

AWARENESS AND KNOWLEDGE ON THE ISSUE OF UNSUBSCRIBED  
MOBILE CONTENT SERVICE AMONG MOBILE USERS

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AWARENESS AND KNOWLEDGE ON THE ISSUE OF UNSUBSCRIBED  
MOBILE CONTENT SERVICE AMONG MOBILE USERS

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## DEDICATION

Education has a value that sometimes cannot be quantified,  
Dear self, don't doubt the journey. No one else but you and  
your thoughts will keep you afloat in strife. Keep working hard.  
Just the earth goes through seasons, so does a family in the course  
Of time endure seasons.  
Through there is gold up in the mountains, lovely pearls deep  
In the sea, those treasure do not mean as much as your worth  
to me.

For this poet, all of you is the poetry  
Thank you

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First and foremost, I would first like to thank my supervisor, Dr. Roshazlizawati Binti Mohd. Nor whose expertise was invaluable in formulating the research questions and methodology. Your insightful feedback pushed me to sharpen my thinking and brought my work to a higher level. You provided me with the tools that I needed to choose the right direction and successfully complete my dissertation.

In addition, I would like to thank my parents for their wise counsel and sympathetic ear. You are always there for me. Finally, I could not have completed this dissertation without the support of my friends that help in provided me with the tools that I needed to choose the right direction and successfully complete my dissertation.

## **ABSTRACT**

Among the roles of the Malaysian Communications and Multimedia Commission (MCMC), which serves as the industry's regulating body, is to handle complaints about communications and multimedia. The role of MCMC is to safeguard communications consumers' rights against manipulation by the irresponsible communications and multimedia industries, including mobile phone users. While the establishment of CFM (Malaysian Consumer Forum) is designed to aid MCMC in protecting consumers. The forum enables users to lodge complaints and work out resolutions for issues relating to communication services. The topic of "unsubscribed mobile content services" is frequently brought up in complaints to MCMC and CFM. The fact that the number of complaints has remained consistent since 2013 indicates that the issue has not been successfully remedied. Since these, education plays an important role in resolving this issue, as many users remain unaware of their rights to unsubscribed content services. Following that, a study on this subject was undertaken among MCMC workers to ascertain their level of understanding. Additionally, this study will examine the success of current campaigns promoting Unsubscribed Mobile Content Services and identify measurable enhancements that will help raise mobile users' understanding and awareness of this content. This research uses a qualitative and quantitative mixed method approach. Questionnaires will be distributed quantitatively among MCMC staff who are also mobile users, with the goal of determining the actual degree of understanding among personnel who should be regarded skilled in the subject. Along with assessing their degree of awareness and expertise, the same questionnaire will provide an overview of the staff's area of influence and additional advocacy strategies that may be used to promote awareness in their communities. In terms of the qualitative method, interviews were conducted with persons from CFM and MCMC to elicit perspectives on certain topics, which would be examined to address specific questions connected to the study's theme. This study will contribute to the existing of knowledge and is intended to provide insight to the respective departments at MCMC regarding the right steps to take to resolve this issue so that it does not reoccur every year.

## ABSTRAK

Tanggungjawab Suruhanjaya Komunikasi dan Multimedia Malaysia (MCMC) yang merupakan agensi kawal selia industri komunikasi adalah menangani aduan mengenai hal berkaitan dengan komunikasi dan multimedia. MCMC berperanan melindungi hak pengguna komunikasi daripada manipulasi oleh industri komunikasi dan multimedia yang tidak bertanggungjawab, termasuk pengguna telefon bimbit. Manakala pembentukan CFM (Forum Pengguna Malaysia) adalah untuk membantu MCMC dalam perlindungan pengguna. Forum ini menyediakan platform bagi pengguna untuk menyampaikan aduan dan menyelesaikan masalah berkait perkhidmatan komunikasi. Berdasarkan kepada aduan yang sering diterima oleh MCMC dan CFM adalah tentang isu "perkhidmatan kandungan mudah alih yang tidak dilanggan". Jumlah konsisten aduan diterima sejak tahun 2013 adalah petunjuk bahawa masalah tersebut belum dapat diselesaikan secara berkesan. Maka, kesedaran adalah asas dalam menyelesaikan masalah ini, kerana ramai pengguna yang masih belum mengetahui hak mereka terhadap isu ini. Sehubungan itu, kajian berkenaan isu ini dilakukan bertujuan untuk mengetahui tahap pemahaman dikalangan pengguna mudah alih yang dimana ia dilakukan dikalangan kakitangan MCMC. Kajian ini juga akan melihat kepada keberkesanan kempen yang ada tentang Perkhidmatan Kandungan Mudah Alih yang Tidak Dilanggan serta penambahbaikan yang boleh dikenal pasti bagi meningkatkan pengetahuan dan kesedaran para pengguna mudah alih berkait dengan isu ini. Kajian ini menggunakan pendekatan kaedah campuran iaitu secara kualitatif dan juga kuantitatif. Menerusi kaedah kuantitatif, soal selidik diedarkan di kalangan kakitangan MCMC yang juga merupakan pengguna mudah alih, di mana maklumat yang di peroleh akan mencerminkan tahap pemahaman sebenar di kalangan personel yang seharusnya di anggap mahir dalam isu ini. Selain itu, borang soal selidik yang sama juga akan memberi gambaran mengenai lingkaran pengaruh staf dan kaedah advokasi lain yang dapat dilaksanakan untuk meningkatkan kesedaran dalam masyarakat mereka. Manakala bagi kaedah kualitatif, temu ramah dengan individu daripada CFM dan MCMC dilakukan untuk mendapatkan pandangan mengenai isu-isu tertentu di mana ia akan dianalisis untuk menjawab soalan-soalan tertentu yang berkaitan dengan topik kajian ini. Kajian ini akan menyumbang kepada penambahan literatur dan juga diharapkan dapat memberikan pandangan kepada jabatan yang bertanggungjawab di MCMC mengenai langkah-langkah yang sesuai yang harus diambil untuk menyelesaikan masalah ini agar tidak berulang setiap tahun.

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## **LIST OF ABBREVIATIONS**

SMS	-	Short Messaging Services
MSPMCS	-	Mandatory Standard for the Provision of Mobile Content Services
MMS	-	Multimedia Messaging Services
MCS	-	Mobile content services
MCMC	-	Malaysian Communications and Multimedia Commission
FTA	-	Federal Trade Commission
CMA	-	Communications and Multimedia Act
CFM	-	Consumer Forum of Malaysia

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

In the lead for Malaysia to become a fully developed and modern nation, technological capability has been seen as a crucial element in enhancing a country's productivity. The mobile industry is one of the key element to deliver on this objective. The constant evolution of new technologies and advancement of applications continue to generate growth in telecommunications industry in Malaysia. These developments have become a factor in witnessing the change of communication between individuals.

Accordingly, the current pandemic of COVID-19 has triggered and urgency for Malaysia to address the needs for greater digital connectivity for Malaysia to be globally competitive, robust, resilient and an enriched digital-based society. Driving factors such as the growth of the mobile-broadband subscriptions, the increase of smartphone adoption, inexpensive devices, affordable voice-data packages, etc. contributed the growth of telecommunications industry in Malaysia. For instance, broadband access continues to demonstrate sustained growth with Malaysia's broadband subscriptions stood at 42.2 million as at 4Q 2020. Figure 1.1 shows national broadband subscriptions from 2015 to 2020<sup>1</sup>.

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<sup>1</sup> Malaysian Communications and Multimedia Commission

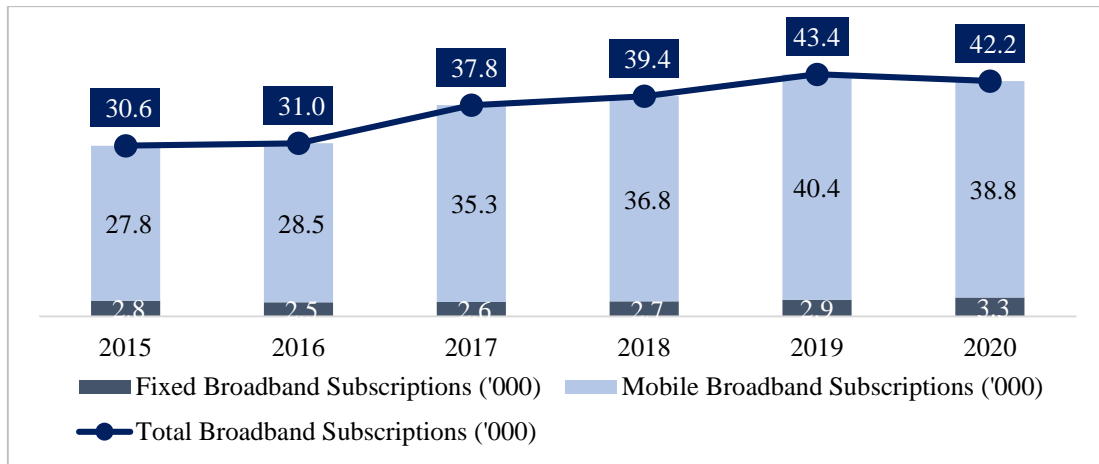


Figure 1.1 Malaysia's broadband subscriptions from 2015 to 2020  
(Source: MCMC)

Among others, mobile phones also play an essential role in the growth of telecommunications industry where it provides a great flexibility which allow individual to be reachable virtually everywhere. In Malaysia, mobile phone ownership stood at 96.4% in 2020. Figure 1.2 shows the percentage of individuals owning and using mobile phone in Malaysia<sup>2</sup>.

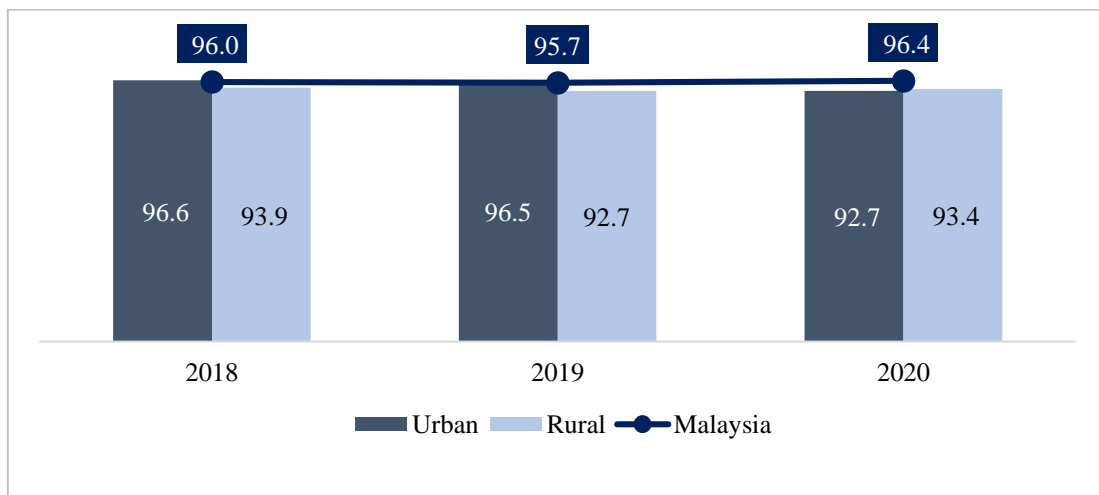


Figure 1.2 Percentage of individual own a mobile phone by strata, Malaysia from 2018 to 2020 (Source: MCMC)

Heightened by growing levels of digital innovation and of more affordable mobile phone hitting the market has led the increase of the mobile content services (MCS). According to Malaysian Communications and Multimedia Commission

<sup>2</sup> ICT Use and Access by Individuals and Households Survey, Department of Statistics Malaysia

(MCMC), MCS is defined as *“Any messaging service which provides content and is accessible on a mobile access device or fixed access device, for which charges may be imposed over and above the standard network charges of the relevant service provider and consist of the provision of content or service to any person and SMS Broadcast”*.

In the early days of cellular market, Short Messaging Services (“SMS”) and Multimedia Messaging Services (“MMS”) have been used and until the now the services were still included in the list of services provided by all telecommunication service providers. It was observed by Spurgeon and Goggin, in relation to the global evolution of SMS and MMS, *when SMS grew much as a mode of communication in nations, it piqued the attention of a wide spectrum of business players, particularly up to date and aspiring entrants.”*.

In a sense, although it was never expected originally to play this role, SMS conditioned markets for data services. Presently, SMS also supports a myriad of substantial new businesses ranging from specialist software developers for SMS traffic management, marketers, and content vendors, including television networks enhancing their programmed offerings with mobile interactivity (voting, competitions, or audience feedback, for instance).

Capitalizing on this unexpected boon, mobile carriers are seeking to position MMS (multimedia services) as the successor to SMS, supported by heavy marketing to promote consumer adoption of new mobile phones with picture and video capacity”. (Spurgeon & Goggin, 2005). SMS and MMS are components of Mobile Content Services (MCS) and MCS is billable to consumers. MCS evolved from SMS and MMS to other digital mobile services, for example, as security layer in banking transactions (TAC and PIN), advertisements and sale of digital contents. With the provisions of these services, service providers monetized the service and sell it to consumers, sometimes at a very ridiculous rate.

According to Goggin and Spurgeon “Cellular communication has become a large and expanding industry, and the technological innovations that mobile

messaging represents potential to generate demand and chances.” (Spurgeon & Goggin, 2005). The complex charging, billing and rate determinations is confusing to consumers, whom often fail to comprehend the charges appearing on their bills. This practice by service providers has been deemed criminal in many jurisdictions, for example, it was reported by USA Today that the Federal Trade Commission (FTA) accused T-Mobile for “cramming”, which is a practice similar to unsubscribed MCS, The FTA has identified, among others, that T Mobile hid the charges among uncomprehend able items in its bill to clients. T Mobile imposed charges of “typically \$9.99 per month” and the charges may be noted as “25184USBFIQMIG” or simply "usage charges”.

Thus, in view of consumers’ rights and welfare, concern arises when consumers are being charged with services that are not subscribed by them, continuously charged by the provider even though it is already terminated, or when consumers received unsubscribed messages without their prior acknowledgement. As MCS literacy remains a key concern, it is essential that for users to equip themselves with basic MCS knowledge.

Henceforth, this study focuses to assess the level of knowledge and awareness towards MCS among mobile users.

## **1.2 Case Company Introduction**

Malaysia aspires to achieve total connectivity, full inclusiveness and digital participation of its population. Through MCMC as the lead agency, the government embarked on telecommunication infrastructure projects and prepared the population for the digital revolution. The exponential expansion of the telecommunication industry placed the duty unto MCMC to ensure that the services provided are beneficial to consumers whilst protecting consumers from being manipulated through unscrupulous tactics of service providers whom seeks to impose unnecessary charges for services rendered by them

The issue on MCS arises when the service provided to consumer without the consumer requesting for it (but the consumer is charged for the content), when the services are no longer required but was not effectively terminated (consumer is still being charged) or consumer are sent content with no prior acknowledgment of consent. On a broader spectrum, complaints on mobile contents can also be sub-categorized as spamming, targeted SMS blasting, and abuse of short codes. These are among the common reports on misuse and abuse of the mechanism of charging for mobile content services by service providers.

Under the Mandatory Standard for the Provision of Mobile Content Services (“MSPMCS”) which took effect on 1 July 2010, the failure to adhere to the code is a breach whereby under Section 105(3) of the Communications and Multimedia Act (CMA) 1998, MCMC can issue a notice of non-compliance and MCMC can order that the provision of services to be suspended. Continuing breach will make the offending party liable to be compounded or be liable to criminal prosecution whereby they will be charged in court under Section 242 of CMA 1998 which carries a fine of not more than RM100,000 or to imprisonment not more than 2 years. Despite the efforts taken by MCMC in terms of enforcement and consumer awareness strategies, the trend for complaints related to MCS is not decreasing. The number is an indication that unsubscribed MCS is a serious issue which requires constant supervision and it is a recurring problem. The steady number also suggests failure of enforcement actions in deterring offenders from committing the same offence. From another angle, this is an indication that the advocacy message related to unsubscribed MCS to the general public is far cry from being successful.

The concept of local champions in disseminating policy change should be considered in creating awareness or reinforcing the knowledge among the general public on unsubscribed MCS issue. Presently, MCMC has 823<sup>3</sup> employees employed in different divisions and offices. MCMC’s main office is located in Cyberjaya, and it also has twelve (12) state offices and six (6) branch offices throughout Malaysia and it has a Training Centre which was established as a focal point especially on providing training and knowledge to all employees of MCMC.

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<sup>3</sup> As at January 2021

Local champions are important because research has shown that humans are most influenced by similar others such as colleagues (Parker & JoAnn, 2010). Parker & JoAnn observed and made the following comments on the effectiveness of local champions in implementation of local policy, “According to informants, local champions can fulfil a number of roles that help promote and sustain programs. They can provide ongoing marketing about the program, reminding people about its presence and value. They also can serve as local experts and resource persons, promoting the programs through ongoing reminders, whether formal (e.g. presentations at employees’ meetings) or informal (e.g. individual conversations about programs benefits). In addition, champions can serve as conduits of information between local implementation processes and regional and medical center managers, as well as external implementation facilitators”.

This research seeks to study the level of understanding among MCMC employees as a mobile user on the issue of unsubscribed MCS before embarks on the idea of making MCMC employees as local champion with the assistance of Training Centre, MCMC Cyberjaya.

### **1.2.1 External environmental analysis**

According to Sammut-Bonnici, T., & Galea, D. (2015), PEST analysis is an acronym for political, economic, social, and technological. The analysis was conducted with the aim to understand external factors and evaluate how business models will have to evolve to adapt to the environment. One of the reason PEST analysis is considered as one of the powerful tool is because the analysis assists in attaining a comprehensive view of an organization’s current environment as also being widely used tool for understanding strategic risk. In addition, the analysis identifies the changes and the effects of the external macro environment on a firm's competitive position. The description for external environmental analysis using the PEST analysis is shown in Table 1.1 below.



Table 1.1 PEST Analysis

Factors	Opportunity	Threat
<b>Political</b>		
Instability of government may indirectly effect on the guidelines in addressing issue of MCS		√
<b>Economy</b>		
As technology develops, mobile services have the potential to impact economic development further through high penetration of 3G and 4G data services which deliver data services to consumers and businesses.	√	
<b>Social</b>		
Social communication between consumer and provider - The way of the MCS been provided or delivered has evolved from SMS to IP based. Consumer may not aware the mechanism of subscribing or accidentally subscribed to the services. Content providers advertisement also not clear or misleading which lead to consumer did not get sufficient information and click the link for the service without knowing they will be charged.		√
Older generations with lack of information towards MCS		√
<b>Technology</b>		
The advancement of technology has created an opportunity for information on MCS to be distributed in digital platform i.e. social media, website, online training, etc.	√	
Heightened by growing levels of digital innovation and of more affordable mobile phone hitting the market has led the increase of the mobile content services.		√

For political factor, it is well-known that Malaysia is a country that practices a system of Democracy based on the Federation system. Nonetheless, the changes in the political landscape and the instability of government may effect on the guidelines in addressing issue of MCS. According to the experts, the Mandatory Standard for the Provision of Mobile Content Services (MSMCS) currently been reviewed to expand the scope to include mobile content services. Hence, from political point of view, it can be observed that the decision being regulated by the political and government factor and may effect to the degree on the landscape of MCS.

For economic factor, there are some correlation between the mobile penetration rate and the growth of economic (Deloitte, 2012). It can be observed that mobile phone has improved communications, social inclusion as well economic activity which comprises of various sectors such as health, agriculture, finance, etc. As technology develops, mobile services have the potential to impact economic development further through high penetration of 3G and 4G data services which deliver data services to consumers and businesses.

Under social factor, the communication between consumers and providers plays an important role to ensure consumers fully understand on the service they subscribed. In addition, the advertisement or any commercial provided by content providers should be concise, clear, as well as avoiding any misleading statement to the consumers. Otherwise, these misleading information will give an impact to the consumers i.e. consumer did not get sufficient information and click the link for the service without knowing they will be charged. Among others, experts expressed their concern on the consistent numbers of people falling prey to these threats where older generations may easily become a victim due to lack of knowledge and awareness on this issue. Hence, different messaging for different target groups is essential to minimize the risk of becoming a victim.

Under technology factor, amidst the COVID-19 pandemic, the lockdown and physical distancing measures imposed in Malaysia has contributed to shift some economic activity towards online platform. Thus, the advancement of technology has created an opportunity for information on MCS to be distributed in digital platform

i.e. social media, website, online training, etc. However, heightened by growing levels of digital innovation and of more affordable mobile phone hitting the market has led the increase of the mobile content services. In the view of consumers' welfare and rights, concern arises on the issue of sending unnecessary paid messages to unsuspecting mobile users.

### 1.2.2 Internal analysis

The internal analysis is essential in identifying on the progress of the organization towards any issue or subject related to the study. The internal analysis for this study comprises several scopes such as management, marketing, financial, operations and management information system (MIS). Identification on the strengths and weaknesses related to the organization were summarized in table below.

Table 1.2 Internal Analysis

Factors	Strength	Weakness
<b>Management</b>		
The framework, model and guidelines is sufficient in addressing the current issue of MCS, unsolicited messages, etc.	√	
<b>Financial</b>		
-	-	-
<b>Marketing Assessment</b>		
Lack of visibility from the awareness and information sharing that has been done before.		√
<b>Operation</b>		
The respective department, division ad sector were effectively carry out their operational activities in addressing the current issue of MCS, unsolicited messages, etc.	√	
<b>Management Information System (MIS)</b>		
There is a social platform used for disseminate the awareness and information to the consumer.	√	

For management assessment, MCMC has its own strengths where MCMC as a regulatory agency in the telecommunications industry has the authority to regulate all matters related to communications and multimedia activities that are not enshrined in communications and multimedia laws and consider also propose reforms to communications laws and multimedia. Thus with adequate frameworks, models and guidelines to address current MCS problems, unsolicited messages, etc. are in place to protect the public from being manipulated by unnecessary mobile content providers.

As for marketing assessment, MCMC through CFM actively conducts awareness activities and information sharing through various medium for the purpose of attracting the attention of the public out there and this is one of the strengths. However, there is a lack of visibility regarding CFM itself among the public as they are more familiar with MCMC as the agency responsible for all telecommunications matters. This may be due to their ineffective marketing campaign activities as well as the introduction of the CFM function itself. As such, this poses some weaknesses to CFM and MCMC directly.

In an operational assessment, MCMC and through the forums under its supervision have a good strength where they give their best in carrying out its operational activities in conveying awareness and sharing information on issues and consumer rights in the field of telecommunications. The organization continuously disseminates information and awareness to the public for the purpose of increasing knowledge of information, education to the public regarding consumer rights, regulations and technology for consumers.

For Management Information System (MIS) assessment, there are digital platforms used by MCMC and CFM such as social media platforms for them to attract a lot of attention among mobile users about their functions and role in disseminating and increasing knowledge and awareness related to telecommunications issues. Thus, it is one of the strengths possessed to ensure that awareness and knowledge can be communicated to users effectively.

### 1.3 Problem statement

Despite the efforts taken by MCMC in terms of enforcement and consumer awareness strategies, the trend for complaints related to MCS is not decreasing. The number is an indication that unsubscribed MCS is a serious issue which requires constant supervision and it is a recurring problem. Based on figure below, it showed that the number of complaints received by MCMC on SMS showed a consistent trend in the past three years (2018 – 2020)<sup>4</sup>.

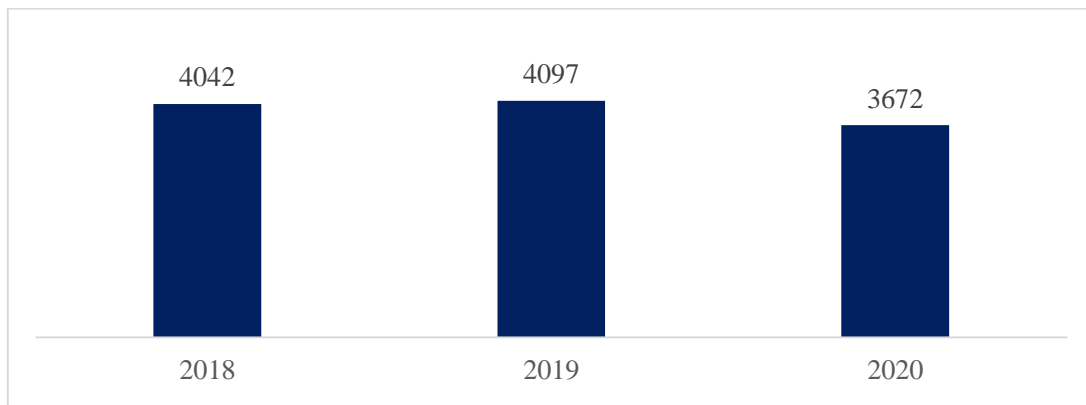


Figure 1.3 Number of complaints received by MCMC on SMS (Source: MCMC)

The steady number also suggests challenges on the enforcement actions in deterring offenders from committing the same offence. From another angle, this is an indication that the advocacy message related to unsubscribed MCS to the general public is far cry from being successful. Accordingly, in the view of consumers' welfare and rights, concern arises on the issue of sending unnecessary paid messages to unsuspecting mobile users.

#### 1.3.1 Problem diagnosis

With regards to the issue of MCS, concern arises on three different perspectives as follows:

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<sup>4</sup> Malaysian Communication and Multimedia Commission

1. The level of knowledge and awareness towards MCS among mobile user
2. Service Providers' Attitude Towards MSPMS
3. Advocacy Modules

Hence, the problem is further diagnose by using a Fishbone (Ishikawa) Diagram. According to Liliana, L. (2016,), the diagram was generated with the aim of identifying and grouping the causes which generate a quality problem. Gradually, the process has also been used to group in categories the causes of other types of glitches or problem which an organization confronts with.

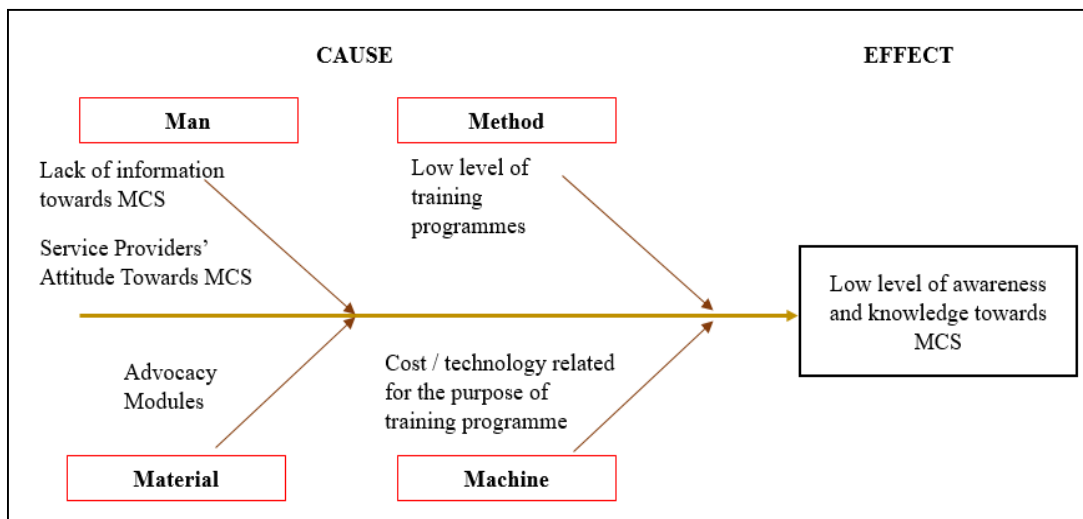


Figure 1.4 Fishbone (Ishikawa) Diagram

In the process of identifying possible causes on the low level of knowledge and awareness towards MCS, four basic elements were used which are Man, Method, Material and Machine. Under the **man element**, it is observed that the knowledge and awareness among MCMC employees as a mobile user on the issue involving unsubscribed MCS is not that impressive. The conclusion is drawn from conversation and the inability of interviewed MCMC officers as a mobile user to answer questions related to unsubscribed mobile content services. Being in the forefront of the issue, MCMC employees as a mobile user also should at least have a minimum level of understanding on MSQOSMS and how it protects consumers, including themselves. It is therefore important to understand the current level of understanding among MCMC officers. As there is no existing research on awareness

level on unsubscribed MCS issue among Malaysian consumers, the level of understanding is still yet to be discovered.

In addition, service providers also are partly to be blamed in the supply of unsubscribed MCS as they have not taken any pro-active steps to reduce or prevent future complaints on MCS. It is observed that the current mechanism for subscription of MCS, whereby the relation between service providers and third party content suppliers, makes regulatory efforts harder as service providers can be deemed as interested party in MCS subscription transactions. Proceeds from sales of each MCS will be channeled to service providers as fees and it would be counterproductive on the service providers' part, to restrict MCS subscription.

Under the **method element**, based on several interviews made with the expert on MCS, there are minimum awareness on mobile content services. The awareness need to be up-to-date and follow the current trend or issues to make it more effective and relatable for consumer. As seen by the consistent numbers of people falling prey to these threats, more effort must be done by the related organizations to ensure that less and less people become victims. Different messaging for different target groups, possibly even going to a younger age group.

For **material element**, currently, the resource available to consumers in relation to MCS are publications by Consumer Forum of Malaysia (CFM) which are made available in their website [www.infokonsumer.com.my](http://www.infokonsumer.com.my). However, the content provided are brief and presented in casual manner, to attract readers. A chapter on MCS are also available in Convergence Handbook (Malaysian Communications and Multimedia Commission, 2016) published by MCMC and distributed among employees only. Chapter 12.4 was written in a detailed manner and it may be confusing to readers as it is littered with technical jargons and few examples. Thus, a comprehensive module is needed to address the dearth of resources on unsubscribed MCS.

For **machine element**, considering the current situation of Malaysia in combatting the COVID-19 pandemic, the cost / technology related for the purpose of awareness programme also effecting the level of awareness and knowledge towards MCS. Hence, responsibility should also be put on device manufacturers, service and platform providers etc to share the burden of educating the employees as well as public.

### 1.3.2 Theoretical Gaps

Any study undertaken should contribute to the advancement of knowledge in the sector or industry in which it is conducted. The research results or outcomes should have an influence on the industry and be relevant outside of the research setting. The overall significance of this study is to identify the gap on the lack of knowledge and awareness towards the issue of MCS.

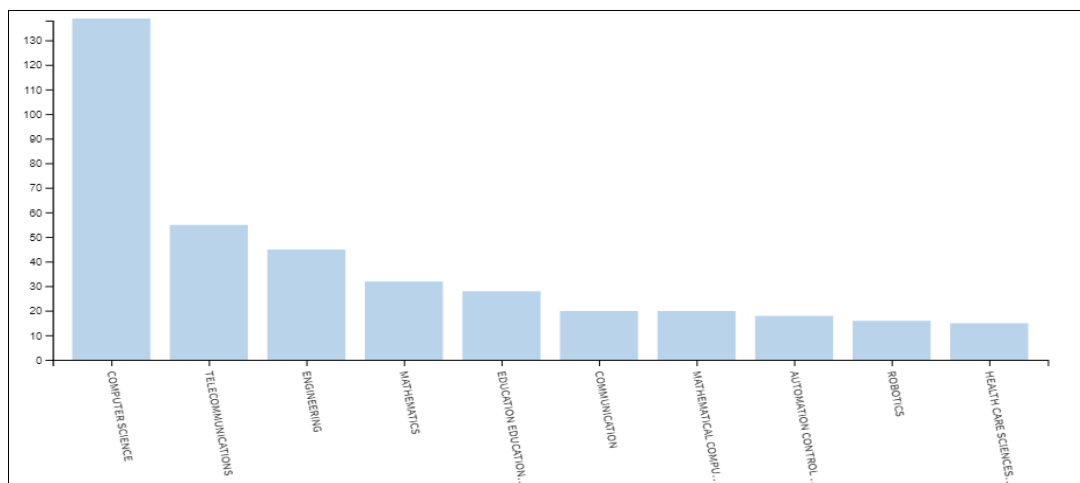


Figure 1.5 The bar graph analysis from Web of science browser

According to analysis made under keyword of awareness, knowledge, mobile content and mobile user in Web Science website under UTM, total of 172 records were found but majority of the records are not significant and related to this study. Thus, this study will help future researchers to better understand for assessing the awareness and knowledge among mobile user towards the mobile content received. Therefore, this research will be of great benefit to future researchers to identify the



level of awareness and knowledge of mobile users and how methods can be adopted to further enhance the effectiveness of awareness and knowledge campaigns regarding mobile content received.

### **1.3.3 Practical Gaps**

The topic that has been chosen for the study plays a significant role in the organization in addressing issue on the advocacy message related to unsubscribed MCS to the general public is far cry from being successful. In addition, based on several literature review, there are minimal number of articles related to this study that originate from Malaysia. Hence, to overcome the problem, the practical gap which comprises the issue on lack of awareness and knowledge in Malaysia must be filled by introducing the concept of local champions in disseminating and creating awareness or reinforcing the knowledge among the general public on unsubscribed MCS issue.

### **1.4 Research questions**

The following research questions are:

1. What is the current level of understanding on the issue of MCS?
2. How to develop MCMC employees as a mobile user to be local champions on unsubscribed MCS issue?
3. What is the impact of the existing tools of education towards creating awareness and knowledge among consumers?

## **1.5 Research objectives**

Thus, with all problems and questions that arise, the following will address the corresponding research objectives:

1. To understand the current level of awareness and understanding on the issue of unsubscribed MCS among mobile users
2. To propose a method or enhanced tools to increase knowledge and awareness among MCMC employees as a mobile user and equip them to be local champions on unsubscribed MCS issue.
3. To identify impact of the proposed method of creating awareness and knowledge among consumers.

## **1.6 Researcher's Role**

A research is done to study something more clearly and also to renew the study or research that has been done by previous researchers. The research results obtained are also new knowledge that needs to be learned so that an action can be done more quickly and accurately and very effectively. Therefore, through this action research project it can help the organizations in providing useful information and awareness to the growing number of mobile users regarding current issues. This can also indirectly help organizations improve and provide better services to the public. In conducting this action research, researchers have a role to conduct research ethically by following standard protocols in obtaining the required data through qualitative and quantitative methods, interpreting the data, and performing appropriate interventions so that information related to mobile content issues reaches to the users.

## **1.7 Researcher Ethics**

Study was conducted in compliance with ethical principles outlined in the Mandatory Standard for the Provision of Mobile Content Services. Study only involves content related to issue on MCS, enforcement of guideline and data retrieval from communication with the experts and respondents. All records and data are to be kept strictly confidential and can only be used for the purpose of this study. All precautions are taken to maintain data confidentiality. Permission from the relevant heads of department was obtained prior to the study. The authors are required to follow and comply with their decision and all other relevant regulations including the Communications and Multimedia Act 1998.

## **1.8 Significance of research**

The significance of conducting this study is vital for the purpose of improvement in the organization tin addressing the issue of MCS. These can be explored by conducting in-depth details analysis to provide benefit to the public as well as organizations.

### **1.8.1 Significance to theory**

SMS is a tool that had existed there from a beginning as well as is almost more significant as telephone conversations. Throughout a previous few years, technology especially cellular telephones rapidly evolved beyond a point where several names, ideas, including software which was originally regarded indispensable are been outdated. Nonetheless, messaging still rules the digital industry from different perspective such as secure authentication, OTPs, alerts to promotions and etc. Hence, there is a need to conduct this study from consumers' point of view to address their rights and welfare, particularly when consumers are being charged with services that are not subscribed by them, continuously charged by the provider even

though it is already terminated, or when consumers received unsubscribed messages without their prior acknowledgement

### **1.8.2 Significance to practice**

Based on the complaint received, it poses a question on the effectiveness of the awareness campaigns and the level of compliance among stakeholders on the regulation towards SMS and MCS services. Currently there is no awareness campaign designed specifically on this issue by MCMC. In light of these observations, this study attempt to assess the issue on the MCS particularly on the level of knowledge and awareness towards MCS. Furthermore, this study seeks to give MCMC's appropriate domestic as well as outside parties with a thoughtful and effective statistical analysis for assist in the development of pertinent rules as well as initiatives in the particular fields towards the issue of MCS.

## **1.9 Definitions of terms<sup>5</sup>**

### **1.9.1 Malaysian Communications and Multimedia Commission**

The Malaysian Communications and Multimedia Commission's key role was the regulation of the communications and multimedia industry based on the powers provided for in the Malaysian Communications and Multimedia Commission Act (1998) and the Communications and Multimedia Act (1998).

Pursuant to these Acts, its role is also to implement and promote the Government's national policy objectives for the communications and multimedia sector. The Commission is also charged with overseeing the new regulatory framework for the converging telecommunications and broadcasting industries and on-line activities. In 2001, the Commission's role was expanded to include

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<sup>5</sup> Source: Malaysian Communications and Multimedia Commission (MCMC)

overseeing the postal service sector pursuant to the Postal Services Act 1991 and licensing of the Certification Authorities under the Digital Signature Act 1997.

### **1.9.2 Mobile Content Services**

Mobile Content Services has been defined in the Mandatory Standards for the Provision of Mobile Content Services, effective 1 July 2010, as any messaging service which provides content and is accessible on a mobile access device or fixed access device, for which charges may be imposed over and above the standard network charges of the relevant service provider.

It consists of:

- a. The provision of content to any person including but not limited to content such as information, news update, data, quizzes, joke, greeting messages, ringtones, wallpapers logos and games for which charges may or may not be imposed to consumer
- b. The provision of a service to any person, including but not, limited to, chat services, Participation in contests, fundraising and voting; or
- c. A combination of (a) and (b), but shall not include value-added services provided by services, auto redial, back up SIM card, call barring, call directory, call divert, call transfer, call waiting, caller ID, caller number non-display, conference call, favorite numbers, IDD, missed call alert, multi-SIM card, number retention, number porting, mobile voice and message roaming, speed dial, voicemail, video call services or any other value added service; and
- d. Short Messaging Service (“SMS”) Broadcast.

### **1.9.3 Mandatory Standard (MS)**

The Mandatory Standard (MS) for MCS is applicable to Application Service Providers (ASP)<sup>6</sup> class licensees that provide messaging and public cellular services, and Network Service Provider (NSP)<sup>7</sup> licensees that provide billing and mobile content platform for the provisioning of mobile content services. These SPs are alternatively defined in the MS for MCS as Mobile Content Service Provider (MCS Provider) for the former and Public Cellular Service Provider (PCS Provider) for the latter.

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<sup>6</sup> ASP Class licensee that provides messaging services and public cellular services

<sup>7</sup> NSP that provide billing and mobile content platform for the provision of MCS

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