AN IMPROVEMENT OF BUDGET MONITORING PRACTICES TO INCREASE WORK EFFICIENCY AT MALAYSIAN COMMUNICATIONS AND MULTIMEDIA COMMISSION (MCMC) STATE OFFICES

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DEDICATION

To my lovely husband and kids, who are always there for me
To my lovely Mak and Mak Ayah, who always pray for my success
To my lovely family, who always cheer me up
To my ALPs friends, who always give me spirits
To my lovely Supervisor, Dr Norasnita, who always support and guide me

My journey would not be possible without support, guidance, prayer from all of
you

To everyone who involved directly and indirectly towards this journey, UTM
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This study is dedicated to you.

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ABSTRACT

Budget monitoring is crucial to ensure that the organisation's expenses are well managed and transparent. Therefore, it is an ongoing process to ensure the effectiveness and the efficiency of expenses in an organisation. In the Malaysian Communications and Multimedia Commission (MCMC) State Offices, there is no proper platform to monitor budget utilisation. MCMC State Offices (MCMC-SO) will request the MCMC Finance and Account Division (MCMC-FAD) budget utilisation expenses since MCMC-FAD only captures the budget utilisation expenses. Furthermore, this process flow took time and caused an inefficiency to MCMC-SO. Hence, this study aims to identify the issues and current practices of budget monitoring in MCMC-SO, to implement a budget monitoring dashboard and to measure the effectiveness level of the budget monitoring dashboard in increasing work efficiency by evaluating the user's perception and satisfaction before and after using the dashboard solution. The data collection method was used mixed methods, involving qualitative (interview) and quantitative (survey). Results show that the dashboard interventions introduced for budget monitoring significantly improve work efficiency in MCMC-SO

Keywords: Budget Monitoring, Dashboard, Effectiveness, Efficiency

ABSTRAK

Pemantauan belanjawan adalah penting untuk memastikan perbelanjaan organisasi diurus dengan baik dan telus. Oleh itu, ia merupakan satu proses yang berterusan untuk memastikan keberkesanan dan kecekapan perbelanjaan dalam sesebuah organisasi. Di Pejabat Negeri Suruhanjaya Komunikasi dan Multimedia Malaysia (MCMC), tiada platform yang sesuai untuk memantau penggunaan belanjawan. Pejabat Negeri MCMC (MCMC-SO) akan meminta perbelanjaan penggunaan belanjawan daripada Bahagian Kewangan dan Akaun MCMC (MCMC-FAD) memandangkan data perbelanjaan penggunaan belanjawan hanya dipantau oleh MCMC-FAD. Walau bagaimanapun, aliran proses mengambil masa dan menyebabkan ketidakcekapan kepada MCMC-SO. Justeru, kajian ini bertujuan untuk mengenal pasti isu dan amalan semasa pemantauan belanjawan di MCMC-SO, untuk melaksanakan papan pemuka pemantauan belanjawan dan untuk mengukur tahap keberkesanan papan pemuka pemantauan belanjawan dalam meningkatkan kecekapan kerja dengan menilai persepsi dan kepuasan pengguna sebelum dan selepas menggunakan penyelesaian papan pemuka. Kaedah pengumpulan data menggunakan kaedah campuran, melibatkan kualitatif (temu bual) dan kuantitatif (tinjauan). Keputusan menunjukkan bahawa intervensi papan pemuka yang diperkenalkan untuk pemantauan belanjawan meningkatkan kecekapan kerja dengan ketara dalam MCMC-SO

Kata Kunci: Pemantauan Bajet, Papan Pemuka, Keberkesanan, Kecekapan

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KKMM	-	Ministry of Communications and Multimedia Malaysia
MCMC	-	Malaysian Communications and Multimedia Commission
MCMC-FAD	-	Malaysian Communications and Multimedia Commission Finance and Account Division
MCMC-SO	-	Malaysian Communications and Multimedia Commission State Offices
PPSO	-	Pulau Pinang State Office
PHSO	-	Pahang State Office
KDSO	-	Kedah State Office
MSO	-	Melaka State Office
PRSO	-	Perlis State Office
PSO	-	Perak State Office
JSO	-	Johor State Office

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The effectiveness of service in an organisation relies on the management system's efficiency. A good management system consists of systematic and secure information security to create a more effective and efficient organisation. All activities must be analysed, recorded, and reported using the right method to make it easier for the end-user. Therefore, along with the evolution of technology, an organisation should take the opportunity to streamline and simplify its monitoring system using technology. With this awareness, initiatives have been taken to produce a user-friendly monitoring dashboard complete with an informative and effective reporting display function at Malaysian Communication and Multimedia Commissions (MCMC) State Offices.

This chapter will discuss the background of the research, the problem statement, and the research objective. There are nine (9) sections included in this chapter.

1.2 Case Company Introduction

1.2.1 MCMC Background

In Malaysia, creating and expanding a new convergent communications and multimedia business in the mid-1990s necessitated a new paradigm demanding new media regulations and regulation methods. In November 1998, Malaysia approved a convergence regulatory approach for the communications and multimedia industries,

in line with this. The Communications and Multimedia Act of 1998, which established a new regulatory licencing framework for the industry, and the Malaysian Communications and Multimedia Commission Act (1998), which established a new regulatory body, the Malaysian Communications and Multimedia Commission, were both enacted to give effect to the new regulatory model.

Located in Cyberjaya, Selangor, MCMC currently consist of two main cluster and five main sectors, 23 divisions, including 14 MCMC States and 6 Branches of Offices nationwide. MCMC-SO (MCMC-SO), previously known as MCMC Regional Offices, consist of only Six Regional Offices. In 2019, MCMC Regional Offices expanded and became MCMC State and Branches Office. The overall structure of MCMC-SO can be illustrated as per Figure 1.1 as follows:
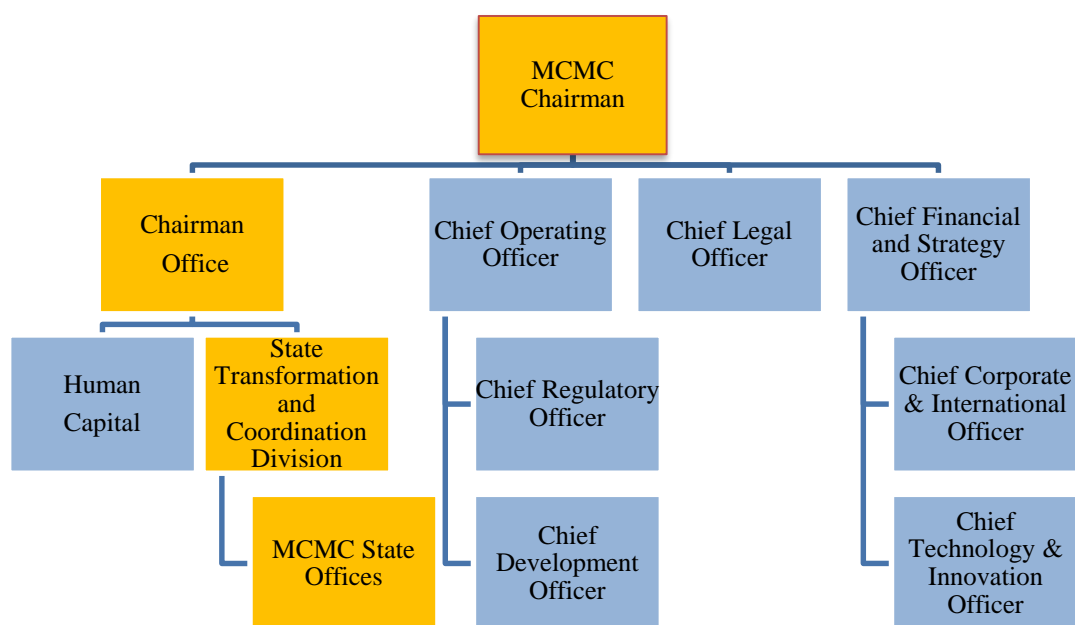
Figure 1.1   MCMC Overall Organisational Chart

MCMC-SO is supervised by State Transformation and Coordination & Division (MCMC-STCD) located in MCMC Headquarters (MCMC-HQ). Currently, MCMC-SO is occupied with 157 staff all over Malaysia. MCMC-SO major task is to help MCMC-HQ execute MCMC fieldwork and State liaison with State Government. Effective on 15 September 2020, MCMC-SO has been enhanced through empowerment and accountability through the State Transformation plan.

MCMC-SO has become a microcosm of MCMC and has been earmarked as MCMC's focus areas in 2021. Besides introducing a Pelan Jalinan Digital Negara (JENDELA) initiative throughout the country, MCMC-SO has become an essential entity to help the industry underground at the State Level.

1.2.2   Budgeting in MCMC

Budget monitoring is crucial to ensure that the organisation's expenses are well managed and transparent. Every year, the operational expenses will be included in the MCMC overall budget as other divisions. Based on Section 41 Malaysian Communications and Multimedia Commission Act 1998, section one (1), the expenditure of the Commission up to such amount as may be authorised by the Minister for any one year shall be defrayed out of the fund. For section two (2), before 1 September each year, the Commission shall submit to the Minister an estimate of its expenditure (including the expenditure for research and development programs) for the following year in such form and containing such particulars as the Minister may direct.

The Finance and Account Division (MCMC-FAD), located in MCMC-HQ, Cyberjaya, captured budget monitoring for each state. All MCMC-SO rely on the data captured by MCMC-FAD. The budget utilisation data is needed during budget preparation or finalising year-end Key Performance Indicator (KPI), projecting for the following years budget and during the purchase requisition process. The process flow of requesting for budget utilisation report from MCMC-FAD as per Figure 1.1 below:
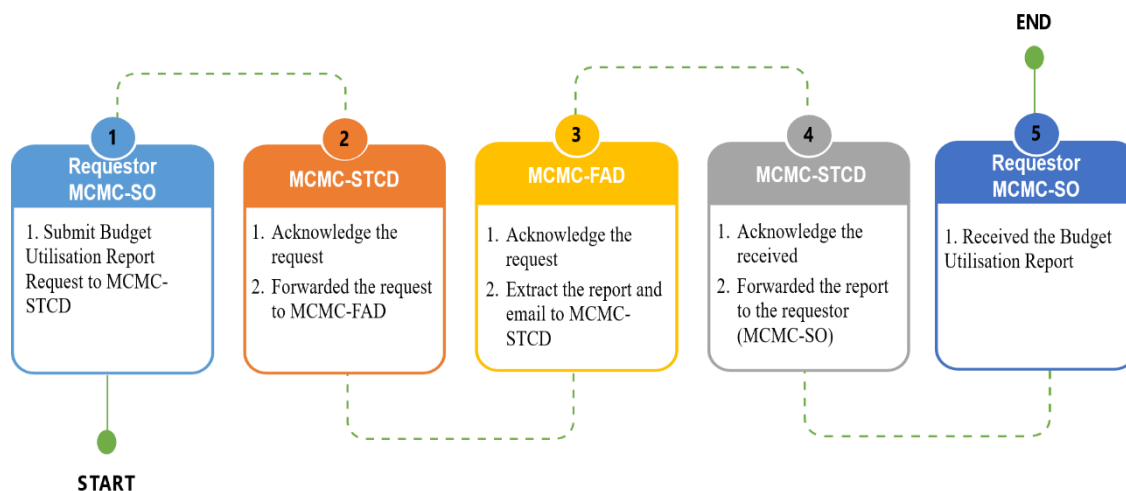
Figure 1.2   Process Flow for Budget Utilisation Report Request

Based on process flow in Figure 1.2, the process starts with the requestor, personnel from MCMC-SO, requesting the budget utilisation report. Since MCMC-SO is under the State Transformation and Coordination Division (MCMC-STCD), MCMC-SO will need to request the budget utilisation data to the MCMC STCD. Then MCMC-STCD will request the data from MCMC-FAD. Further, MCMC-STCD will then forward the data to the requestor.

1.2.3   SWOT Analysis

SWOT Analysis is a simple yet effective tool for assessing a company's resource capabilities and weaknesses, market possibilities, and external threats to its future (Thompson et al., 2007: 97). The acronym SWOT stands for 'strengths', 'weaknesses', 'opportunities' and 'threats'.The SWOT analysis in Table 1.1 was done in this chapter to explore more about budget monitoring procedures in MCMC-SO

Table 1.1   The SWOT analysis

	INTERNAL FACTORS	EXTERNAL FACTORS
POSITIVE	**STRENGTHS** - The availability of the new monitoring technique - Availability of all staff to handle the monitoring - Can be accessed by others	**OPPORTUNITIES** - Help user department forte in their field - Technology advancement in MCMC SO - Creating a report for other users
NEGATIVE	**WEAKNESSES** - Rely on Finance Department data - No budget monitoring platform - Only the person in charge know the budget utilisation	**THREATS** - Data leakage - Incomplete data

The strength is the availability of the new monitoring technique for the MCMC-SO. The researcher explores the monitoring technique using Microsoft One drive to start because the platform is user–friendly. In addition, all users can access the

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dashboard remotely. The other strength is the availability of the staff to handle the dashboard. The current user that requests a report from Finance Department can manage the dashboard. The dashboard also can be accessed by other parties while the main parties are not available. It makes the monitoring efficient instead of depending on only one person to give the data.

The weaknesses that exist due to no monitoring are that the user department will depend on finance reports to create a monthly report for current utilisation and visualise the data. The availability of the budget monitoring platform will help the user department perform a job quickly and more effectively. Currently, only the person in charge knows the utilisation of budget personally. By having monitoring, the dashboard can be shared with others in the state and will make them understand the current budget utilisation in their MCMC-SO.

Having the dashboard will help the user department manage the report and the data in terms of opportunities. In addition, it will lead the user to learn something new on the technology advancement. The other opportunities are, the user can create the report for another person using the functions in the dashboard.

On the other hand, technology is sometimes becoming a threat. For example, using an online platform could lead to data leakage. If the other person knows the dashboard link, they can open and manipulate the data. In addition, the other threat is the incomplete data. Another user cannot see the utilisation for the particular date if the user did not key in the data.

The SWOT analysis reveals the topic's challenging position, which must be investigated further. As a result, completing this research is also a step towards addressing the issues that occur.

1.3 Problem Statement

The utilisation report from MCMC Finance and Account Division (MCMC-FAD is not much complete and too general. It will cause a late and not an effective way of doing a job. From the observation, there is no specific mechanism or technique for budget utilisation capturing in MCMC-SO. Few issues have been identified on this matter:

(a)   A different process for different MCMC-State Offices (MCMC-SO)

MCMC-SO mostly rely on the data from MCMC-FAD. There are also MCMC-SO that have their own method to monitor budget utilisation. However, there are also MCMC-SO that do not monitor their utilisation at all. When it comes to the step where MCMC-SO need to do a procurement process, they need to manually calculate whether they still have a balance or ask the finance division regarding the utilisation.

(b)   No specific mechanism to monitor budget utilisation in MCMC-SO

Due to no monitoring of expenditure, MCMC-SO faced a challenge when they exceeded budget. The procurement process cannot be done, and a virement budget process must be done. It will cause inefficiency in doing the job.

(a)   Lack of information regarding utilisation to forecast the following year budget

MCMC-SO need to forecast for the following year's budget every year. Each MCMC-SO will personally contact MCMC-FAD for the current year utilisation. The data must be ready before forecasting for next year's budget. Finance Division need to extract one by one data for 20 State and Branch Offices. Each MCMC-SO needs to manually key in the template for last year's budget, current budget, and forecast budget regarding key-in data. The process took a long time due to the manual process.

1.3.1   Problem Diagnosis

The Fishbone diagram in Figure 1.3 below shows the factors that affect the inefficiency of the budget monitoring process in MCMC-SO:

CAUSE   **EFFECT**

STAFF   INFORMATION

1. Lack on awareness on   1. No data of budget utilisation to
monitoring technique   forecast the following year budget

                               2. No data of budget utilisation to
                               perform a purchase requisition   Inefficiency of
                                                                     budget
                                                                     monitoring
                                                                     process in
                                                                     MCMC State
                                                                     Offices

          PROCESS   SYSTEMS

          1. Different process from   1. No proper monitoring Platform
          different State Offices

          2. Repetition Process – Request
          report from Finance Department

Figure 1.3   The Fishbone Diagram

1.3.2   Theoretical Gaps

Any research carried out should contribute to advancing knowledge in the sector or industry. Therefore, the results or outcomes should impact the industry and be relevant outside the research environment. Based on the analysis at Web of Science, there are no topics related to "budget monitoring", "dashboard", and efficiency. However, there are 84 records of the research under "monitoring dashboard" and "efficiency". The visualisation data is as Figure 1.4 below:
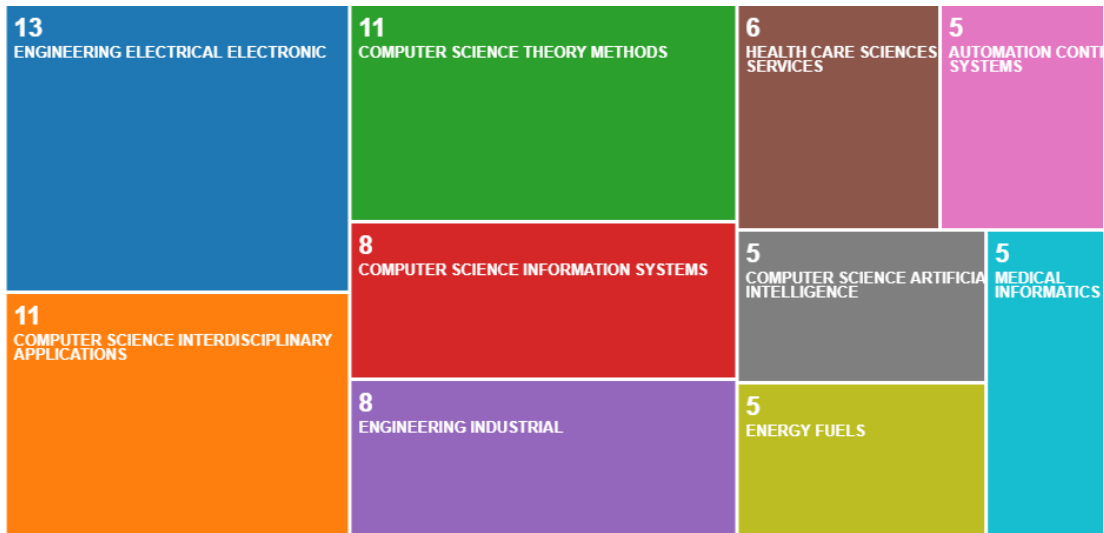
Figure 1.4   The Treemap Analysis from Web of Science Browser

Based on the treemap above, most of the research is under the Engineering and Computer Science field, whereby none are related to management. Hence, this research is needed to fill the theoretical gap of the study.
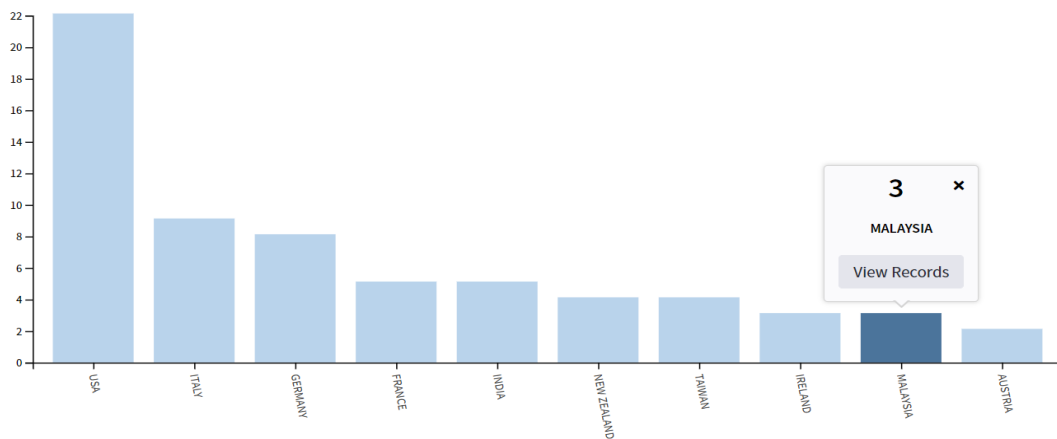
Figure 1.5   The Bar Graph Analysis from Web of Science Browser

The bar graph in Figure 1.5 has also supported this analysis, whereby there are three research studies regarding the monitoring dashboard in Malaysia but the energy field. Hence, this research contributed to the body of knowledge in Malaysia to increase the number of research in the management field.

1.3.3 Practical Gaps

The researcher has chosen the area of the research as there is still no research on budget monitoring techniques in MCMC. It plays a vital role in the outcome of the study. It can also help the MCMC expand the monitoring techniques throughout all divisions in MCMC HQ.

1.4 Research Questions

Based on the information mentioned in the problem statement, the following research questions are as stated below:

Main Research Question:

How to monitor budget utilisation in MCMC-SO efficiently?

Research Question 1:

What are the issues and current practices of budget monitoring in MCMC-SO?

Research Question 2:

What intervention should be implemented to improve the existing budget monitoring process?

Research Question 3:

Does the intervention increase the work efficiency of MCMC-SO Staff?

1.5 Research Objective

The objectives of the proposed research, as well as to answer the research question, are:

Research Objective 1:

To identify the issues and current practices of budget monitoring in MCMC-SO;

Research Objective 2:

To implement a budget monitoring dashboard that is expected to help MCMC-SO manage their budget monitoring and increase their work efficiency;

Research Objective 3:

To measure the effectiveness level of the budget monitoring dashboard in increasing work efficiency at MCMC-SO by evaluating the user's perception and satisfaction after using the dashboard solution.

It is anticipated that the intervention will help the MCMC-SO achieve effectiveness and efficiency in handling and monitoring budgets and improve the current practices.

1.6   Researcher's Role

In this study, the researcher plays a big role in gathering and analysing the data, computing the finding, and presenting the result. In achieving a good research outcome, the researcher must follow the sequence of research methodology and not be biased in the data gathering process.

a. The researcher must obey the research guidelines and must finish the research within the stipulated timeline;

b. The researcher must submit the report timely and follow the reporting guidelines given;

c. To ensure the research follows the procedure, the researcher must follow the ethics of doing research;

d. The researcher must be able to present the findings to the Industry and University examiner upon request.

1.7 Research Ethics

In achieving a good outcome in research, the researcher must follow all ethics while doing the research. The researcher must understand and manage the research properly without harming all parties involved. All of the participants involved must have well briefings and information about the study. Firstly, it is important to let the participants know the study's flow and engage in a few stages of answering the questionnaire and intervention planned. As for action research, the participants need to be aware of the research cycle to reduce confusion or withdrawal during the research process.

Secondly, participants' details should be obtained when the study is involved in handling the confidential information. The researcher should also manage the confidential information properly to avoid any consequences to the participants. Finally, in terms of participation, the respondents have the right to withdraw during the research process, and the researcher must be aware of this situation. Therefore, the researcher must always have a backup strategy to manage the issue.

1.8 Significance of the Research

In improving the organisation workflow, the proposed research is important. It is anticipated that detailed research and analysis will help improve an organisation and changes in the community.

1.8.1 Significance to Theory

The monitoring and dashboard are broad of study globally. However, in in-depth budget monitoring dashboard research, none of the related research appears. Hence, conducting this action research will contribute to the body of knowledge for further study. Apart from that, MCMC is the only regulator in Malaysia and research in this area are still needed to reduce the gap. Therefore, it is suggested that the research may be expanded to other management areas in other departments in Malaysia.

1.8.2 Significance to Practice

The research has a significant contribution to MCMC generally and to MCMC-SO. It has a positive impact on both parties as well as on the staff itself:

1.8.2.1 Standardisation of the monitoring process

As an important entity to MCMC, MCMC-SO needs a standard process that the research results' findings will prove. The dashboard will help improve MCMC-SO practices and procedures and quickly capture the data from the MCMC-SO sight itself. As a result, all MCMC-SO and branch offices will have the same methods as before, relying on the MCMC-FAD report.

1.8.2.2 Improve MCMC-SO decision making

By having their own way to capture the budget and monitor the utilisation, it is easy for MCMC-SO to estimate the following year's budget effectively and efficiently. The monitoring dashboard will help MCMC-SO make fast decisions and fast action. Also, MCMC-SO can cross-check their own data with MCMC-FAD for verifying purposes by having their own monitoring dashboard. If the budget allocated is underutilised, MCMC-SO can make a fast decision on how to fully utilise the allocation or use it for the purposes that benefit MCMC-SO.

1.8.2.3 Empowering MCMC-SO task

The dashboard also will have a big impact on MCMC-SO, which will make MCMC-SO more responsible in doing things related to MCMC money. It also provides awareness to each staff as MCMC is currently in austerity measures for each money spent. The budget monitoring dashboard will also be transparent across the MCMC-SO, MCMC-HQ, and staff.

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. To explain the terminology used in this analysis, authors may use conceptual concepts to demonstrate the meanings of terms. The definitions for the terms used in the research is taken from MCMC websites: *www.mcmc.gov.my*

Malaysian Communication and Multimedia Commissions ("MCMC") – Statutory body under Minister of Communication and Multimedia Malaysia. MCMC is a regulator for Communication and Multimedia in Malaysia.

MCMC State Offices - "MCMC-SO" – State Offices located in each state of Malaysia. It consists of 14 States and six Branch Offices all over Malaysia.

Budget Monitoring – an approach for State Offices to have a mechanism to monitor budget utilisation.

Dashboard – A mechanism proposed for budget monitoring at MCMC-SO.

Microcosm – MCMC-SO acts as an MCMC's eyes and ears in the community for MCMC.

Pelan Jalinan Digital Negara "JENDELA" – an initiative from Malaysia's government for preparation towards 5G Malaysia and a plan to provide better service in term of connectivity for Malaysian.

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