



**Faculty of Administrative Science and Policy Studies**

**Universiti Teknologi MARA**

**Practical Training Report:**

**Jabatan Perpaduan Negara dan Integrasi Nasional  
Bahagian Miri**

**Prepared By:**

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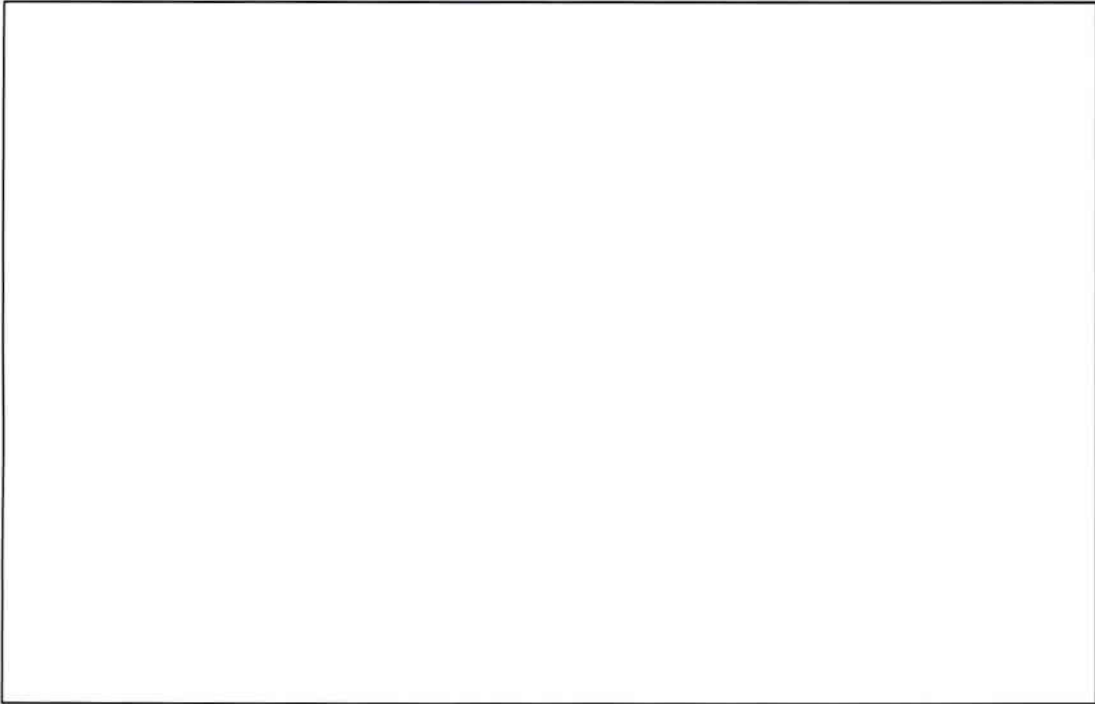
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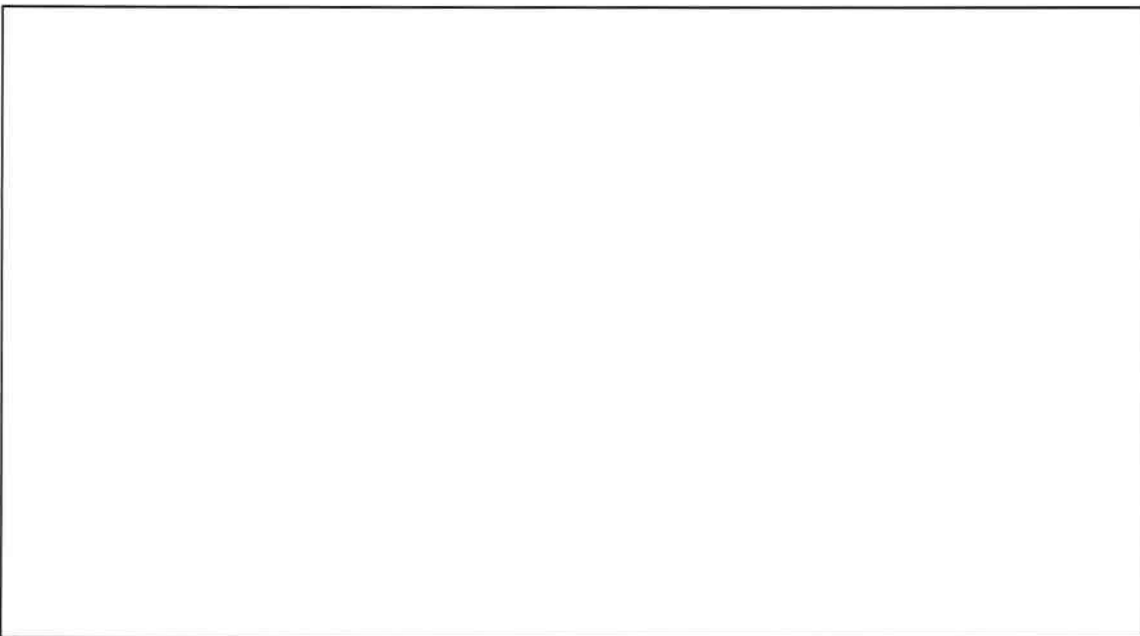
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**September 2012 – January 2013**

**Supervisor's Comments**

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**Moderator's Comments**

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**CLEARANCE FOR SUBMISSION OF THE PRACTICAL TRAINING REPORT  
BY THE SUPERVISOR**

MISS SHARON PEARL AK HENRY SERUB

I have received the final and complete practical industrial report and approve the submission of this report for evaluation.

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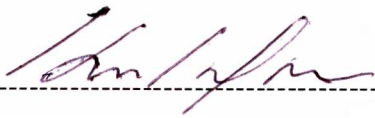
## **Acknowledgement**

First and foremost, I would like to thank God for giving me the chance to finish up this practical training report. Aside from that, I would like to thank my Practical Training (ADS 666) supervisor, Miss Sharon Pearl ak Henry Serub, for all the knowledge and guidance that have been gave during finishing this practical report. To my parents, thanks for all the supports physically and mentally. As to my friends, thanks for helping me either directly or indirectly during finishing this practical report. Thank you.

## Declaration

I hereby declare that the work contained in this practical training is my own except those which have been duly identified and acknowledged. If I am later found to have committed plagiarism or other forms of academic dishonesty, action can be taken against me under the Academic Regulations of UiTM's.

Signed



SYAZWANI HAREN BINTI BAHARUDIN

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## CHAPTER 1

### INTRODUCTION OF THE ORGANISATION

#### 1.0 INTRODUCTION

This chapter includes the background of the organisation, the organisation's chart, objectives, logo, vision, mission, motto, client charter, and the organisation's client service mission for the National Unity and Integration Department.

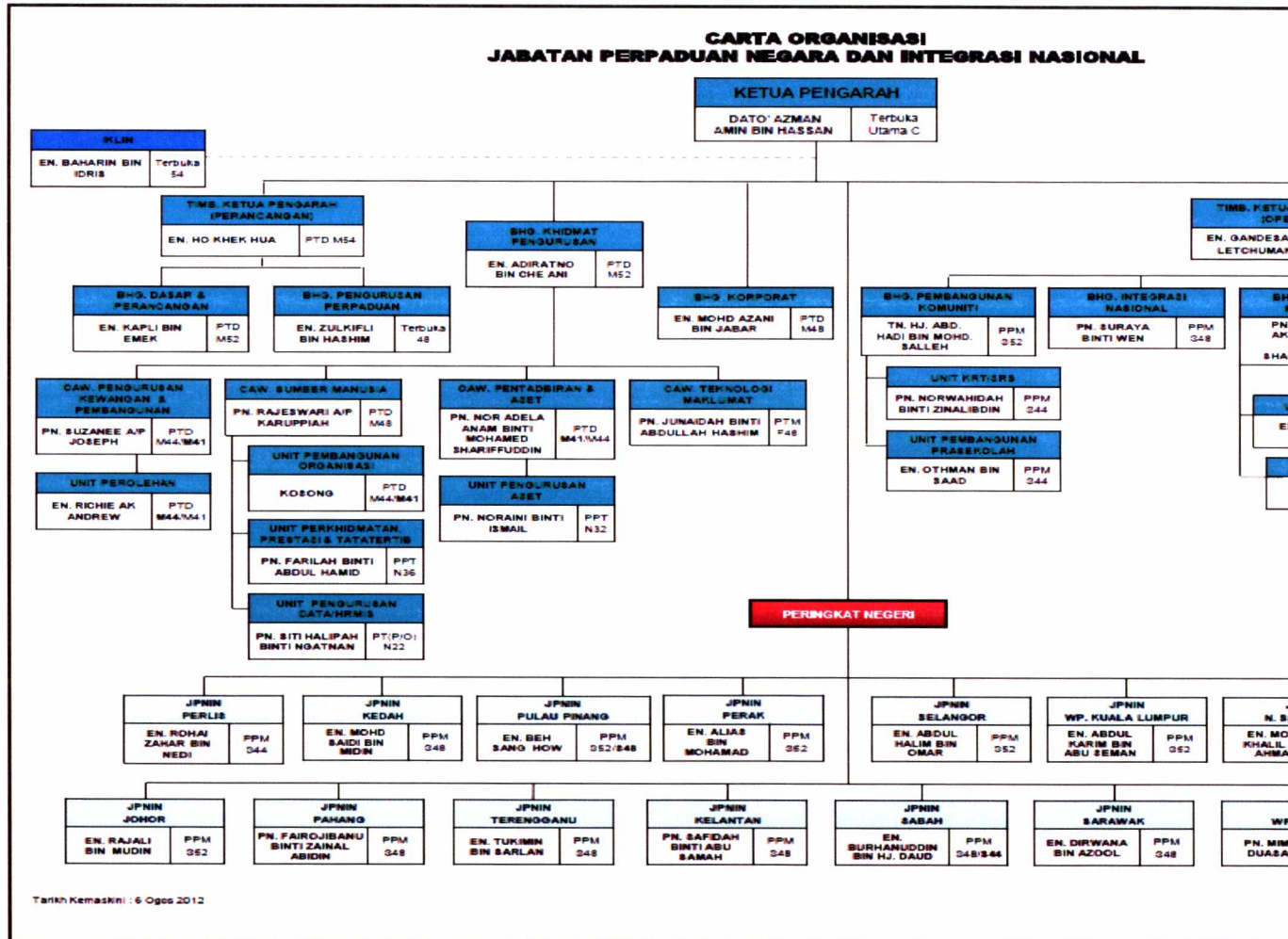
#### 1.1 Background of the Organisation

The Department of National Unity and Integration which is under the Prime Minister's Department was originally known as Department of National Unity from 1969 until 1971. 1<sup>st</sup> July 1969 was the date when this department was set up. The name of the department kept on changing from time to time. For example, from 1972 until 1973, the name of this department was Ministry of National Unity. Below are the names of this department from 1969 until today:

YEAR	NAME OF DEPARTMENT
1 <sup>st</sup> July 1969	Department of National Unity (Prime Minister's Department)
1972	Ministry of National Unity
1974	Board of National Unity (Prime Minister's Department)
1980	Department of Rukun Tetangga and National Unity (Prime Minister's - Department)
1983	Department of National Unity (Prime Minister's Department)
1990	Department of National Unity (Ministry of National Unity and Social

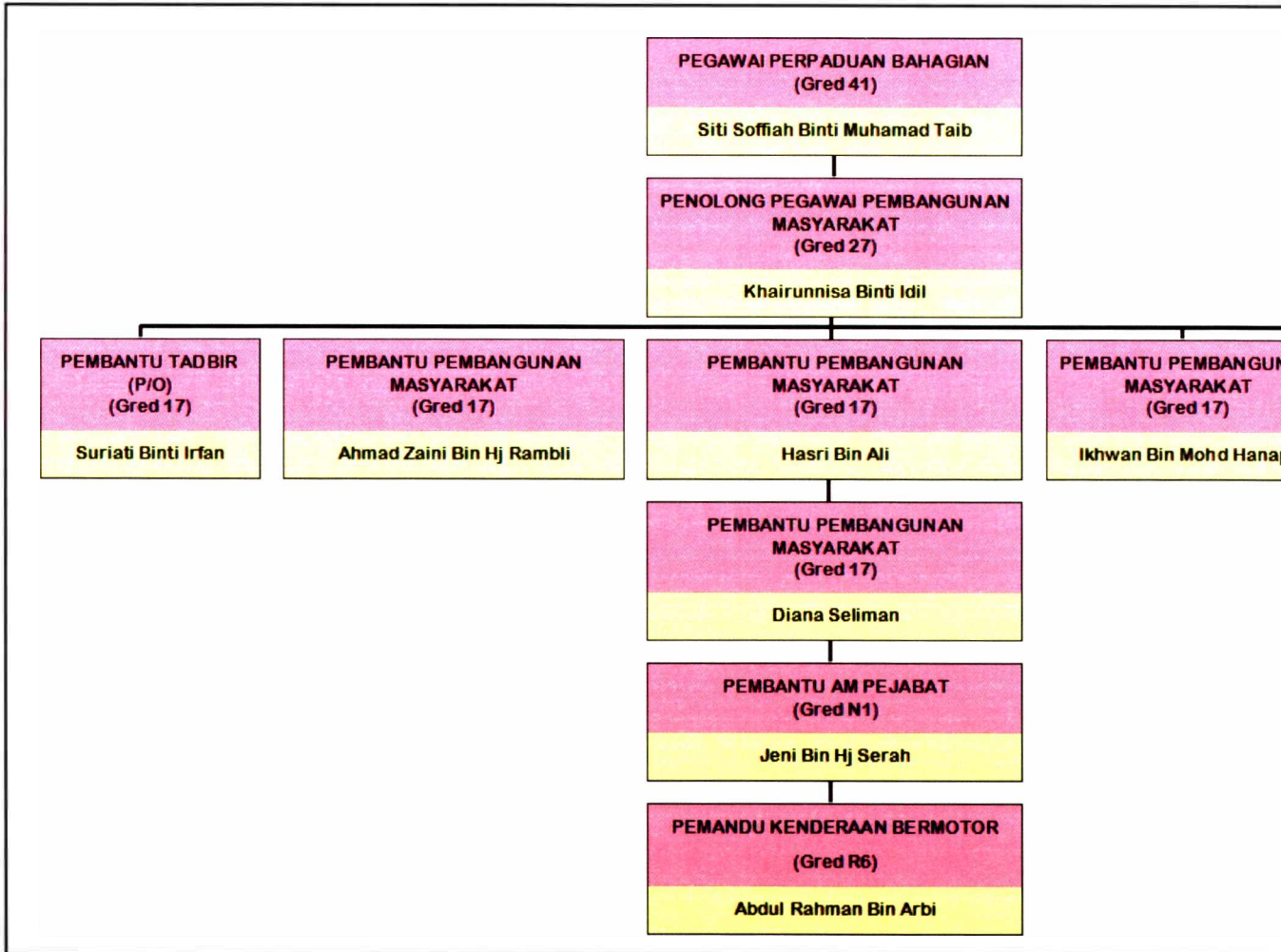
	Development)
2004	Department of National Unity and Integration (Prime Minister's Department)
2008	Department of National Unity and Integration (Ministry of Unity, Culture, Arts and Heritage)
April 2009	Department of National Unity and Integration (Prime Minister's Department)

## 1.2 Organisational Chart for Department of National Unity and Integration



(Retrieved from <http://www.jpnin.gov>)

1.3 Organisational Chart for Department of National Unity and Integration in Miri



## **1.4 Objectives**

The objectives of the National Unity and Integration Department were divided according to the sections under the department which are the Neighbourhood Committee, Volunteer Patrol Scheme, *Tabika Perpaduan*, *Rukun Negara* Club, and *Rukun Negara* Secretariat. Below will be explained on the objectives for each section:

### **1.4.1 Neighbourhood Committee**

The Neighbourhood Committee came with an objective which is to preserve, develop and strengthen the people unity and national integration in line with government policy according to Federal Constitution and *Rukun Negara*.

### **1.4.2 Volunteer Patrol Scheme**

The Volunteer Patrol Scheme came with five objectives. The five objectives for the scheme are:

- To assist crime prevention and to tackle social problems
- To assist law enforcement
- To give life and property protection
- To increase the neighbourhood spirit among the locals
- To administer current situation in order to be more peaceful and harmony

### **1.4.3 Tabika Perpaduan**

The *Tabika Perpaduan* came with an objective which is to create childhood potential in all Self-Growth Balanced aspects, have basic-skill and to instill positive attitude based on Federal Constitution and *Rukun Negara* Principles.

#### 1.4.4 **Rukun Negara Club**

The *Rukun Negara* Club came with four objectives. The four objectives for the club are:

- To introduce the *Rukun Negara* principles
- To give an understanding and knowledge on five principles of *Rukun Negara*
- To foster and to enhance a spiritual awareness on the importance of *Rukun Negara* as life norms basis
- To make *Rukun Negara* principles as a continuous way of life in order to produce people with identity, loyal, united, vision, pride, open and ethical traits in line with national vision

#### 1.4.5 **Rukun Negara Secretariat**

The *Rukun Negara* Secretariat came with four objectives. The four objectives for the secretariat are:

- To become a mechanism to the government at the higher learning institution level in enriching knowledge, understanding, appreciation, assessment and practice of graduates on *Rukun Negara* principles
- To project *Rukun Negara* Secretariat as an effective 'platform' to foster and inculcate patriotism amongst graduates
- To enhance awareness especially amongst graduates to practice *Rukun Negara* principles in their daily lives towards producing people with identity, loyal, united, vision, pride, open and ethical traits in line with nation vision
- To create competitive nation and race with a level playing field at world stage

### 1.5 **Vision**

The National Unity and Integration Department's vision is to become a major leading agency which preserve, increases and strengthens unity and societal harmony in Malaysia.

### 1.6 **Mission**

The mission for the National Unity and Integration Department is to increase and strengthen unity and societal harmony based on the Federal Constitution, *Rukun Negara* and Malaysia.

### 1.7 **Motto**

The National Unity and Integration Department's motto is "UNITED WE PROGRESS".

### 1.8 **Client's Charter**

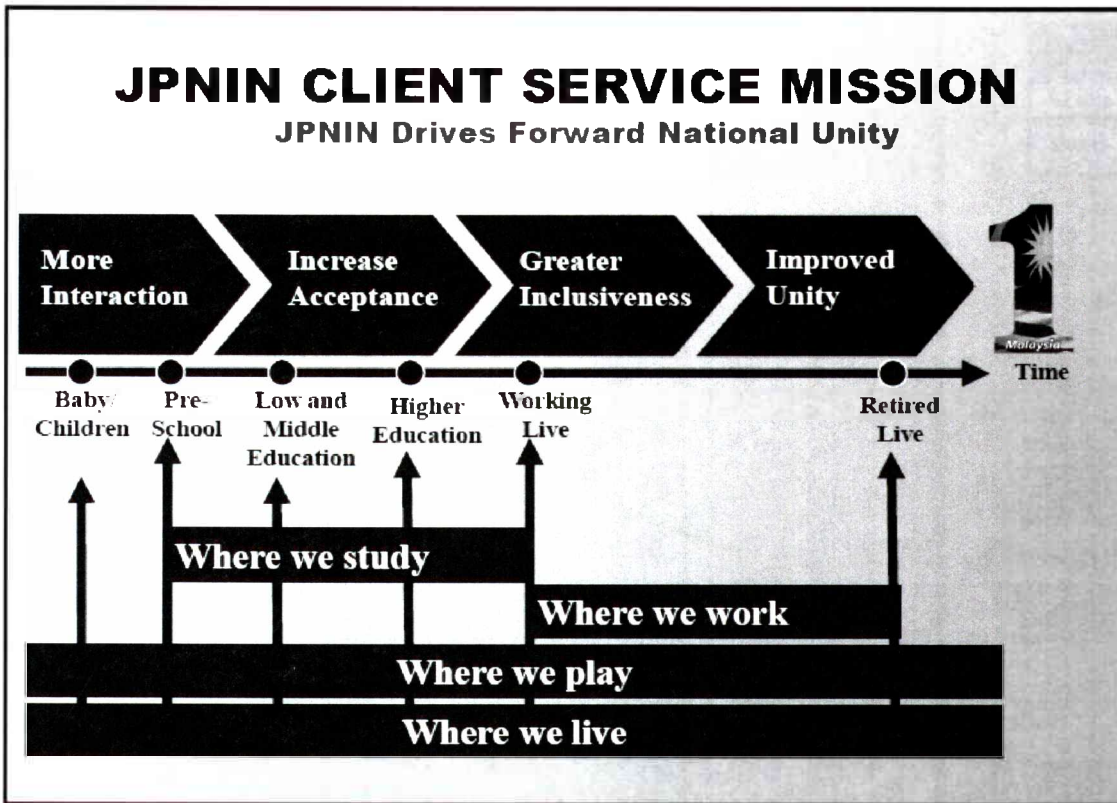
The National Unity and Integration Department are committed in creating a community of unity and harmony through its service following the sustainable development. Just like any other organisation, the National Unity and Integration Department also has its client's charter. There are 12 items in the National Unity and Integration Department's client's charter which are:

- Achieve less than 25 cases per million population based on social stress index
- Ensure all high risk areas are in the green colour code categories
- Execute at least 90% of unity activities planned
- Approve designated Neighbourhood Committee and Voluntary Patrolling Scheme within 7 days from the date of acceptance of complete documents
- Distributing grants to existing Neighbourhood Committee before 31<sup>st</sup> March

- Distributing grants to new Neighbourhood Area not more than 2 months from the date approved
- Provide training to new Neighbourhood Committee members within 3 months after the date of appointment
- Provides personal identity card within 2 months from the date of complete documents
- Achieve at least average score 3.5 out of 5 for parents satisfaction toward *Tabika Perpaduan*
- Approve application *Rukun Negara* Club and *Rukun Negara* Secretariat within 1 month from the date of application received
- Distribute launching grants for new *Rukun Negara* Club and secretariat within 1 month from the date approved
- Completing the rental agreement contract within 3 months from the approval date



1.9 Client Service's Mission



(Retrieved from <http://www.jpnin.gov.my> on October 15, 2012)

**1.10 Location of Practical Training**

I started my practical training from July 16, 2012 and ended my practical training on August 17, 2012. I have my practical training at Miri's National Unity and Integration Department. The office is located at Tingkat 2, Blok A, Wisma Persekutuan 2, 98000 Miri, Sarawak.

### 1.10.1 Location Map



(Retrieved from <http://maps.google.com.my> on October 15, 2012 )

## CHAPTER 2

### SCHEDULE OF PRACTICAL TRAINING

#### 2.0 INTRODUCTION

This chapter describes on the report and summary of daily task assigned which are extracted from the Log Book.

#### 2.1 First Week (16<sup>th</sup> July 2012 until 20<sup>th</sup> July 2012)

On the first day of the practical training, I was introduced to the Miri's Department of National Unity and Integration's staffs by the *Pegawai Perpaduan Bahagian*, Puan Siti Soffiah binti Muhammad Taib. After that, several tasks were given. The tasks were given to me by the *Unit Perkhidmatan Pembantu Tadbir (Perkeranian / Operasi)* and the *Unit Skim Rondaan Sukarela / e-Rukun Tetangga*. The *Unit Perkhidmatan Pembantu Tadbir (Perkeranian / Operasi)*'s given tasks were distributing notification letters to the pigeon hole cabinet and photocopy notification letters. While the task given by the *Unit Skim Rondaan Sukarela / e-Rukun Tetangga* was retyping hard copy documents.

On the second day of the practical training, I continued doing the unfinished task which was retyping the hard copy documents given by the *Unit Skim Rondaan Sukarela / e-Rukun Tetangga*. After finished retyping the hard copy documents, the *Unit Perkhidmatan Pembantu Tadbir (Perkeranian / Operasi)* gave me three tasks to be done which are photocopy *Borang Perakuan Perlantikan Semula Pegawai*, check keyed-in data, and photocopy *Buku Perkhidmatan Kerajaan Malaysia (Rekod Perkhidmatan dan Cuti)*. *Borang Perakuan Perlantikan Semula Pegawai Kontrak* is used by the contract employees such as the contract teachers from all *Tabika Perpaduan* in Miri to extend their contract term. Meanwhile, the use of *Buku Perkhidmatan Kerajaan Malaysia (Rekod Perkhidmatan dan Cuti)* is to record the teachers' working days and off days.

On the third day of the practical training, I attended a talk entitled '*Kelebihan Solat dan Puasa dari Sudut Sains*' in Pustaka Miri together with *Pegawai Perpaduan Bahagian, Penolong Pegawai Pembangunan Masyarakat* and *Pembantu Pembangunan Masyarakat* from the department. The talk was given by a lecturer from Institut Pendidikan Guru Kampus Rajang and it was attended by the civil servants in Miri. After attending the talk, there are two tasks given. The first task was given by *Unit Perkhidmatan Pembantu Tadbir (Perkeranian / Operasi)* and the task was to fill in *Borang Perakuan Perlantikan Semula Pegawai Kontrak* for the teachers from *Tabika Perpaduan* in Miri. The second task was given by the *Penolong Pegawai Pembangunan Masyarakat* and it was to update the important contact numbers for the department which includes the contact numbers of *Yang Berhormat (YB)* in Miri, all Department of National Unity and Integration in Sarawak, headquarters in Kuching and Putrajaya, and all government agencies in Miri.

On the fourth day of the practical training, I continued doing the unfinished task which was updating the important contact numbers for the department. After finished updating the important contact numbers for the department, I accompanied the *Penolong Pegawai Pembangunan Masyarakat* to meet the Neighbourhood Committee's representatives from Luak 2 to discuss on the formation of Volunteer Patrol Scheme in their area. After meeting the Neighbourhood Committee's representatives, the *Penolong Pegawai Pembangunan Masyarakat* instructed me to key-in the data from *Borang Menilai Prestasi Kawasan Rukun Tetangga Untuk Agihan Geran*. The form is used to evaluate the performance of the Neighbourhood Area for grant distribution.

On the fifth day of the practical training, I continued doing the unfinished task which was to key-in the data from *Borang Menilai Prestasi Kawasan Rukun Tetangga Untuk Agihan Geran*.

## **2.2 Second Week (23<sup>rd</sup> July 2012 until 27<sup>th</sup> July 2012)**

On the sixth day of the practical training, I continued doing the unfinished task which was to key-in the data from *Borang Menilai Prestasi Kawasan Rukun Tetangga Untuk Agihan Geran*. The next task is to calculate the marks for the forms. The mark calculated indicates the Neighbourhood Area's performance. The marks given were based on the Neighbourhood Area's organised activities, monthly financial statement enclosed and other requirements fulfilled.

On the seventh day of the practical training, there are three tasks that has been given by the Unit Skim *Rondaan Sukarela / e-Rukun Tetangga* which were retyping hard copy documents, check the keyed-in data in the *Laporan Pemantauan Permohonan Murid Tabika Perpaduan* saved in the Department of National Unity and Integration's website, and making online registration for the new Neighbourhood Committee's members from Taman Tunku Jalan Sibul Zon 1, Rumah Jimbau Sungai Gudang, Pekan Long Lama Baram Marudi, Vista Perdana Fasa 1, and Tudan Fasa 5.

On the eighth day of the practical training, I continued doing the unfinished task which was making online registration for the new Neighbourhood Committee's members. After finished making online registration for the new Neighbourhood Committee's members, the *Unit Skim Rondaan Sukarela / e-Rukun Tetangga* gave another new task which was updating the date of appointment and the expiration date for the Neighbourhood Committee's members from Bakam, Krokop, Piasau Utara and Desa Indah 2 Gardenia through the Department of National Unity and Integration's website.

On the ninth day of the practical training, I continued doing the unfinished task which was updating the date of appointment and the expiration date for the Neighbourhood Committee's members.

On the tenth day of the practical training, I attended a talk entitled '*Tazkirah Ramadhan*' in Pustaka Miri together with *Penolong Pegawai Pembangunan Masyarakat and Pembantu Pembangunan Masyarakat* from the department. The talk was attended by the civil servants in Miri.

### **2.3 Third Week (30<sup>th</sup> July 2012 until 3<sup>rd</sup> August 2012)**

On the eleventh day of the practical training, there were two tasks given by the *Unit Skim Rondaan Sukarela / e-Rukun Tetangga*. The first task was to key-in the name of the people that went to the '*Kursus Pemantapan Pengurusan Kewangan Rukun Tetangga*' into *Rekod Daftar Latihan*. The course was attended by the teachers and teacher's assistant from *Tabika Perpaduan*, and also by the Neighbourhood Committee's members. The Neighbourhood Committee's members that went to the course consist of the Chairman, Secretary, and the Treasurer. The second task was updating the date of appointment and the expiration date for the Neighbourhood Committee's members from Kampung Abdul Rahman Lambir and Pujut Selatan through Department of National Unity and Integration's website.

On the twelfth day of the practical training, there were two tasks that has been given by the *Unit Skim Rondaan Sukarela / e-Rukun Tetangga*. The first task is to check the new updated appointment date and expiration date of the Neighbourhood Committee's members saved in Department of National Unity and Integration's website. They are the Neighbourhood Committee's members from Desa Indah Balsem A, Desa Indah Balsem B, Desa Indah Balsem C, Desa Indah Balsem D, Desa Murni 1, Desa Murni 2, Desa Pujut 2 Gardenia, Desa Senadin Fasa 1, and Institut Kemahiran Belia Negara (IKBN). The second task is updating the date of appointment and the expiration date for the Neighbourhood Committee's members from Desa Senadin Fasa 3, Lutong, Piasau Jaya Fasa 1, and Piasau Jaya Fasa 3 & 4 through the Department of National Unity and Integration's website. After finishing the tasks given by the *Unit Skim Rondaan Sukarela / e-Rukun Tetangga*, I accompanied *Penolong Pegawai Pembangunan Masyarakat* to go visit the *Tabika Perpaduan Krokop* and *Taska Permata Bumiko*. The difference between *Tabika Perpaduan* and *Taska Permata* is *Tabika Perpaduan* is for children age five and six while *Taska Permata* is for children age four years and below.

On the thirteenth day of the practical training, the *Unit Tabika* gave a task which was to do online registration for the new Neighbourhood Committee's members from Riam Lopeng through the Department of National Unity and Integration's website.

On the fourteenth day of the practical training, the Unit Tabika instructed me to make the list of Neighbourhood Committee's members from Kampung Tunku Abdul Rahman Lambir, Pujut Selatan, Riam Lopeng, and Rumah Jimbau Sungai Gudang Marudi in the form of *Format C*. The *Format C* contained detailed information which includes names, date of birth, Identification Card (IC) number, job, gender, race, home address, office address, home contact number, office contact number, and the member's position in the Neighbourhood Committee. The differences between the *Format C* and the *Format B* are *Format B* does not include the column for position in the Neighbourhood Committee while *Format C* has the column and *Format B* contained the proposed list of Neighbourhood Committee's members for the new term while the *Format C* contained the confirmed list of Neighbourhood Committee's members for the new term.

On the fifteenth day of the practical training, I continued doing the unfinished task which was to make the list of Neighbourhood Committee's members in the form of *Format C*.



#### **2.4 Fourth Week (6<sup>th</sup> August 2012 until 10<sup>th</sup> August 2012)**

On the sixteenth day of the practical training, the *Unit Skim Rondaan Sukarela / e-Rukun Tetangga* gave a task which was to retype the documents called KEW.PA 11 since it has been wrongly done by the teachers from *Tabika Perpaduan* because some of the them have followed the KEW.PA 11 old format. This KEW.PA 11 is the Inventory Inspection Report that reported all types of inventory in the kindergarten.

Starting the seventeenth day of the practical training, the *Penolong Pegawai Pembangunan Masyarakat* gave a task which was to read the Department of National Unity and Integration's MS ISO 9001:2008 for the Neighbourhood Committee Management. The Neighbourhood Committee Management under MS ISO 9001:2008 are divided into nine types of procedures. The first procedure that has been read was JPN RT01: Stipulation of Neighbourhood Area. There are two objectives to be achieved from this procedure which are to ensure that the establishment of Neighbourhood Area will be approved by the *Ketua Pengarah* of the Department of National Unity and Integration within two months from the date the application was received and to ensure that the establishment of Neighbourhood Area will reach 100% or more according to the approved plan.

On the eighteenth day of practical training, the second procedure that has been read was JPN RT02: Appointment of Neighbourhood Committee's Members. This procedure comes with an objective which is to provide guidelines for the appointment of the Neighbourhood Committee members after a Neighbourhood Area has been set up or redrawn. The members appointed must be the residents from the Neighbourhood Area itself in accordance with the rule of *Peraturan-peraturan Perlu (Rukun Tetangga) 1975 Pindaan 1988 – Peraturan 5A dan 5B(1)*. The main committee members in the Neighbourhood Area are Chairman, Deputy Chairman, Secretary, Secretary Assistant, and the Treasurer.

On the nineteenth day of practical training, the third procedure that has been read was JPN RT03: Distribution of Neighbourhood Allotment Grant. The objective of this procedure is to ensure the headquarters distribute the Neighbourhood's allocated grant at the latest in March every year. After that, the *Pengarah Perpaduan Negeri* will distribute the allocated grant to the Neighbourhood Area at the latest in April every year. The allocated grant is the financial aid to administer the Neighbourhood Area.

On the twentieth day of practical training, the fourth procedure that has been read was JPN RT04: Neighbourhood Committee Members' Training Management. This procedure comes with two objectives which are to ensure that the Neighbourhood Committee's members are trained and to ensure that they are trained within a year after being appointed. The training will be conducted in Institut Kajian dan Latihan Integrasi Nasional (IKLIN).

## **2.5 Fifth Week (13<sup>th</sup> August 2012 until 17<sup>th</sup> August 2012)**

On the twenty-first day of practical training, the fifth procedure that has been read was JPN RT05: Compilation of Information of Neighbourhood Area. The objective of this procedure is to gather information regarding the Neighbourhood Area's activities from all state every month.

On the twenty-second day of practical training, the sixth procedure that has been read was JPN RT06: Reactivation and Revocation of Neighbourhood Area Stipulation. The objective of this procedure is to reactivate the non-active Neighbourhood Area and/or to make Neighbourhood Area revocation. The revocation of the Neighbourhood Area designation is the revocation done through the notice announced by the *Ketua Pengarah*.

On the twenty-third day of practical training, the seventh procedure that has been read was JPN RT07: Application to Hold Voluntary Patrolling Scheme. This procedure comes with the objective of to ensure the Voluntary Patrolling Scheme operation application process for Neighbourhood Area will be approved by the *Ketua Pengarah Perpaduan Negeri*.

On the twenty-fourth day of practical training, the eighth procedure that has been read was JPN RT08: Operation of Voluntary Patrolling Scheme in Neighbourhood Area. The objective of this procedure is to ensure the Voluntary Patrolling Scheme operation is operated in the Neighbourhood Area. This scheme is applied by the volunteered residents under *Peraturan 2A, Peraturan-peraturan Perlu RT (1975) Pindaan 1988*. It is fully handled by the scheme committee members and with cooperation from the volunteered residents in the Neighbourhood Area.

On the twenty-fifth day of practical training, the ninth procedure that has been read was JPN RT09: Participation, Withdrawal/ Residents Termination of Voluntary Patrolling Scheme in Neighbourhood Area. This procedure's objective is to provide guidelines for volunteered residents' participation and withdrawal after the approval of the Neighbourhood's Voluntary Patrolling Scheme. The new volunteered residents is the one that have made written request to Voluntary Patrolling Scheme's committee members to become the volunteered residents for the Neighbourhood's Voluntary Patrolling Scheme by filling up the *Borang Tujuh*.

## CHAPTER 3

### ANALYSIS

#### 3.0 INTRODUCTION

This chapter described on the analysis of data entry practices in Miri's National Unity and Integration Department that have been done during the industrial training.

#### 3.1 DEFINITIONS OF DATA ENTRY

Data entry is also known as the forms processing. In this chapter, the term that will be used is data entry. There are many definitions for data entry practices. One of the definitions is data entry is the process of entering data into a computerised database or spreadsheet. Here are some simple explanation on what are data, database, and spreadsheet. **Data** is the distinct pieces of information, usually formatted in a special way. It can exist in a variety of forms such as numbers or text on pieces of paper, bits and bytes stored in electronic memory, and facts stored in a person's mind. **Database** is a collection of information organised in such a way that a computer program can quickly select desired pieces of data. It is also known as an electronic filing system. To access information from a database, a database management system (DBMS) is needed. Database Management System enables you to enter, organize, and select data in a database. Meanwhile, **spreadsheet** is a table of values arranged in rows and columns. Each value can have a predefined relationship to the other values. If one value is changed, therefore, the other values may need to be changed as well. Examples of spreadsheet applications are Lotus 1-2-3 and Microsoft Excel. Data entry can be performed by an individual typing at a keyboard or by a machine entering data electronically. (Retrieved from WEBOPEDIA, 2012)

BusinessDictionary.com defined data entry as a direct input of data in the appropriate data fields of a database, through the use of a human data-input device such as a keyboard, mouse, stylus, or touch screen, or through speech recognition software.

Other definition is the data entry means to operate equipment, usually a keyboard that input data into a company's system. Input data can be in terms of alphabetic, numeric, and even symbolic. The data entry operator may be required to verify or edit data as it is entered. (Retrieved from About.com)

Besides that, data entry can also be defined as the process of entering data into the computer, either through spreadsheets or database. It can be done through keyboard entry, scanning, and voice identification. Data entry can be done manually or electronically. Examples of data entry done manually is adding data by typing while data entry electronically is by using machine, such as scanner, that will add data into the database. Before accomplishing data entry, the data must first be converted into a code as it will lend a hand in stockpiling the information. Data entry can be brought about in several ways, such as through key entry, tape entry, and scan entry and it can be differentiated into two major forms such as online and offline data entry. (Retrieved from ArticlesBase)

PC Magazine (n.d.) defined data entry as entering data into the computer that includes keyboard entry, scanning and voice recognition. When transactions are entered after the fact, which is known as batch data entry, they are just stacks of source documents to the keyboard operator. Deciphering poor handwriting from a source document is a judgment call that is often error prone. In online data entry operations, in which the operator takes information in person or by phone, there is interaction and involvement with the transaction and less chance for error.

In summary, data entry can be defined as the process of entering data into a computerised database or spreadsheet and it can be done through the use of a human data-input device such as a keyboard, mouse, stylus, or touch screen, or through speech recognition software. The input data entered can be in terms of alphabetic, numeric, and even symbolic using either manual or electronic methods.

### 3.2 THE IMPORTANCE OF DATA ENTRY

Before explaining the importance of data entry practices in organisations, it is important to know the causes that makes data entry becomes important these days. Before the data entry practices were introduced, most organisations used traditional filing systems to store data and this also include Miri's National Unity and Integration Department. In traditional filing systems, data were stored in the form of paper files, within folders and filing cabinets. The use of traditional filing systems have several weaknesses until it resulted in many organisations starting to adopt the data entry system that use computer programs, such as the use of spreadsheets, to store its data. Traditional filing systems weaknesses can be in term of data security, the access time, editing and communication, and order of data (retrieved from Small Business Chron). Besides that, another weakness of using traditional filing systems is it can take up a lot of space in the office (retrieved from Blurt It). Below will be discussed on several of the traditional filing systems weaknesses:

The first weakness in using the traditional filing systems is in term of **data security**. Although the traditional filing systems has advantages of not being electronically hacked or damaged by software security problems such as attacked by the computer viruses, the data security by using this systems can be damaged if the paper files are lost. Some filing cabinets do have locks but there are still many offices that do not lock their cabinets. This leaves a lot of important and often confidential data exposed to the risk of theft. Also if any files go missing then they will have gone forever. For example, the paper files in the traditional filing systems can be lost in fires and floods. The lost paper files cannot be backed-up, like how the electronic data can be backed-up. This means, the information on the paper files will also be gone with the fires and floods and this will bring problem for the organisation to gather back the data.

The second weakness in using the traditional filing systems is in term of **the access time**. This is one of the primary weaknesses of traditional file systems which is it takes times to access data. It can take minutes or even hours just to locate a few files in a

large paper filing system. During the industrial training in Miri's National Unity and Integration Department, one of the employee in the department has gave me a task which is to transfer the handwritten data in form of paper documents into the forms of spreadsheets. While searching for the handwritten data that is located in the paper file, it took a few minutes since there are many other forms of data in the paper file.

The third weakness in using the traditional filing systems is in term of **editing and communication**. Traditional file systems do not allow its users to easily edit the information in the files or send information to others. Paper files often cannot be edited directly, forcing users to make new copies to update old files. To distribute data on paper files, users have to use mail, fax or scan the data which can consumed time and decrease work productivity.

The fourth weakness in using the traditional filing systems is in term of **order of data**. Data can get out of order in traditional filing systems. If someone accidentally puts a file in the wrong place, or takes a file out of a cabinet and forgets to put it back, it can lead to lost data or the creation of additional copies of files. The creation of additional copies of files is known as data redundancy. There is an incident during the industrial training in Miri's National Unity and Integration Department where one of the paper files were misplaced on one of the employees' table. At that time, the works that require the use of the information in the paper files had to be delayed since the information cannot be attained. This kind of situation can actually decrease the employee's efficiency as well as the department's productivity.

The fifth weakness in using the traditional filing systems is in term of **it can take a lot of space in the office**. Traditional file systems are usually stored in filing cabinets that can be very large and cumbersome. The filing cabinets can take up a lot of space in the office. Rather than use a lot of space for the filing cabinet, it could have been better to use the office space for more desks, for example. The filing cabinets in Miri's National



Unity and Integration Department take a lot of space in the office until it makes the employees' working space become smaller.

By discussing several weaknesses of the traditional filing systems, it can be seen why organisation nowadays choose data entry or electronic data entry as their choice. In these modern days, data entry becomes a powerful tool for any organisation in term of managing the organisation's information. This means, data entry has become significantly important to any organisation because it has several importances that can bring benefit to the organisation. Below are some of the importance of data entry for any organisations, which include Miri's National Unity and Integration Department:

The first importance of data entry to Miri's National Unity and Integration Department is it helps the department to **organise its information** (retrieved from Hub Pages). There are various factors affecting data such as time, privacy, easy availability, duplication and other. Through data entry practices, the department can synchronize the data that it have, maintain confidentiality, have easy access in the future, and enable the department to update its information whenever they are required to do so. The Miri's National Unity and Integration Department maintain its information confidentiality by allowing only the employees of the department to have access to the department's information. For example, only the department's employees can have access to the Neighbourhood Committee members' information that has been saved in the department's website. The employees can have access to the information in the department's website by entering the correct password. The employees also able to update the department's information, such as to update the Neighbourhood Committee members' appointment and expiry date that need to be done every two years, just by accessing the department's website.

The second importance of data entry to Miri's National Unity and Integration Department is it helps **increase the employee's efficiency** (retrieved from Hub pages).

Employee's efficiency is one of the big issues for any organisation. If data is not available in a short time, it will directly affect the performance of the employee. Data entry also synchronizes the information that helps professionals to understand easily. Because the executives do not have to spend time on non-core activity, it will lead to the increase on the efficiency of the employees. In Miri's National Unity and Integration Department, the employees can always provide their upper management the requested information as the data can be attained easily from the saved information in the departments' databases and even websites. Besides that, they can also manage the data transcribing in a short time by using computer software such as Microsoft Word and Microsoft Excel.

The third importance of data entry to Miri's National Unity and Integration Department is in term of **cost factor** (retrieved from Hub Pages). Huge difference can be seen in term of cost when information is delivered using the digital format and the traditional format. If the information is available in digital format, multiple employees in the department can have access at the same file at a time. This means, there is no need to waste the department's allocated money on photo copy or print out. For example, in Miri's National Unity and Integration Department, the employees in the department can have access on the Neighbourhood Committee members' information at the same time by accessing it through the department's website.

The fourth importance of data entry to Miri's National Unity and Integration Department is it helps the department to experience **rapid productivity** (retrieved from Hub Pages). If the information is available quickly, both employers and employees can get the real situation of the organisation. The executive in any organisations can improve the performance by removing the hurdles as well as implementing solution. By continuously monitoring the hurdles and solving it, one can easily increase the productivity of the organisation that can help the organisation to achieve its ultimate goal. For example, one of the National Unity and Integration Department's goals in its client charters is to approve designated area Neighbourhood Committee and voluntary

patrolling scheme within seven days from the date of acceptance of complete documents. Due to the use of data entry in the department, this goal can be achieved. It is because the use of data entry helps the employees in the department to enter the data that they gained, for example the information on the Neighbourhood Committee members, in a short time.

In summary, among the importance of data entry for any organisations includes in helping to organise the organisation's information, increase the employee's efficiency, save cost, and increase the organisation's productivity.

### 3.3 TYPES OF DATA ENTRY

Data entry, as explained above, is a process of digitising data which is done by entering the data into a computer program. Usually, data comes in the form of paper documents. For example, the National Unity and Integrity Department will collect the data on the Neighbourhood Committee's members using the paper documents called *Cadangan Senarai Nama Ahli Jawatankuasa Rukun Tetangga*. This type of paper documents is known in the forms of *FORMAT B* (see Appendix A) and *FORMAT C* (See Appendix B). The paper documents in the form of *FORMAT B* are usually filled using handwritten. After the required data has been collected, the data will be entered into computer spreadsheets and then it will be printed out in the form of *FORMAT C*. The differences between the *FORMAT B* and *FORMAT C* paper documents are *FORMAT B* paper documents contained name, date of birth, Identification Card number, job occupation, gender, race, and contact numbers, while the *FORMAT C* printed paper documents contained additional information which is the member's post in the Neighbourhood Committee. The data contained in the *FORMAT C* paper documents will then be keyed in into the department's databases. The department's employees will key in the data in *FORMAT C* paper documents into the department's website which is [www.jpnn.gov.my](http://www.jpnn.gov.my) (see Appendix C). Data entry can be done either manually or automatically (retrieved from WIKIPEDIA). The National Unity and Integrity Department uses the manual data entry to enter the data from *FORMAT B* paper documents to the computer spreadsheets. Further explanation on manual data entry and automated data entry will be explained on the next page.

### 3.3.1 MANUAL DATA ENTRY

There are several characteristics of manual data entry that makes it different from the automated data entry. Several characteristics of manual data entry includes the use of human operators to enter data to the computer, keyboard as the input device to enter the data, types of data entered into the computer are text and numeric, and it emphasise on speed and accuracy. Below will be explained on several of the characteristics of manual data entry:

The first characteristic of manual data entry is it **involves human operators** to key in data found on the form. For example, the National Unity and Integration Department use human workforce to do the key in data in the *FORMAT B* of *Cadangan Senarai Nama Ahli Jawatankuasa Rukun Tetangga* paper documents to the department's computer spreadsheets. In Miri's National Unity and Integration Department, all the employees in the department are involved in this process. It is because every employee in the department has been assigned to be in charge on their assigned Neighbourhood Area.

The second characteristic of manual data entry is the most common way of entering data manually into the computer is by using the **keyboard**. In Miri's National Unity and Integration Department, all employees use keyboard to enter data into the computer. Moreover, all the employees in the department are provided with computers and printers. This is one of the facilities that have been provided by the department to its employees to help them feel more ease in doing their given tasks.

The third characteristic of manual data entry is the types of data entered into the computer are **text and numeric**. As manual data entry only involves the use of keyboard as the input device, the types of data that can be entered into the computer are only text and numeric. The text and numeric data will then be entered into the given software according to the companies need. For example, Miri's National Unity and Integration

Department use Microsoft Excel, Microsoft Word, and the department also uses the department's websites to enter its text and numeric data.

The fourth characteristic of manual data entry is it **emphasise on speed and accuracy**. Speed here referred to the typing speed. The employees involves in manual data entry must type fast so the data entry process can be done faster. Besides entering the data in a high speed manner, it is important to keep the data entered accurate since using the human workforce to enter data might lead typo error during the data entry. Inaccurate entered data may create problems to the organisation, such as in interpreting the information for the benefit of the organisation. During the industrial training in Miri's National Unity and Integration Department, the employees in the department have encountered typo error in doing the data entry. This is a common mistake since human are naturally prone to make mistake.

In summary, manual data entry needs human operator to help entering the data from paper documents into the computer program, it needs keyboard as the input device, the data entered are in the forms of text and numbers, and it also emphasise the human operator to have speed in typing and accurate typing.

### **3.3.2 AUTOMATED DATA ENTRY**

Automated data entry or form processing helps automate data processing by using pre-defined templates and configurations. A template in this case, would be a map of the document, detailing where the data fields are located within the form or document. As compared to the manual data entry process, automatic form input systems are more preferable, since they help reduce the problems faced during manual data processing such as eliminate human errors, cut down on manual labour, automation which means the computer will help extract the information you need, conserve resources such as time, as well as save money. The automated data entry systems use different types of recognition methods such as Bar Code Recognition (BCR) for barcodes, Intelligent Character Recognition (ICR) for hand print, Magnetic Ink Character Recognition (MICR), Optical Character Recognition (OCR) for machine print, and Optical Mark Reading (OMR) for check and mark sense boxes. Below will be explained further on Bar Code Recognition, Intelligent Character Recognition, Magnetic Ink Character Recognition, Optical Character Recognition, and Optical Mark Reading:

Barcode is an optical machine-readable representation of data relating to the object to which it is attached. Originally barcodes systematically represented data by varying the widths and spacing of parallel lines, and may be referred to as linear or one-dimensional (1D). Later they evolved into rectangles, dots, hexagons and other geometric patterns in two dimensions (2D). Although 2D systems use a variety of symbols, they are generally referred to as barcodes as well. Barcodes originally were scanned by special optical scanners called barcode readers; later, scanners and interpretive software became available on devices including desktop printers and smart phones. The **Bar Code Recognition (BCR)** can read more than 20 industry 1D and 2D barcodes including Code39, CODABAR, Interleaved 2 of 5, Code93 and more. It automatically detects all barcodes in an image or specified area within the image.

**Magnetic Ink Character Recognition (MICR)** is a character recognition technology used primarily by the banking industry to facilitate the processing and

clearance of cheques and other document. The Magnetic Ink Character Recognition encoding, called the MICR line, is located at the bottom of a cheque or other voucher and typically includes the document type indicator, bank code, bank account number, cheque number and the amount, plus some control indicator. The technology allows Magnetic Ink Character Recognition's readers to scan and read the information directly into a data collection device. Unlike barcodes or similar technologies, Magnetic Ink Character Recognition's characters can be easily read by humans. This recognition method help minimising the chances of errors in clearing of cheques, useful for easier and faster transfer of funds, secure, and provide high-speed information scanning and processing.

The **Optical Character Recognition (OCR)** is a character recognition technology that recognises machine-printed uppercase and lowercase alphabetic, numeric, accented characters, many currency symbols, digits, arithmetic symbols, expanded punctuation characters and more. It is the mechanical or electronic conversion of scanned images of handwritten, typewritten or printed text into machine-encoded text. It is widely used as a form of data entry from some sort of original paper data source, whether documents, sales receipts, mail, or any number of printed records. It is a common method of digitizing printed texts so that they can be electronically searched, stored more compactly, displayed on-line, and used in machine processes such as machine translation, text-to-speech and text mining.

The **Intelligent Character Recognition (ICR)** is an advanced of Optical Character Recognition (OCR). It is a handwriting recognition system that allows fonts and different styles of handwriting to be learned by a computer during processing to improve accuracy and recognition levels. For instance, it recognises hand-printed American and European English characters using pre-defined character sets such as the uppercase, lowercase, mixed case alphabetic, digits, currency symbols such as for dollar, cent, Euro, pound, and Yen, arithmetic and expanded punctuation characters.



The **Optical Mark Recognition (OMR)** is the process of capturing human-marked data from document forms such as surveys and tests. Optical Mark Recognition identifies bubbles filled in by hand or check boxes on printed forms. It usually supports single and multiple mark recognition. The fields to be recognized can be specified as grids or single bubbles. Many traditional Optical Mark Recognition devices work with a dedicated scanner device that shines a beam of light onto the form paper. The contrasting reflectivity at predetermined positions on a page is then used to detect the marked areas because they reflect less light than the blank areas of the paper. Some of the Optical Mark Recognition devices use forms which are preprinted onto transoptic paper and measure the amount of light which passes through the paper, thus a mark on either side of the paper will reduce the amount of light passing through the paper. In contrast to the dedicated Optical Mark Recognition device, desktop Optical Mark Recognition's software allows a user to create their own forms in a word processor and print them on a laser printer. The Optical Mark Recognition's software then works with a common desktop image scanner with a document feeder to process the forms once filled out.

The automated data entry enable an organisation to process its documents from their scanned images into a computer readable format such as ANSI, XML, CSV, PDF or input directly into a database. In summary, automated data entry such as Bar Code Recognition, Intelligent Character Recognition, Magnetic Ink Character Recognition, Optical Character Recognition, and Optical Mark Reading help an organisation to reduce the problems they faced due to the use of the manual data entry such as eliminate human errors, cut down on manual labour, save time, as well as save money.

### 3.4 DATA ENTRY JOB REQUIREMENTS

The task of data entry requires the use of human workforce to help entering data into the computer programs such as database and spreadsheets. Besides performing data entry, the employees that work with data entry also perform other clerical tasks such as filing documents and using the office machines such as using the photocopy machine as well as scanner. The employees that work with data entry are also known as word processors, typists, data entry keyers, and data entry clerks. In Miri's National Unity and Integration Department, all the employees in the department are involved in doing the data entry. All of them met the requirements needed for data entry workers. There are several requirements that need to be fulfilled by a person to qualify him or her to be a worker or employee that does the data entry in their workplace which are having software knowledge as well as hardware knowledge, have written and oral skills, and also fast in typing. Other than that, the other requirement for a data entry worker is the ability to stay focus for lengthy periods. Below will be explained further on the stated requirements for the employees or workers that deal with data entry:

The first requirement for data entry workers is in term of **software knowledge**. The data entry workers must at least require software knowledge in using the Microsoft Office products such as Microsoft Word, Microsoft Excel, and Access. All these basic Microsoft Office products are required for data entry. For instances, the Microsoft Word is used for word processing, Microsoft Excel is used for spreadsheets, and Microsoft Access is used as the tool to record management application or database management. In Miri's National Unity and Integration Department, all the employees have the software knowledge in using the Microsoft Office products. From the Generation Y to the Baby Boomers in the department, all of them have the basic software knowledge. By having software knowledge, it helps the employees in the department to do data entry related to the department. It can be seen that the employees in the department receive continuous training in enhancing their software knowledge. The proof is, if the employees did not receive training to help enhance their software knowledge, the Baby Boomers employees

would not be able to do their data entry task using the current broadly used software, which are the Microsoft Office products.

The second requirement for data entry workers is in term of **hardware knowledge**. Besides having the software knowledge, the data entry workers must also have the hardware knowledge. Hardware knowledge here refers to the knowledge in using the data entry input devices as well as the output devices. This means, besides having the software knowledge in using the Microsoft Office products such as Microsoft Word, Microsoft Excel, and Microsoft Access, the data entry workers need to have the knowledge in using the data entry input and output devices such as using scanner, printer, fax machine, and photocopy machine. It is important to know how to use these devices because these devices are used during the data entry process. For example, keyboard is used as a data entry input devices where the data in the form of words, numeric, and symbols are being entered into computer programs or software. Printer is being used to print the entered data to check any typing error mistakes or as a recorded paper documents. In Miri's National Unity and Integration Department, all the employees are capable in using the data entry input devices as well as the output devices. This also includes the Baby Boomers generation. It is important for them to have knowledge in both software usage as well as hardware usage. This is to ensure the data entry task will run smoothly.

The third requirement for data entry workers is in term of the **written and oral skills**. It is important for the data entry workers to have written and oral skills. This means, the data entry workers are required to be good in their spelling, punctuation, and grammar skills as it indicate their level of the written and oral skills. Having good written and oral skills helps reduce error during the data entry process. Sometimes, mistakes during the data entry may occur due to wrongly spelled entered data where the wrongly spelled word came from the data entry workers' poor spelling skills. It is important for data entry workers to key in the data correctly so that the information that will be received by their organisation is accurate. In Miri's National Unity and Integration

Department, the employees have good written and oral skills. But there is some times where they typed the wrongly spelled data during the data entry process. Although this did not give big bad impact to their work, but an outsider might assume the department's employees as not efficient in doing their work because their work have mistakes, in other words, their works is lacking in quality.

The fourth requirement for data entry workers is in term of the **speed and accuracy in typing**. Some organisations require the data entry workers that can type at a high speed while at the same time the data entered are accurate. As for example, the professional data entry operators who work with alphanumeric keyboards are often required to type between 8,000 and 10,000 keystrokes per hour. This is equivalent to 133 to 166 words-per-minute during typing. In Miri's National Unity and Integration Department, the employees are able to type fast. There are many data to be entered so it is important for the employees to be able to type fast. This is to ensure their given task can be done before the dateline. Besides that, it is to ensure their work will not be postponed due to the slow typing. Postpone or delay in work will reduce the employees' efficiency as well as the organisation's productivity. Although the employees in the department can type in a faster manner, they are prone to typing error during the data entry process. For example, there is several times where they misspelled the name or the Identification Card number of the Neighbourhood Committee members. This type of mistakes will lead to data inaccuracy. Other than that, it also can lead to problems for the department to search for the Neighbourhood Committee members' information in the future. For example, if they want to search for a Neighbourhood Committee member's information using their name or Identification Card number in the future, if in the past the member's name or Identification Card number were typed wrongly, it will make the member's information become unfound. The department's employees might have to waste some of their time just to search for the member's information.

The fifth requirement for data entry workers one must have the **ability to focus for lengthy periods**. As we know, the data entry workers need to enter many data and

usually the data entry process took quite a long period, depending on the amount of data that need to be entered. This means, during the long period of time, the data workers only focus entering the data by looking at the data in the paper documents and then enter the data to the computer program or software by looking at the computer screen while at the same time typing on the keyboard on a high speed with accuracy. Here, it is important for the data entry workers to have the ability to stay focus on doing the same thing for lengthy periods. If the workers are unable to stay focus, there might be typing error or wrong data entered during the data entry process. The data entry workers' ability to stay focus for lengthy periods is necessary so that error during the data entry process can be eliminated or reduced. In Miri's National Unity and Integration Department, the employees that do the data entry process are able to stay focus for lengthy periods. Although they are still prone to make errors during the data entry process, but by staying focus they can be able to reduce errors.

From the explanation above, it can be summarised that some of the requirements needed to become a data entry workers are having software knowledge as well as hardware knowledge, have written and oral skills, fast in typing, and have the ability to stay focus for lengthy periods. If these requirements are fulfilled, it will help the organisation's data entry process to become more effective, efficient, less error or mistakes, and it will lead to a quality work.

## CHAPTER 4

### RECOMMENDATION

#### 4.0 INTRODUCTION

This chapter will highlight the strengths and weaknesses of the data entry practices in Miri's National Unity and Integration Department during the industrial training, with solution for improvement.

#### 4.1 MANUAL DATA ENTRY

Manual data entry is the widely used approach in Miri's National Unity and Integration Department compared to the automated data entry. Manual data entry here refers to physically typing information into a computer. Manual data entry has several strengths and even weaknesses when compared to automated data entry. Further explanation on both strengths and weaknesses will be explained below.

##### 4.1.1 STRENGTHS

Among the strengths are it may be cheaper than buying the automated data entry equipment and it has the potential to be more accurate than the automated data entry. Below will be explained further on the stated strengths:

The first strength of using manual data entry is it **may be cheaper than the cost of buying appropriate equipment for automated data entry**. But this is specifically for small data entry tasks. Examples of small data entry tasks are entering names, address or other basic information. In Miri's National Unity and Integration Department, all the employees in the department do the data entry tasks without using the automated data entry equipment such as scanner. It is because the some of the data entry tasks that they do are quite simple. For example, they only need to enter data on the Neighbourhood Committee members' information to the department's computer database. In this case,

buying additional automated data entry equipment may be costly since the department can use the existing employees to do the small data entry tasks.

The second strength of using manual data entry is it **has the potential to be more accurate than automated data entry**. It is because a human worker can recognise and correct errors as they occur and so an attentive data entry worker may make fewer errors than an automated system. For example, if the data stated on the paper documents itself is wrongly spelled, the automated data entry equipment cannot detect the mistake and are not able to correct the mistake which in this case to correct the spelling. Instead, the data will just be scanned and be entered into the computer programs without any correction made. Unlike when using the human worker or manual data entry, the wrongly spelled data can be recognised and be corrected as well. This means, the data entered will be right as the spelling problems are corrected at the time the data is entered.

#### **4.1.2 WEAKNESSES**

Even though manual data entry has several strengths or advantages, it also has several weaknesses or disadvantages. Among the weaknesses are manual data entry may possibly suffer human error, it tends to be slower than automated data entry, and it may give bad impact towards the data entry workers in the long-term period. Below will be explained further on each of the weaknesses stated:

The first weakness of using manual data entry is it is **prone towards human error**. Even though human worker can recognise and correct errors as they occur, the human worker that do not have close attention to detail, suffering lack of concentration, or fatigue may tend to make errors. Usually, in the beginning of the data entry process, the data entry workers are able to give full attention towards the task. During that time, the data entry workers can actively recognise any error made during entering the data and then correct the error. But as the time goes by, data entry workers full attention may start decreasing and this will lead them to not have close attention towards the data entered,

lack of concentration, and suffering fatigue. In this case, errors might occur. In Miri's National Unity and Integration Department, most of the employees have full concentration in the beginning of the data entry task but as the time goes by, they tend to have lack of concentration in doing the task. Some of the employees in the department will tend to take a rest outside the office for a while and some may even do other things, such as surf online and even sleep, since they already reach the lack of concentration level during the data entry task.

The second weakness of using manual data entry is it is **time consuming** (retrieved from cvision). If using the manual data entry, it might take a skilled data entry worker four minutes to enter a page of data with 400 words on it into a computer. But by using the automated data entry equipment such as scanners, it can take the information on the paper documents and create a digital copy within seconds. For large data entry projects or time sensitive projects, the speed of automated data entry may be a significant advantage. In Miri's National Unity and Integration Department, as the department does not involve in the large data entry projects, the speed of data entry is not emphasize. If the department still uses the manual data entry, it may save the department's cost in buying the automated data entry equipment such as scanner but if they choose to use the automated data entry equipment, the department may be able to increase their work efficiency and productivity.

The third weakness of using manual data entry is it **may give negative impact towards the data entry workers' physical health in the long-term period** (retrieved from wiseGEEK). As data entry process requires focus and concentration, it can be mentally exhausting and physically challenging. If the data entry workers do not maintain good posture, do not take breaks for their eyes and hands, and practice hand and body stretching exercises during doing the data entry, they may suffer health problems related to the unhealthy practice during using the computer. For instance, they may suffer health problems like carpal tunnel syndrome.



In summary, it can be concluded that among the strengths or advantages that can be gained from the use of manual data entry are it may be cheaper than the cost of buying appropriate equipment for automated data entry and it has the potential to be more accurate than automated data entry. However, despite the strengths or advantages, there are also several weaknesses or disadvantages that may be gained from the use of manual data entry which are it is prone towards human error, time consuming, and it may give negative impact towards the data entry workers' physical health in the future.

## **4.2 AUTOMATED DATA ENTRY**

The automated data entry is the not a widely used approach in Miri's National Unity and Integration Department compared to the manual data entry. Automated data entry here refers to the use of different types of recognition methods such as Bar Code Recognition (BCR) for barcodes, Intelligent Character Recognition (ICR) for hand print, Magnetic Ink Character Recognition (MICR), Optical Character Recognition (OCR) for machine print, and Optical Mark Reading (OMR) for check and mark sense boxes to enter of process data into the computer. The automated data entry has several strengths and even weaknesses when compared to automated data entry. Further explanation on both strengths and weaknesses will be explained below.

### **4.2.1 STRENGTHS**

Among the strengths of the automated data entry are the data entry process can be done faster, and inexpensive. Below will be explained further on the stated strengths:

The first strength for automated data entry is the data entry process can be done **faster** compared to the use of manual data entry. The data entry process can be done faster as the data will be scanned or captured and transferred to the computer program in a few seconds only. If compared to the manual data entry, the process of transferring data from a paper documents might take longer period, depending on the type of paper documents it is. This is suitable to process large amount of data as time is regarded as precious by an organisation which means the organisation would not let its employees to take long period just to enter or to process the large amount of data since there are many other tasks that need to be done by the employees. In this case, automated data entry is a good solution to an organisation as it will make the data entry for the large amount of data become faster compared to the use of manual data entry. For Miri's National Unity and Integration Department, since the department do not handle large amount of data at one time, they can stick with using the manual data entry as the employees still can manage to do that within the given time.

The second strength for automated data entry is the data entry process done is **inexpensive in the long-term period** compared to the use of human workforce in manual data entry approach. Employing human workforce to do the data entry process is more costly compared to buying the automated data entry equipment. It is because by employing human workforce, an organisation need to pay its employees every month as long as they give their services for the organisation. Meanwhile, if using the automated data entry, the cost only incurred during buying the equipment as well as fixing the equipment when it is broken.

#### 4.2.2 **WEAKNESSES**

Even though automated data entry has several strengths or advantages, it also has several weaknesses or disadvantages. Among the weaknesses are it does not yield data of acceptable quality, the speed benefit of scanning may be lost due to verification process, and also capture errors. Below will be explained further on each of the weaknesses stated:

The first weakness of the automated data entry is **it does not yield data of acceptable quality**. That is why the data scanned and entered using the automated data entry equipment, such as scanner, is still subject to a verification process. This means, after the scanning and recognition process passes, the data scanned and entered will be reviewed by the data entry workers. In this process, the data scanned will be verified, rejected, repaired, or will have character correction.

The second weakness of the automated data entry is, **due to the verification process** as stated above, **the speed benefit of scanning can be lost**. It is because, the verification process itself is a tedious process and in cases where there are numerous fields to be verified, the speed benefit of scanning can be lost.

The third weakness of the automated data entry is it is prone to **capture errors**. Capture error can cause by several reasons. Among the reason is the paper documents

that want to be scanned might have improper marking, printing issues, torn and damaged, and have staples and paper clips.

In summary, it can be concluded that among the strengths or advantages that can be gained from the use of automated data entry are the data entry process can be done faster compared to the use of manual data entry and is inexpensive for the long-term period. However, despite the advantages, there are also several weaknesses or disadvantages that may be gained from the use of automated data entry which are, it does not yield data of acceptable quality, it may reduce the speed benefit due to the scanning verification process, and also it is prone to capture errors.

### 4.3 **RECOMMENDATIONS**

Since Miri's National Unity and Integration Department use mostly the manual data entry to do its data entry process, below are some of the recommendation that can be done to improve the weaknesses in the department's data entry practices:

Since the manual data entry process is prone towards human error, it is important for the employees in the department to **verify their entered data**. Not all the employees in the department verify their entered data. In this case, it is the upper management or the officer duty to ensure all the employees verify the data entered by them to avoid problems in the future. The upper management or the officer must train their employees to do so and make inspection whether the data entered is verified or not.

Besides being too prone towards human error, manual data entry is also time consuming and costly. Although the department does not deal with large amount of data to be entered, the employees in the department also have other tasks to be done instead of concentrating on the data entry tasks. Besides that, to add in new employees to the department in order to make the working environment in department become more efficient will be quite costly. In this case, it is better for the department to include the **use of automated data entry equipment** such as scanner to make the data entry process become faster. Although buying the automated data entry equipment seems costly, but actually in the long-term, it is less costly if compared to paying salaries to the employees every month just to make the working environment become more efficient.

As manual data entry practices require focus and full attention in which it can be mentally exhausting and physically challenging, it is important for the employees in the department who do the data entry tasks to **practice a safer and healthier data entry practices**. It can be done by maintaining good posture, typing in an ergonomically sound position, and taking a break for their eyes and hands. Most experts in workplace ergonomics suggest that people sitting at a computer for extended periods of time should

take a break at least once an hour and move away from their computer screens. Hand and body-stretching exercises can help prevent health problems like carpal tunnel syndrome. In this case, the upper management or the officer should promote a safer and healthier data entry practices in the department such as by promoting it through flyers and promoting it during the meeting or during the day in the office. Besides promoting the employees on the safer and healthier ways to do the data entry practices, it will also show how concern the upper management or the officer towards their employees. This eventually will increase the level of motivation among the employees in doing their task as they know their welfare are also being taking care by their department.

From the above recommendation, it can be concluded that by taking seriously on the issue of verifying entered data, use automated data entry equipment such as scanner for data entry process, and practicing a safer and healthier data entry practices can make the data entry practices in Miri's National Unity and Integration Department better.

## CHAPTER 5

### CONCLUSION

To conclude, the practical training that I attend for five weeks at Miri's International Unity and Integration Department is very useful and beneficial to me as it has give me a lot of experiences that could not be gained from learning institutions. Five weeks is a short time for me to learn about the management and administration in the public sector but since I have had the comprehensive and compact activity and task during the practical training, I have learnt a lot of experience and a lot of new things. The subjects that I learnt in my learning institutions also had helped me to adapt to the working environment faster where some of the theories and tips given by the lecturers are very useful to be applied during the practical training.

In **Chapter 1**, I have elaborated on the background of the organisation, presenting the department's organisational chart at the national and state level, as well as the local department's level which is in Miri's National Unity and Integration Department, explaining the objectives of the department which can be divided into the objectives for Neighbourhood Committee, Volunteer Patrol Scheme, *Tabika Perpaduan*, *Rukun Negara* Club, *Rukun Negara* Secretariat, sharing the vision, mission, motto, client's charter, client service's mission, and not to forget the location of the practical training as well as its location map.

In **Chapter 2**, I have explained about the task carried out and assigned to me during my five weeks practical training by extracting all the information that I had wrote in my practical training Log Book. It also shows the skills I obtained during the performance of the tasks and the process of the tasks performed by me. From Chapter 2, it can be seen that the upper management and the employees in Miri's National Unity and Integration Department are very supportive with regard to giving tips and cooperation on how to get the job done, as well as guiding me on the job process. In summary, among

the tasks that I have done during the five weeks of practical training are distributing notification letters to the pigeon hole cabinet, photocopy, retyping hard copy documents, verified one of the employees' entered data, attended talks, updating the important contact numbers for the department which includes the contact numbers of Yang Berhormat (YB) in Miri, all Department of National Unity and Integration in Sarawak, the Department of National Unity and Integration's headquarters which are located in Kuching (for the state of Sarawak) and Putrajaya (for the whole Malaysia), and also all the contact numbers of government agencies in Miri, accompanied the department's *Penolong Pegawai Pembangunan Masyarakat* to meet the Neighbourhood Committee's representatives, entering data to the department's computer program, verify the mark calculated on the Neighbourhood Area's performance's paper documents, do the online registration for the new Neighbourhood Committee's members in Miri, updating the date of appointment and the expiration date for the Neighbourhood Committee's members in Miri, verified the new updated appointment date and expiration date of the Neighbourhood Committee made by one of the employees in the department, accompanied the department's *Penolong Pegawai Pembangunan Masyarakat* on visiting one of the *Tabika Perpaduan* and *Taska Permata* in Miri, and understanding the Department of National Unity and Integration's MS ISO 9001:2008 for the Neighbourhood Committee Management. The MS ISO 9001:2008 for the Neighbourhood Committee Management were divided into nine types of procedures which include JPN RT01: Stipulation of Neighbourhood Area, JPN RT02: Appointment of Neighbourhood Committee's Members, JPN RT03: Distribution of Neighbourhood Allotment Grant, JPN RT04: Neighbourhood Committee Members' Training Management, JPN RT05: Compilation of Information of Neighbourhood Area, JPN RT06: Reactivation and Revocation of Neighbourhood Area Stipulation, JPN RT07: Application to Hold Voluntary Patrolling Scheme, JPN RT08: Operation of Voluntary Patrolling Scheme in Neighbourhood Area, and JPN RT09: Participation, Withdrawal/ Residents Termination of Voluntary Patrolling Scheme in Neighbourhood Area.



In **Chapter 3**, I had analysed the task given to me in which I need to relate with theories and research of which I have learnt previously in my learning institution. This is important since I get the chance to apply the theories we learn in the classroom into real working environment. In this chapter, I have discussed on the data entry practices in Miri's National Unity and Integration Department. The discussion include the definitions on data entry where it can be summarised as the process of entering data into a computerised database or spreadsheet and it can be done through the use of a human data-input device such as a keyboard, mouse, stylus, or touch screen, or through speech recognition software. The input data entered can be in terms of alphabetic, numeric, and even symbolic using either manual or automated approaches. Besides that, the importance of data entry has also been discussed and among the importance are it helps any organisation in organising its information, increase the employee's efficiency, save cost compared to the traditional filing systems, and it also help any organisation to increase its productivity.

In the discussion also include the weaknesses of the traditional filing systems such as in term of data security, the access time, editing and communication, order of data, and the use of space in the office, which lead an organisation to increase the use of data entry while at the same time the organsation decrease the use of traditional filing systems. Other than that, the types of data entry has also been discussed where it includes the manual data entry and the automated data entry.

It can be summarised that the manual data entry needs human operator to help entering the data from paper documents into the computer program, it needs keyboard as the input device, the data entered are in the forms of text and numbers, and it also emphasise the human operator to have speed in typing and accurate typing. The automated data entry can be summarised as the process of data entry where it use the automated data entry equipments, such as scanner, to replace human workforce in doing the data entry process. There are several different types of recognition methods which include Bar Code Recognition (BCR) for barcodes, Intelligent Character Recognition

(ICR) for hand print, Magnetic Ink Character Recognition (MICR), Optical Character Recognition (OCR) for machine print, and Optical Mark Reading (OMR) for check and mark sense boxes. After explaining the different types of data entry process, the topic discussed on the data entry job requirements which include having software knowledge as well as hardware knowledge, have written and oral skills, and also speed in typing.

In **Chapter 4**, I described the strength and weaknesses of the data entry practices in the manual data entry approach as well as the automated data entry approach. After that, I relate the strength and weaknesses of the two approaches with the data entry practices in Miri's National Unity and Integration Department which I identified during my practical training. For the manual data entry, it can be concluded that among the strengths or advantages that can be gained from the use of manual data entry are it may be cheaper than the cost of buying appropriate equipment for automated data entry and it has the potential to be more accurate than automated data entry while the weaknesses or disadvantages that may be gained from the use of manual data entry are it is prone towards human error and it is time consuming. For the automated data entry, it can be concluded that among the strengths or advantages that can be gained from the use of automated data entry are the data entry process can be done **faster** compared to the use of manual data entry and is inexpensive for the long-term period while the weaknesses or disadvantages that may be gained from the use of automated data entry are it does not yield data of acceptable quality, it may reduce the speed benefit due to the scanning verification process, and also it is prone to capture errors. In chapter 4, I also have made several recommendations on how to overcome the weaknesses in the department which can deter the performance and productivity of the employees. The recommendations that has been discussed include encouraging the upper management or the officers to take serious on the employees work practices especially in verifying their entered data, use automated data entry equipment such as scanner for data entry process in the department, and encourage the upper management or officers to promote a safer and healthier data entry practices in the department so that it can make the data entry practices in Miri's National Unity and Integration Department become better.

In summary, I can say that the practical training is an important part of the learning process for the students. It is because it provides the real challenges and problems in working environment that need to be faced by the student, such as the communication in the office, how to deal with the upper management, and manners in completing a task.

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# APPENDIX

APPENDIX A: *Cadangan Senarai Nama Ahli Jawatankuasa Rukun Tetangga* paper document in Form

<b>JPNIN</b>	JABATAN PERPADUAN NEGARA DAN INTEGRASI NASIONAL	M/Surat :	7 / 10
		Terbitan :	02
	Pelantikan Ahli Jawatankuasa Rukun Tetangga JPNIN/RT/02	Pindaan :	05
		Tarikh :	1.7.2009

**CADANGAN SENARAI NAMA AHLI JAWATANKUASA RUKUN TETANGGA**

Kawasan Rukun Tetangga : \_\_\_\_\_

BIL.	NAMA	TARIKH LAHIR	NO. K/P (BARU/LAMA)	PEKERJAAN	JANTINA (L/P)	KETURUNAN	RUJUK NO. TE

*Prosedur ini adalah dokumen terkawal dan boleh didapati di laman [www.jpnn.gov.my](http://www.jpnn.gov.my) Jika prosedur ini diotak, bukan dokumen terkawal*

(Retrieved from <http://www.jpnn.gov.my>)

APPENDIX B: *Senarai Nama Ahli Jawatankuasa Rukun Tetangga* paper document in *Format C*

<b>JPNIN</b>	JABATAN PERPADUAN NEGARA DAN INTEGRASI NASIONAL	M/Surat :	9 / 10
		Terbitan :	02
	Pelantikan Ahli Jawatankuasa Rukun Tetangga JPNIN/RT/02	Pindaan :	05
		Tarikh :	1.7.2009

**SENARAI NAMA AHLI JAWATANKUASA RUKUN TETANGGA**

Kawasan Rukun Tetangga : \_\_\_\_\_

Tempoh : \_\_\_\_\_


BIL	NAMA	TARIKH LAHIR	NO. KP (BARU/LAMA)	PEKERJAAN	JANTINA (L/P)	KETURUNAN	ALAMAT	
							RUMAH & NO. TEL	PE. N

*Prosedur ini adalah dokumen terkawal dan boleh didapati di laman [www.jpnin.gov.my](http://www.jpnin.gov.my)  
Jika prosedur ini dicetak maka prosedur ini bukan dokumen terkawal*

(Retrieved from <http://www.jpnin.gov.my>)



# APPENDIX C: National Unity and Integration Department's Information System

**SISTEM MAKLUMAT JPNIN**  
Jabatan Perpaduan Negara dan Integrasi Nasional

[Laman Utama](#) | [Profil](#) | [e-RT](#) | [e-SRS](#) | [e-TP](#) | [e-IDRT](#) | [e-Sepakat](#) | [e-Bangunan](#) | [Permohonan Online](#) Selamat Datang pbnmiri ! | [Daftar Keluar](#)

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**BORANG PENDAFTARAN KEAHLIAN  
AJK RUKUN TETANGGA/PERONDA SRS/MEDIATOR KOMUNITI**

No. Kad Pengenalan (Contoh : 850703146549)

Nama

Alamat Pada MyKad

Poskod Pada MyKad

Negeri Pada MyKad ----- v

No Telefon

Sekiranya alamat terkini berbeza dengan alamat pada MyKad, sila lengkapkan maklumat berikut :

Alamat Terkini

Poskod Terkini

Negeri Terkini ----- v

Jantina  Lelaki  Perempuan

Warganegara  Ya  Tidak

Kaum **Melayu** ----- v

Pekerjaan ----- v

Kelulusan Tertinggi ----- v

---

**BAHAGIAN A : MAKLUMAT AJK RUKUN TETANGGA**

AJK Rukun Tetangga  Ya  Tidak

---

**BAHAGIAN B : MAKLUMAT PERONDA SKIM RONDAAN SUKARELA**

Peronda SRS  Ya  Tidak


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**BAHAGIAN C : MAKLUMAT MEDIATOR KOMUNITI**

Mediator Komuniti  Ya  Tidak

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**BAHAGIAN D : MIJAT NAIK GAMBAR**



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