions to improve the Content Code

There are several propositions suggested by the respondents to improve the Content Code. Among them are: to include the knowledge of Content Code practices in school curricula, to highlight opinions of civic groups to content creators and to strengthen the roles of the Complaint Bureau. Respondents also suggested more in-house training and seminars so that media players better understand the implementation of Content Code practice in the media environment, and to strengthen and focus on engaging the public with regards to the roles of the Content Forum and make them aware of the Content Code practices.

Quantitative Study

This section provides the results of the quantitative survey of members of the Content Forum. A total of 138 respondents were involved in this survey, representing nine organisations from the Content Forum. The results highlight awareness of the Content Code, the practice of Content Code in an organisation, acceptance, importance and effectiveness of the Content Code.

Awareness and Practice of the Content Code

The findings found that 71% of the respondents said that they are aware of the Content Code with the rest unaware of it. The most popular channel to hear about Content Code is through briefings at the workplace and via the Internet, while flyers are the least popular channel used.

On the practice of the Content Code at their workplace, 71% say they practice it, while the rest are not practising it yet. Additionally, many (45.9%) of the respondents agreed that the department that handles the implementation of the Content Code is the Legal and Regulatory Department.

However, only 31.7% of respondents confirmed that their organisations have provided or conducted training regarding the Content Code. Nearly half (48.6%) of the respondents affirm that they are using the Content Code at all levels while producing content or services.

Only 7.2% of the respondents stated that they are using the Content Code at the end of content production or service processes. The most popular channel used to deliver information about the Content Code in organisations is email, with the least popular channel used being the online newsletter.

Acceptance of the Content Code

The respondents were asked about their acceptance of the Content Code based on 10 statements, which they were required to rate from Strongly Agree to Strongly Disagree (Table 1). The overall mean and standard deviation obtained are 3.0205 and 0.70678. The mean score shows that the level of acceptance towards the Content Code among members of the Content Forum is at a moderate level.

Based on their responses, the statement "organisational members feel the Content Code is useful" obtained the highest mean (3.29). It is followed by "organisational members feel that the Content Code is important."(mean = 3.25). On the other hand, most of the members feel that the Content Code does not get wide exposure in the mass media (mean = 2.67).

Importance and Effectiveness of the Content Code

Among 18 statements asking about the importance of the Content Code, questions such as "The Content

Table 1: Acceptance of The Content Code

Statement		STD	D	SLA	A	SA	M	SD
Organisational members feel The Content Code is useful.	Freq %	9 7.3	13 10.6	45 36.6	45 36.6	11 8.9	3.9	1.022
Organisational members feel that the Content Code is important.	Freq %	11 8.9	13 10.6	44 35.8	44 35.8	11 8.9	3.25	1.06
The Content Code is comprehensive.	Freq %	8 6.6	13 10.7	63 51.6	33 27	5 4.1	3.11	0.893
The Content Code is easy to understand.	Freq %	8 6.5	18 14.6	54 43.9	40 32.5	3 2.4	3.1	0.909
The Content Code is suitable for all media.	Freq %	13 10.6	18 14.6	48 39	38 30.9	6 4.9	3.05	1.039
The Content Code can be easily put to practical use.	Freq %	7 5.7	25 20.3	59 48	28 22.8	4 3.3	2.98	0.891
Organisation members have a high level of knowledge of The Content Code.	Freq %	5 5.7	29 23.6	52 42.3	32 26	3 2.4	2.96	0.909
Organisation members have a high level of acceptance towards The Content Code.	Freq %	7 5.7	30 24.4	52 42.3	33 26.8	1 0.8	2.93	0.879
The terminologies used in The Content Code are easy to understand.	Freq %	8 6.5	29 23.6	57 46.3	28 22.8	1 0.8	2.88	0.864
The Content Code gets wide exposure in the mass media.	Freq %	20 16.3	34 27.6	39 31.7	27 22	3 2.4	2.67	1.069

STD: Strongly disagree   D: Disagree   SLA: Slightly agree   M: Mean
A: Agree   SA: Strongly agree   SD: Standard deviation

Code will ensure media content is suitable for children" (mean=3.89) and "The Content Code will ensure media content is suitable for family" (mean=3.80) are among the highest mean scores. However, "The Content Code can encourage flexibility in producing content" (mean=2.94), "The Content Code can encourage innovation" (mean=2.94) and "The Content Code can encourage creativity" (mean=2.82) are the three statements with the lowest scores (Table 2).

The respondents agreed that the Content Code is the most effective in ensuring media content is suitable for children, as the question such as "The Content Code will ensure the media content is suitable for children" (mean=3.53) obtained the highest mean

Table 2: Importance of The Content Code

Statement		CNI	SI	MI	HI	FI	M	SD
Content Code will ensure that media content is suitable for children.	Freq %	5 4	3 2.4	36 28.8	38 30.4	43 34.4	3.89	1.041
Content Code will ensure that media content is suitable for family.	Freq %	6 4.8	5 4	39 31.2	33 26.4	42 33.6	3.80	1.1
Content Code can avoid violent content.	Freq %	6 4.8	6 4.8	40 32	35 28	38 30.4	3.74	1.092
Content Code can avoid foul language.	Freq %	7 5.6	7 5.6	43 34.4	26 20.8	42 33.6	3.71	1.156
Content Code can avoid indecent content.	Freq %	8 6.4	8 6.4	41 32.8	28 22.4	40 32	3.67	1.176
Content Code can avoid false content.	Freq %	8 6.5	4 3.2	45 36.3	31 25	36 29	3.67	1.124
Content Code can avoid obscene content.	Freq %	7 5.6	8 6.4	43 34.4	30 24	37 29.6	3.66	1.137
Content Code can avoid menacing content.	Freq %	6 4.8	6 4.8	48 38.4	31 24.8	34 27.2	3.65	1.08
Content Code can overcome sensitive issues.	Freq %	7 5.6	9 7.1	41 32.5	37 29.4	32 25.4	3.62	1.109
Content Code can increase moral values and ethics.	Freq %	11 8.8	8 6.4	43 34.4	31 24.8	32 25.6	3.52	1.195
Content Code is sensitive to people with disabilities.	Freq %	8 6.5	10 8.1	46 37.1	28 22.6	32 25.8	3.53	1.151
Content Code can increase the competitiveness among content providers to produce quality content	Freq %	11 8.8	11 8.8	45 36	25 20	33 26.4	3.46	1.222
The implementation of The Content Code can realise the Malaysian culture.	Freq %	15 12	13 10.4	41 32.8	37 29.6	19 15.2	3.26	1.197
Content Code can produce high quality content.	Freq %	17 13.6	15 12	46 36.8	33 26.4	14 11.2	3.10	1.174
Content Code can encourage competitiveness in producing local content.	Freq %	13 10.3	19 15.1	57 45.2	23 18.3	14 11.1	3.05	1.094
Content Code can encourage flexibility in producing content.	Freq %	18 14.6	19 15.4	51 41.5	22 17.9	13 10.6	2.94	1.162
Content Code can encourage innovation.	Freq %	14 11.3	26 21	48 38.7	26 21	10 8.1	2.94	1.095
Content Code can encourage creativity.	Freq %	22 17.7	21 16.9	48 38.7	23 18.5	10 8.1	2.82	1.169

CNI: Completely not important   SI: Slightly important   MI: Moderately important   M: Mean
HI: Highly important   FI: Fully important   SD: Standard deviation

Table 3: Effectiveness of The Content Code

Statement		CNE	SE	ME	HE	FE	M	SD
Content Code will ensure media content is suitable for children.	Freq %	8 6.3	15 11.9	39 31.0	30 23.8	34 27.0	3.53	0.191
Content Code can avoid foul language.	Freq %	7 5.6	15 11.9	47 37.3	26 20.6	31 24.6	3.47	1.150
Content Code will ensure that media content is suitable for family.	Freq %	8 6.3	16 12.7	45 35.7	27 21.4	30 23.8	3.44	1.170
Content Code can avoid indecent content.	Freq %	12 9.4	17 13.4	41 32.3	23 18.1	34 26.8	3.39	1.273
Content Code can avoid violence content.	Freq %	7 5.6	20 15.9	46 36.5	25 19.8	28 22.2	3.37	1.157
Content Code can avoid menacing content.	Freq %	7 5.6	20 15.9	46 36.5	27 21.4	26 20.6	3.36	1.142
Content Code can avoid obscene content.	Freq %	11 8.7	19 15.0	44 34.6	22 17.3	31 24.4	3.34	1.242
Content Code can avoid false content.	Freq %	9 7.2	20 16.0	46 36.8	23 18.4	27 21.6	3.31	1.187
Content Code is sensitive to people with disabilities.	Freq %	13 10.3	20 15.9	42 33.3	29 23.0	22 17.5	3.21	1.211
Content Code can overcome sensitive issues.	Freq %	9 7.1	22 17.5	57 45.2	17 13.5	21 16.7	3.15	1.118
Content Code can increase moral values and ethics.	Freq %	12 9.4	24 18.9	44 34.6	29 22.8	18 14.2	3.13	1.164
Content Code can increase the competitiveness among content providers to produce quality content.	Freq %	14 11.1	25 19.8	44 34.9	22 17.5	21 16.7	3.09	1.220
The implementation of Content Code can realise the Malaysian culture.	Freq %	17 13.5	21 16.7	49 38.9	27 21.4	12 9.5	2.97	1.145
Content Code can encourage competitiveness in producing local content.	Freq %	17 13.5	31 24.6	48 38.1	19 15.1	11 8.7	2.81	1.122
Content Code can produce content with high quality.	Freq %	19 15.1	32 25.4	47 37.3	17 13.5	11 8.7	2.75	1.136
Content Code can encourage flexibility in producing content.	Freq %	22 17.5	30 23.8	44 34.9	19 15.1	11 8.7	2.74	1.174
Content Code can encourage innovation.	Freq %	19 15.0	36 28.3	44 34.6	19 15.0	9 7.1	2.71	1.113
Content Code can encourage creativity.	Freq %	26 20.5	33 26.0	46 36.2	17 13.4	5 3.9	2.54	1.082

CNE: Completely not effective   SE: Slightly effective   ME: Moderately effective   M: Mean
HE: Highly effective   FE: Fully effective   SD: Standard deviation

score. However, "The Content Code can encourage innovation" (mean=2.71) and "The Content Code can encourage creativity" (mean=2.54) are among the lowest mean scores for the effectiveness of Content Code (Table 3).

Strengths and Weaknesses of the Content Code

The three main strengths of the Content Code highlighted by the respondents are: that it is able to exert control over the content before broadcast, that it preserves Malaysian culture and that it enables people to avoid sensitive issues, violence, unaccepted conflicts, obscenity and unnecessary content. The major weaknesses of the Content Code highlighted by the respondents are that it blocks creativity, and that it is difficult to understand and to implement.

Expectations of and Improvements to Content Code

The highest expectations listed by the respondents are for the Content Code to be more consistent on certain acts and to maintain the self-regulatory climate. It is expected that every player apply the Code; respondents would also like the Code to be more open, except with regards to the issue of race and religion.

As for suggestions to improve the Content Code, the top three suggestions are for the Content Code to be up to date; hold workshops and forums as mediums for the dissemination of information; conduct more awareness programmes and campaigns; and for it to stay relevant with the times so that it becomes easier to understand.

Analysis and Discussion

The responses of the respondents on the practice and application of the Content Code from in-depth interviews and survey research support one another. However, the in-depth interviews are responses from the management level of organisations that have adopted the Content Code while the respondents of the survey are a cross-section of staff from similar organisations.

Respondents of in-depth interviews were all aware of the Content Code and were familiar with the implementation of the Code in their organisation.

The same cannot be said of the survey research respondents. The result showed that only 71% of them are aware of the Content Code and the same figure says that the Content Code is implemented in their organisations. This drives the point that even among organisations that have adopted the Content Code, there are still nearly 30% of members in the respective organisations who are not aware of the existence and implementation of the Code; there could be internal communication problems within the organisation that need to be overcome.

The Code was said to be useful, important, comprehensive, easy to understand and suitable to all media.

It is expected that all the staff members should be aware of the Code and have knowledge of its implementation. Information on the Content Code is conveyed to organisation staff through training, briefings, seminars and workshops. Similar views were obtained from in-depth interview and survey. Therefore, in order to improve the implementation of the Code, more intensive efforts through staff training, briefings and workshops are needed. Some believe that close collaboration with MCMC and the Film Censorship Board will strengthen the adoption of the Code.

The Content Code is well-accepted by the media fraternity. The Code is said to be useful, important, comprehensive, easy to understand and suitable to all media. It has been important and effective in ensuring suitable media content for children and family; it can help to avoid the publishing of violent and obscene content and foul language. It is a mark of the strength of the Code that it has been able to control information and content before broadcast, preserve Malaysian culture and avoid sensitive issues, violence, unaccepted conflicts, obscenity and unnecessary content.

The Content Code has provided the guideline for the media to select suitable content before broadcast and for avoiding sensitive issues like racism, conflicts and violence. We are confident in saying that the Content Code has been successful in achieving its purpose and aims.

The research findings also revealed that the Content Code did not get wide coverage in the mass media and the terminologies used in the code are not easy to understand. The Content Code is thought to be less important and less effective in encouraging flexibility, innovativeness and creativity of media content. These points should be pondered from time to time, so that the Content Code can be improved.

There were not many complaints about media content since the implementation of the Content Code. Responses from survey respondents, interview respondents and Content Forum management reveal that the complaints were mostly on advertisements and on the issue of religion. The Complaint Mechanism as explained by the Chairman of the Complaint Bureau is clear, transparent and effective. The same person says that there is a need for conducting self-regulation practices training for media professionals and the public, so that they would be aware of the mechanism.

The Content Forum management also reaffirmed the need to highlight opinions from civic groups to content creators, and to strengthen the roles of the Complaint Bureau. There is a need to organise more in-house training and seminars so as to make media players understand the implementation of Content Code practice in the media environment. They also highlighted the need to strengthen the focus on engaging the public about the roles of the Content Forum and make them aware of the Content Code practice.

Conclusion

All in all, the Content Code is very helpful as a guideline for media practitioners to choose and produce suitable content for public consumption. However, some disadvantages such as the hinderance of creativity, difficulty in understanding it and being outpaced by current media developments are issues for consideration. The key recommendations based on the findings of the study are as follows:

1. The awareness of the Content Code should be promoted not only to media practitioners but also among the public, through campaigns and promotions. The Content Forum is there to provide a platform to encourage the public to participate in contributing ideas and critiques.

2. The Content Code should be revised from time to time to keep pace with media development.

3. The use of language in the Code should be simplified for easy understanding and implementation.

4. The knowledge of the Content Code should be included in the curriculum for formal education as well as in the standard staff training curriculum.

5. It should be made a mandatory requirement for media organisations in planning, implementing and evaluating a sound mechanism of media self-regulation in their organisations.

6. In implementing media self-regulation, there should be a minimum of government interference in handling complaints.

7. Since the Content Code is well-accepted by media organisations, it is recommended that the Content Forum should expand its membership and networking.

8. Compliance to the Code should be made mandatory to all media practitioners, whether government or private.

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