

UTILIZING PRODUCTIVITY AMONG PROCUREMENT OFFICERS AFTER
THE COMPLETION OF THE TENDER PROCESS AT PROCUREMENT
DIVISION, MINISTRY OF EDUCATION

MOHD RADZIFF BIN AHMAD

UNIVERSITI TEKNOLOGI MALAYSIA

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DIVISION, MINISTRY OF EDUCATION

MOHD RADZIFF BIN AHMAD

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requirements for the award of the degree of
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DEDICATION

Thanks to my wife and children who have always understood and supported me in
fulfilling this responsibility

This research is dedicated to you.

ACKNOWLEDGEMENT

First of all, I would like to express my gratitude to Allah SWT for providing good health in completing this study. Despite the challenging work environment in addition to the pandemic that hit the country, with the help of the supervisor in this study, Dr. Beni Widarman bin Yus Kelana, this study can finally be completed. From the beginning to the end of the study He was a caring person and cared about the progress of my study. Thank you for your patience and tolerance given. May you always be successful in all your efforts and endeavours.

Secondly, I would like to thank all the officers of the Procurement Division, Ministry of Education who were involved in answering the surveys conducted. Thanks also to SMEs who were interviewed for obtaining qualitative data and also together helped the successful implementation of the interventions obtained in this study. Hopefully the intervention implemented to some extent can help increase the productivity of procurement officers.

Finally, thanks to the family who always understood and supported me in completing this study. May we all always be under the protection of Almighty.

ABSTRACT

Employee productivity is very important for an organization. Productive employees will provide great benefits to the organization and the individual itself. However, there is one situation that causes employees to be unproductive. Among the conditions that can cause employees to be unproductive is a periodic work schedule. This means work is only performed at certain times and not full time throughout the year. This happened at the Services Unit, Procurement Division, Ministry of Education Malaysia. The organization believes that programs such as training and temporary job rotation of officers to other Units in the Procurement Division are a practical and cost-effective approach. The purpose of this research is to identify the factors that contribute to the lack of productivity and measure the level of effectiveness of the intervention obtained by testing two variables namely knowledge and productivity. Using interview, survey and observation methods involving a total of 25 respondents, a mixed method approach was used. Thematic Analysis and the Social Science Statistical Package (SPSS) were then used to interpret and analyse the findings obtained as a result of the listed mixed methods. As a result, the training and temporary work rounds implemented in this organization were found to be significant based on the results of Thematic Analysis and paired sample t-test analysis. It is hoped that this research is useful especially to the human resource management unit of an organization for the purpose of increasing employee productivity in the public sector.

Keywords: Productivity, knowledge, training, job rotation, motivation

ABSTRAK

Produktiviti pekerja amat penting bagi sesebuah organisasi. Pekerja yang produktif akan memberikan manfaat yang besar kepada organisasi dan individu itu sendiri. Walau bagaimanapun terdapat satu-satu keadaan yang menyebabkan pekerja tidak produktif. Antara keadaan yang boleh menyebabkan pekerja tidak produktif adalah jadual kerja berkala. Ini bermaksud kerja hanya dilaksanakan pada waktu-waktu tertentu dan tidak sepenuh masa sepanjang tahun. Perkara ini berlaku di Unit Perkhidmatan, Bahagian Perolehan, Kementerian Pendidikan Malaysia. Organisasi percaya bahawa program seperti latihan dan penempatan sementara pegawai ke Unit lain di Bahagian Perolehan merupakan pendekatan yang praktikal dan menjimatkan. Tujuan penyelidikan ini dijalankan adalah untuk mengenal pasti faktor yang menyumbang kepada kekurangan produktiviti dan mengukur tahap keberkesanan intervensi yang diperolehi dengan menguji dua pembolehubah iaitu ilmu pengetahuan dan produktiviti. Dengan menggunakan kaedah temu bual, tinjauan dan pemerhatian yang melibatkan sejumlah 25 responden, pendekatan kaedah campuran telah digunakan. Analisis Tematik dan Pakej Statistik Sains Sosial (SPSS) kemudian digunakan untuk menafsirkan dan menganalisis penemuan yang diperolehi hasil kaedah campuran yang disenaraikan. Hasilnya, latihan dan pusingan kerja sementara telah dilaksanakan dalam organisasi ini didapati signifikan berdasarkan keputusan Analisis Tematik dan analisis uji-t sampel berpasangan. Diharap penyelidikan ini berguna kepada terutama kepada unit pengurusan sumber manusia sesebuah organisasi bagi tujuan meningkatkan produktiviti pekerja dalam sektor awam.

Kata Kunci: Produktiviti, ilmu pengetahuan, latihan, pusingan kerja, motivasi

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LIST OF ABBREVIATIONS

eP	-	e-Procurement
MOE	-	Ministry of Education
JPN	-	Jabatan Pendidikan Negeri
PPD	-	Pejabat Pendidikan Daerah
PN	-	Pakatan Nasional
PH	-	Pakatan Harapan
EKSA	-	E-Pembelajaran Sektor Awam
Cuepacs	-	Congress of Unions of Employees in the Public and Civil Services

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The public sector is the largest sector in the country. According to Congress of Unions of Employees in the Public and Civil Services (Cuepacs), the current size of the country's civil service with 1.6 million people is ideal since it includes personnel from the public health and education sectors as well as those attached to security and enforcement agencies (NST, By Adib Povera - January 2, 2021 @ 5:14pm). This amount to provide services to 32 million Malaysians excluding foreigners and foreign workers. The large number of civil servants certainly gives an advantage to the country's delivery system. An efficient delivery system shows the progress of a country. In this regard, every ministry and agency in the country needs to provide efficient delivery to the public and their clients. Here human resource management is important at each ministry and agency to shape the delivery of the required services. Adequate manpower requirements will ensure effective service delivery. Apart from human resource management, the attitude and personality of the employees themselves play an important role in developing the service delivery system. Therefore, continuous personality development training should be provided to civil servants throughout their period of service.

Productivity is commonly defined as a ratio between the output volume and the volume of inputs. In other words, it measures how efficiently production inputs, such as labour and capital, are being used in an economy to produce a given level of output. Productive success involves structuring problem-solving and learning activities with the goal of achieving both improved performance on problem solving and sustainable learning - Puntambekar & Heubscher, 2005; H. G. Schmidt, Loyens, Van Gog, & Paas, 2007.

Productivity is an important element in the organization. Volume of output, quality of output and profit of the organization are all depending on the productivity of organization and its employees itself.

Training is the process of providing employees with specific skills or helping them correct deficiencies in their performance and development is an effort to provide employees with the abilities the organization will need in future - Gomez-Mejia Balkin & Cardy, 2001. The act of informing or instructing personnel on a certain task to improve their performance or understanding is known as training. People must be successfully and efficiently trained if they are to do their jobs to the best potential standard. When training is effective, it means that the activities produced the desired results. Furthermore, your employees must acquire or maintain the skills and information required to do their jobs, direct others, and supervise work. One of the causes of true quality issues can be related to a lack of training. Effective training should be affordable, but it is also a wise investment.

Job rotation is defined as an approach in transferring employees from one job to another systematically where it requires employee to possess different skills in providing outputs thus enhance their work efficiency and performance - Ajusa & Atambo, 2016. In this study researchers will use temporary job rotation which is similar function and objective. Temporary job rotation also includes lateral or non-lateral transfers inside a department or organisation to allow employees to work in a new position.

This chapter will cover seven sub-chapters, including the company's history, a problem that has arisen in the organisation, research questions and objectives, the researcher's role in the research, research ethics, the theoretical and practical importance of the proposed research, and definitions of terms.

1.1.1 Case Company/Institution Information

Among the improvements in the public service circular is to provide continuous training to early servants to ensure that knowledge is always practiced in the assignment. The minimum training period for a civil servant is 7 days a year. Training includes physical courses, online courses (EPSA), attending seminars, attending assemblies and many more. Apart from the government through *Pekeliling Perkhidmatan Bilangan 3 Tahun 2004* has introduced transfer policy to employees in strategic post and job rotation in order to expand knowledge. Those employees in critical post should be relocated or transferred out to another ministries or agencies to avoid any personal interest in the task. In addition, civil servants are encouraged to move to different divisions for human resource management purposes. More exposure in different parts will give an advantage to the individual.

1.1.1.1 Background of Organization

Procurement Division is one of the core division in every Ministry or Agencies. The capacity of Procurement Division for each Ministry and Agency are different depends on the size of the Ministries / Agencies. Big Ministries such as Ministry of Education, Ministry of Defense and Ministry of Health has big structure in Procurement Division and involving many officers and staffs. This is because the government budget of these Ministries is higher compared than other Ministries.

Procurement Division is one of the main divisions in Ministry of Education (MOE). There are 154 - warrant post (*warran perjawatan*) for this Division consists of officers and supporting staffs. The headquarters is located at Complex E, Pusat Pentadbiran Kerajaan Persekutuan, 62604 Putrajaya. One of the main roles of the Procurement Division is to handle contract tender's worth more than RM 5 million and above. In the 2019/2020 annual budget, MOE's Procurement Division has been allocated a total of RM1 billion for the purpose of procurement and maintenance services. This number is a large number for a division. Therefore, in moving towards the digital world, the government has introduced online procurement (e-procurement)

and MOE has started e-procurement since the middle of the year 2018. This e-procurement system is a single procurement system for the whole country and is coordinated by *CommerceDotCom* (CDC). The company has been appointed by the Ministry of Finance. With e-procurement, work processes, marking and selection can be implemented more quickly and transparently. Tender documents can be stored securely in the system and review of a tender will be faster. Feedback and suggestions from users, namely ministries and agencies, allow the appointed system administrator or vendor to improve the system from time to time. The following is the structure of the MOE Procurement Division:

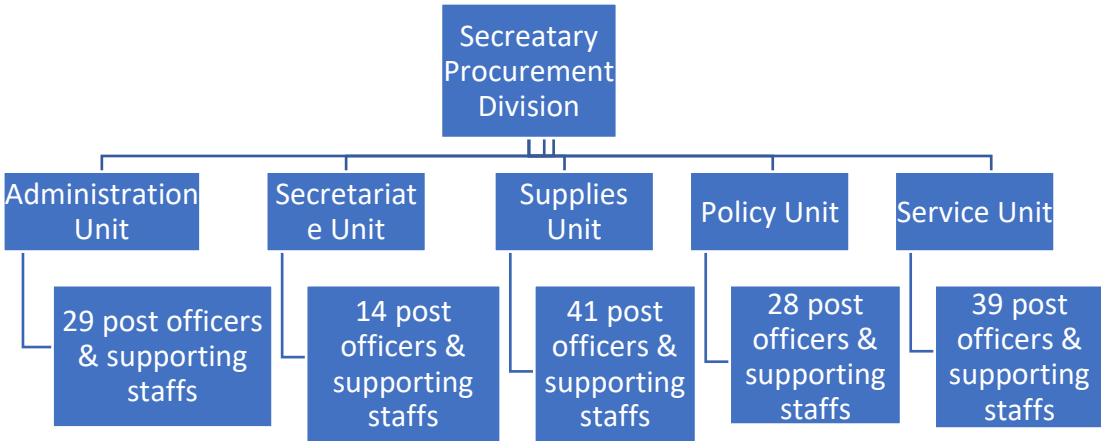


Figure 1. 1 Procurement Division Structure

This study will be focusing on Service Unit, which is responsible towards awarding tender for Procurement Division of MOE. As we know, Service Unit received biggest allocation in Procurement Division, MOE. One of Deputy Secretary Division Grade M54 in Procurement Division leads this unit. Service Unit are consisting of three sub-unit. The sub-unit are cleaning maintenance, security and supply cooked food.

Each sub-unit consist of 7 officers’ grade M41 and above. Most of the data in Service Unit are confidential. Only authorize person can access the data in order to prevent leaking information.

Each tender will be awards up to 36-month job of contract and will be retender again after the contract completed. Primary/ secondary schools and other academic institutional are divide by state, district and zone. Jabatan Pendidikan Negeri (JPN) and Pejabat Pendidikan Daerah (PPD) are responsible to collect and gather information from each school under their territories. These information's will be supply to desk officers in Service Unit of Procurement Division, MOE. These data will be analyzing and will be endorse by Ministry of Finance before for advertisement purposes.

There are 7772 primary school and 2436 secondary school in Malaysia (EMIS Data on 31 January 2019). Besides primary and secondary school, Kolej Matrikulasi, Institute Pendidikan Guru, Vocational College, Technique School, Sport School, Institute Aminudin Baki and Permata are also under MOE. On 2019 Malaysia's budget, MOE is the biggest budget receiver compare than other Ministries. Currently Procurement Division of MOE handling RM1.5 billion contract value. RM1 billion allocation for servicing and another RM500 million allocation for procurement for year 2020.

1.1.1.2 PEST Analysis

An effective and commonly used method for understanding strategic risk is PEST analysis where the changes and impacts of the external macro environment on the competitive position of the organization are identified and defined (Sammut-Bonnici & Galea, 2015). A PESTEL analysis is a framework or tool used to analyse and monitor the macro-environmental factors that may have a profound impact on an organisation's performance. In this analysis, the researcher focuses on the procurement process as the procurement process using eP has changed the way employees work in the Procurement Division, MOE.

In term of political factors, government intervention is when they decided to upsize or downsize Ministry. For example, in 2018 when Pakatan Harapan (PH) won General Election, they decided to merge Ministry of Higher Education with Ministry of Education. This merge makes Ministry of Education become the biggest Ministry

in the country. This merge also makes each division under MOE become bigger with additional warrant post. Meanwhile during government's transition from Pakatan Harapan (PH) to Pakatan Nasional (PN) in 2020, the size of ministries was reduced to increase quantity of ministries. E-procurement (eP) system has been widely used since the change of government in 2018. Nowadays eP system has been widely used in almost all ministries and agencies

In term of economy factors, tax income, capital income, export volume, national growth and many more will reflect government income. The stability of economy will reflect allocation budget for each Ministries. Same goes to Ministry of Education, the amount of allocation related to the government income and expenditure. In economic terms, the use of eP system has saved a lot, especially the reduction of paper. This system is system based oriented.

In term of social factors, allocation will increase yearly because of the increase of population, improvement of carrier's attitude and income, emphasizing on safety and health consciousness and many more. However, eP system reducing contact between the system administrator and the contractor. This is the best step to increase transparency where information is not easily disseminated to others.

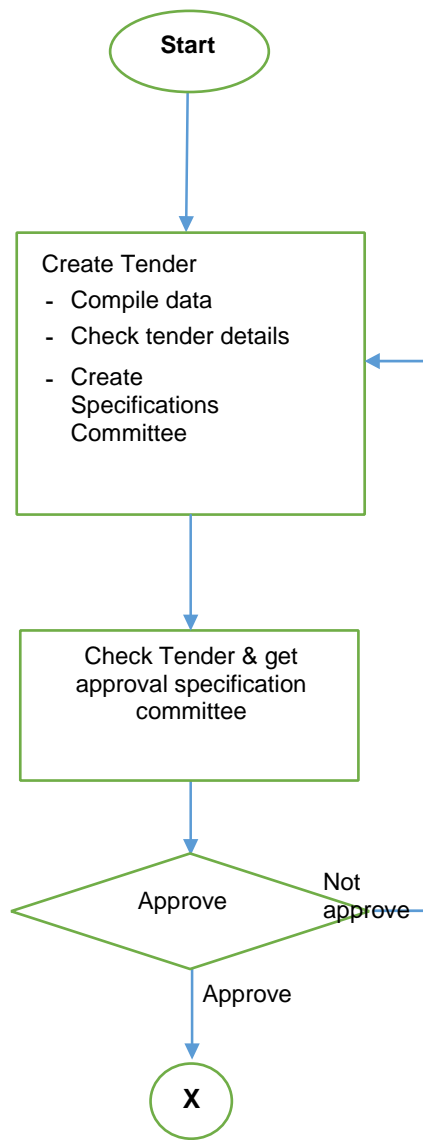
In term of technology factors, every Ministries and Agencies are heading towards science and technology innovation and achievement. With the latest technology, government delivery services are massively improving to satisfy publics. In this study, it involves a lot of technology development where the tender process uses the e-procurement system (eP) completely. This system aims to facilitate the government tender process where it is faster, only qualified officers can access, secure system, big storage system and transparent.

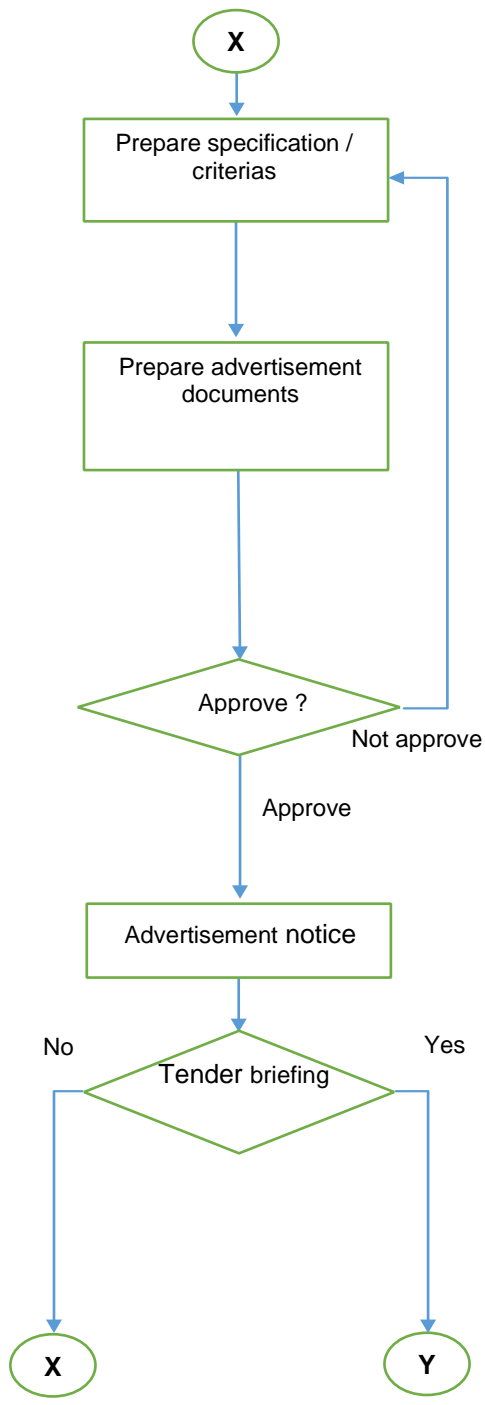
In term of environmental factors, government looking this as important due to the increasing scarcity of raw materials and pollution threat. For example, nowadays paperless and email medium are practical in order to achieve green technology.

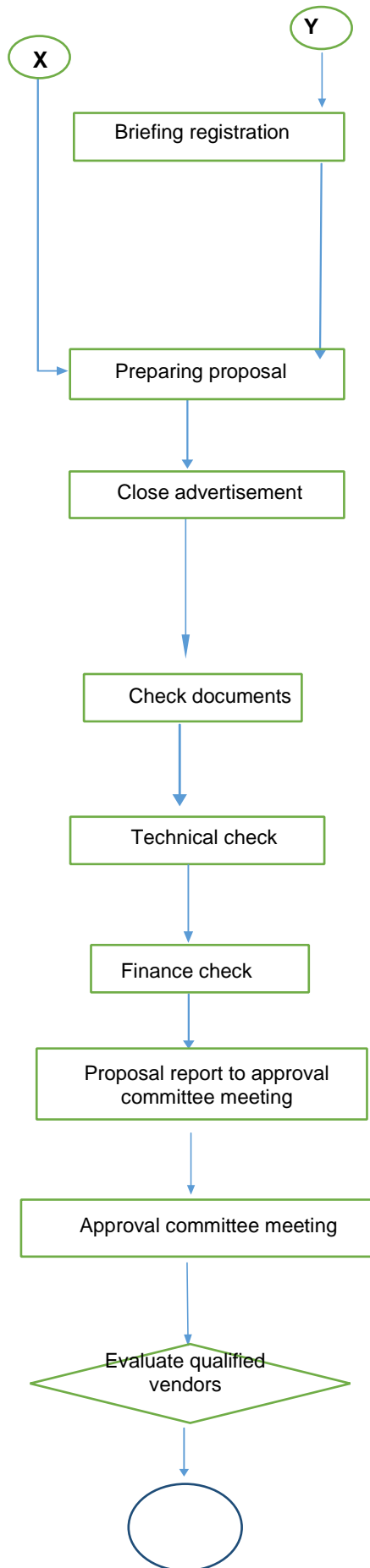
Finally, in term of legal factors, although these factors may have some overlap with the political factors, they include more specific laws such as public protection laws, discrimination laws, employment laws and health and safety laws. Government needs to know what is and what is not legal in order to trade successfully and ethically.

1.2 Problem Statement

The main problem that occurs is the existence of a cooling period for two months after the tender process ends. This is because the next tender process will begin in the next two months. This time of two months is called the cooling period. The productivity of officers at this time is unproductive as no specific tasks are given by the administration. As we know, Procurement Division, are responsible to manage tender from beginning until tender were awarded. This full process of tender will take 4 months to be completed. The flow chart is as shown in Figure 1.1. The flow chart for process of tender is include in My Portfolios previously known as *Fail Meja* in every officer in this Division. My portfolios are compulsory for every officer to ensure them to has written references in their task. Once the tender completed and awarded to qualified vendors, officers in Service Unit of Procurement Division has 2 months before next cycle of tenders. Usually, two cycles of tenders will be conduct in a year. The following is the work process of the service unit during the tender process which approximately 4 months.







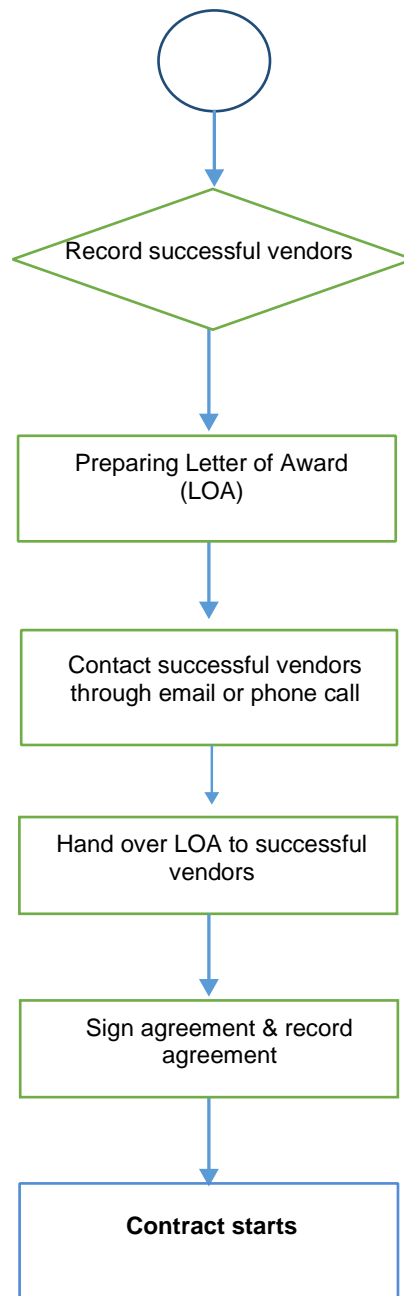


Figure 1. 2 Flow Chart for Full Process of Tenders

Before further describing the problem in the study, the flow chart in Service Unit from Procurement Division will take approximately four months to be completed. After tenders completed, officers from Service Unit have two months cooling period before upcoming next tender process.

Based on initial interview that has been conducted in preliminary data gathering process with Administration Unit, there were changes in terms of attendance records, punctuality of officers' present to the office, presence of officers during office hours and frequent taking leave. This only happens when the tender process is completed. apart from that attitude, officers were also found to be less motivated during the cooling period. This is believed to be due to the lack of workload during the cooling period.

Apart from the change in the attitude of officers, a study was also conducted on the workload done after the tender process was completed. After tender is completed, procurement officers need to monitor contractor's performance on the tender given. Apart from monitoring, procurement officers also have the role of obtaining feedback from the State Education Office (JPN) on any report. However, the volume of cases is very low. Compared with the tasks during the tender process and after the tender process, it is found that the workload and working time after the tender completed or cooling period is totally less. Lack of workload during the cooling period makes officers unproductive. Table 1.1 and 1.2 below shows the shows the report of attendance and punctuality from September 2020 until February 2021.

Table 1. 1 Attendance report for Sub-Unit Cleaning Procurement

Attendance Report from Sept 2020 – Feb 2021						
Average Monthly Attendance for Sub-unit Cleaning Procurement Officers	Sept 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21
7 officers times 24 working days a month divided 24 working days a month (7*24/24)	7	7	7	6	3	2

Based on Table 1.1, it is found that the average attendance to the office in the period of each month is good for the months of September to December. This is because the tender process takes place in these months. However, the average

attendance began to decline from January-February 2021. This is because the cooling period began in January-February 2021 where the workload was less than in previous months.

Table 1. 2 Punctuality report for Sub-Unit Cleaning Procurement

Punctuality Report from Sept 2020 – Feb 2021						
Average Punctuality for Sub-unit Cleaning Procurement Officers	Sept 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21
After 9 AM punch-in	6/24	5/24	4/24	6/24	40/24	38/24
Total cases in 24 working days a month						

Based on Table 1.2, it is found that the number of punctuality cases to the office after 9 am increased only in January and February 2021. The number of cases increased in these two months due to the cooling period after the tender process completed.

1.2.1 Ishikawa (Fish Bone) Diagram

The Ishikawa (fish bone) diagram will be used in this study to better emphasize the underlying cause of the lack of productivity at the Procurement Division following after tender process completed or during the cooling phase.

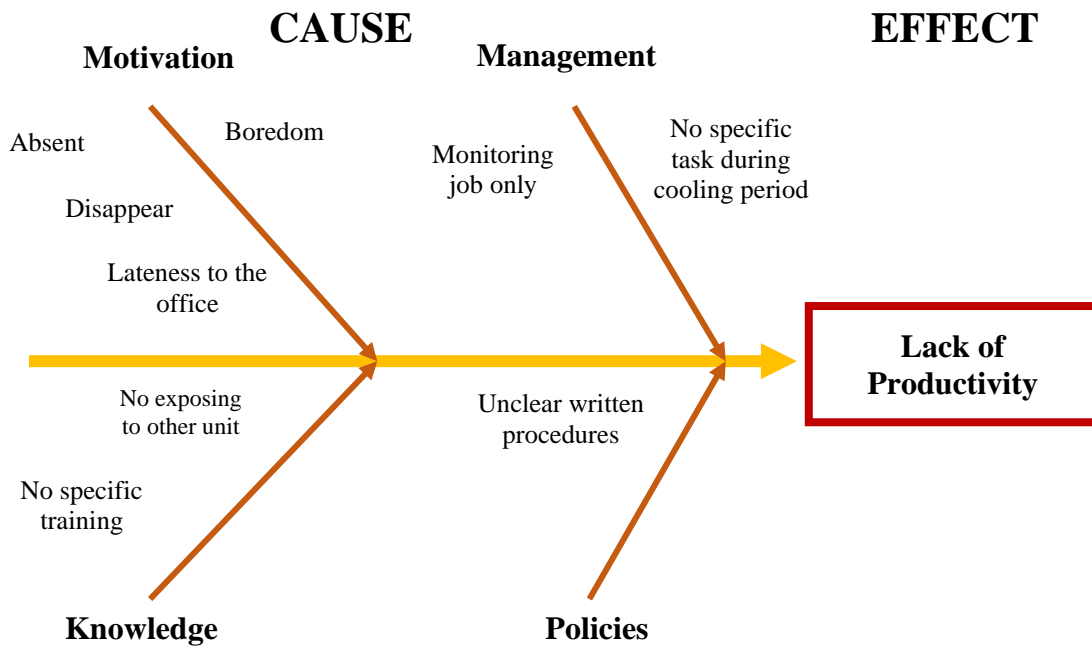


Figure 1.3 Fishbone Diagram for Problem Diagnosis

Figure 1.3 highlighted the root cause of the occurrence of lack of productivity among officers in Procurement Division, MOE. As a result of the fishbone diagram, among the main causes of lack of productivity are from employee motivation, divisional level management, knowledge and current policies.

Firstly, motivation decreases after tender is completed automatically no urgent task that needs to be performed by officers other than monitoring and get the feedback from school and contractors. Procurement officers had their free time during this period and this period is called cooling period. Due to the lack of duties officers will be more likely not to be in the office. In certain scenarios, officers are always late to the office or absent. There are situations where the level of boredom increases in this level.

The second cause is from current management in Division level. No specific assignment has ever been issued from the administrative unit to officers who have completed the tender process. This is because the administration thinks that the monitoring task is one of the tasks after the tender process is completed.

The third cause is science. During the cooling period, no specific training was given to officers to fill the free time. One of the alternatives provided is online training through Public Sector E-learning (EPSA). However, EPSA is a learning program that has been recorded and employees can access this system within a year to complete seven days of coursework. In addition, there is no exposure to other units in the Procurement Division. In fact, this exposure is very important to officers because the possibility for them to be transfers to another unit is very high. As we know that very unit in Procurement Division is different in term of process and procedures. This is the most appropriate time by giving opportunities to procurement officers to learn something new.

Finally, the fourth cause is current policies. There are unclear written policies that allow employees to be given additional work to increase productivity during the cooling period. In addition, civil servants are bound by instructions to perform the work directed only from time to time.

1.3 Research Goal

Under the research goal, the researcher will highlight the research questions based on the problem that has been explained in detailed in Problem Statement. Aside, under this sub-topic, the researcher will also emphasize on the research objectives of this research.

1.3.1 Research Questions

The research questions have been identified based on the problems that arise. Thus, the questions of the study are:

RQ1: What are the main factors that contribute to low productivity among officers at Procurement Division, MOE?

RQ2: What are the appropriate approaches to increase productivity?

RQ3: Does interventions such as training and placement are appropriate to be implemented?

1.3.2 Research Objectives

Based on the research questions, research objectives have been constructed in order to conduct this research. The research objectives consist of:

RO1: To identify factors contribute to lack of productivity among officers in Procurement Division, MOE. employees' work inefficiency at National Security Council Negeri Sembilan.

RO2: To measure the effectiveness level of training and temporary placement during cooling period time.

RO3: To give recommendation on improving training and temporary placement among officers.

1.4 Researchers Role

This study involves the involvement and experience of researchers directly because researchers have been working in the Procurement Division since 2019. Thus, researchers can easily obtain information from the units involved. Researchers were also able to Collaborate from the colleague from the Procurement Division in obtaining the survey feedback. The researcher plays a critical part in assuring the efficacy of this study's research. This study necessitates researchers sharing research methodology information, developing data systems, deciding on data collection methods, carrying out data collection and analysis, and ensuring that all data is properly obtained and

documented. The questions were based on suggestions and feedback from colleagues. In other words, surveys and interview questions need to get the approval of the top managerial level and my research supervisor so these are relevant to the study.

1.5 Research Ethics

There are a number of ethical principles that should be considered when performing research. Not only should research aim to do good, but it should also avoid harming research subjects. While ethical principles in research may vary by country, these are the essential principles of ethical research. This is important not only for ethical reasons, but also for practical ones, because failing to follow these basic principles can lead to research being ridiculed and rejected. Minimizing the risk of injury to research participants is the first principle of research ethics that the researcher tries to follow when performing this study. The researcher briefed the participants in detail before starting the study so that they were aware of the research's flow and direction.

Second, the researcher has gained informed permission, which means that respondents are aware of why they are participating in the study and what they expect from it. The objective of the study, the procedures utilized in conducting the research, the potential findings of the research, as well as the connected demands, discomforts, inconveniences, and hazards that the respondents may face are among the details acknowledged by the participants. During the data gathering procedure, the researcher also protects the privacy and confidentiality of respondents. All sensitive information that might offend responders has been kept private. Finally, respondents have the option to withdraw their participation in the study. Aside from that, the respondents were informed that they had the right to withdraw their involvement at any moment during the research procedure, and that the researcher would not pressurize them to stay in the study if they chose to do so.

1.6 Importance of the Proposed Research

This study is important in increasing the productivity of procurement officers during the cooling period time. This study is also important to ensure that appropriate interventions are practiced based on the reports received after the intervention is implemented. If the intervention can increase productivity, then training and temporary job rotation must be done continuously for the next cooling period.

1.6.1 Theoretical

This subchapter will discuss regarding previous and contemporary studies involving the issues in this study. The first part discussing about the relevant theory that is Ishikawa theory that being used in this study. The other part discussed regarding the same topic of lack of productivity among officers in Service Unit, Procurement Division after tender completed in term of finding and cause. Further discussion about the theory and model used in this study will be elaborate in next subchapter.

The theory implementation that being compared with other include the Ishikawa theory. The theory consists of cause of unproductivity. According to Janet Turner Parish, Leonard L. Berry and Shun Yin Lam 2007 in a review article, (Wineman 1982) found that environmental factors, such as workspace design and ambient conditions, are critical to employee productivity and satisfaction.

I strongly agreed with the journal which saying that workspace design and ambient condition will affects productivity of workers. Same goes to Procurement Division, if the ambient conditions are good, the productivity among officers will increase.

According to Lise M. Saari and Timothy A. Judge from Employee Attitudes and Job Satisfaction (Judge 2004 Wiley Periodicals, Inc.) numerous studies have shown that dissatisfied employees are more likely to quit their jobs or be absent than satisfied employees. Based on the Fishbone Diagram for Problem Diagnosis above,

one of the symptoms from dissatisfied officer are absent and disappear during office hours.

1.6.2 Practical

The awareness from human resource or administration unit importance to practicing temporary placement and provide training for procurement unit's officers in order to utilizing productivity. As for this, head of Procurement Division is the one who will be the main contributors to the intervention program. Clear instructions from the head of division through the administration unit will ensure that this intervention can be implemented. This intervention can definitely be implemented because it involves training and temporary job rotation at the internal level only. It does not involve other parts and does not involve high costs. As a result of the intervention implemented, it will provide advantages to the procurement division and the officers involved. Advantages to the organization are that the implementation of work processes can be carried out more efficiently as temporarily stationed officers will assist units in need. the organization can also save costs where there is no hiring of contract officers from outside the organization. While in terms of training, organizations and officers will both get advantages where the organization can provide the necessary knowledge to officers and at the same time officers can improve knowledge of related fields. As a result of the interventions implemented, researchers believe that problems such as lack of productivity can be overcome by providing assignments and training to the officers involved. Problems such as absenteeism, punctuality and boredom can be overcome by assigning tasks in units that require during the cooling period. In addition, by providing training during the cooling period, officers can add knowledge and it is very useful if officers are placed in other units in the future.

1.7 Definition of Term

An important aspect of the research paper or report is the description of terms in which the main or significant terms in the research are clearly identified. Researchers will illustrate the meanings of terms for this research via conceptual definition and operational definition.

1.7.1 Productivity

Definition: According Paul Krugman, *The Age of Diminishing Expectations* (1994), Productivity isn't everything, but in the long run it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker. In other words, productivity is the output by an officers based on a demand from the organization. The productivity of an officer can be compared with other colleagues based on the quality of work provided.

1.7.2 Training

Definition: According to Fuller & Farrington 1999, Training is designed to increase the skills and knowledge of people. Adequate training will ensure that tasks can be performed effectively and give an advantage to the organization.

1.7.3 Temporary Job Rotation

Definition: According to Susan M. Heathfield 2019, temporary employees are hired to assist employers to meet business demands yet allow the employer to avoid the cost of hiring a regular employee. In this case, temporary job rotation using officers in the same division only during the cooling period and the purpose is similar which is to meet organization's demand and to expose officers with the new thing.

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