ADHERENCE TO PROJECT PLANNING THROUGH IMPROVED GUIDELINES: A PILOT CASE OF USPD (UNIVERSAL SERVICE PROVISION DIVISION)

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DEDICATION

To my dearest Ibu and Ayah who had given me all the thought and motivation with endless sacrifices up to moral supports;

My siblings and whole family whose always support and continuous encouragement;
To my supervisor who always guided me, who keeps me going and made this thesis happen;

Also to all the surrounding people, who had given me the idea and light for this journey;

This research is dedicated to you.

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I would also like to express my thanks to Dr Haliyana Khalid, my supervisor for this Action Research subject. The advice and guidance are very helpful and I did understand very well in doing research in academic ways. She also provided me with the right suggestion for my research title and improved the understanding on my topic to suit the standard of initiating the research for a particular subject. It is very helpful to me as my background is different for my degree which is engineering background. Again I am pleased to thank her for such guidance and assistance.

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ABSTRACT

The Universal Service Provision Division (USPD) is responsible for the operationalized the USP Regulations 2002, under the Communications and Multimedia Act 1998. Currently the Division is responsible for planning a new site list for the provisioning of broadband services in rural areas.

The purpose of this research is to identify and analyze the planning guidelines in the Universal Service Provision Division. There will be some stakeholders involved. Both were divided into two parts which are the internal stakeholders will consist of USP Division, Infrastructure Division and Geospatial Department. For the external stakeholders, there will be the service providers from Maxis, Digi, Celcom, Telekom Malaysia and TTDC. The data was collected via observation, interview, discussion and questionnaire and journal reference. The result will be tested and simulated within the USP Division and verified on the ground.

The potential contribution of this research are UPSD's guidelines for planning. High accuracy in broadband planning. Reduce miscommunication between all the stakeholders (especially internal stakeholders). Clear understanding of concern by each stakeholder, especially the internal stakeholders. Reduce redundancy for broadband planning sites.

This research will provide a clear and effective guideline for planning in USPD and MCMC. Quick resolution for complaint sites received by the public. Meet the high expectations expected from all the related stakeholders from Telecommunication industries.

ABSTRAK

Pemberian Perkhidmatan Sejagat (PPS) adalah dibawah peraturan Pemberian Perkhidmatan Sejagat (PPS) 2002, dibawah Akta Komunikasi dan Multimedia 1998. Pada masa ini ia bertanggungjawab untuk merancang lokasi baru bagi pemberian perkhidmatan jalur lebar di luar bandar.

Tujuan kaji selidik ini dilakukan adalah untuk mengenalpasti dan menganalisa proses dalam membuat perancangan dibawah Bahagian Pemberian Perkhidmatan Sejagat. Terdapat beberapa pihak yang akan terlibat. Ia terbahagi kepada dua bahagian iaitu pihak dalaman yang terdiri daripada Bahagian Pemberi Perkhidmatan Sejagat (BPPS), Bahagian Infrastruktur, dan Jabatan Geospatial. Bagi pihak luar pula, terdiri daripada pemberi perkhidmatan Maxis, Digi, Celcom, Telekom Malaysia dan TTDC. Maklumat akan dikumpul melalui temuduga, perbincangan, soalan dan rujukan jurnal. Keputusan daripada maklumat yang dikumpul akan diuji dan dibuat simulasi di dalam Bahagian PPS dan akan dilaksanakan di lapangan.

Terdapat beberapa sumbangan yang akan diterima oleh pihak Bahagian PPS iaitu dengan meningkatkan ketepatan dari segi perancangan projek jalur lebar. Mengurangkan masalah komunikasi antara semua pihak. Pemahaman yang jelas dan juga mengurangkan pertindihan bagi lokasi perancangan jalur lebar.

Kaji selidik ini akan memberikan penjelasan dan menambahkan keberkesanan perancangan Bahagian PPS dan MCMC. Serta akan dapat mencapai aspirasi kerajaan dan industri telekomunikasi di Malaysia.

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LIST OF ABBREVIATION

Abbreviation	Meaning	Page
SOP	Standard Operating Procedure	1
MCMC	Malaysian Communications and Multimedia Commission	2
USPD	Universal Service Provision Division	2
USTs	Universal Service Target	3
ID	Infrastructure Division	6
GDSD	Geospatial Department	6
2G, 3G, 4G	Mobile Coverage Service Technology	7
EOA	Expert Opinion Analysis	32

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The Telecommunication industry is a very big industry with multiple jurisdiction and structure behind. The industry was widely considered very profitable in the beginning and currently has also increased or evolved in technology advancement globally. The industries had become very important and considered as the third utility after water supply and electricity.

Globally the industry global forecast is around USD1.5billion a year (published by S.O'Dea, 5 Feb, 2021). With the advance improvisation and evolution of the industries. A very efficient and reliable project planning is very crucial and requires certain expertise and experience especially in telecommunication engineering and project management.

In every department in an organisation, it is a requirement to have the Standard Operating Procedure (SOP) in place. However there are still few departments which are still practicing the old method of process or procedure. This process or procedure did give a difficulty to be at par with the global standard and to achieve the same with the successful country.

1.1.1 Background of Organization

The telecommunication industries in Malaysia is governs and operates under the two legislation which are the Communications and Multimedia Act 1998 (regulates the licensing framework for the telecommunication industry) and the Malaysian and

Multimedia Commission Act (1998) which created the regulatory body of Malaysian Communications and Multimedia Commission (MCMC).

Malaysian Communication and Multimedia Commission (MCMC) is set with 10 target objectives:

1. Establish Malaysia as a major global centre and hub for communications and multimedia information and content services;
2. Promote a civil society where information-based services will provide the basis of continuing enhancements to quality of work and life;
3. Grow and nurture local information resources and cultural representation that facilitate the national identity and global diversity;
4. Regulate for the long-term benefit of the end user;
5. Promote a high level of consumer confidence in service delivery from the industry;
6. Ensure an equitable provision of affordable services over ubiquitous national infrastructure;
7. Create a robust applications environment for end users;
8. Facilitate the efficient allocation of resources such as skilled labour, capital, knowledge and national assets;
9. Promote the development of capabilities and skills within Malaysia's convergence industries; and
10. Ensure information security and network reliability and integrity.

1.1.2 Universal Service Provision Division (USPD)

The Universal Service Provision Division (USPD) is a division of Malaysian Communication and Multimedia Commission (MCMC). The Division is responsible for operationalizing the USP Regulations 2002, under the Communications and Multimedia Act 1998. Currently the Division is responsible to plan and execute initiatives or projects to improve the telecommunications infrastructure in the Universal Service Target (USTs). Currently, the Division is managing 12 big projects nationwide

with an approximate cost of RM15bil. There are currently 26 personnel in the Division. The division is very unpredictable as there are lots for funds to be managed and seldom interfered from external parties mostly by the politicians.

1.1.3 Universal Service Target (USTs)

The Universal Service Target is the area or groups selected based on demographic, population density, cost of living and as well the telecommunication infrastructure readiness in that particular area. It's normally notified by the Commission and published to the public.

1.1.4 PEST Analysis

Commonly used analysis to see the effectiveness and understand the strategic risk is by using PEST analysis. This involves Political, Economic, Social and Technological. These 4 factors will be analysed for Universal Service Provision Division (USPD) as well MCMC.

For political factors, MCMC is always related to political stability. This is due to the appointment of its management that does involve or appointed by politicians and in this case is the Minister of Communication and Multimedia Malaysia. The Minister does have the capability to appoint, re-appoint and terminate the Chairman of MCMC at any point of time. This has given a risk to the management as the appointment is a contract base position. Besides that, if in the case of government change there will be a new minister and eventually there will be a new Chairman of MCMC. These changes are very crucial and provide difficulties for the organisation to maintain its target or long term planning.

From the Economic factors, the MCMC through the Minister of Finance had announced the plans under Malaysian Budget 2021: the RM 9.4 billion for the development of a holistic digital strategy for the year 2021. This amount involves the project that initiated or planned under USPD. The amount will be effectively distributed if the project planning is initiated with a reliable and comprehensive procedure.

From the society perspective, MCMC did have a good number of employees as currently there are around 800 employees. These numbers don't reflect the efficiency and effectiveness of the organisation if it is not properly managed and structured carefully. Currently the distribution of MCMC employees is not clearly adequate and there is a lot of redundancy as there are not clear demarcation for scope of work and eventually affect the work efficiency as similar jobs were done separately. This wastage of resources is not good for social perspective. This is also the reasons why there are issues within internal MCMC relating staffing and also affect the overall productivity of the organisation as a whole.

In the perspective of Technology, MCMC is one of the pioneers in talking about technology. However, there are still gaps in terms of knowledge among the employees. These have to be improved as MCMC is on top of the chain in managing and regulating the telecommunication industries which are directly associated with technology.

1.2 Problem Statement

Based on initial interviews with the officers within MCMC, Industry Player, state offices and specifically the officers in USPD. There are a lot of issues and problems pertaining to the project planning and procedure that are currently practised.

Currently the Division has a very big amount of budget to spend for new project implementation. In making this achievable, the Division will have to plan all the new projects considering all the aspects, technical, regulatory, federal law, state law and certain jurisdiction etc. All of this is very important in order to have a very good, reliable and accurate budgeting for every project. However, currently there are certain areas, which require improvement.

Throughout the years of managing projects, the division planned projects without any clear guidelines in terms of selecting new sites. The guidelines are very general and are a decision based upon the situation. This has made the project

implementation department facing difficulties in addressing most of the complaints or requests by the public.

Having said that, there are reasons and causes for this to method of working in USPD. First is the data sharing between internal stakeholders of the department within MCMC. Some were having issues such as lack of trust, and bad perception between officers. Besides that, these issues are also encountered between MCMC and external stakeholders which are the Service Providers like Maxis, Celcom, Digi, U Mobile etc. These issues is when dealing with a very big data and a lot of parameters involved. This will contribute to the data errors or discrepancy when updating. On the receiving side which is USPD do not have enough officers or workforce in verifying all of this information. The data is very sensitive since they are competing between each other, trust related by the service providers. Lastly, the USP Division is a very crucial division, previously there are a lot of interference from several of people especially politician and sometimes are for their political gain. This will eventually interrupt the Division in managing the fund and project properly according to its main objectives.All of the issues pertaining to establishing the guidelines is summarized in points as per below:

1. There is no guidelines and method in planning for new projects;
2. The issues were due to the information and data sharing between internal and external party;
3. Big and sensitive data/information;
4. Big data, a lot of errors and discrepancies as well as not up to date; and
5. External interference.

The above discussion is the current problem faced by officers in USPD. In order to resolve this, it is proposed that new guidelines specifically for planning under USPD be established. There are few methods that are suggested for this which are by doing questionnaires and interviews with all the parties involved. There will be two parties involved, which are the internal and external. The internal party was identified as USP Division, Infrastructure Division, and Geospatial Department. While the external party were most of the major Service Providers such as Celcom, Digi, Maxis, Telekom

Malaysia and TTDC. The internal division/departments scope of work or role and responsibilities:

Table 1.1: Roles of Involvement

Division/Department	Role for Involvement	Remarks
Universal Service Provision Division (USPD)	The owner division whose responsible for planning and development using the USP Fund collected from the Service Providers	A Division under MCMC report to MCMC Chief Operating Officer (COO)
Infrastructure Division (ID)	The assisting division, which is responsible for monitoring overall telecommunication industry's progress and as well planning or preparing for next coming telecommunication technology.	A Division under MCMC report to MCMC Chief Operating Officer (COO)
Geospatial Department (GDSD)	A Department who's responsible for managing the data collected from all the service providers. This department is very important as all the sensitive information are gathered by them.	A Department report to MCMC Chairman

While on the other hand the external parties involved as shown in Table 1.2. The involvement only in general, the planning guideline is only for internal circulation

Table 1.2: List of External Parties Involved in Designated Universal Service Provider (DUSP)

Service Provider	Service Provided	Role for USPD
Celcom Axiata Berhad	The first mobile operator in Malaysia, offers most extensive mobile coverage (2G, 3G, 3.5G and 4G services) – MCMC Licensee	Major Contributor for the USP Fund
Digi Telecommunications Sdn Bhd	Mobile operator in Malaysia, provide 2G, 3G, 3.5G and 4G services – MCMC Licensee	Major Contributor for the USP Fund
Maxis Berhad	Mobile operator in Malaysia, provide 2G, 3G, 3.5G and 4G services – MCMC Licensee	Major Contributor for the USP Fund
U Mobile Sdn Bhd	New mobile operator in Malaysia, provide 2G, 3G, 3.5G and 4G services – MCMC Licensee	Major Contributor for the USP Fund
Telekom Malaysia berhad	The most known telecommunication company and a pioneer for the Malaysian telecommunications industry. Provide both fixed and mobile services.	Major Contributor for the USP Fund

1.3 Fish Bone Diagram

For this Action Research (AR), Fish Bone method or theory models will be used for high level overview of the main pillars pertaining to the study.

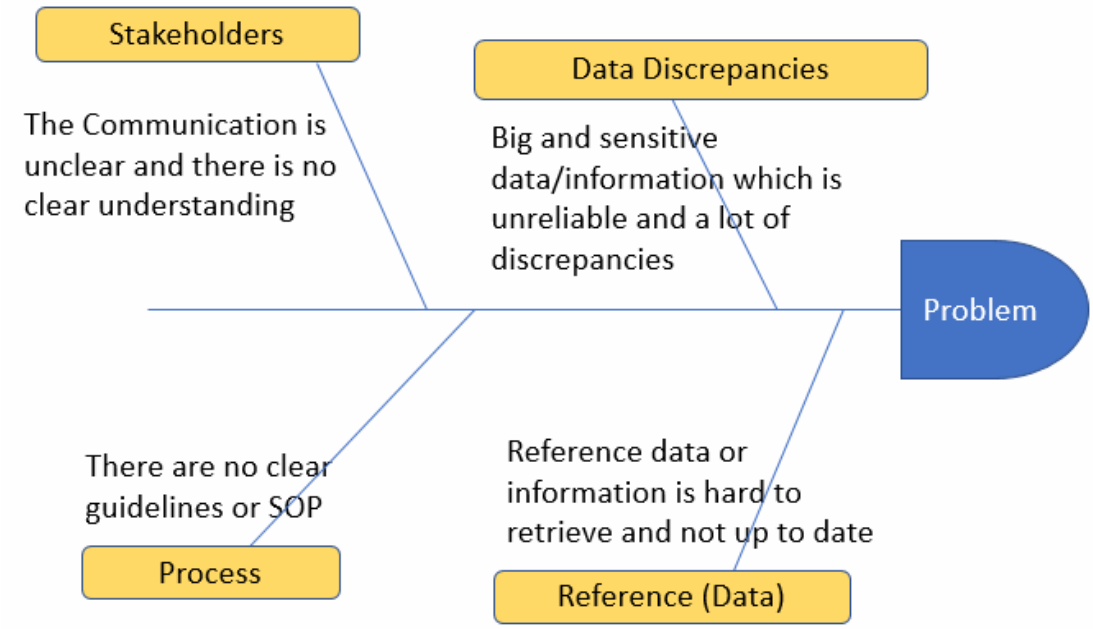

Figure 1.1: Fishbone Diagram for the Research

1.4 Research Goal

The researchers will be highlighting the research question, explaining the research objectives based on the problem statement.

1.4.1 Research Questions

The objectives of this research is to understand the current problem and challenges in project planning under the Universal Service Provision Division (USPD) and as well to propose new and suitable guidelines for project planning in USPD. Summarized Action Research Question are as per below:

1. What is the current challenge of current method in planning new sites for new project under USP Project?;
2. How the new guidelines, SOP and System* can improved the planning for MCMC (USPD)?; and

3. What do you think the impact would be after the study and the new guidelines are implemented?

1.4.2 Research Objectives

From the research question above, the compute research objectives are as per below:

1. To understand the current problem and challenges in project planning under USP Division;
2. To proposed new guidelines for project planning in USP Division; and
3. To assess the effectiveness of the new guideline for project planning in the USP Division.

1.5 Researcher's Role

The researcher will initiate the research and do the data collection, do the interviews, and propose new guidelines after the research process is completed. While on the other hand, the researcher will have the responsibilities to ensure that all the information gathered will not be shared publicly or with another unrelated party.

1.6 Research Ethics

In this research, the researcher will adhere to the academic process of executing research.

1.5 Importance of the Proposed Research

By initiating this research, there are a lot of benefits projected if the research is accomplished and able to be implemented and executed. The first and the most important of this proposed research is to ensure the planning and developments under the USPD or by MCMC in general is governed properly with a very clear instruction and procedures. MCMC as a regulator will play a major impact in telecommunication industries in Malaysia. Secondly, the USPD is a division in MCMC who manage a significant amount of money which is collected from all the registered service providers (licensees) under Communication and Multimedia Act 1998. In other words, to have transparent procedures and clear understanding between all the involved parties and as well for the interest and benefit to the public.

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