

THE INCLUSIVE DESIGN OF CONTENT MANAGEMENT SYSTEM FOR
KLIK DENGAN BIJAK

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DEDICATION

I dedicate my thesis work to my family and many friends. A special feeling of gratitude to my mother, Habibah binti Md Taib whose words of encouragement and push for tenacity ring in my ears. Special thanks to my wife Idayusnita Maarof, and my beautiful kids Qaseh Ameera Zafeera binti Md Tahir and Ayden Aiman Rizq bin Md Tahir for being there for me throughout the entire program.

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ABSTRACT

The purpose of this research is to measure the implementation of a content management system to improve the effectiveness of Klik Dengan Bijak awareness. It aims to identify the issues related to the effectiveness of Klik Dengan Bijak among its targeted audiences, to implement the intervention to increase the effectiveness of Klik Dengan Bijak and to recommend a plan to increase Klik Dengan Bijak's audience reached through the content management system. The study used the mix method approach. The study was divided into two stages, a qualitative study was conducted for Cycle 1, to identify the problems and to propose the interventions. In the second stage, quantitative analysis was used to measure the effectiveness of the intervention in Cycle 1 and Cycle 2. For the qualitative study, the thematic analysis approach was used for data analysis using NVivo software. To obtain quantitative data, an online survey questionnaire was distributed to 33 users. A descriptive and T-test analysis were carried out using Statistical Package for the Social Sciences (SPSS) software. Consequently, the triangulation approach was used to combine all quantitative and qualitative results to produce a reliable outcome. Based on the observation, there is a difference between the mean and standard deviation ratings for both before and after implementing the intervention. Hence, the null hypothesis was rejected and the result showed that there is a difference between before and after the intervention implementation. In Cycle 2 Action Research, a quantitative method was used in this analysis. An online survey questionnaire was distributed to 29 users. A descriptive and T-test analysis has been carried out using SPSS software. New intervention has been implemented in Cycle 2; to provide awareness for the content management system to increase the audience reached for Klik Dengan Bijak. There was positive improvement before and after intervention implementation, indicating that all three of our objectives were successfully achieved.

ABSTRAK

Tujuan penyelidikan ini adalah untuk mengukur pelaksanaan sistem pengurusan kandungan bagi meningkatkan keberkesanan kesedaran Klik Dengan Bijak. Kajian bertujuan untuk “mengenal pasti isu-isu yang berkaitan dengan keberkesanan Klik Dengan Bijak di kalangan khalayak sasarannya”, untuk “melaksanakan intervensi untuk meningkatkan keberkesanan Klik Dengan Bijak” dan “mencadangkan pelan untuk meningkatkan capaian audien Klik Dengan Bijak melalui sistem pengurusan kandungan”. Kajian ini menggunakan kaedah gabungan. Kajian ini dibahagikan kepada dua peringkat iaitu kajian kualitatif yang dijalankan melalui kitaran 1, mengenal pasti masalah dan mencadangkan intervensi. Pada peringkat kedua, analisis kuantitatif digunakan untuk mengukur keberkesanan intervensi kitaran 1 dan kitaran 2. Bagi kajian kualitatif, pendekatan analisis tematik digunakan untuk analisis data menggunakan perisian NVivo. Bagi data kuantitatif, soal selidik melalui dalam talian telah diedarkan kepada 33 pengguna. Analisis deskriptif dan ujian-T telah dijalankan menggunakan perisian Statistical Package for the Social Sciences (SPSS). Pendekatan triangulasi digunakan untuk menggabungkan semua keputusan kuantitatif dan kualitatif untuk menghasilkan hasil yang boleh dipercayai. Berdasarkan pemerhatian, terdapat perbezaan di antara nilai min dan sisihan piawai bagi kedua-dua sebelum dan selepas pelaksanaan intervensi. Oleh itu, hipotesis nol ditolak dan keputusan menunjukkan terdapat perbezaan antara sebelum dan selepas pelaksanaan intervensi. Kitaran 2 Kajian Tindakan telah menggunakan analisis melalui kaedah kuantitatif. Untuk data kuantitatif dan kaedah penyelidikan, soal selidik tinjauan dalam talian telah disediakan kepada 29 pengguna. Analisis deskriptif dan ujian-T telah dijalankan menggunakan perisian SPSS. Intervensi baharu telah dilaksanakan dalam Kitaran 2 iaitu meningkatkan kesedaran kepada sistem pengurusan kandungan bagi meningkatkan capaian audien untuk Klik Dengan Bijak. Terdapat peningkatan positif sebelum dan selepas pelaksanaan intervensi, menunjukkan bahawa ketiga-tiga objektif berjaya dicapai.

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LIST OF ABBREVIATIONS

CMS	-	Content Management System
D&M	-	DeLone and McLean Information Systems Model
ESSP	-	Everyday Safety Skills Program
IPR	-	Interview Protocol Refinement
IS	-	Information System
ISE	-	Internet Safety Education
JIT	-	Just in Time
KDB	-	Klik Dengan Bijak
MCMC	-	Malaysian Communications And Multimedia Commission
SPSS	-	Statistical Package for the Social Sciences
STEEP	-	Social, Technological, Economic, Environmental, and Political
SWOT	-	Strength, Weaknesses, Opportunity, Threat
TAM	-	Technology Acceptance Model
UNICEF	-	United Nations Children's Fund

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Every year, a massive volume of content is created at an increasing pace. The expressions "information overload" and "content anarchy" characterise the inefficient scenario that occurs in many organization nowadays. Many people search numerous repositories around the company for data, records, images, and videos. Documents of various versions, languages, and formats are saved in multiple places and systems. Collaboration on information, documents, and co-authoring is difficult, with essential papers exchanged through email and shared directories. Companies have a significant barrier in managing a large range of material on a company-wide basis. Worse, most of the information is unstructured. However, the information quality of unstructured data is critical because it includes critical, confidential, innovative, and corporate decision-relevant information that is rapidly becoming a vital business resource. Content Management System (CMS) originated as an integrated approach to information management to address this content turmoil. CMS allows for content to be managed and has garnered a lot of attention and interest across industry.

The market for CMS is flourishing and expanding at an exponential rate as more organization are use it. Year after year, CMS have gotten easier to use and manage. As an emerging subject in information systems (IS) study, only a small amount of research has been undertaken in this field so far. In contrast to the tremendous interest shown by corporations and practitioners, CMS got relatively minimal attention from academics. There is no one, completely detailed description of what CMS is and what it stands for everywhere (Ramalingam, 2016).

Content management has been acknowledged as a helpful instrument for sharing and applying information in educational institutions, such as universities, colleges, primary and secondary schools. Content management is used to manage valuable content by different organizations for different purposes such as technical documentation, reference, training, marketing and educational materials. According to Mansour Alosaimi (2016), content management is carried out in order to manage important content during the content's lifecycle. It is customary for it to begin with content production and conclude with the archive of the content. Metadata may help manage material better. Knowledge content may be tagged. Taxonomy is a system for classifying and organising data so that it may be more easily retrieved and utilised where mostly CMS are used for this.

Digital material may be created, edited, published, and stored using CMS. Documentum is an example of a proprietary CMS. Meanwhile, open source CMS such as Alfresco, Plone, and Joomla are capable of displaying online content in the proper format. From introducing digital content to managing an entire digital experience across several channels, such as email, mobile applications, social media, websites, and more, CMS is maturing into a more powerful system.

This research focuses on the implementation of the CMS for the Klik Dengan Bijak (KDB) to increase the audience reached. KDB is an initiative by Malaysian Communications and Multimedia Commission (MCMC) in 2012, which aims to educate Malaysians on online safety.

Numbers of programs have been implemented under the umbrella of KDB such as seminars, exhibitions, speaking invitations and competitions. One of the objectives of KDB is to reduce cybercrime rates in Malaysia. According to Bernama (2019), cybercrimes involving RM67.6 million in damages were recorded in the first quarter of 2019. Scams, credit card fraud, identity theft, and data breaches are among the cybercrimes that have taken centre stage. There is a risk of a rise in losses that have been stated to be at RM96.1 million since 2012. (Ramendran, 2016). Back then, e-commerce frauds, parcel scams and VOIP scams were the types of cybercrimes that faced the biggest problems. KDB has many materials consisting of videos,

infographics, slides, posters and others which are currently kept in different and various places including internal server and individual's folder. There is a need for content management to ensure that the content and materials for KDB to be structured so it can be repurpose, updated, and archived.

1.2 Case Company Introduction

Klik Dengan Bijak (KDB) is an initiative by the Malaysian Communications and Multimedia Commission (MCMC) to promote the internet's positive use. It was launched in 2012 and had more than five million audiences (Bernama, 2019). MCMC created this initiative to educate consumers with the advancement of the Internet, which could expose new threats to national security and internet users with the proliferation of harmful seditious content. Each Internet user is now both consumer and producer of media (Heinonen & Kristina, 2011). The power to create content in social media such as Facebook, Instagram, Twitter, TikTok or Snapchat is in consumers' hands, where they broadcast almost everything about their everyday lives, thoughts, and knowledge instantaneously. There is no one to be the information gatekeeper, and everyone has their own unique opinions.

Therefore, KDB has incorporated National Principles' values as its central theme to educate internet users on self-regulation and internet addiction. Karaer & Akdemir (2019) found that as Internet use increases, internet addiction among internet users also increases. Currently, KDB has more than 85,000 followers on social media including Facebook, Instagram and YouTube. Since the launching, KDB has trained more than 1,700 advocators all over Malaysia including managers and assistant managers at Pusat Internet. Today, the awareness level of KDB has reached 80.90% based on the survey made by 6,762 respondents. KDB also serves as a platform for strategic partners who wish to raise public awareness of media literacy, an alternative measure to content restriction by a government body.

1.2.1 External Environmental Analysis

The number of cybercrime in Malaysia is increasing due to the lack of awareness of online risk (Sheikh Yahya, 2020). According to police sources, 9,215 commercial crime cases involving losses of RM717.2 million were reported nationally from January to April (Malay Mail, 2020). Malay Mail also reported that an increase of 2 per cent or 5,697 cyber-fraud incidents were registered for January to August 2020 compared to 4,671 incidents for the same period in 2019. Cybercrime victims not only affected the adults but also involved teenagers and children. (Cyber Security Malaysia & Wan Muhammad Fadzil, 2016) reported that 50 per cent of secondary school students are using social media sites for interaction and not being monitored by their parents or guardians. The reports also mentioned that one in four students are exposed to online harassment, intimidation and exclusion. There have been several controversies over the impact of the Internet and modern technologies on youths. It can be seen from the report that there should be an intervention on online awareness activities in Malaysia to protect not just the adult but children and other vulnerable groups.

The situation of Malaysia cybercrime and the KDB program, can be further analyzed using the STEEP Analysis, which consist of Social, Technology, Environmental, Economic and Political factors (Zahari & Romli, 2019). All these elements can be used to evaluate the impact of the program to the cybercrime rate in Malaysia. The description for external environmental analysis using the STEEP analysis is shown in Table 1.1 below.

Table 1.1 The STEEP Analysis

Factors	Opportunity	Threat
Social: Increase in internet usage, thus increase online risk		✓
Technology factor: Advancement in technology widen the awareness of advocacy programs	✓	
Economy factor: Limited staff resources because of management restructuring, thus increased the workload of the personnel		✓
Environmental factor: The spread of fake news are increasing		✓
Political factor: Direction of communications and multimedia is determined by the political conditions that structure the governance in the country.		✓

A. Social Factor

In terms of social, according to Internet Users Survey 2020 by MCMC (2021), there are 88.7% Internet users in 2020, an increase of 1.3% from 87.4% in 2018. The duration of daily use of Internet is shown in Table 1.2 below.

Table 1.2 Duration of Daily Use of Internet

Hour	Year	
	2018 (%)	2020 (%)
<1	9.6	1.3
1-4	39.2	24.9
5-8	23.9	28.6
9-12	13.4	21.5
13-18	5.7	9.0
>18	8.1	11.5

B. Technology Factor

Advocacy groups that make use of these tools may disseminate information more quickly, attract more members, and employ a wider range of tools to put their plans into action. Mobile and social networking sites, specifically, may be used by young activists to recruit individuals, organise collective action, raise awareness and shape attitudes, raise finances to support the cause, and communicate with decision-makers, among other things. Even while both mobile phones and social networking sites may be used for these advocacy-related goals, there are benefits and downsides to adopting one over the other in certain circumstances.

C. Economy Factor

During the year 2020, COVID-19 false news is grabbing attention. Research by Cybersecurity Company CHEQ and the University of Baltimore concluded that the spread of internet false news damages the global economy \$78 billion yearly (Brown, 2019). According to the paper, misleading news has caused a loss in stock market value of \$39 billion annually, and it also examines the direct economic costs.

D. Ecology and Environmental Factor

There was a noticeable rise in instances of cyberbullying, exposure to graphic or inappropriate material, or even skipping meals due to excessive Internet content during the lockdown in the spring of 2020 than there was before to it.

The school closure and home-based teaching and learning (PdPR) has impacted children today. Because so many of these students are now enrolled in online courses and spending an increasing amount of time on the internet, they may be more susceptible to online predators. Spending more time on the internet in an unstructured fashion might expose children to potentially hazardous and violent material, as well as increasing their vulnerability to online bullying.

E. Political Factor

Political parties, other groups and individuals are increasingly using the Internet to spread their messages by inter alia, establishing 'Web'* pages, which provide a variety of facilities such as policy documents, interactive 'chat' facilities and links to other sites. The Internet is increasingly being used by political groups, ranging from small community organisations to major political parties. The reasons for using the Internet do however differ. While community organisations may use the Internet because they have few financial resources and the Internet is a cost effective and efficient communications medium, major political parties currently seem to be using the technology for a wider range of reasons. Although many major political parties do recognise that the Internet is an increasingly powerful communications medium that is ideal for promoting their cause, other reasons may initially prompt them onto the 'information superhighway'. Political parties may wish to appear technologically aware, adept and up to the minute; they may wish to appeal to particular types of people who are most likely to currently use the Internet;(13) and they do not want to be left behind by their competitors if these competitors have an Internet presence.

The creation of Webpages that include a range of facilities such as policy papers, interactive chat facilities and connections to other sites, political parties, other organisations and people are increasingly utilising the Internet to promote their ideas. Political organisations of all sizes, from neighbourhood associations to big political parties, are increasingly turning to the Internet for communication. However, the motivations for accessing the Internet vary. Community organisations may utilise the Internet because it is a cost-effective and efficient communication medium for them, but big political parties now seem to employ the internet for a broader variety of reasons. The Internet is becoming an increasingly powerful communications tool that is excellent for supporting a cause, although many major political parties may first join the 'information superhighway' for different reasons. To look technologically savvy and up-to-date is a goal for political parties; they may also want to target certain groups of individuals who now use the Internet and they do not want to be outpaced by their rivals who have an Internet presence.

1.2.2 Internal Environmental Analysis

Internal environmental study of an organisation identifies both its strengths and weaknesses. What occurs inside the company provides a wealth of data for assessment. Internal elements include human resources, physical and intangible assets, management, and operational efficiency. The internal strengths and shortcomings of the content management system for Klik Dengan Bijak may be evaluated further to substantiate the conclusions in the table below.

Table 1.3 The Internal analysis

Factors	Strength	Weakness
Marketing Assessment Availability of the Specialists in Community Engagement Department to manage and execute all plans in the department	✓	
Management Assessment No content management in the department. Files and materials kept in various folders and places		✓
Financial Assessment There is allocated budget for the department to organize advocacy programs	✓	
Operations Assessment Lack of training for advocators, last training was held more than 2 years,		✓
Management Information System (MIS) Assessment Content Management System	✓	

1.2.3 SWOT Analysis

Content management system is one of the helpful instruments for sharing and applying information in the organization. Other instruments for storing and managing content include internal folders and cloud systems. Therefore, the statistics and documentation regarding the storing and content management should be documented and monitored to enhance the performance and service.

Table 1.4 The SWOT Analysis

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> ● Record for new content available ● Large and lively user base community ● Allows the user to have a significant deal of control over the administration and creation of their material. ● No cost to users ● It is possible to add new features based on user requests. ● Regardless of the device (laptops, tablets, smartphones, etc.), ● Assist those in need by giving them the tools to do so. 	<ul style="list-style-type: none"> ● Security threats & data leaks ● Customization might requires coding knowledge ● Incompatibility issues ● Must on network
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ● Expanding features to enable users to produce more content ● Acquiring further integration relationships with other websites and mobile carriers ● Increase awareness among other stakeholders ● Search engine optimization ● Collaboration with other agencies 	<ul style="list-style-type: none"> ● Lack of data management competence low level of reach out ● Inability to reach out to prospective customers ● Expensive CMS backup, security, and hosting

The SWOT analysis in Table 1.4 was done in this chapter to explore more about implementation of the content management system for Klik Dengan Bijak and its relation in terms of technology and how the user utilizes it. The strength can be seen in terms of record for new content available in the KDB modules. MCMC is producing new content for KDB for the website and social media. With the CMS, users will be aware of the new content available. CMS also allows a large and lively user base community. Furthermore, CMS can be highly customizable providing the users great control on content management and development and it is free for users. The functionality can be extended as per the user requirement and will be made available across platforms like laptops, tablets, and mobile. This will empower people to help others through the CMS.

The weakness that can be seen related to the issue is the user who is not properly trained to update content in the CMS. The security threats & data leaks might affect the effectiveness of CMS. Some customization might require coding knowledge which will limit the people to update the content in CMS.

In terms of opportunities, the factor that is related to the issue is expanding capabilities to allow users to create more content. CMS can also be made available for acquiring more partnerships and collaborations with other agencies, this can increase awareness among other stakeholders.

On the other hand, CMS can have limited data management capability depending on the model and features available. There is also a possibility of lack of awareness by potential users. The SWOT analysis shows the problematic situation in the topic that needs to be evaluated further. Thus, conducting this study is also a step to cater the problem that arises related to the issue.

1.3 Problem Statement

Klik Dengan Bijak (KDB) is an initiative by MCMC with the objectives to educate and raise public awareness about Internet safety and security. KDB consists of modules on online risk such as cyber bullying, fake news, scam and online gaming. KDB has collaborated with various agencies on many programs such as competitions, forums, seminars and exhibitions. KDB has been invited to schools, universities, and private and government agencies to deliver KDB modules.

KDB modules consist of different types of content such as slides, videos, infographics and animations. The speaker for KDB uses slides to present KDB modules to the audiences. Currently there is no content management system for KDB content. Each file was kept in separate folders and different departments in the organization. Speakers are able to track any updates on the content. Since KDB is for public use, there is no platform for the public such as parents and teachers to use KDB modules to be delivered at their schools or home. The content should be made

available in public space so there will be many stakeholders who will be benefited from the programs. Furthermore, due to COVID-19, many engagements and physical activities have been cancelled due to Movement Control Order (MCO) by the government.

There should be no cost issue as the budget for KDB implementation has been budgeted in the yearly annual budget for the department. Therefore, due to the various content and different types of stakeholders that will be using the KDB modules, there should be a proper content management system (CMS) to manage and update KDB content accordingly. The CMS will make it easy for the speaker to find content and alert on the new content available. Furthermore, people outside from the organization will also be able to access the KDB content.

CMS is an evolving application that can be affected by the new technologies and practices. CMS should be implemented systematically to have a successful implementation. CMS must be also integrated into an existing discipline such as community of practices, to make the learning process meet the objectives. Research in the field of CMS is still inconclusive, especially in the area of implementing CMS.

If more people are using the KDB modules and delivering the content to their network, it will increase the audience reached. Currently the audience reached for KDB is about 5 million. The CMS will be able to increase the audience reached by 30 per cent annually.

The lack of content management in KDB modules can be solved by the implementation of CMS. This research will study more about the implementation of CMS and selection of features so it will be utilized by the organization and public as well.

1.3.1 Problem Diagnosis

The content for Klik Dengan Bijak is developed from time to time based on the requirements of the content. The content was stored in the workstation and can be retrieved when needed. The analysis information in terms of the success of the system as well as the information from interview and assessment during the intervention will determine the success of the transformation phase. All the information will be collected and analyzed to solve the issue that arises during the development of CMS.

Once the initial problem is framed, we should explore further why we are having the problem in the first place (Fallis, 2013). The Fishbone diagram in Figure 1.1 shows the factors that affect the audience reached in KDB awareness and promotion program.

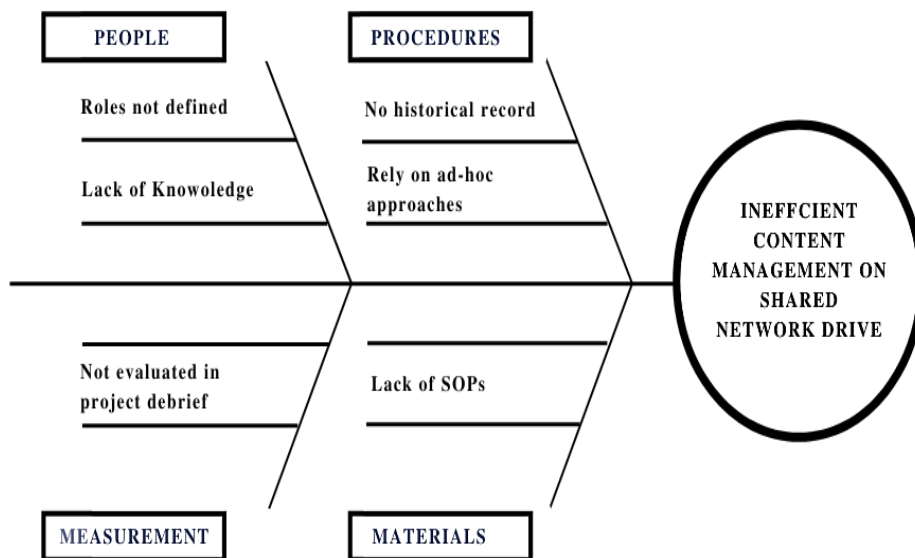


Figure 1.1 The Fishbone diagram

The factor that is being recognized is in terms of the staff that are involved in the content management, who are not well trained and lack knowledge about the correct technique etc. Currently, there are 6 staff available in the department, but only two people are dedicated to Klik Dengan Bijak. There is no officer determined to manage all the files.

Apart from that, inadequate formal teaching for the CMS results in a lack of knowledge that somehow contributes to the issue in this study.

1.3.2 Theoretical Gaps

Any conducted research should have its significance in developing the knowledge in the particular field or industry. The findings or outcome should give an impact to the industry and applicable outside the research setting.

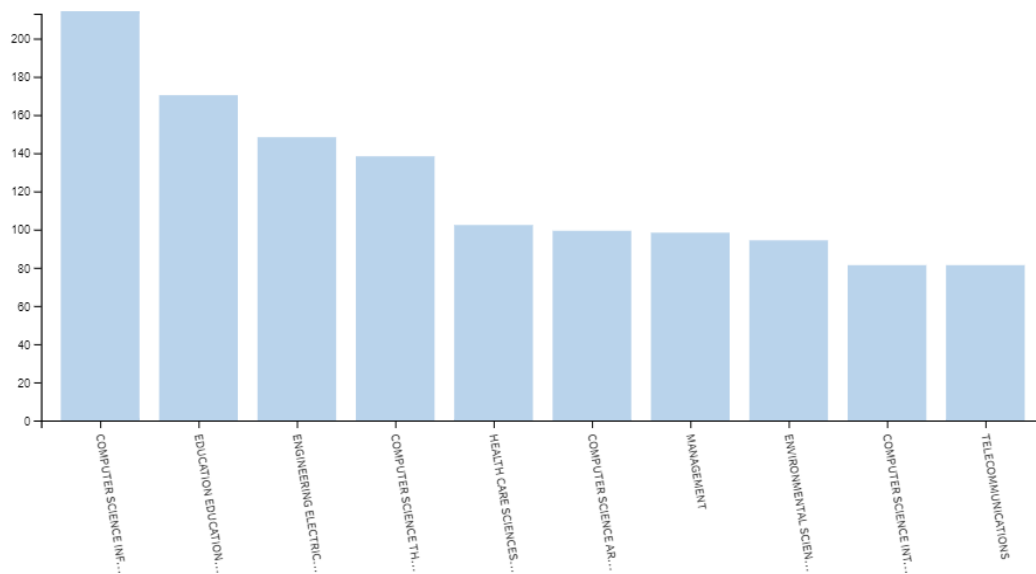


Figure 1.2 The bar graph analysis from Web of science browser.

The finding in Figure 1.2 shows the importance of the proposed study for the CMS, based on the highest portion of the analysis box with a total of 1,564 studies. Most of the research topics are from the field of computer science and educational research. However, further analysis from the Web of science as shown in Figure 1.3 shows that the highest research publications are from the US, China, England, Australia, Canada and Italy. China and India are two Asian countries that have contributed to the current research topic. Malaysia is not on the first list, indicating the importance of our country's contribution to this topic.

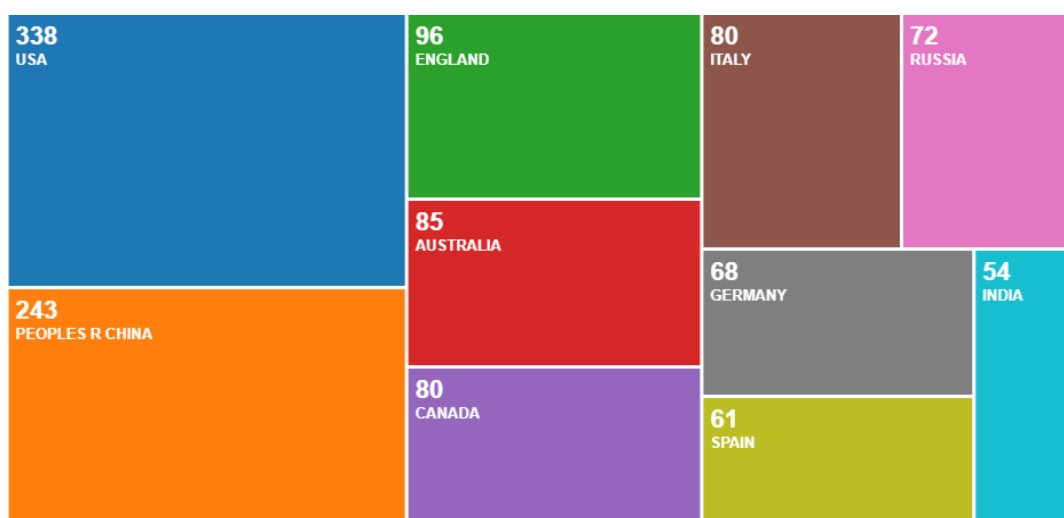


Figure 1.3 The bar graph analysis from the Web of science browser.

1.3.3 Practical Gaps

The topic that has been chosen for the study plays a significant role the audience reached for Klik Dengan Bijak advocacy and awareness program. KDB’s current practices are focusing on the on ground activities such as speaking invitations, seminars, booths and exhibitions. The COVID-19 pandemic has caused many events and the program has been cancelled or postponed due to the Movement Control Order (MCO) in Malaysia. Among the prominent events affected were the advocacy on-the-ground programmes and activities. This intervention would be able to help KDB increase their audience reach. Based on the literature review, there are

minimal articles related to this study that originate from Malaysia and there were few articles about the effectiveness of the content management system.

1.4 Researcher Questions

The research questions were considered as the active step to this study, after the development of the problem statement. It is essential to guide the flow of the study, show what to find and provide clear purpose. Thus the research questions for this study include:

- a) Research Question 1:
What is the effectiveness of KDB's current practice?
- b) Research Question 2:
How does the development of the Content Management System (CMS) contribute to the effectiveness of KDB?
- c) Research Question 3:
What is the impact of CMS on KDB audience reach?

1.5 Researcher Objective

The development of the research questions is inter-related to the objective of the study. The research objectives should be achievable, clear and verifiable research as it directly contributes in answering the research questions. Hence, the objectives for this study includes:

- a) R1. To measure the effectiveness of KDB's current practice.
- b) R2. To determine the relevancy of the inclusive design CMS on the effectiveness of KDB.
- c) R3. To measure the effect of CMS to the KDB's audience reached

1.6 Researcher's Role

Transformative change is necessary for a researcher to produce effective study results by taking action and conducting research at the same time. This action research project can assist the organization or department in improving and providing better services to their customers. In this study, the researcher plays an important role in the diagnostic field, specifically the effectiveness of CMS. The findings of this research will present the significant impact of the CMS in the awareness of KDB. As a member of the organization's staff, it is the researcher's responsibility to conduct this study in order to address the problem that has arisen. The researcher is responsible for explaining the procedure, collecting data, and suggesting implementation ideas in the department in order to raise awareness and improve KDB's current practice. The researcher wished to contribute to the department and the community.

1.7 Research Ethics

The study was carried out in accordance with academic research ethics. Information collected will be treated as private and will only be used for this study. The researcher take every measure to protect the privacy of any personal information. Before beginning the research, the researcher received the approval from the department in charge. MCMC's policies compel the researcher to abide by their decisions and all other applicable rules.

1.8 Significant of the Research

The proposed research is essential in terms of improvement of the organization workflow. Analysis and in-depth details of the issue can be explored further by conducting research and implementing changes for the benefit of the community and organization.

1.8.1 Significant of Theory

Internet safety is significant globally, and it is one of the major concerns for all Internet users. The topics should be studied further in the future because they provide benefits to the population. The gap should be filled through additional research involving other facilities with more staff in the state office. This is significant because a study involving state offices can provide better findings about the level of awareness and practice at the state level. Aside from that, the research can be conducted from a different angle, such as analysis from the perspective of parents or teachers. The current gap can be closed if research is conducted on a global scale to find ways to increase awareness of Internet safety. The advocacy knowledge needs to be improved because it involves all Internet users in Malaysia and globally. Thus, choosing a study topic is critical because it can benefit the population while also adding to the body of knowledge. The content management system could be used by the public not only in Malaysia but also other part of the country. The issue of Internet safety are almost similar internationally, as such this research could contribute to the effectiveness of Internet advocacy globally.

1.8.2 Significant of Practice

The study could lead to the most effective advocacy and awareness of *Klik Dengan Bijak* to prepare the Internet users on the online risk through collecting data for improvement and further research. The implementation of CMS could help the advocators to deliver the module of KDB in the systematic way. Furthermore, the modules can also be used outside of the organization which will be beneficial for the organization. From the literature review, there are minimal articles related to this study that originate from Malaysia. Therefore this study can be the initial step for other institutions to start their documentation and monitoring regarding the advocacy awareness program and performances of its delivery that are able to be improved. The study demonstrates the benefit it provides to the advocators and those who need to deliver the KDB modules when the personnel are aware and obligated to provide the best content to the audience.

Aside from that, the conducted study may benefit the MCMC because it may be one of the digital transformation or intervention programs into nationwide awareness practice. As a result, the user will have a safer Internet environment, and the personnel's work process will improve. This, in turn, will contribute to a better outcome for the community and an improvement in the personnel's work process and expand current practice.

1.9 Definition of Terms

The definition of terms, in which the key or significant terms in the study are clearly defined, is an important part of the research paper or report. In order to explain the terminology used in this analysis, authors may use conceptual concepts to demonstrate the meanings of terms.

- a. **Klik Dengan Bijak:** Klik Dengan Bijak (Click Wisely) is an initiative by the Malaysian Communications and Multimedia Commission (MCMC) to educate and raise public awareness about Internet safety and security. The Internet is a virtual world with limitless resources and boundaries, but without sufficient knowledge and precaution, it could pose threats to us in real life.
- b. **Inclusive Design:** Way of going about developing a system which consist the elements of (1) fair use; (2) usage versatility; (3) simple to use and intuitive; (4) visible details; (5) error tolerance; (6) low physical effort and; (7) acceptable scale and proportions for approach and use
- c. **Content Management System:** Content Management System (CMS), is online content management software that enables people to create, maintain, and edit website content without the need for specific technical skills.
- d. **Advocator:** Staff at the organization including at the state office who are in charge of advocacy programs. Advocators will deliver the KDB modules to the public or any invitation from schools, universities or government and private agencies.

- e. **KDB Modules:** Consist of KDB modules such as cyberbullying, fake news and online risks.
- f. **MCMC:** Malaysian Communications and Multimedia or MCMC regulates and promotes the communications and multimedia industry encompassing telecommunications, broadcast, Internet services, postal and courier services, and digital certification.
- g. **Advocacy:** Advocacy is the process of receiving assistance from another person to assist you in expressing your opinions and wants and in standing up for your rights. Someone who assists you in this manner is referred to be your advocate.

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