

UNIVERSITI TEKNOLOGI MARA FACULTY OF INFORMATION MANAGEMENT

INDUSTRIAL TRAINING REPORT: SOCIAL SECURITY ORGANIZATION (SOCSO) (ALOR SETAR, KEDAH)

WISMA PERKESO, LOT. 186, JALAN TELUK WANJAH, 05538 ALOR SETAR, KEDAH

SPECIAL PROJECT: ENFORCEMENT RECORDS MANAGEMENT SYSTEM

BY MOHD FAZIL BIN ALI 20141272345

IM245 - BACHELOR OF SCIENCE (HONS.) INFORMATION SYSTEM MANAGEMENT

FACULTY OF INFORMATION MANAGEMENT UNIVERSITI TEKNOLOGI MARA KELANTAN

01 FEBRUARY 2017 - 30 JUNE 2017

INDUSTRIAL TRAINING REPORT: SOCIAL SECURITY ORGANIZATION (SOCSO) (ALOR SETAR, KEDAH)

SPECIAL PROJECT: ENFORCEMENT RECORDS MANAGEMENT SYSTEM

BY MOHD FAZIL BIN ALI

FACULTY SUPERVISOR SIR. MOHAMMAD AZHAN BIN ABDUL AZIZ

REPORT SUBMITTED IN FULFILLMENT OF THE REQUIREMENT FOR THE INDUSTRIAL TRAINING FACULTY OF INFORMATION MANAGEMENT UNIVERSITI TEKNOLOGI MARA KELANTAN

01 FEBRUARY 2017 - 30 JUNE 2017

DECLARATION

I hereby declare that this is my original work. I have not copied from any other student's work or from other sources. I am also declare that no part of this report has been published or submitted for publication except where due to reference or acknowledgement is made explicitly in text, nor has any part been written for me by another person. I confirm that I have read and understood the UiTM regulations with regards to plagiarism and will be penalized by the university if found guilty.

Signed by

Mohd Fazil Bin Ali

2014127345

Date of submission: 11 July 2017

ABSTRACT

Abstract: The trainee undergoing industrial training based on the period from 1 February 2017 to 15 June 2017 in Social Security Organization (SOCSO) Alor Setar as part of requirement in completing course for the Bachelor of Info. Science (Hons.) Information System Management. SOCSO is an abbreviation for Social Security Organization which is a government body that provides social security protection to all employees. All of industrial training students will be given a rotation between 4 departments (Administration, Enforcement, Recovery, and Benefit) in SOCSO Alor Setar. During the 20 weeks period of training, students will be supervised and monitored by a supervisor. The trainee was assigned a special project for Enforcement Department by organization supervisor, Mr. Ahmad Firdaus Bin Hashim (Head Unit of Enforcement Department). The trainee required to develop a records management system which computerized several records in Enforcement Department. The trainee also required to learn about the basic operation and procedures of the organization in every department.

Keywords: records management system, computerized records, records management, basic operation, procedures, enforcement records

ACKNOWLEDGEMENT

Alhamdulillah and first of all, I would like to thanks to Allah S.W.T for giving me a good health to complete this industrial training report on time. I was able to complete this report that was given to me successfully within the given time.

My deepest appreciation and thanks to the Social Security Organization (SOCSO) Alor Setar for giving me the opportunity to be part of them for my industrial training. I am pleased to be able to acquire new knowledge and experience through the guidance of SOCSO staffs familiar with the knowledge of the work.

I would also like to thanks to my organization supervisor Mr. Ahmad Firdaus Bin Hashim and to all of head unit, Mr. Mamsor Bin Abdul Manaf, Mr. Basharudin Bin Khalid, Mrs. Fuziyah Binti Saad, Mrs. Iza Hasni Binti Kasim and Mrs. Noor Azleen Hartini Binti Arshad for giving me guidance in every unit that I have been placed. I would also like to thanks to other SOCSO staffs that are willing to provide instructional guidance for any important tasks within the organization that are given to me. The friendly attitude of SOCSO staffs makes it easier for me to communicate and be more comfortable in a harmonious atmosphere.

I would like to express the deepest appreciation and thanks to my respected and beloved lecturer, Sir. Mohammad Azhan Bin Abdul Aziz as my faculty supervisor who has provided guidance and advice to me while during my industrial training period in SOCSO Alor Setar. Besides, thanks to Madam. Nurulannisa Binti Abdullah as the industrial training coordinator for giving me plenty of guidelines before and during my industrial training. Special thanks to visiting supervisor Mdm. Siti Khadijah Rafie and Mdm. Zati Atiqah Mohamad Tanuri from UiTM Merbok, Kedah for their time and energy spent to visit me during my industrial training, many useful advice and suggestion were shared to me during a short consultation with them.

However, it would not have been possible without the kind support and help from my dearest friend and family, I would like to extend my sincere thanks to all of them in helping me during my industrial training. I would like to take this opportunity to express my gratitude to all of those who have contributed their kind services to me throughout my training sessions.

TABLE OF CONTENTS

	ON	
ABSTRACT.		
ACKNOWLE	EDGEMENT	ii
	ONTENTS	
LIST OF TAE	BLES	v
LIST OF FIG	URES	vi
LIST OF APP	PENDICES	b
CHAPTER 1:	INTRODUCTION	
1.1 BAC	KGROUND OF THE ORGANIZATION	1
1.2 ORG	GANIZATIONAL STRUCTURE	
CHAPTER 2:	DEPARTMENTAL STRUCTURE	10
2.1 INFO	ORMATION COMMUNICATION & TECHNOLOGY (ICT) DEPARTMENT	10
2.2 DEP	ARTMENT FUNCTION	12
CHAPTER 3:	INDUSTRIAL TRAINING ACTIVITIES	18
3.1 TRA	INING ACTIVITIES	18
3.1.1	MICROSOFT ACCESS LEARNING	18
3.1.2	ELECTRONIC PUBLISHING	19
3.1.3	OTHER ACTIVITIES	29
3.1.4	DEPARTMENTAL ROTATION	34
3.2 SPEC	CIAL PROJECT	40
3.2.1	INTRODUCTION	40
3.2.2	PROJECT PLANNING	43
3.2.3	ANALYSIS	44
3.2.4	DESIGN	50
3.2.5	IMPLEMENTATION	57
3.2.6	MAINTENANCE	58

CHAPT	ER 4: CONCLUSIONS	. 59
4.1	APPLICATION OF KNOWLEDGE, SKILLS AND EXPERIENCE IN UNDERTAKING THE TASK	.59
4.2	PERSONAL THOUGHTS AND OPINION	. 60
4.3	LESSON LEARNT	. 61
4.4	LIMITATIONS AND RECOMMENDATIONS	. 62
REFERE	ENCES	63
	DICES	64

LIST OF TABLES

Table 1: SOCSO Kedah State Office Details	4
Table 2: Training Activity 1	
Table 3: Training Activity 2	
Table 4: Training Activity 3	
Table 5: Training Activity 4	
Table 6: Training Activity 5	
Table 7: Training Activity 6	
Table 8: Training Activity 7	
Table 9: Training Activity 8	30
Table 10: Training Activity 9	

LIST OF FIGURES

Figure 2: SOCSO Headquaters Entrance	Figure 1: SOCSO Headquarters	
Figure 4: SOCSO Official Logo 3 Figure 5: SOCSO Kedah State Office 4 Figure 6: Construction Worker 1 5 Figure 7: Construction Worker 2 6 Figure 8: Official Organizational Structure 7 Figure 9: Official Organizational Chart 8 Figure 10: Org Chart Replace 9 Figure 11: Benefit Department (combined with ICT Department) 11 Figure 12: i-PERKESO 19 Figure 13: i-PERKESO Brochure 20 Figure 14: Software Used to Develop Brochure 20 Figure 15: SOCSO Event Poster 22 Figure 16: Software to Design Poster 22 Figure 17: Variety of Car's Sticker 23 Figure 18: SOCSO Contribution System 24 Figure 19: Employer Screen for the System 25 Figure 20: Employee Screen for the System 25 Figure 21: Multimedia User Manual (How to use the system) 26 Figure 22: Multimedia User Manual (Installation for Windows 7) 26 Figure 23: Software Used to Create Multimedia User Manual 27 Figure 24: Multimedia User Manual Editing 27 Figure 25: Graphical Presentation 28 <td></td> <td></td>		
Figure 5: SOCSO Kedah State Office	Figure 3: SOCSO Abbreviation Name	
Figure 6: Construction Worker 1	Figure 4: SOCSO Official Logo	3
Figure 7: Construction Worker 2	Figure 5: SOCSO Kedah State Office	4
Figure 8: Official Organizational Structure	Figure 6: Construction Worker 1	5
Figure 9: Official Organizational Chart	Figure 7: Construction Worker 2	6
Figure 10: Org Chart Replace.9Figure 11: Benefit Department (combined with ICT Department).11Figure 12: i-PERKESO.19Figure 13: i-PERKESO Brochure.20Figure 14: Software Used to Develop Brochure.20Figure 15: SOCSO Event Poster.22Figure 16: Software to Design Poster.22Figure 17: Variety of Car's Sticker.23Figure 18: SOCSO Contribution System.24Figure 19: Employer Screen for the System.25Figure 20: Employee Screen for the System.25Figure 21: Multimedia User Manual (How to use the system).26Figure 23: Software Used to Create Multimedia User Manual.27Figure 24: Multimedia User Manual Editing.27Figure 25: Graphical Presentation.28	Figure 8: Official Organizational Structure	7
Figure 11: Benefit Department (combined with ICT Department)	Figure 9: Official Organizational Chart	8
Figure 12: i-PERKESO19Figure 13: i-PERKESO Brochure20Figure 14: Software Used to Develop Brochure20Figure 15: SOCSO Event Poster22Figure 16: Software to Design Poster22Figure 17: Variety of Car's Sticker23Figure 18: SOCSO Contribution System24Figure 19: Employer Screen for the System25Figure 20: Employee Screen for the System25Figure 21: Multimedia User Manual (How to use the system)26Figure 22: Multimedia User Manual (Installation for Windows 7)26Figure 23: Software Used to Create Multimedia User Manual27Figure 24: Multimedia User Manual Editing27Figure 25: Graphical Presentation28	Figure 10: Org Chart Replace	9
Figure 13: i-PERKESO Brochure	Figure 11: Benefit Department (combined with ICT Department)	11
Figure 14: Software Used to Develop Brochure	Figure 12: i-PERKESO	19
Figure 15: SOCSO Event Poster	Figure 13: i-PERKESO Brochure	20
Figure 16: Software to Design Poster	Figure 14: Software Used to Develop Brochure	20
Figure 17: Variety of Car's Sticker	Figure 15: SOCSO Event Poster	22
Figure 18: SOCSO Contribution System	Figure 16: Software to Design Poster	22
Figure 19: Employer Screen for the System	Figure 17: Variety of Car's Sticker	23
Figure 19: Employer Screen for the System	Figure 18: SOCSO Contribution System	24
Figure 21: Multimedia User Manual (How to use the system)		
Figure 22: Multimedia User Manual (Installation for Windows 7)	Figure 20: Employee Screen for the System	25
Figure 23: Software Used to Create Multimedia User Manual	Figure 21: Multimedia User Manual (How to use the system)	26
Figure 24: Multimedia User Manual Editing	Figure 22: Multimedia User Manual (Installation for Windows 7)	26
Figure 25: Graphical Presentation28	Figure 23: Software Used to Create Multimedia User Manual	27
Figure 25: Graphical Presentation28	Figure 24: Multimedia User Manual Editing	27
	Figure 25: Graphical Presentation	28
Figure 26: Statistical Data29		
Figure 27: Documentation 1	Figure 27: Documentation 1	30
Figure 28: Documentation 231	Figure 28: Documentation 2	31
Figure 28: Documentation 231 Figure 29: Continuation from Documentation 231		
Figure 28: Documentation 2	Figure 28: Documentation 2	31

Figure 31: SIKAP System (Benefit Department)	.33
Figure 32: Enforcement Department	.35
Figure 33: Recovery Department	36
Figure 34: Recovery Department Inventory Room	37
Figure 35: Recovery Department File Room	37
Figure 36: Administration Department	38
Figure 37: Benefit Department	39
Figure 38: Enforcement Records Management System Gantt Chart	43
Figure 39: Continuation of Above Gantt Chart	
Figure 40: System Context Diagram	44
Figure 41: System Data Flow Diagram (DFD)	45
Figure 42: Enforcement Management Records System (ERD)	46
Figure 43: Staff Authentication Data Dictionary	
Figure 44: Employers Registration Data Dictionary	46
Figure 45: Employees Registration Data Dictionary	47
Figure 46: Refund of Contribution Data Dictionary	47
Figure 47: Summon of Department Data Dictionary	47
Figure 48: Complaints Data Dictionary	48
Figure 49: Prosecution Data Dictionary	48
Figure 50: Enforcement Records Management System Flowchart	49
Figure 51: Login, Menu and Logout Interface	50
Figure 52: Employers Registration, Search and Records Interface	51
Figure 53: Employees Registration, Search and Records Interface	52
Figure 54: Refund of Contribution Registration, Search and Records	53
Figure 55: Summons of Department Registration, Search and Records Interface	54
Figure 56: Complaints Registration, Search and Records Interface	55
Figure 57: Prosecution Registration, Search and Records Interface	36

LIST OF APPENDICES

APPENDICES A: INDUSTRIAL TRAINING STUDENT'S CHECKLIST	65
APPENDICES B: ATTENDANCE RECORDS	66
APPENDICES C: REPORT DUTY DECLARATION FORM	67
APPENDICES D: MEDICAL CERTIFICATES	68
APPENDICES E: SAMPLE OF SYSTEM INTERFACES AND ELECTRONIC PUBLISHING	69
APPENDICES F: OTHER DOCUMENTS	70
APPENDICES G: REFERENCES	
APPENDICES H: LOG BOOK	72

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND OF THE ORGANIZATION



Figure 1: SOCSO Headquarters

History

Social Security Organization (SOCSO) was formed under the Employees' Social Security Act 1969 as a government department of the Ministry of Labor and Manpower on 1 January 1971. It is entrusted with the administration of two social security schemes, namely the Employment Injury Scheme and the Invalidity Scheme.

The Employment Injury Scheme provides protection for employees against contingencies, including occupational disease and accidents that occur while travelling in the course of employment. The Invalidity Scheme, on the other hand, provides 24 hours coverage against invalidity or death due to any cause. The objective of both schemes is to guarantee cash payment and benefits in kinds to employees and their dependents in the event of a contingency.



Figure 2: SOCSO Headquaters Entrance

The Social Security Scheme was first introduced in the country in 1958, soon after Malaysia gained its independence. At the same time, the International Labor Organization (ILO) was conducting a study on social security. In 1962, a high-level committee was formed to review the study results. The study by A.N. Ambo through the ILO provided the basis for the drafting of the Employee's Social Security Bill, which was subsequently passed by the Parliament of Malaysia in April 1969 and named the Employees' Social Security Act 1969.



Figure 3: SOCSO Abbreviation Name



Figure 4: SOCSO Official Logo

Vision

To become the premier and outstanding leader in social security towards 2020.

Mission

To provide a social security protection to Insured Person and their dependents through social security schemes and to increase awareness on occupational safety and health that will ultimately improve the Insured Person social wellbeing.

Objective

To provide social security protection to all employees and their dependents through social security schemes base on the concept of caring society in line with the National Development Policy and Vision 2020



Figure 5: SOCSO Kedah State Office

Table 1: SOCSO Kedah State Office Details

ORGANIZATION DETAILS	
Name	Social Security Organization (SOCSO)
Office	SOCSO Kedah State Office
Address	Pejabat PERKESO Negeri Kedah, Wisma PERKESO, Lot. 186, Jalan Teluk Wanjah, 05538 Alor Setar, Kedah
Phone Number	04-7746666
Fax Number	04-7339840 / 9870
E-mail	pksasetar@perkeso.gov.my
Website	https://www.perkeso.gov.my/

Product and Service



Figure 6: Construction Worker 1

Social Security Organization (SOCSO) provides two types of services to its dependents. The services are the Employment Disaster Insurance Scheme and Pension Scheme.

Employment Disaster Insurance Scheme provides protection to workers who suffer from Disaster Work. Work disaster means a catastrophic occurrence on a worker himself caused by an accident or an illness arising out of and in the course of his employment in a company against him. The scheme provides protection to workers against accidents while carrying out their work and is due to their work, while on-the-road trips between the place of residence and the place of work and the work-related travel. Furthermore, it also provides protection against accident during an emergency at the employer's premise and illness, which is a disease caused by its work. Among the benefits available under the Employment Injury Insurance Scheme are Medical Benefits, Temporary Disability Benefits, Permanent Disablement Benefits, Continued Service Allowance, Recovery Benefits, Dependent Benefits, Mortality Benefits and Education Benefits.

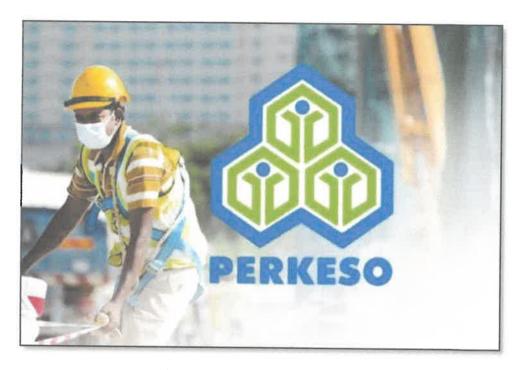


Figure 7: Construction Worker 2

The second scheme is the Pension Scheme. Disability is a serious illness, permanent or unreasonable or unlikely to cure which causes a worker unable to earn a minimum of one third (1/3) of the ability of a normal employee. Among the benefits provided under this scheme are the benefits of Pension, Pension Assistance, Constant Service Allowance, Retirement Pension, Mortality Benefits, Recovery Benefits and Education Loan Benefits.

In order to enable employees to receive these benefits, employer must be responsible for registering under SOCSO for every employee working under their company. Employers with at least one or more employees are required to register and pay contributions monthly to SOCSO in accordance with the Employees Social Security Act, 1969. Employers should ensure that all workers employed by the employer are registered and their contributions are paid. The employer's contribution amount is 1.25%, while employee contributions are 0%. This means that the obligation to pay this contribution rests solely on the employer.

1.2 ORGANIZATIONAL STRUCTURE

Structure

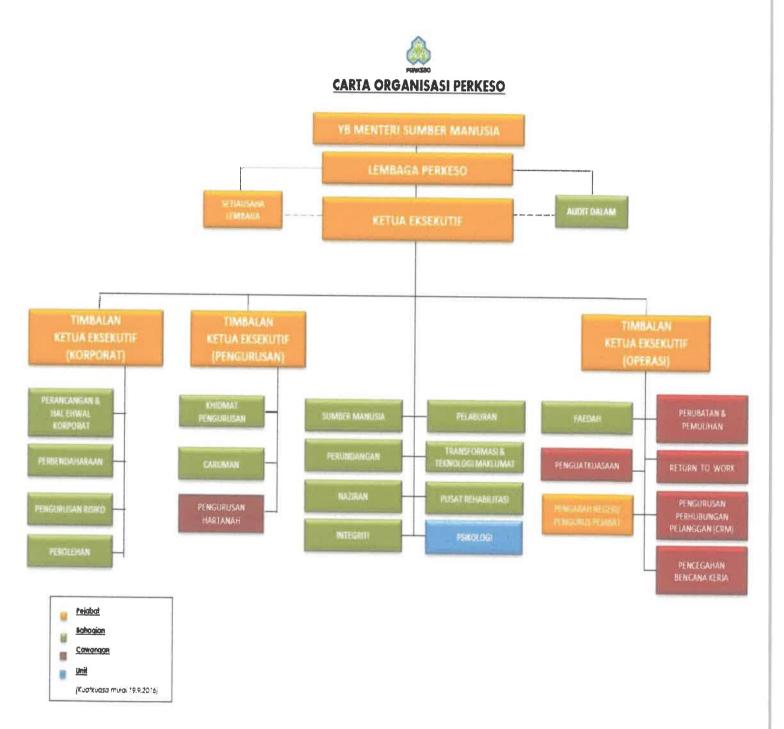


Figure 8: Official Organizational Structure

Organization Chart

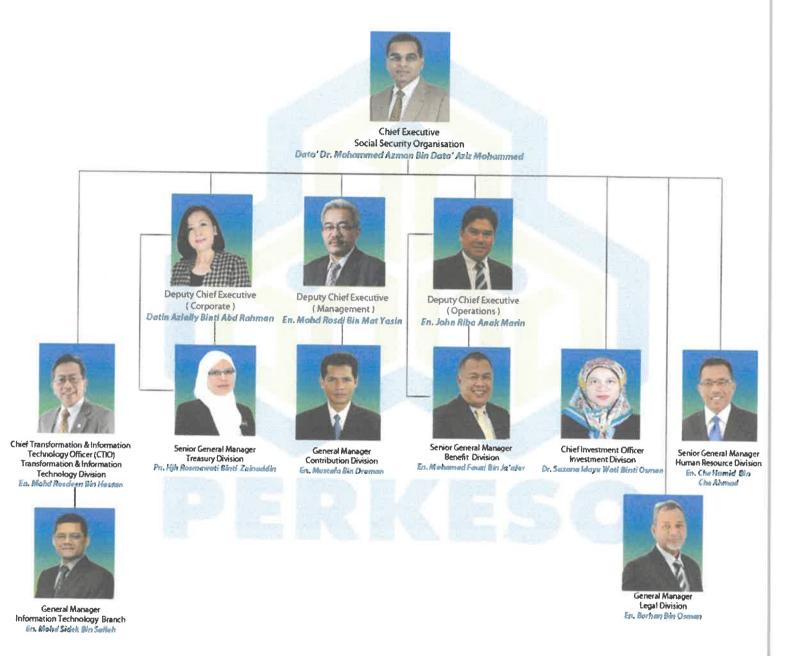
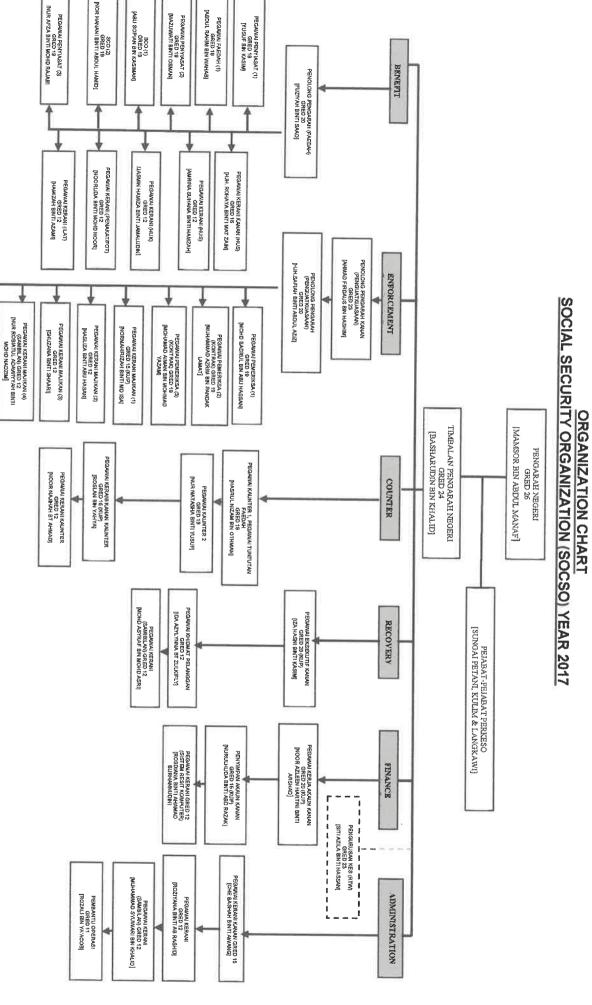


Figure 9: Official Organizational Chart



PEGAWAI KERANI MAJIKAN (5) (SAMBILAN) GRED 12 (MOHD FAIZ 8IN MOHD SHAFIE)

Figure 10: SOSCSO Kedah State Office Organizational Chart

PEGAWAI KERANI MAJIKAN (8) (SAMBILAN) GRED 12 [AZYWAN BIN ABD AZIZ]

CHAPTER 2: DEPARTMENTAL STRUCTURE

2.1 INFORMATION COMMUNICATION & TECHNOLOGY (ICT) DEPARTMENT

SOCSO ICT Department located at the 6th floor of Wisma PERKESO Alor Setar. It is a small unit that has been combined with Benefit Department and coordinated by an ICT Officer, Mr. Abdul Rahim Bin Wahab and together with 4 technical assistances. The small unit of ICT within this state office is responsible in dealing with headquarters ICT Department. Any ICT work-related will be managed by the small unit to enhance administration of ICT and to ensure that all the system workflow are running in accordance to the SOCSO ICT Security Policy as well as the Operation and Networking Control.

ICT Security Policy

The Social Security Organization (SOCSO) ICT Security Policy consist all the guidelines and conditions for use of SOCSO ICT assets. It is understood that visitors and third party usage of the ICT assets signifies that the users have read, understood and agree to the guidelines and conditions set by SOCSO. The policy explains that all users have responsibilities and roles in the protection and proper usage of the SOCSO ICT assets.

SOCSO's ICT Security Policy contains rules that must be read and followed in using SOCSO information and communication technology (ICT) assets. The policy also addresses all users at SOCSO and third parties who have access to ICT assets on their responsibilities and roles in safeguarding SOCSO ICT assets.

Objective

Social Security Organization (SOCSO) ICT Security Policy objective was created to ensure organization continuity by minimizing the impact of ICT security incidents. The policy also aims to facilitate information sharing in accordance with SOCSO operational requirements. This can only be achieved by ensuring all ICT assets are protected.

The main objectives of SOCSO ICT Security are as follows:

- a. Ensuring SOCSO's smooth operation and minimizing damage or destruction.
- b. Protecting the interests of those who are dependent on information systems from the effects of failures or weaknesses in terms of confidentiality, integrity, availability, authenticity of information and communication.
- Prevent misuse or theft of SOCSO's ICT assets.

Scope

SOCSO's ICT asset consists of hardware, software, services, data or information and human. SOCSO's ICT Security Policy sets the following basic requirements:

- a. Data and information must be accessed on a continuous basis, quickly, accurately, easily and reliably in order to enable effective and quality delivery of results and delivery of services.
- b. All data and information should be kept confidential and handled as good as possible at all times to ensure the completeness and accuracy of information and to safeguard the interests of the organization, service, and the people.



Figure 11: Benefit Department (combined with ICT Department)

2.2 DEPARTMENT FUNCTION

System Planning And Acceptance

In the Social Security Organization (SOCSO) Security Policy, there is a system planning and acceptance where it is used to minimize the risk of system failure. Capacity planning for resource use should be monitored and planned for future capacity needs. Among the things to take into consideration is recording the capacity requirements for new and ongoing activities. Also, implement fine tuning to improve system performance. Additionally, studies the use of ICT resources that have a long life cycle and have a high impact on maintenance costs. Reports for Use and Capacity Planning should be provided periodically.

For System acceptance, the acceptance and testing system requirements and criteria for a new, modified, or new version of the application system must be set during system development and before formally accepted or agreed upon. Things that need to be implemented before the migration to production activities are as follows:

- a. Performance requirements and computer system capacity
- b. Procedure of error recovery and restart
- c. Contingency plan
- d. Considerable safety controls
- e. Ensure installation of new systems will not affect existing systems and operations
- f. Provide training in operation and use of new systems
- g. Service continuity plan or system
- h. Providing a User Acceptance Test (UAT) / Final Acceptance Test (FAT) / Certificate of Acceptance (COA) as a statement that SOCSO acknowledges that system requirements and criteria are complied

Backup Information

Backup is used in managing the integrity and availability of information and information processing facilities. Backup copies of information and software should be implemented and tested periodically by taking into account the backup and recovery procedures recorded, maintained and reviewed according to requirements. Backup all software systems and applications at least once or after getting the latest version and back up all data and information if there is a daily change according to the critical level of information. Backup systems will also be tested as well as recovery procedures if available to ensure they work perfectly and effectively when used especially during emergencies. The information should be kept at least three generations of backup (daily, weekly, monthly) and each one has two cycles. Moreover, back information also used to ensure records and stores backup copies at different locations and securely.

Network Security Management

Network controls should be managed and controlled to protect against threats and to control the security of systems and applications within the network including information in transit. Controls that need to be implemented include:

- a. Segregate responsibility for networking and computer operations
- Ensuring procedures and users including third parties who have obtained the Information
 Technology Division's approval prior to remote access are permitted
- c. Ensuring that remote user records are stored and maintained
- d. Install and monitor all incoming and outgoing traffic through the firewall
- e. Installing a sniffer software or network analyzer on a user's computer is prohibited
- f. Install the Intrusion Protection System (IPS) software to detect any intrusion attempts and other activities that may threaten SOCSO's system and information
- g. Install Web Content Filer on the Internet Gateway to block banned activities
- h. Using the SOCSO network including wireless provided by SOCSO only while in the office premises and while using SOCSO ICT assets

Media Control

Media Control is to protect against the vulnerability, change, transfer and damage of ICT assets and disruption of organizational services. Mobile media management such as tapes, disks, thumb drives, CDs and DVDs to be transmitted shall comply with the subjects of which all the media to be re-used should be deleted and not recoverable if no longer required. All media containing official secret information shall be kept in a safe place such as in the vault and the approval of the top official shall be obtained prior to executing a media transfer containing official secret information.

Furthermore, media disposal should also be made where it is a procedure for dispose of media containing official secret information and matters to consider is that media containing official secret information should be stored and deleted correctly and safely such as burning or deleting information using an appropriate application. Any sensitive media disposal should be recorded

Among the information handling procedures under Media Control is handling, processing, storing and disseminating information in the form of documents, computer systems, networks, mobile telecommunication equipment, voice, multimedia and fax based on classification must comply with things like label the backup media with regular and clear according to established procedures while restricting and defining media access to authorized users only. Other matters that need to take under consideration are to restrict the distribution of data or media for authorized purposes and to control and record media maintenance activities to avoid any unauthorized damages and disclosures.

Finally, there are also things to be followed in ensuring the security of documentation system security such as ensuring that the documentation system were kept in a safe place and ensures access to the system, documentation is restricted and obtains approval of the software administrator if there is need for any particular document.

ICT Monitoring

Monitoring is required to detect unauthorized information processing activities. Among the ICT monitoring performed is the audit log where audit log contains information such as User ID, Date and Time of an activity, IP Address, location or hostname and document or file achieved and type of access if available.

In the use of the Monitoring System, procedures for monitoring the use of information processing facilities should be developed and systems monitoring work should be reviewed periodically. Things to consider in monitoring are the permitted access with information such as User ID, Date and Time of activity, the type of activity as well as the files achieved and predefined and identified operations such as account privileges such as administrator (privilege account), system start -up and stop. Unauthorized access attempts such as failed and rejected User IDs should also be considered and system alerts such as console alerts or message system log exceptions, network management alarms also play an important role in the monitoring process.

In order to protect the log information, logging facilities and log information should be protected against unauthorized intrusion or access. Controls that need to be taken into consideration are an amendment to the type of messages that have been saved and the log files that were created or deleted.

In addition, in the ICT monitoring process there are also logs of system administrators and operator systems where all activities related to system administrators and operator systems must be logged and stored within 1 year. The information that needs to be logged is the time an activity is occurring whether it is successful or failed and the account is related to the activity.

Error logs should also be taken into account in ICT monitoring. Errors reported by the user or system related to information processing problems or communication systems should be logged, analyzed and actionable. Procedures for dealing with errors should be prepared by reviewing the logs to ensure that all problems have been resolved properly and to analyze the remedial actions taken to ensure that the actions taken are allowed with appropriate controls.

Application and Information Access Controls

In ICT units, this is used to prevent unauthorized access to information contained in the application system. Access to information and system application functionality by users and system administrators should be controlled according to the predefined access policy. Controls to limited access are based on user requirements in accordance with the Access Control Policy. Access requirements should take into account matters such as the provision of access control menus to application system functions, control of user access rights and access control of applications.

Isolation of sensitive systems is also necessary, environmental isolation of computers or sensitive application systems should take into account things such as sensitive application systems to be clearly identified and documented by application owners and resource sharing of sensitive applications and risks associated with such sharing identified by the application administrator, isolation for this purpose can be achieved through physical or logical isolation.

Procurement, Development and Maintenance of Systems

ICT units are responsible for security requirements in information systems to ensure security is part of the information system. Specification and analysis of safety requirements are part of security requirements which should be taken into account for automated control specification which are set at various stages such as procurement of information systems including package or customized software, system design and upgrading of information systems.

System File Security

System File Security is used to ensure that the system files are controlled and operated in a secured manner. Operating Software Control is a procedure under System File Security which is used to control the installation of software on the operating system where it should be provided taking into account by updating of the software on the operating system and applications including patching and upgrade platforms can only be done by the ICT System Administrator.

Additionally, the operating information used in the test system should be removed from the test system after the test is completed and that the copy and use of the operating information is recorded.

There is also a Access Point Code Access Control where access to the Source Code is controlled, the source libraries program is not stored in the operating system if the system is capable and only authorized staff can access or update the source libraries program and program source code as well as obtain confirmation from authorized officer while the Change Control Procedures shall be complied with for each maintenance of the source libraries program.

Information System Audit

This is done to maximize effectiveness and minimize disturbance to or from the information system audit process. In the control of an information system audit, auditing and activity requirements involving reviews of system operations should be scheduled to minimize the risk of interruption to the service. Among the things to consider in this regard are audit requirements to be agreed by SOCSO Management and the scope of the audit should be controlled and restricted to read-only access to software and data. Additional requirements from the agreed scope must be identified and obtained. All access should be monitored and if needed audit logs should be prepared and all procedures, requirements and responsibilities should be documented.

In addition, the protection of information system audit software, access to information system audit software should be protected to prevent any abuse and should be isolated from the operating system and development.

CHAPTER 3: INDUSTRIAL TRAINING ACTIVITIES

3.1 TRAINING ACTIVITIES

During the industrial training, the trainee has been given a wide range of training activities which cover all aspects of management despite their main work area were in ICT Department. The main activity was developing a system for Enforcement Department, while in the same time the trainee was also given a chance to learn the basic procedure of Social Security Organization (SOCSO) management and operation.

3.1.1 MICROSOFT ACCESS LEARNING

Table 2: Training Activity 1

Task	Microsoft Access Tutorial
Date	2 March 2017
Scope	User Training
Hardware/Device	Laptop
Software	Microsoft Access

Microsoft Access is one of the easiest ways to create the database for home or small business usage. The user can generate a lot of form, queries and reports. Microsoft Access is much better to do with the data stored and data separation based on needs.

Organization supervisor, Mr. Ahmad Firdaus Bin Hashim asks the trainee to make some tutorial of Microsoft Access to him as the trainee had learnt several things about it from the previous semester at UiTM. The trainee teaches the basic how to use Microsoft Access such as data replacement which the data in several forms can be edited. Therefore, the trainee then makes a simple tutorial how to use overall by using Microsoft Access in simple ways. The system will make the user easier to insert, search, view, edit and retrieve data across the multiple tables.

The purpose of this tutorial is to change how records management has been performed in SOCSO Kedah State Office. Old records that ages few years back were kept in an old form which those records are wrote in several books for different records.

3.1.2 ELECTRONIC PUBLISHING

Table 3: Training Activity 2

Task	Design Brochure
Date	15 March 2017
Scope	Electronic Publishing
Hardware/Device	Laptop
Software	Adobe Photoshop CS5

There is a new system called i-PERKESO which developed by Headquarters ICT Department. i-PERKESO is an innovative project initiated by Social Security Organization (SOCSO). It allows Employees to check their contribution status, and allow Employers to make contributions and payment online. Any Malaysian Citizen can sign up for an i-PERKESO account with their Identity Card (MyKad). But if you are registered members of PERKESO, you may be entitled to the upcoming loyalty program. Since this is a new system, the trainee was then ask by organization supervisor to design a brochure for the use of SOCSO Kedah State Office in promoting i-PERKESO to all of employers. The brochure is used by Enforcement Department in which they are responsible to make a promotion for this newly developed system.



Figure 12: i-PERKESO



Figure 13: i-PERKESO Brochure



Figure 14: Software Used to Develop Brochure

Table 4: Training Activity 3

Task	Design Poster
Date	17 May 2017
Scope	Electronic Publishing
Hardware/Device	Laptop
Software	Adobe Photoshop CS5

Social Security Organization (SOCSO) Kedah State Office held an event which invites an individual to give a speech for motivation of staff and knowledge sharing session in between speaker with the staff. All staff in the Wisma PERKESO is invited to join this event.

Thus, the trainee was ask to design a poster for the purpose of promoting this event to all staff in Wisma PERKESO. This poster was placed in lobby notice board and inside lift in which there is a notice board inside the lift too.



Figure 15: SOCSO Event Poster

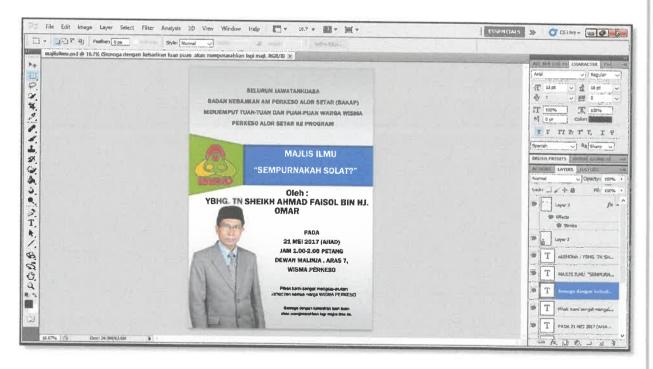


Figure 16: Software to Design Poster

Table 5: Training Activity 4

Task	Design Car's Windscreen Sticker for Staff
Date	1 June 2017
Scope	Electronic Publishing
Hardware/Device	Laptop
Software	Adobe Photoshop CS5

The old sticker was outdated because it is used for year 2015/2016. Staff from Administration Department asks the trainee to design for new sticker to be used for year 2017/2018. The trainee also been assigned to design several sticker for them to select the best one to be used.



Figure 17: Variety of Car's Sticker

Table 6: Training Activity 5

Task	Multimedia User Manual
Date	5 February 2017
Scope	Electronic Publishing
Hardware/Device	Laptop
Software	Sony Vegas Pro

In the first month, during industrial training the trainee has been given a task of creating Multimedia User Manual for Social Security Organization (SOCSO) Contribution System which under the responsibility of Enforcement Department. It is an old system which still be used by SOCSO to provide employer an ease of management for their employees in terms of contribution. This system provide details of each employees for their contribution deduction based on inserted salary and employer who managed the system can keep updating their employees profile such as salary and those records will be stored and print when needed by SOCSO.



Figure 18: SOCSO Contribution System

The purpose of creating Multimedia User Manual for the system is to support the old User Manual which only available in PDF format. Multimedia User Manual also will be used in teaching lesson which held by SOCSO every month for new employer. New employer will be invited to the teaching lesson and be given several instruction and management regarding contribution management and payment for their employees. Employer can also request to copy the Multimedia User Manual for their own use after teaching lesson finished.



Figure 19: Employer Screen for the System

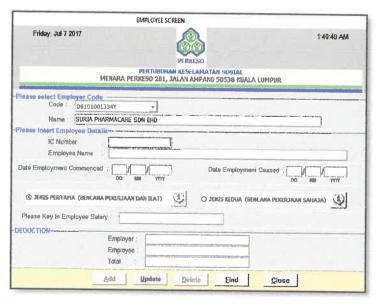


Figure 20: Employee Screen for the System

The trainee has created Multimedia User Manual in terms of step in using SOCSO Contribution System. In addition, Multimedia User Manual also available for the installation of the system in two different operating system which is Windows 7 and Windows 10.



Figure 21: Multimedia User Manual (How to use the system)



Figure 22: Multimedia User Manual (Installation for Windows 7)

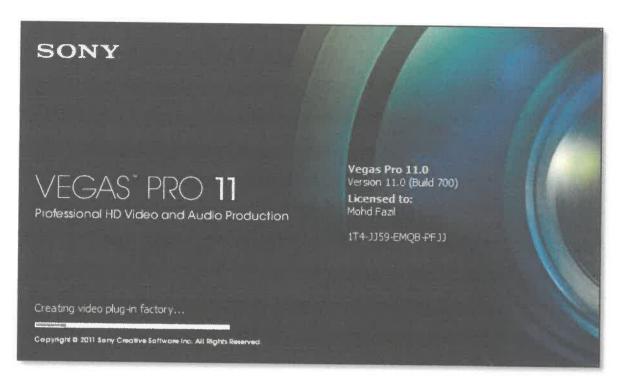


Figure 23: Software Used to Create Multimedia User Manual

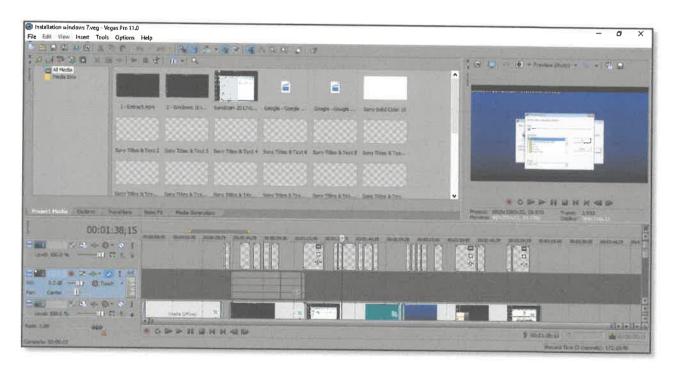


Figure 24: Multimedia User Manual Editing

Table 7: Training Activity 6

Task	Graphical Presentation		
Date	21 February 2017		
Scope	Electronic Publishing		
Hardware/Device	Laptop		
Software	Microsoft PowerPoint		

During the trainee were placed in Enforcement Department. Head Unit of Enforcement Department asks the trainee to create a graphical presentation for the board meeting in the upcoming month regarding of officer's work performance in employer investigation. The trainee then creates graphic presentation by using Microsoft PowerPoint, a software that have simplest and friendly interface to be used by presenter.

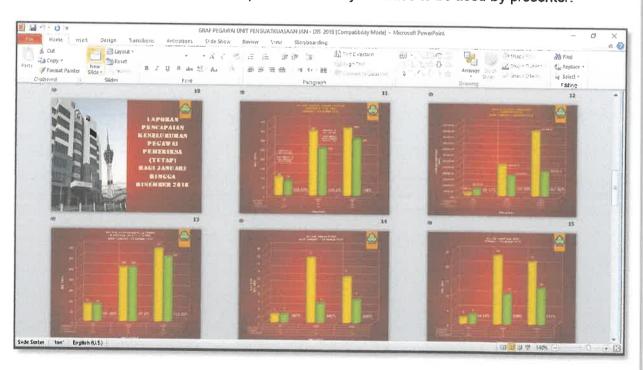


Figure 25: Graphical Presentation

3.1.3 OTHER ACTIVITIES

Table 8: Training Activity 7

Task	Statistical Preparation
Date	22 May 2017
Scope	Data Presentation
Hardware/Device	Laptop
Software	Microsoft Excel

In the third month of industrial training, the trainee then was exposed in dealing with statistical data especially in the Benefit Department. Trainee was asks to prepare a statistical data of Benefit Department for the year 2014-2016 by using Microsoft Excel. This statistic was then used in promotion event involved with Social Security Organization (SOCSO) such as showcase. It is data that represent of cases handled by SOCSO regarding of workplace incident and benefits claiming.

Bilangan kes penyakit khidmat dilaporkan dan kes HUS melibatkan penyakit khidmat dibayar mengikut agen penyebab, 2014-2016

	Kes penyakit khidmat dilaporkan					Kes HUS melibatkan penyakit khidmat dibayar						
Agen penyebah	PERKESO Keseluruhan		PERKESO Kedah		PERKESO Keseluruhan		PERKESO Kedah					
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
DISEASES CAUSED BY AGENTS											2010	2010
Chemical Agents	104	64	93	8	4	7	21	13	14	2		
Physical Agents	1,277	1,402	1,606	52	33	82	369	310	341	31	38	48
Biological Agents	17	- 11	8	5	4		3	4	2	31	30	40
Jumlah	1,398	1,477	1,707	65	41	89	393	327	357	35	41	49
DISEASES BY TARGET ORGAN SYSTEM							400	041	307	- 55	41	90
Occupational Respiratory Diseases	106	249	451	43	53	55	40	58	77	7	28	34
Occupational Skin Diseases	288	301	310	1	1	2	139	69	89	,	1	- 31
Occuptional Musculo-Sketel Disorders	675	708	1.006	30	50	106	279	271	297	21	33	27
Jumieh	1,069	1,257	1,757	74	104	163	458	398	463	29	62	82
OCCUPATIONAL CANGER	15	9	8	2	1	1	2	000	2	20	SIL	02
OTHERS	515	615	788	19	4	4	195	183	241	13	- 4	- 1
TOTAL	2,997	3,358	4,270	180	150	257	1.048	908	1.063	77	107	113

Figure 26: Statistical Data

Table 9: Training Activity 8

Task	Documentation
Date	February - March 2017
Scope	Letter Preparation
Hardware/Device	Laptop
Software	Microsoft Word

In the first and second month of industrial training, the trainee was exposed to a general work. This is one of the procedures for industrial students to gain their knowledge in exploring the basic procedures and management of SOCSO. It is being learned by all of industrial students regardless of their course of study.



Figure 27: Documentation 1

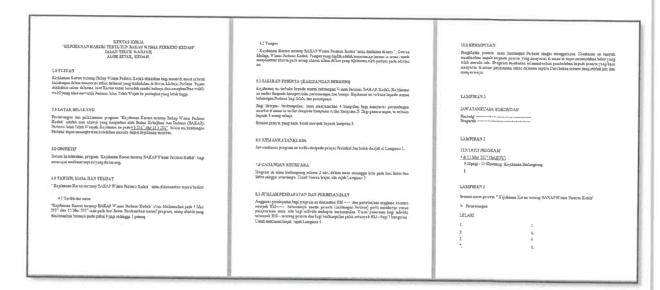


Figure 28: Documentation 2

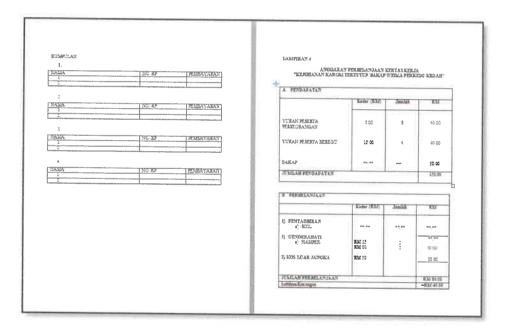


Figure 29: Continuation from Documentation 2

Table 10: Training Activity 9

Task	Retrieving, Updating and Review Official Data		
Date	March - April 2017		
Scope	Data Accessioning		
Hardware/Device Office PC			
Software	Q-TERM, SIKAP & PINTAR System		

This is also the basic procedure to be learned by industrial training students in Social Security Organization (SOCSO) Kedah State Office. The different between other activities is that this activity required trainee to use official PC provided by organization, this is because of the confidential level they are dealing with and can only be accessed by SOCSO's computer.

It involved in accessing SOCSO Official system which is Q-TERM, SIKAP & PINTAR system. Q-TERM and PINTAR only available in Enforcement Department, while SIKAP available in Benefit Department. A system which can only be access by official staff because it required staff's number. This system contains information such as employees' salary, identity card number, employer's details, contribution details, and many more.

The trainee then was given a chance to operate this system under supervision of Head Unit and ICT Office. It requires supervision by professional staff because to prevent any misplaced of information.

The trainee was using this system to retrieve data for official use by required department. Furthermore, updating information within this system also be done several times by trainee. Lastly, review all the required official data as per request by Head Unit of department which to ensure that they were no error in any data.



Figure 30: Q-TERM System (Enforcement Department)

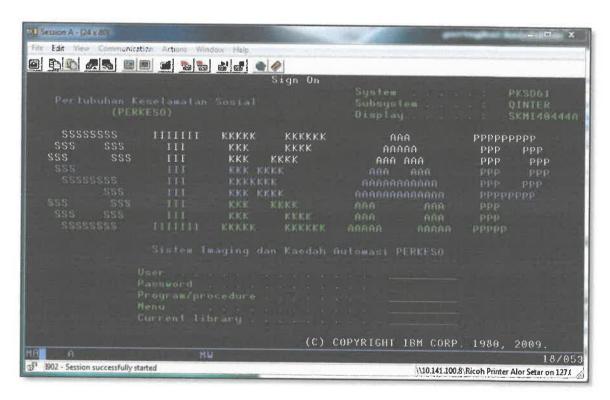


Figure 31: SIKAP System (Benefit Department)

3.1.4 DEPARTMENTAL ROTATION

Most of the previous activities are being sub divide into several main categories which to provide a clear summarization of training activities. The trainee has done most of the activity throughout the departmental rotation process which made by Social Security Organization (SOCSO) for their industrial training students regardless of their main working department. The trainee placement was under ICT Department and departmental rotation activities were part of SOCSO efforts in giving chance to industrial training students to learn basic procedures of SOCSO management and operation while adapting to the formal working environment.

Enforcement Department

The trainee departmental rotation starts with the first 7 weeks in this department which located on 6th floor. It was supposed to be 6 weeks in this department but due to the special project that the trainee dealing with, it need to be extended to another 1 more week.

This department consists of Head Unit, Senior Officer, 3 Executive Officers and 6 Assistant Officer. Head Unit of this department is responsible for the trainee supervision as he is the organization supervisor. In exposure of SOCSO basic procedures and management, this will be the first unit for an industrial training student will be placed. Trainee mostly will be exposed to learn basic activities in Enforcement Unit which to enhance their experience and knowledge towards the enforcement activities.

This is the unit which the trainee was assigned with special project for industrial training with the supervision of ICT Department. It was given by organization supervisor (Head Unit of Enforcement Department) to assist office's efficiency in information retrieval.

Furthermore, the trainee also gets to know on how the arrangement of file room, classification number used despite the confidential it holds, hence there are no pictures to be provided. Moreover, the trainee also gets to learn the system available in Enforcement Unit which is Q-TERM and PINTAR system. Basically, it is a system used to print contribution records of employer to their employee and can be considered as one part of confidential things in SOCSO. Sometimes, trainee may get involved in Enforcement's operation that often will be conducted, assist staff and learn the process with the supervision of Head Unit or Senior Officer.

In terms of electronic publishing, the trainee was responsible in preparing a Multimedia User Manual of installation and steps of usage for SOCSO Contribution System which compatible for only Windows 7 and Windows 10. Other than that, the trainee also has been given a task of preparing poster for newly released system which is i-PERKESO.



Figure 32: Enforcement Department

Recovery Department

This is the second department when the trainee has been placed which is 4 weeks in this department that located on the 1st floor, supposed to be 5 weeks in this department but due to time extended in developing records management system in Enforcement Department, 1 week has been deducted from this department to give way for special project. This department consists of 7 staffs which are Head Unit, 2 Executive Officer and 4 Assistant Officer. Head Unit responsible to supervise industrial training students in this department.



Figure 33: Recovery Department

Industrial training student will be exposed to the basic process of the department which mainly responsible in dealing with insured person by giving medical equipment such as walking stick, wheelchair, urine bag, other medical equipment. Among the thing that trainee has done in this department is to review the procedures to be taken before giving out medical equipment, any related documentation must be approved by Hospital. Any mistake should be informed to Head Unit.



Figure 34: Recovery Department Inventory Room

Furthermore, the trainee also gets to learn system available in Recovery Department by doing process of updating inventory system. Moreover, the trainee learns the arrangement of file room and classification number used. Different arrangement and classification number because there are two different files available in this unit which is yellow and white file. Besides, Recovery Department is the place where all documents were received, the trainee gets the chance of learning on what department need those documents and for what purpose while understand the linkage of system in Recovery Department and Benefit Department.



Figure 35: Recovery Department File Room

Administration Department

This is the third department that the trainee has been placed, 5 weeks in this department which located on 7th floor and a major department of Social Security Organization (SOCSO) Kedah State Office. This department consists of 8 staffs which are Director, Executive Accountant, Executive Administration, Customer Service Operator and 4 Assistant Officer.

The trainee has been exposed to basic process of the unit in all aspects such as administrative, finance and circulation. The first thing that student will learn is how the process of distributing letter by SOCSO. It starts by checking every single address in a letter is correct, insert in envelope, flanking to ensure that letter flanked correctly according to its weight, fill in official form made by POS Malaysia. Other than that, learn the arrangement of file room which is determining what to be included and place accordingly because administration's file room contain confidential and contains high security information such as staff's personal file and financial related documents.

Inside Administration Department also have Finance Department which is a small unit combined together. In SOCSO, anything involved with finance usually would not be taught to practical students because of its confidentiality except for cheque preparation. Besides, in Administration Department, the trainee learn the process of updating store room and taking order of new items that are less in quantity. Furthermore, the trainee also involved in preparing multimedia equipment for a program held by SOCSO in the hall room. Moreover, the trainee also assist staff in general works such as preparing letter for claim to SOCSO Headquarter, prepare poster for any event in SOCSO's hall room and preparing pictures of staff to be used in organization chart.



Figure 36: Administration Department

Benefit Department

This is the last department that the trainee has been placed which is 4 weeks in this department that located on the 6th floor. It consists of 13 staffs which are Deputy Director, Senior Officer, ICT Officer, 5 Executive Officer and 5 Assistant Officer.

The trainee has been exposed to basic process of the department such documentation, statistic, documentation filing. Major activity that industrial training students will learn in this department is document filing in which it need to be done daily or every two days, this department receive quite huge number documents and any documents that has been closed for in case. The trainee also gets to learn classification number in the file room and its arrangement.

Furthermore, the trainee also was given a task of creating statistical graph for the purpose of presentation. Moreover, training activity for the trainee in this department is documentation filing for every different cases and assist staff in general works. Lastly, the trainee gets to learn the total functionality of major system in this department which is SIKAP system and using it in a very basic ways because the confidentiality of information available within this system.



Figure 37: Benefit Department

3.2 SPECIAL PROJECT

3.2.1 INTRODUCTION

Project Overview

Enforcement Department located on 6th floor. There few other department such as Administration, Recovery and Benefit. This is department that requests the trainee to develop a system which can facilitate their records management. The system was named as Enforcement Records Management System.

In this section, there will be briefly described information about Enforcement Records Management System which has been developed by the trainee for Enforcement Department under the supervision of ICT Department. Major aspects that will be discussed include background of the system, problem statement, objectives of the project, target user and scope of the project.

This special project is about a system that contains 6 different records that has been used by Enforcement Department which are Employers Registration, Employees Registration, Refund of Contribution, Summons of Department, Complaints and Prosecution. All of these records will be combined together in one simplest and user-friendly system. The system will facilitate user in terms of data entry, searching, viewing, editing and data retrieval across multiple records available within one system which will lead to a better time efficiency.

Usability wise, this system will provide better management of records in Enforcement Department in terms of system sharing, sorting and retrieving. The system has an ability of performing a better searching function and provides a systematic data display. Therefore, provides the department a better printed record.

Problem Statement

In Social Security Organization (SOCSO) Kedah State Office, the 6 different records that have been mentioned in project overview previously are old records that ages few years back in which they were kept in an old form where those records are manually wrote in several log books for different records. Therefore, if the log book misplaces or missing, there have no backup to be used for.

In addition, the 6 different records are been used for the purpose of auditing by SOCSO Headquarter. Manually wrote records are inefficient in providing accurate record based on needs that has been request by audit team. There are several criteria which required by team and it can be different from time to time. Some requests for first 3 months of records in certain year while the other audit team request for only few employer records. Hence, it is hard for staffs to gather manually wrote records based on that request because it will be time consuming for them to go through.

Objective

The objective of this system is to change the way of old records has been managed in order to provide better effectiveness of records retrieval and improve time efficiency in records searching.

- Computerized old records to digital format
- Provide accurate records for auditing purposes
- Improve Key Performance Indicator (KPI) for records management
- Display records systematically

Scope

The scopes of this special project are as below:

- I. Allows users to search data based on certain criteria needed for every different category of records stored.
- II. Allows all users to manage 6 different records simultaneously in one system that has SharePoint for the database.
- III. Functioned in editing, updating and deleting the data of any records searched.
- IV. Allows users to print out systematically sorted data in a well attached standardized interface design for all records.

Target User

The target user of Enforcement Records Management System is all staffs in Enforcement Department in which 6 Assistant Officer will be responsible for the data entry, editing and retrieving. Head Unit, Senior Officer and 4 Executive Officer will be responsible in searching and viewing. Any wrong input of data will be informed to Assistant Officer for correction.

Tools Used for Development

I. <u>Microsoft Access</u>

Developing the total functionality of system including coding, debugging, macros and database by using the built-in features in the software.

II. Adobe Photoshop CS5

Customizing graphical interface for the system

III. Microsoft Word

Creating user manual for the system which including installation, database sharing and backup

3.2.2 PROJECT PLANNING

Gantt Chart

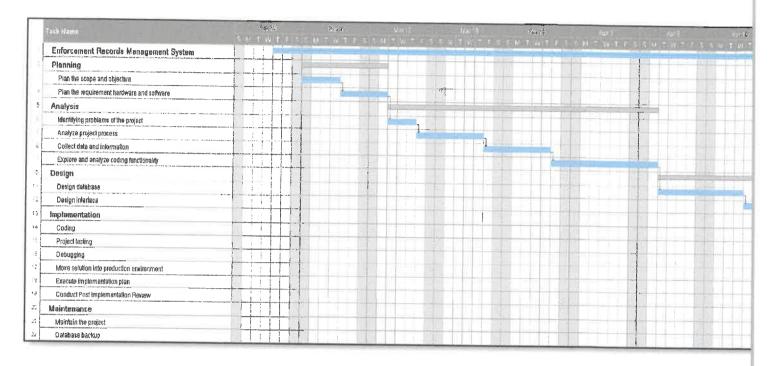


Figure 38: Enforcement Records Management System Gantt Chart

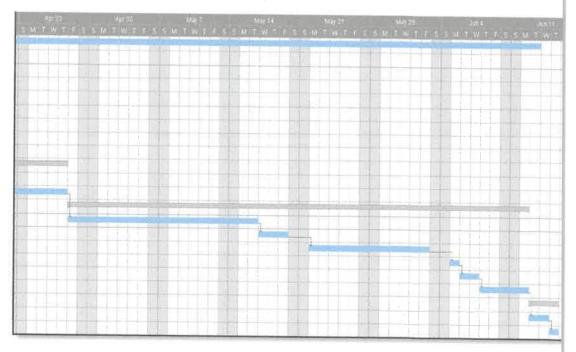


Figure 39: Continuation of Above Gantt Chart

3.2.3 ANALYSIS

In order to develop the new system, first thing the trainee has done is by analyzing the current ways of managing the records that has been used by the organization. As to develop the new system, it needs to be ensured the system that is going to be developed will gave better output for the organization. The new system must improve the business activities of the organization.

The analysis is a part of the system development life cycle (SDLC) where in this phase the trainee need to understand the in depth details for the system changes which means in this system, all requirements will be studied and structured. The purpose of this phase is to determine what information and the information processing services are needed in order to support the selected organization function and objective. The analysis has a two sub-phases which requirement of determination and requirement of structuring.

Context Diagram

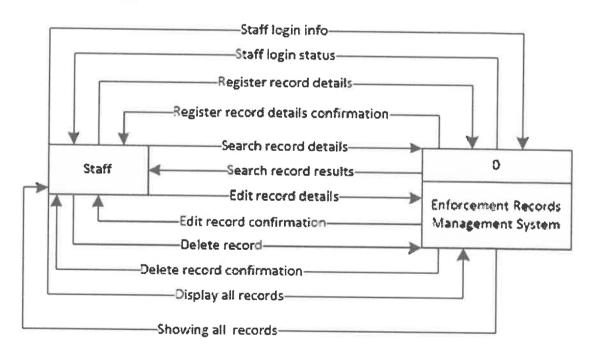


Figure 40: System Context Diagram

Data Flow Diagram (DFD)

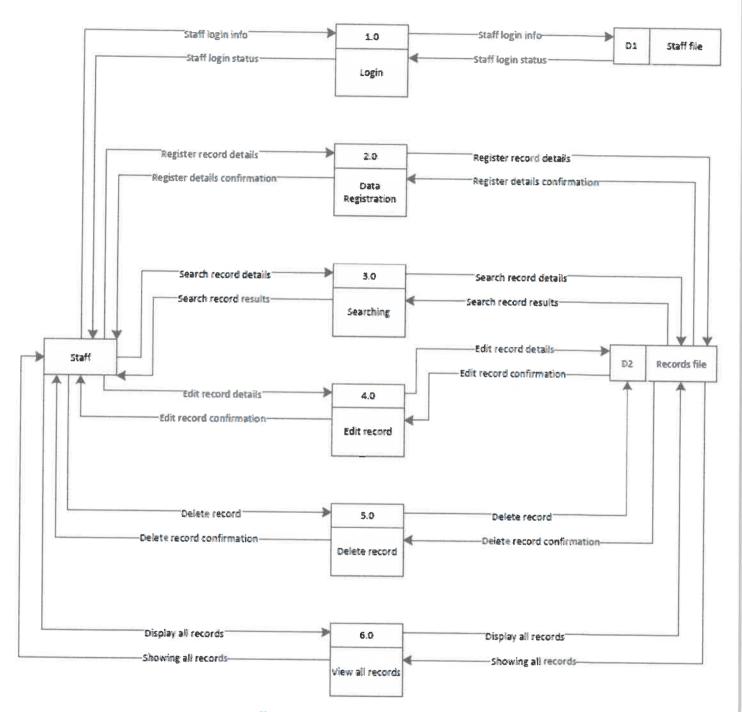


Figure 41: System Data Flow Diagram (DFD)

Entity Relationship Diagram (ERD)

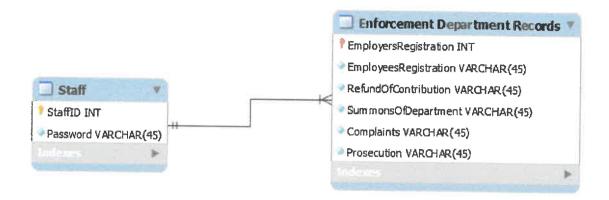


Figure 42: Enforcement Management Records System (ERD)

Data Dictionary



Figure 43: Staff Authentication Data Dictionary



Figure 44: Employers Registration Data Dictionary

Field Name	Data Type	Description	
Nama_Majikan	Text	Nama Majikan	
Tarikh_Terima	Date/Time	Tarikh Cop Terima	
Tarikh_Daftar	Date/Time	Tarikh Daftar	
No_Kod	Text	No. Kod Majikan	
Bil_Pekerja	Number	Bilangan Pekerja	
Remarks	Text	Catatan	
Bil	AutoNumber	Bilangan Fail	
Tahun	Number	Tahun	

Figure 45: Employees Registration Data Dictionary

Field Name	Data Type		Description
Nama_MajikanBBC	Text	Nama Majikan	west (peron)
No_KodBBC	Text	No. Kod Majikan	
Tarikh_TerimaBBC	Date/Time	Tarikh Cop Terima	
Nama_KeraniBBC	Text	Nama Kerani	
Tarikh_SerahBBC	Date/Time	Tarikh Serah Kepada Pegawai	
Nama_PegawaiBBC	Text	Nama Pegawai	
Tarikh_PKABBC	Date/Time	Tarikh Hantar Kepada PKA	
Tarikh_MemoBBC	Date/Time	Tarikh Memo Ke HQ	
CatatanBBC	Text	Catatan	
BilBBC	AutoNumber	BilBBC	
Tahun	Text	Tahun	
No_Telefon	Number	No. Telefon Majikan	

Figure 46: Refund of Contribution Data Dictionary

Field Name	Data Type	Description	
Tahun	Number	Tahun Saman	
Nama_Majikan	Text	Nama Majikan	
No_Kod	Text	No. Kod Majikan	
Jenis_Kesalahan	Text	Jenis Kesalahan	
Tarikh_Sedia	Date/Time	Tarikh Sedia	
Nama_Kerani	Text	Nama Kerani	
Tarikh_PPN	Date/Time	Tarikh T/Tgn PPN	
Tarikh_SerahMajikan	Date/Time	Tarikh Serahan Kepada Majikan	
Tarikh_Hadir	Date/Time	Tarikh Hadir Ke Pejabat	
Serah	Text	Serah	
Gagal_Serah	Text	Gagal Serah	
Kes_Tindakan	Text	Kes Dalam Tindakan	

Catatan	Text	Catatan	
Bil	AutoNumber	Bilangan	
No_Telefon	Text		

Figure 47: Summon of Department Data Dictionary

Field Name	Data Type	Description	
No_KPPN	Text	No. KPPN Pengadu	
Tarikh_Terima	Date/Time	Tarikh Terima Aduan	
Perkara	Text	Perkara	
Tarikh_Maklumbalas	Date/Time	Tarikh Maklumbalas Pertama	
Nama_Pegawai	Text	Nama Pegawai Penyiasat	
Tarikh_Siasatan	Date/Time	Tarikh Siasatan	
Keputusan	Text	Keputusan	
Maklumbalas_Akhir	Text	Maklumbalas Akhir	
Catatan	Text	Catatan	
Nama_Majikan	Text	Nama Wajikan	
No_Kod	Text	No. Kod Majikan	

Nama	Text	Nama Pengadu	
Bit	AutoNumber	Bilangan	
Tahun	Number	Tahun Aduan	
No_Telefon	Number	No. Telefon Pengadu	

Figure 48: Complaints Data Dictionary

Field Name	Data Type	Description
Sil	AutoNumber	Bilangan
Nama_Majikan	Text	Nama Majikan
No_Kod	Text	No. Kod Majikan
Jenis_Kesalahan	Text	Jenis Kesalahan/Seksyen/Peraturan
Nama_Pegawai	Text	Nama Pegawai Penyiasat
Tarikh_HQ	Date/Time	Tarikh Fail Dìrujuk ke HQ
Tarikh_TPR	Date/Time	Tarikh Fail Dirujuk TPR
Tarikh_Daftar	Date/Time	Tarikh Daftar Kes di Mahkamah
Tarikh_Sebutan	Date/Time	Tarikh Sebutan
Nama_PO	Text	Nama P.O
Jumlah_Denda	Text	Jumlah Denda
Tarikh_Bicara	Date/Time	Tarikh Bicara

Catatan	Text	Catatan DNAA/DSB
Tahun	Number	Tahun
Mahkamah	Text	Lokasi Mahkamah
No_Telefon	Number	No. Telefon Majikan

Figure 49: Prosecution Data Dictionary

Flowchart of the System

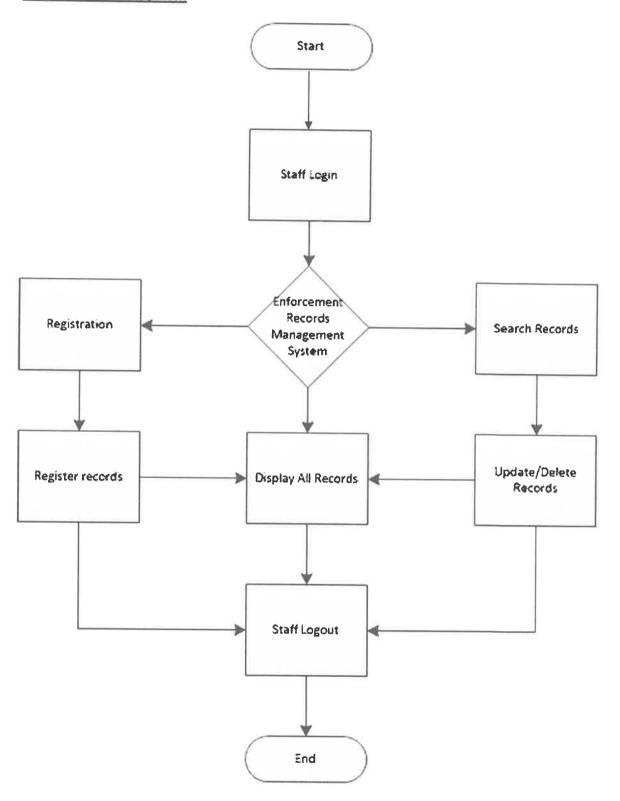


Figure 50: Enforcement Records Management System Flowchart

3.2.4 DESIGN

Interface of the System





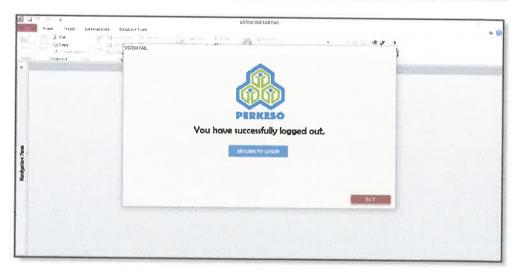


Figure 51: Login, Menu and Logout Interface

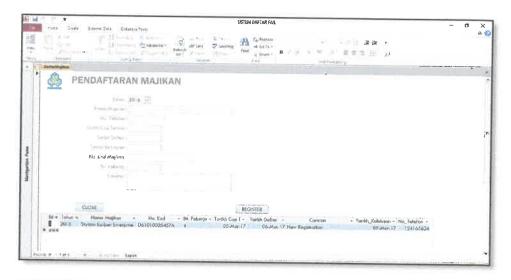
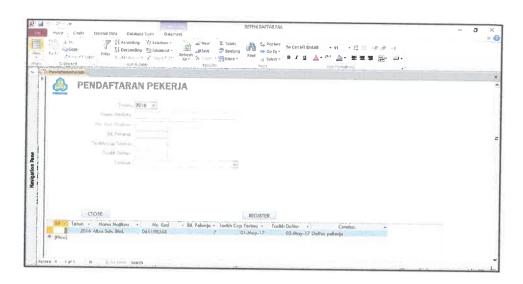






Figure 52: Employers Registration, Search and Records Interface





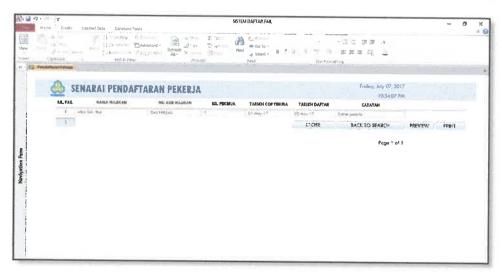
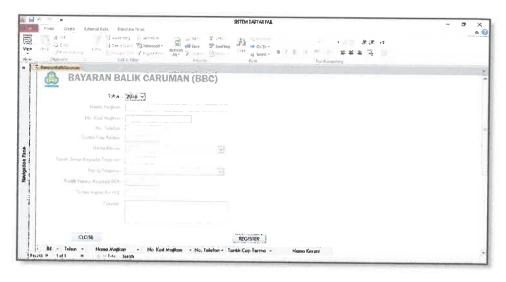


Figure 53: Employees Registration, Search and Records Interface





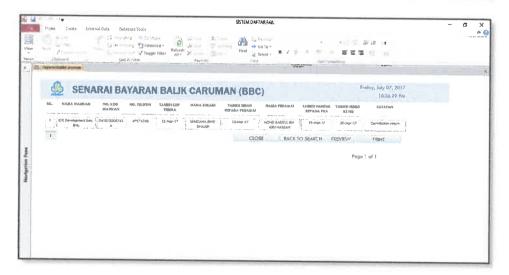
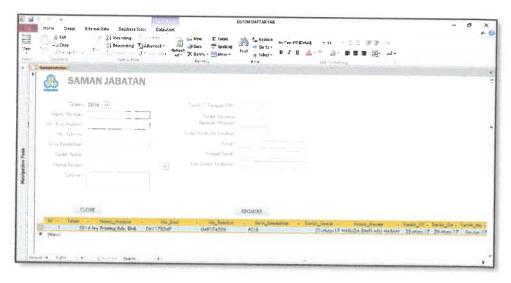


Figure 54: Refund of Contribution Registration, Search and Records





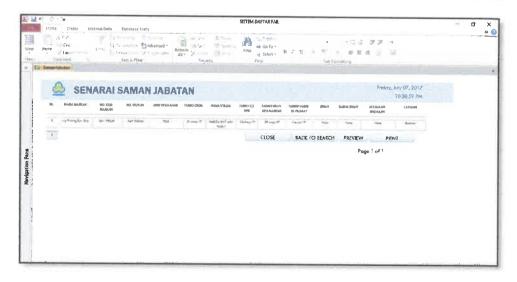
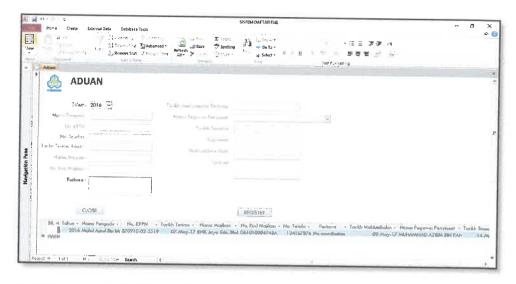


Figure 55: Summons of Department Registration, Search and Records Interface





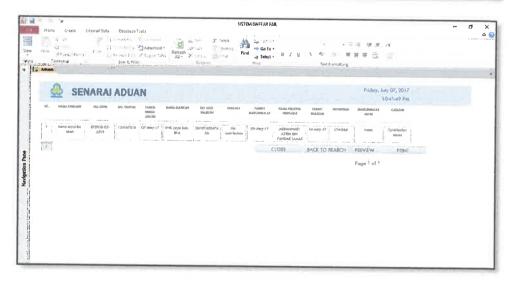


Figure 56: Complaints Registration, Search and Records Interface

home Create Edemar Onta Database Took	SISTEM DAFTAR FAIL		- 3
A list Proceeding State Alternative Makes From State Alternative Makes From State Fro	ced - Sauce Spelling - Go To-	A V M 最重要 問 生	
Pendeletan			
PENDAKWAAN			
Terg. 2016 F	new construction (Telephone) Telephone	9	
Nova Majáza	Marrier aggressi of an y laster		
No You Magnet	Navy P.O.	**	
No. Telefant	Kervah Deada		
In the Yell Stephen Sec. (C)			
Terrent proposed and the con-	Coloda Managements		
Total Committee Committee (Inc.)	Usuar 2004 (258)		
Topito Sepakan			
100000			
CLOSE	13	RECOISTER 1	
83 - Tuhun « Nama Maikan » No. 1	TAK.	" Military salary as a "	
2016 Debuts Sickery Enterprise - 06113	od - No Telefon - Jenis Kesafahan/Sekuyen/Peraturan - No 790X - 49179123 GAGAL MENDAFTAR PERUSAHAAN - NO	trans Pegawai Penyamat - Taribi Fait Duruk ke HQ - Taribi HAMAD Alman Bin MOHM. 27 Mary-17	
· 準 (New)	and the second second second second second second second	secusion and burdenes To applicate	22-May
-			
ecurat, at 1 of 1 by Search			



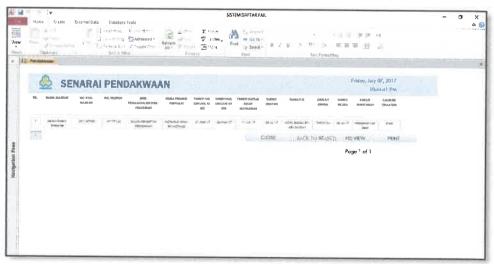


Figure 57: Prosecution Registration, Search and Records Interface

3.2.5 IMPLEMENTATION

In the System Development Life Cycle (SDLC), project implementation is the phase where visions and plans will be executed. Implementation usually will drag time to an extent in which it is more than will has been planned. External and internal constraint can be the main factor of time dragging. During implementation, approval from ICT Department must be submitted in order to gain access to network folder in the server.

Therefore, implementation will be the stage of initial development is where system is put into production. Enforcement Records Management System (ERMS) is coded in Visual Basic programming language by using a built-in feature in Microsoft Access as well as macros embedded to navigate button functionality. Along with that, database of system is also using Microsoft Access. Right before the implementation, all the coding will be checked few times to ensure there are no errors for the system and well connected to database. The same thing applied for macro embedded which to ensure button functionally navigate to a correct form and report. Final stage of implementation will be the system database (back-end) is placed on the network, while system (front-end) has been distributed for all PCs in Enforcement Department. Below is the summary of system implementation that has been done by the trainee.

- 1. Ensure network connected to each other between PCs which to ensure all of them can access to one another in network.
- 2. 1 PC will be a mini-server in whereby this PC used to place system database (back-end). This is the main network PC, if that PC is power off, other users cannot access system as database depends its network.
- 3. Split database in that network folder in the main PC
- 4. Copy system (front-end) through network to all PCs and ensure front-end is linked to back-end in the network.
- Check for permission in each PC in order to gain access to the system, as some PCs might disable its admin privileges in accessing others on network.
 - · Right click system file
 - Properties
 - Security
 - Edit permission
 - Ensure full control

3.2.6 MAINTENANCE

Maintenance is the last stage of System Development Life Cycle (SDLC) in which it is an essential stage of ensuring stability of the system by monitoring the frontend and back-end system. Furthermore, ensuring the maintenance in terms of database security is also an important part in system development in which to ensure that any important data that has been inserted into the database will always has backup for the purpose of secondary usage in case if there are any issues occur within the network or system file.

CHAPTER 4: CONCLUSIONS

In overall, through the industrial training process in ICT Department of Social Security Organization (SOCSO) Kedah State Office, the trainee has gained a lot of valuable knowledge, skills and experience that trainee would not learn during university life as well as working life as SOCSO has its own credibility in management and procedures. It is totally different in all aspect of activities that the trainee has gone throughout study life. Regardless of course taken, industrial training has gave much values in terms of working experience as during this process the trainee will be exposed to every kind of task that covered all aspects of working life which is very useful as part of the beginning in entering the real working life. Therefore, this chapter will conclude the application of knowledge, skills and experience in undertaking the task (knowledge gained), personal thoughts and opinion, lesson learnt and limitations and recommendations by the trainee.

4.1 APPLICATION OF KNOWLEDGE, SKILLS AND EXPERIENCE IN UNDERTAKING THE TASK (KNOWLEDGE GAINED)

There is a lot of valuable knowledge, skills and experience the trainee has gained during industrial training in ICT Department of SOCSO Kedah State Office. Among the knowledge that is very useful for the trainee is how the ICT security policy is being managed under the management of ICT Department, it covered a wide range of ICT procedures and tasks. Every single project implemented under ICT Department will be based on certain regulation or policy in which to ensure that those project are standardized to every category of tasks such as ICT monitoring, networking control, system development and hardware outsourcing.

Basically, among the skill that is connect to understand of ICT Security Policy is the special project developed by the trainee himself. This is because the process developing system is being supervised by ICT Department which the system were developed under the policy implemented by them. In the concept of System Development Life Cycle (SDLC), every phase it will be explained by ICT Officer of what are the relation between a stage and certain ICT Security Policy. As an example, during the analysis phase, the trainee required to access network in order to review the compatibility. In regard of ICT Monitoring Policy, right before accessing the network, permission from administrator must be taken in order to gain access as this is to ensure that there are no malicious programs involved within the system. The same applied for other department which they have their own policy for the project implementation. A useful yet valuable knowledge and experience for the trainee to applied in their working life in the future.

Furthermore, as the trainee was able to apply the records management system in organization, they can also get to learn in understanding the classification of records and system applied not only by looking at how the records is classified, but also how classification system applied in the file room which use to foster speedier retrieving time for any needed file or records.

Lastly, the trainee gets to be involved in learning the general management of Social Security Organization (SOCSO) Kedah State Office. SOCSO is dealing with society and finance, the major management knowledge that the trainee gained is in terms of information accuracy provided as well as certain functionality needed by department. It shows that any management involved within the organization will be done and review several times before it is actually implemented as to ensure the accuracy of information remain as good as possible. Any task would be undertaken in a professional manner by following a proper timeline and also to be done according to the Gantt chart. Task that required greater length of time need to be managed properly as to avoid multitasking which can lead to delay in terms of timeliness.

4.2 PERSONAL THOUGHTS AND OPINION

The trainee feels that the organization provides a lot of opportunities and supportive environment. The supervisor, the staff, and even the top management are friendly and easy to deal with. SOCSO take a great effort in administering their industrial training students from all various of courses, it does not matter from what course ones are, the basic procedure will lead them to learn several thing in every department that they have been located.

Departmental rotation system for all industrial training students is good because each of them can learn while contributing to every department at SOCSO. The trainee feels that several of practical and theoretical knowledge can be learned without any boundary, even though some of the things are out of syllabus, but it is still a great and worth knowledge and experience to learn for.

Meanwhile, the process of getting understanding with the basic procedures and management of SOCSO, students are still taking into consideration based on their specialties. For instance, Information System Management student will be required to develop software that can enhance office, records management, or any required.

4.3 LESSON LEARNT

There are plenty of lessons learnt during industrial training in Social Security Organization (SOCSO) which can be in terms of discipline, punctuality, efficiency, accuracy of task and responsibility. First of all, the trainee learned in task handling which require the trainee to remain his professionalism as our their first priority, this is because SOCSO have to deal much with society and plenty of policies to be followed, thus the only way to brighten up their image and performance is by applying professionalism in every task handling.

Secondly, another lesson learned by the trainee in SOCSO is punctuality. This is because SOCSO really take this as a serious matter in monitoring staff's punctuality. There is no tolerance to those that did not follow the rules unless for emergency purposes. Staff required to punching in their attendance right before 8.00am and off at 4.45pm from Sunday to Wednesday, while Thursday off at 4.30pm. Prove that punctuality is main consideration for employees was during Ramadhan where staff can go off early (30 minutes), but then the lunch hour also lessen to 30 minutes instead of 1 hour (1.00pm-2.00pm to 1.00pm-1.30pm). In order to ensure that every single staff is punctual in their lunch time, it required them to punching in right before 1.30pm.

The trainee also had involved in several program that organized by ICT and Enforcement Department. In each program, it is really important to communicate and discuss each other, especially in giving in exchanging new ideas to make sure the implementation of program is successful. In the team, they guided the trainee in every task given to make sure all tasks are performing well.

Another good lesson learnt by the trainee is discipline. Discipline could be in every aspect such as appearance, task handling. As for men, we required to dress up professionally, formal with tie and no flourish. Meanwhile for women, they need to wear either proper dress or slack with formal shirt. Even this is normal for government bodies and government but still a good lesson that we have learnt to take care of our appearance.

4.4 LIMITATIONS AND RECOMMENDATIONS

Firstly, among the limitation that can be found during industrial training is industrial training students are limited in terms of doing task. Most of the tasks in Social Security Organization (SOCSO) are too confidential for trainee to handle and deal with. Example of confidential, SOCSO holds company file which include every details of employees including pay slip and private details

Another limitation found by the trainee in ICT Department is not providing software and enough equipment that the trainee might be used in daily routine. The trainee was asks to install software by themselves as SOCSO could not provide any software because on authentication issue which mean software only available for official staff whereby the software were register individual for every staff. Therefore, the trainee downloads the trial software and use open source software. The same thing happened for equipment in which the trainee were not allowed to use any organization PC except for official tasks as it is being monitored by headquarters and any activities within the PC will be records in the back log for auditing purposes. Hence, the trainee needs to bring along personal laptop for the development special project.

As for the organization, the trainee would like to recommend SOCSO to provide a place which well equipped with PC and complete with essential software for industrial training students to use. This is because there was too much monitoring activities by headquarter in ensuring work performance and protect confidentiality, hence the trainee would have a hard time in using those equipment and software.

As for the recommendation for faculty, the trainee would suggest the faculty to providing more hands-on courses so that the future students will undergo industrial training in well-equipped hands-on skills rather than only theoretical. The trainee feels that theoretical is hardly use for entry level in industrial training except for theory that is necessary to be applied practically for better understanding such as programming.

REFERENCES

- Ahmad Firdaus Hashim (personal communication, March 7, 2017) consultation the requirements of Enforcement Records Management System.
- 2. Phopale, A. (2017, March 5). Microsoft Access Split Database Architecture to Support Multiuser Environments, Improve Performance, and Simplify Maintainability. Retrieved from http://www.fmsinc.com/microsoftaccess/databasesplitter/
- 3. Split an Access Database. (n.d.). Retrieved March 05, 2017, from https://support.office.com/en-us/article/Split-an-Access-database-3015ad18-a3a1-4e9c-a7f3-51b1d73498cc

APPENDICES

APPENDICES A:

INDUSTRIAL TRAINING STUDENT'S CHECKLIST

INDUSTRIAL TRAINING STUDENT'S CHECKLIST

Student's Name

. MOHD FAZIL BIN ALL

Student's Id

. 2014127345

Unit / Department : /CT DEPARTMENT

Organization

. SOC30 ESDAH STATE OPPICE

Semester

: Mac - July 2017

NO.	DESCRIPTION	APPENDICES IN REPORT	TICK (√)	DATE
1.	Receive, read and understand the documents;		, ,	28/12/16
	Industrial Training Handbook	建筑建筑上	/	
	2. IMC690 Assessment		/	10-14/7/2017
	3. Definition of Special Project (IM225/245 Only)		/	
	4. Insurance Letter (UiTM)		/	
	5. Industrial Training Report Overall Contents		1	
	6. Cover & Title Page Guideline		/	
	7. Declaration Guideline	美工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工	1	
	8. Abstract Guideline		/	
2.	Receive, read and understand the rubrics;	· 中国		
	Rubric – Industrial Evaluation		/	
	2. Rubric - Individual Presentation		/	V
	3. Rubric - Industrial Training Report (Overall)		1	
	4. Rubric - Industrial Training Report (Reflection			
	Assessment)			
3.	Receive, read and understand all the forms		1	
4.	Report duty to organization and submit report duty			
	form to the Industrial Training Coordinator ('Borang			
	Report Duty') within the first week of internship			1-10/2/2017
	Email: nurul1217@kelantan.uitm.edu.my OR			
	Fax: 09-9762156 – HEA (please put a note: "U.P:			
	Puan Nurulannisa Binti Abdullah")			
5.	Understand that students are NOT ALLOWED to	YES		
	take any leave during internship, unless for	(MC / Letter)		
	emergency leave / MC / special case (not more			
	than 6 days in 5 months); or else the internship			
	status is automatically FAIL . Get the permission			
	from Organizational Supervisor before taking any		/	
	leave.			
	**Any extra leave provided by organization is not			
	counted under this clause. Organization may			
	provide extra leave / benefits to students, if			
C	necessary**			
6.	Understand that NO semester break during	MINNEL TO		
	internship.			

7.	Understand that public holidays/special leaves/weekend are different between states; follow current state during internship / organization's policy. (put remark in the logbook)		1	
8.	Record every attendance in the form ('Borang Kedatangan Latihan Industri') or use any method provided by organization (thumbprint or punch card).	YES (Copy of attendance)	/	
9.	Record every task given in the logbook every day. Ask the Organizational Supervisor to sign/verify on daily OR weekly OR monthly basis.	YES (Copy of logbook entries)	/	
10.	Fill up Organizational Supervisor's details ('Template Maklumat Penyelia') and submit to the Industrial Training Coordinator once the supervisor has been assigned. (**You may include the topic for Special Project, if you already have it**) Email: nurul1217@kelantan.uitm.edu.my		/	28/2/2017
11.	Discuss with Organizational Supervisor regarding Special Project (must be ISM OR IM related tasks).		1	
12.	Plan and strategize all the tasks given during internship (discuss with the Organizational Supervisor regarding duration for the tasks, especially Special Project). You may use the planner ('Jadual Perancangan Latihan Industri') OR make your own custom planner using MS Office / MS Project OR use the planner provided by the organization (if any).	YES	/	
13.	Consult with your Faculty Supervisor regarding the tasks (especially Special Project) at least 3 TIMES, via face-to-face OR email OR phone calls OR any types of communication medium, which necessary.		/	
14.	Hand over the industrial evaluation form (Rubric – Industrial Evaluation) to the Organizational Supervisor (softcopy or hardcopy, any way preferable by the supervisor). The Organizational Supervisor will make an evaluation on the student's performance.		/	
15.	PAY your fees (semester Mac – July 2017) Refer Academic Calendar for the date.		/	BEFORE 26/3/2017
16.	REGISTER for IMC690 (Industrial Training) course– Refer Academic Calendar for the date.		/	27/2- 12/3/2017
17.	VALIDATE for IMC690 (Industrial Training) course.— Refer Academic Calendar for the date.		/	13–26/3/2017 GUGUR TARAF 30/3/ 2017
18.	Update your MUET status to the HEA (to those who not yet submitted the result/status).		/	
19.	Have a visit from the Visiting Supervisor (from nearest campus / faculty) during internship. Prepare the evaluation form ('Borang Penilaian		1	

	Visiting Supervisor'). Students may discuss or seek for opinions from the Visiting Supervisor. But approval for the tasks (especially Special Project) may only be done by the Organizational Supervisor & Faculty Supervisor.		/	
20.	Submit the evaluation form (Rubric – Industrial Evaluation) to Industrial Training Coordinator OR Faculty Supervisor within the last week of internship		-	BEFORE / ON 30/6/2017
21.	Attend the presentation (viva) at the faculty *subject to change. Bring along the evaluation form ('Borang Penilaian Pelajar') during the presentation.		/	10-14/7/2017
22.	Submit the Industrial Training Report (hard cover bind, dark blue)		/	10-14/7/2017
23.	Provide a softcopy of Industrial Training Report in a CD, sealed in an envelope nicely, and attached at the back of the report.	YES	/	
24.	Attach this checklist in Appendices section.	YES	/	
25.	Attach any other necessary documents which related to your tasks in Appendices section (i.e.: user manual, photos of activities, forms, sketches of storyboard, sample of interface, etc.).	YES	1	

NOTES:

- 1. Organizational Supervisor supervisor assigned by the industry / organization.
- 2. Faculty Supervisor supervisor (lecturer) assigned by the faculty / campus, of which students come from. (i.e.: A faculty supervisor from Kelantan campus will be assigned for students from Kelantan campus).
- 3. Visiting Supervisor supervisor (lecturer / staff) assigned by the faculty / campus, from the nearest campus/state to the organization. (i.e.: A visiting supervisor from Shah Alam will be assigned for students who undergo the internship in Selangor / Kuala Lumpur).

APPENDICES B: ATTENDANCE RECORDS

A No.

NAMA: MOHD FAZIL BIN ACI

KEM./JAB.: PERKESO ALOR SETAR

BAHAGIAN/SEKSYEN:

JAN 2017

BULAN....

TAR	MASU	KELUAR	MASUR	KELUAF	KENYATAAN	T/T KETUA
1	E 7:50)		516:54		
2	- 12 17 17 mm			816.37		
3				9133	(A-15)	
4		ì			3 1=	
5	£ 7:47		100	£16:49	-10 E	NY.
6	g 7:53	JUMA	AT	#1A:50	4.37	
(A 1)	S 7:53	CUTIS	ABIU	\$16:50	*	1
8	2 7:52	+32		816:50		
9				di Ti		T.
0		8.1	15,6			
1	10.		- 1	OIS FIEN		
2	7:53			01650 01646		
3 1	7:56	· JUMA	AT	15 45		TY.
-	7:58	CUTISA	BTU,	16:48		
5	7:53	1001	1.20	417:23		As .

AMARAN

Sesiapa yang didapati mengetik kad orang lain, tindakan tatatertib akan diambil ke atasnya.

KAD MENCATAT WAKTU

B No.

NAMA: MOHD FAZIL BIN ALI

KEM./JAB.: FERKESO ALOR SETAR

BAHAGIAN/SEKSYEN:

2.0	JAN	117

TAR	MASUK	KELUAR	MASUK	KELUAR	KENYATAAN	JUT KETUA
1.6	7:58			1634		
17				de als		
18	THE S			W.S.		le le
19			ATTENDED IN			
20 0	7:55	JUM	AAT	16:47		4.1
21,	7:53	CUTIS	APTIL	16:45		S Harris
22	N 7:52			N1 F:49		
23	7:52		1	16:36	3 10	to st
24				10.74	Trees I	
25					July a W	11
26	7:55		0	16:47		
27	7:57	JUM	AAT G	16:47	01 11 11	-
28	7:55	CUTI SA	BIL "	- W		
29	`,	UNILA	1			
3,0	E AL					
31	*				THE R	

AMARAN

A No.

BULAN

NAMA: Mond Fasil bin Ali

KEM./JAB.:

PERKESO ALOR SETAR

BAHAGIAN/SEKSYEN:

- MAR 2017

D	ULAN	•••••					
TAR	MAS	SUK	KELUAF	R MASU	KELUAR	KENYATAAN	T/T KETUA
				he			
1	5.7	-55	W MAIN		E15:48		
2	2 7	42			21 C:36		
3			39	MAAT	220		
4			CUTI	SABTU			
5	l g r	7:5			216:45		
6	87	55.			#16:46	Š.) b
7	2 7	56			\$16:47		
8	8.7:	55	21.Π:39	813:11	%16:50		3
9	2 7	56			A16:31		
0			JUA	TAAT			
1			CUTI S	ABTU			
2	§ 7:	55	311		116.45		
3	9 7:	55			216:46		
4	\$ 7	55	-110		\$16:46	1.52	
5	7.5	7		1.20	#16:45	7777	
- 6	100	- 1	- (

AMARAN

Sesiapa yang didapati mengetik kad orang lain, tindakan tatatertib akan diambil ke atasnya.

KAD MENCATAT WAKTU

B No.

NAMA: Mohd Pazil bin Ati

KEM./JAB.: PERKESO ALOR SETAR

BAHAGIAN/SEKSYEN:

- MAR 2017

TAR	MASUK	KELUAR	MASUK	KELUAR	KENYATAAN	T/T KETUA
16	7:57			816:30.		
17		AMUL	AT			
18		CUTI S	ABTU			
19						

24	ANNAAT		
25	CUTI SABTU		
26 7:54		X16:45	
27 7:57		116:45	
28 4 7:55		%15:45 %15:45	
29 7:57	1.		
30 7:55		¥1631	
31	JUMAAT		

WJF001020-PNMB., K.L.

AMARAN

A No.

NAMA: MOHO FAZIL BIN ALI

KEM./JAB.:

PERKESO ALOR SETAR

BAHAGIAN/SEKSYEN:

- APR 2017

TAR	MASUK	KELUAR	MASUK	KELUAR	KENYATAAN	T/T KETUA
1		СИТ	SABT	U	-3	
2	<u>0</u> 7-50			N16.45		
.3				016.45		
4		ŝ		<u> </u>		
5	2 7-55		Gr.	2†7:40		
6				£15:32		2
7		JU	TAAT			
8	9.00	CUT	SABTU			FI.
9						
10	9 7:55		1	316:45		
11	7:55			216 4		
12	¥ 7:56			\$16:4	31	
13	2 7:56		-0	216:30		
14		JUN	TAAT		:5	П.
15		CHI	SABTU		2 1 1	

AMARAN

Sesiapa yang didapati mengetik kad orang lain, tindakan tatatertib akan diambil ke atasnya.

KAD MENCATAT WAKTU

B No.

NAMA: MOHO FAZIL BIN ALL

KEM./JAB.:

PERKESO ALOR SETAR

BAHAGIAN/SEKSYEN:

== APR 7017

TAR	MASUK	KELUAR	MASUK	KELUAR	KENYATAAN	T/T KETUA
16	7:55	<u> </u>		31648		
17	<u> </u>	:1 N:40 E	16.58	51 C 58		
18	9 7:56	Tion, IN		216:46		
19	4 7:56			21 A.48		
20	7:57			21531		
21	10	JU	MAAT			
22		CUT	SABTI	i		X
23						
24		CUT	AR			
25						
26	7:56		4	16:46	7	
27	7:54		7.	16:32		
28		JUN	TAAT			
29	١.	CUTI				
30	7:54			15:46	-	
31						

WJF001020--PNMB., K.L.

AMARAN

A No.

NAMA: MOHD FXZIL BUY ALI

KEM./JAB.: PERKESO ALOR SETAR

BAHAGIAN/SEKSYEN:

- - MAY 2017

TAR	MASUK	KELUAR	MASUK	KELUAR	KENYATAAN	T/T KETUA
1		CUI	7 AM			
2	N 7:55		A 151	%4.C.47 01.G-1	1 1 n	
3	9 P-50	Lift.		816:47		
4	s 758	XXIII	e I	516:04 516:04		
5		, Jun	IAAT	020.0		0.25
6	0 =	CUTIS	ABTU			
7	WV		HOLU HO			
8	2 752		e in S	816·4£		
9	9 75F	32 S		8164	VII V	
10	~ ()	CUT	AM	in si-		
11.	1 7:54					
12	37272	JU	MAAT			175.4
13		CUTI S	ABTU		N. C.	
14	ž 7:56			\$15:45		2,-
15	i Žido	77		¥16:48		V

AMARAN

Sesiapa yang didapati mengetik kad orang lain, tindakan tatatertib akan diambil ke atasnya.

KAD MENCATAT WAKTU

B No.

NAMA: MOHO FAZIL BIN ALI

KEM./JAB.: PERKESO ALOR SETAR

BAHAGIAN/SEKSYEN:

- - MAY 2017

TAR	MASUK	KELUAR	MASUK	KELUAR	KENYATAAN	T/T KETU/
16	7:57		36	5 A		
17	France		1	12545		4,
18	The second	2 2 1		41546 neces		V.S
19	7.57	JU	TAAN	<u> </u>		
20		CUTIS	ABTU		II.	
21			*		Cusi	637
22	7-54			V4 C-47		
23	7.56			915:45	THE STATE OF	Te
24	7.57			15.45		t n
25	7:56			15:32		
26		JUV	- 1	221		
27	1	CUTI \$	ABTU			
28	·7:53	8) - 61 :	3:27 %	6:17		
29						
30	7.54	Q.	3:28	16:17	45	
31	7:54 7	9.26	4:14	15:16		

WJF001020--PNMB , K.L.

AMARAN

A No.

NAMA: MOHD FAZIL BIN AL

KEM /JAB .:

BAHAGIAN/SEKSYEN:

JUN 2817

AMARAN

Sesiapa yang didapati mengetik kad orang lain, tindakan tatatertib akan diambil ke atasnya.

KAD MENCATAT WAKTU

B No.

NAMA: MOHD FAZIL BIH ALI

KEM./JAB.:

BAHAGIAN/SEKSYEN:

E'- JUN 20179

BULAN

TAR	MASUK	KELÜAR		KELUAR	KENYATAAN	. T/T KETUA
16		JUM	IAAT			
17		CUTI	ABTU			
18						
19						
20						
21						
22						
23		JUM	AΑ			trer a
24		CUTI	SABTU			
25		CUTI	AM			er.
26		CUI	PAM			
27						e), e , o
28						
29						
30		JUI	AAT			
31						\$ *

WIEDDIA2D PNMR K

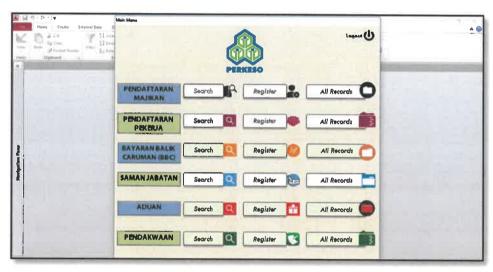
AMARAN

APPENDICES C: REPORT DUTY DECLARATION FORM

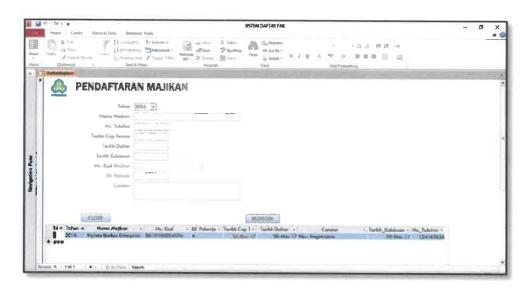
APPENDICES E:

SAMPLE OF SYSTEM INTERFACES AND ELECTRONIC PUBLISHING

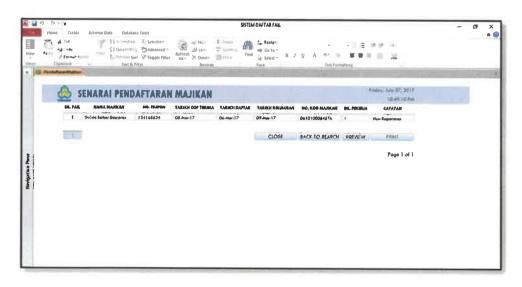


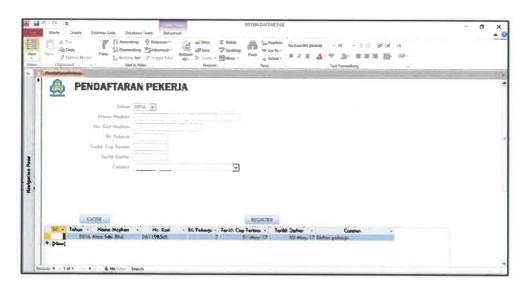


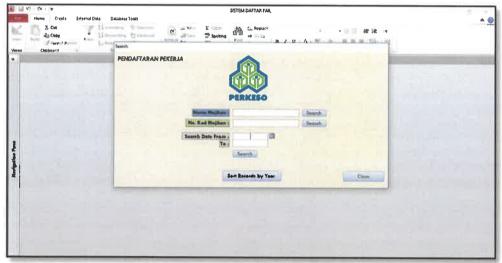


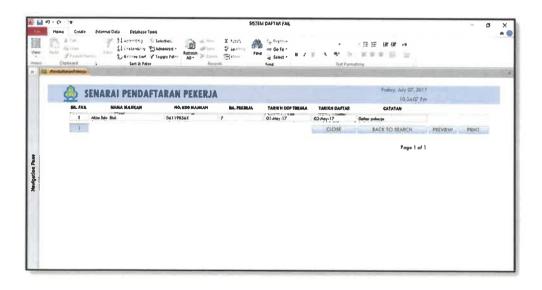


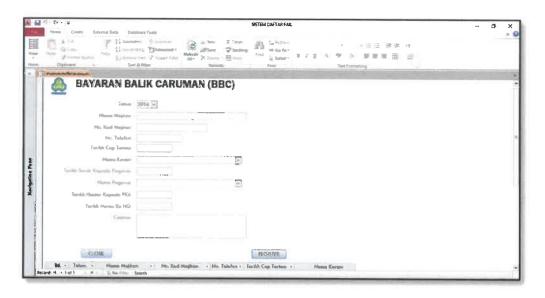




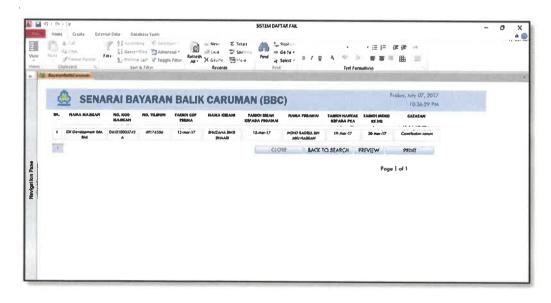


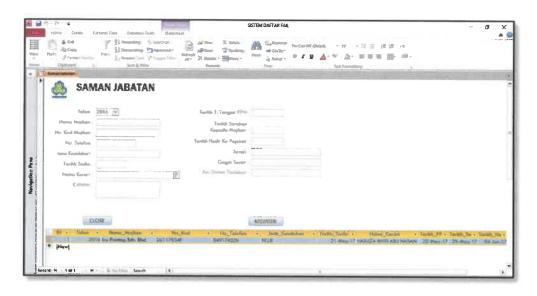




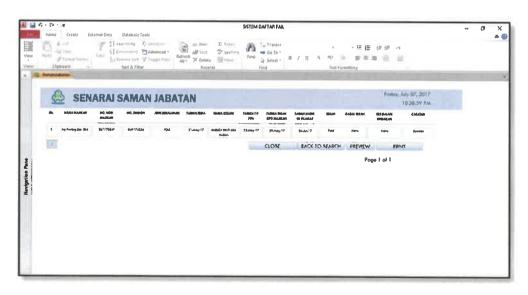


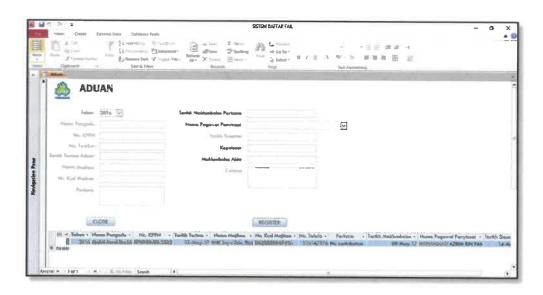




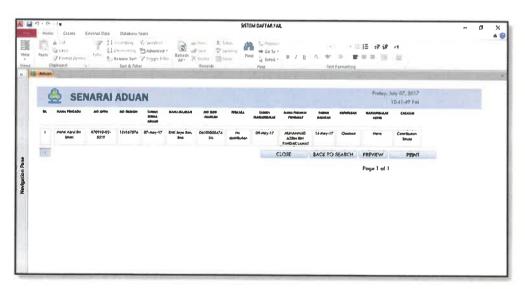


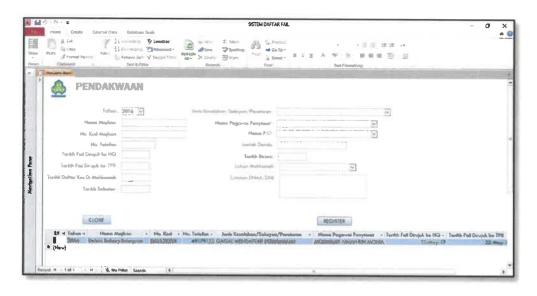




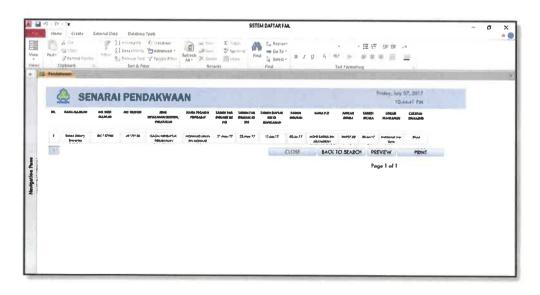








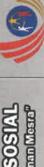






PERTUBUHAN KESELAMATAN SOSIAL

SIkap Terbuka Layanan Mesra^p



PERITUBUHAN KESELAMATAN SOSIAL

"Sikap Terbuka Layanan Mesra"

MUDAH

Eaveren Gerumen Oullne IPERKESO

SELAMAT

Jaftar Segeral PERKESO GEPAT



Kunjungi : Pejabat Pengarah Negeri Kedah, Pertubuhan Keselamatan Sosial,

05530 Alor Setar, Kedah. Tel: 04-7746666

MUDAH

Sayaran Garuman Online IPERKESO

CEPAT

SELAMAT



Daftar Segeral /PERKESO



No. 186, Wisma PERKESO, Jalan Telok Wanjah,

Fax: 04-7339870

Layari: www.iperkeso.my

Pertubuhan Keselamatan Sosial,

No. 186, Wisma PERKESO,

05530 Alor Setar, Kedah. Jalan Telok Wanjah,

Fax: 04-7339870 Tel: 04-7746666

Kunjungi : Pejabat Pengarah Negeri Kedah,

Layari: www.iperkeso.my

SELURUH JAWATANKUASA BADAN KEBAJIKAN AM PERKESO ALOR SETAR (BAKAP) MENJEMPUT TUAN-TUAN DAN PUAN-PUAN WARGA WISMA PERKESO ALOR SETAR KE PROGRAM



MAJLIS ILMU "SEMPURNAKAH SOLAT?"

Oleh : YBHG. TN SHEIKH AHMAD FAISOL BIN HJ. OMAR

PADA
21 MEI 2017 (AHAD)
JAM 1.00-2.00 PETANG
DEWAN MALINJA, ARAS 7,
WISMA PERKESO

Pihak kami sangat mengalu-alukan kehadiran semua warga WISMA PERKESO

Semoga dengan kehadiran tuan puan akan mengimarahkan lagi majlis ilmu ini.





























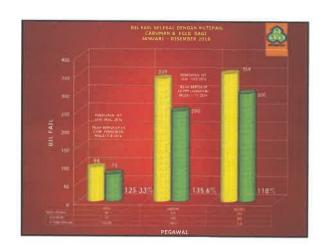


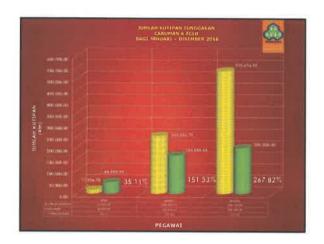


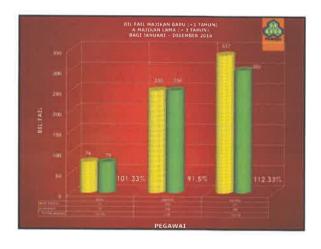


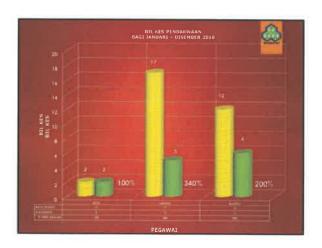


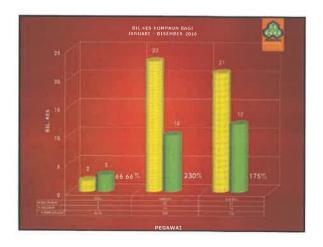




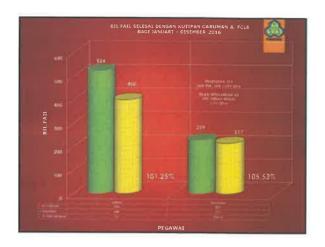


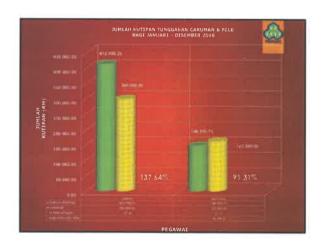


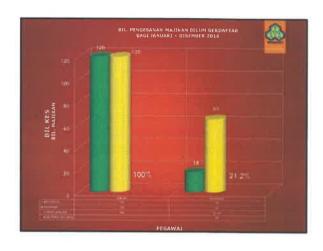




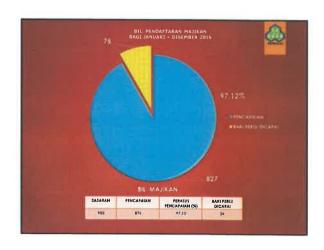




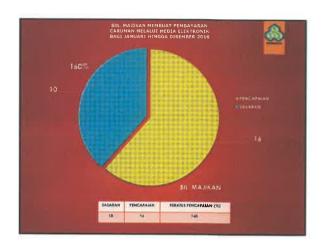














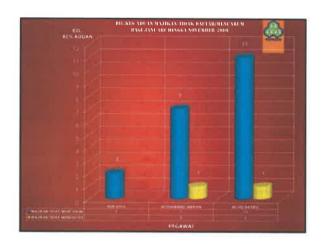






		BILLES ADEAN WARRAN THEAR DATE AROSENC ARE SE BAGEJONEARE MENGGODISEMBER 2016					000	
	al money		Description of the same			250	Hamiltonia 198	ASSES.
16.	32/2014 MAZIATOL MIZA BINTI MA HAP (470607-02-6874)	MAJIKAN TIDAK MENCARUM	18.07.3014	16.09.2014	27.01.2016	27.09.2014	76	MOHAMMAD
17.	33/2014 TAN EHENG SIANG (740404-42-8133)	MAJIKAN TEDAK MENCARUM	15,01,2014	15.09.2014	13.10.2016	13.10.2014	,	MOND BADRUL
I&	34/2014 MAZILAN BEN BRAHBA (430812-02-6677	MAJKAN TIDAK MENCARUM	6.10.2014	6.10.2014	28.10.2014	23.10.2014	Ø_	MANAMAN
14,	35/2016 VAINAWHI A/7 MARIAPAN (91012E-02-E334)	MAJIKAH TIDAK MENCARUM	22.10.2014	23.10.2014	2.11.2014	2.11,2014	,	MOND
20.	34/2014 FARDAH BOTT MURAD (480008-02-5254)	MAJIKAN TIDAK MENCARUM	04.12,2016	04.12.2014	27.12.2014	27.12 2014	y	MOND SADYU.



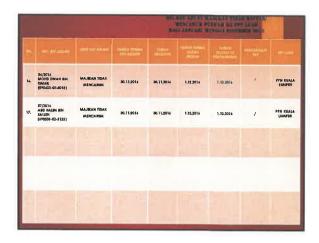








			BAGLJANU BRI BINGGA DISIMBER 2016					-	
		494 111 (2.004	District Colons Bill Australia			1100			
11.	23/2014 HURUE RAZLIA HADRIA BIM MOHAMAD ZUKI (977111-02-5724)	MAJIKAN TIDAK MENCARUM	147,2016	14.7.2016	17.7.2014	17.7.2014	¥.	PPH SELANGOR	
12.	24/2016 A3MAH BINTI TALIB (680115-02-5366)	MAJIKAN TIDAK	14.7.2014	14,7,2014	17.7.2014	17,7-2014	1	MANDOR	
13.	25/2014 ROSLEI BIN ABU RASIM (670127-08-5803)	MAJIKAN TIDAK MENCARUM	20.7.2014	20.7.2016	20.7.2014	20.7.2014	V.	PPN KUALA EMAPUR	
14.	28/2016 MUHD AAUN BIN ABDUL JAAFAR (140715-02-5763)	MAJIKAN TIDAK MENCARUM	7,8,2014	7.8.2016	9.8.2014	7,8,2014	1	PPN PULAU PINANG	
15.	29/2016 SIDA A/P EBAU OB: SAM BAD A/L EK	MAJIKAN TIDAK MENGARIM	1,8,2014	7.8.2014	1.0.2016	7,0,2018		PPH FULAU	























APPENDICES G:

REFERENCES



Management & Careers

Improving Employee Productivity and Efficiency

By David Childs, Ph. D.

The Dallas County Tax
Office used four core
quality management
concepts to empower
and inspire employees
to "make the mission
happen." The results
were impressive.

wenty years ago, the Dallas County Tax Office turned itself into a laboratory to study what would happen if quality management principles were applied to help employees meet the organization's goals. The office environment was transformed from one in which employees were unfocused and unmotivated into a "purposeful family" atmosphere, in which employees were made aware of the office's purpose (and their purpose there), were empowered and inspired to "make the mission happen," and were recognized and rewarded for doing so. Today, the Dallas County Tax Office can report that quality management principles work, and they produce dramatic results. The office is more efficient and productive, and customer service has improved. The Dallas County Tax Office has earned four national awards for quality management and, for the past two years, has been the only government entity to be recognized by Quality Texas, patterned after the Malcolm Baldrige National Quality Program.

While numerous books about quality management and leadership argue that there are eight, 11, or 13 "secrets" to quality management, there are really just four core concepts:

1. Have a clear, well-understood mission.

- 2. Empower staff to individually do what is needed to "make the mission happen."
- Measure results to determine how successfully the mission is being executed, or not.
- Adapt, constantly fine-tune, and improve.

These practices require little in the way of time and resources, but they generate dramatic benefits in real-life office environments.

IT'S ABOUT THE MISSION. PERIOD.

From the moment a job applicant enters the office, the Dallas County Tax Office makes it clear that everything is about the mission: to provide quality citizen service. A large poster of the office mission greets applicants as they enter the front door. During the interview process, applicants are asked if they had noticed the poster as they entered the office, and they are asked to explain what the mission statement means to them. Applicants are also asked to write two essays describing a personal memory of when someone was compassionate to them and when someone went out of their way for them. If hired, they sign a contract that they will "live the mission." They are taken on a "welcome to the office" tour that includes pointing out every poster of the mission that hangs on the walls throughout the office. It is made clear

that every decision the office makes regarding promotions, discipline, annual reviews, bonuses, etc., is based on how successfully each employee personifies and promotes the mission.

An employee receives a "Mission Maker" thank-you letter if he or she gets a verbal or written compliment from a customer; or a "Mission Focus" counseling form if a customer makes a complaint, a manager observes the employee responding to a customer in a less than enthusiastic manner or if he or she interacts with fellow employees in a less than professional or constructive manner. Usually, employees are reminded of their application essay about someone being compassionate or going the extra mile for them. Thus, employees are constantly reminded that the office is serious about accomplishing the mission.

HIRE ACTUALIZERS AND EMPOWER THEM

When hiring, look for what psychologist Abraham Maslow called "actualizers." Actualizers are positive, can-do, selfstarters. If you intend to empower staff to make the mission happen, employees will need to thrive on their authority and maximize it in a constructive way Actualizers possess six tell-tale personality traits. They are positive, happy, active, confident, energetic, and sophisticated. When interviewing applicants, look for these traits in their facial expressions, body language, attitude, and responses.

The most revealing question that can be asked in an interview is: "Tell me about your last three jobs and last three bosses." The answer the applicant gives

is probably what that person will be saying about you and your organization after they've been with you for six months. The answer you want to hear is that they liked their boss and co-workers, enjoyed the company, and are proud of the specific contributions that they made. Applicants who speak positively, constructively, and professionally about previous employers, co-workers. and work environments are much more likely to become positive, professional contributors to your organization.

At the Dallas County Tax Office, employees are fully empowered to "serve the customer, within the law." They are also encouraged to "serve the customer, then do the paperwork" and to "interpret laws and statutes as favorably for the customer as legally possible." Staff are empowered to create property tax payment plans for citizens, and they may call other states to resolve confusion regarding vehicle titles and registrations. They may decide to accept a check - and the responsibility for it - even without the recommended customer and bank account verification information. They may keep the office open until all customers are served. In short, they are empowered to legally serve the customers. Period. Should mistakes or bad decisions happen, or unacceptable legal interpretations be made, management takes external responsibility while internally using the error as an opportunity for constructive learning, training, and finetuning. The office's philosophy is that occasional glitches, created by empowered over-exuberance, do not create nearly as many problems or obstructions to performance as those that would be created by an office full of bureaucratic robots.

POSITIVE COUNTING

In recent years, many organizations have created performance measurement cultures, but those efforts have often focused on reducing rather than improving. This can lead to a top-down negative, punitive, slash and burn approach that employees perceive as an "us against them" battle. It puts the organization at war with itself, and the result is that the measures damage morale and performance rather than inspire improved productivity and customer service.

The Dallas County Tax Office, on the other hand, has had great success at implementing measures in a positive, teamwork-inspired environment. The goal of the performance measures, like everything else in the office, is to make the mission happen. The measures are designed to monitor how well the mission is being achieved, and they are used to reward staff whose performance exceeds benchmarks. The focus is positive: Are we succeeding? What can we do better tomorrow? Who needs to be recognized and rewarded? A team of top management, middle management, and staff develops, monitors, and modifies the measures as needed (generally due to legislative or technologyinduced changes in processes).

The improvements in productivity inspired by this approach have been impressive. In the Telephone Unit (a staff of 13 employees who answer an average of 22,000 inquiries per month regarding property taxes and motor vehicle titles and registration) over the past five years the same number of staff have reduced peak-season average callwaiting time from more than eight minutes to a little more than three minutes. The number of times telephone staff exceeded their monthly performance targets increased from only five times for the entire year of 2003, when the program began, to 78 instances by 2007— an average of a little more than six employees per month exceeding their targets.

In tax collections, over the past 12 years, 45 cities and school districts within Dallas County have contracted with the tax office to collect their property taxes. Not only is the Dallas County Tax Office collecting these additional accounts with no increase in staff, but existing staff also reduced the peak-season payment process time from two weeks to two days. The improved productivity also increased interest earnings by \$12 million.

Finally, in motor vehicles, performance targets were implemented in 1998 and an average of 16 motor vehicle staff (of a total of 120 employees in the department) exceeded the standard each month. By 2008, an average of 54 employees were exceeding the standard each month. The average number of titles issued per employee improved to 5,378 in 2008 from 4,382 in 2001. The average number of registrations issued per employee improved to 16,221 in 2007 from 12,554 in 2001. The average time to process mailed-in registration renewals dropped to two days from two weeks. while the average time customers spent waiting in line for renewals dropped to 8 minutes from 48 minutes.

Overall, over the past 20 years, fewer staff are doing three times as much work, and doing it faster. The office is more efficient, having actually reduced staff by four people, to 230. Consequently, while significantly improving performance, the Dallas County Tax Office has maintained a 20-

Awards and Recognition

- 2008 Quality Texas (Malcolm Baldrige Performance Excellence Program) Recognition
- 2007 Quality Texas (Malcolm Baldrige Performance Excellence Program) Recognition
- 2005 Texas Association of Assessing Officers Quality Customer Service Award
- **2005** Texas Association of Counties Exceptional Delivery of Service Award
- **2002** National Academy of Public Administration E-Governance Award of Merit
- **2001** National Association of Counties Achievement Award
- **2000** Texas Association of Counties Best Management Practices Award
- 1995 National Association of Counties Achievement Award
- 1995 National Transportation
 Association Best Public Service
 Video Award

year gross budget average annual increase rate at a modest 3.3 percent — including raises, increased health-care costs, technology costs, inflation, and so on. Comparable county agencies have seen average annual budget increase rates of 10.92 percent and 11.47 percent.

And at the same time, personal complaints to the tax collector about quality of service over the past 20 years have dropped from five per day to one per week. Meanwhile, unsolicited written compliments have increased to 221 (18.5 per month) in 2007 from 24 (2 per month) in 1998.

CONTINUAL FINETUNING

The Dallas County Tax Office also developed a process to generate suggestions for improving the organization. The program, called Fit for Service, conducts a retreat for managers, assistant managers, and staff representatives to periodically (every 2-3 years) elicit creative recommendations on how to make improvements in 12 areas. The ideas generated at these meetings are collected, reviewed, and turned into a to-do list. Staff members are assigned to make them happen, and projects are implemented over the 2-3 year cycle. The office newsletter provides updates about the progress of each project. The 12 areas are:

- I. Office Environment. What improvements would enhance the organization's goal of maintaining a "purposeful family" environment?
- **2. Development and Training.** How can the organization improve on training, developing, empowering, and encouraging its employees?
- 3. Communications. Walk a mile in your customers' shoes. How can we improve their experiences with the office's telephone, Web, fax, and other services?
- **4. Equipment.** What enhancements are needed to maintain reliability of office equipment (chairs, photocopy machines, file cabinets, etc.)?
- 5. Forms and Signs. Again, keep the customer in mind. How can forms, office signage, the Web site, etc. be made more customer friendly?

- 6. Audits, Laws, and Regulations. How can laws, regulations and audits be streamlined so as not to obstruct the mission?
- 7. Relationships. How can the organization's relationships or partnerships with other public and private organizations better accomplish the mission?
- 8. Space. How could the way the organization uses its available work space help to prepare it for space demands five years from now?
- 9. Supplies. Is inventory clean, organized, and available?
- 10. Technology. How can the organization's technology be made more responsive and user friendly?
- **11.Additional Opportunities.** How can the organization adapt management approaches that a staff member might have witnessed in

- another organization, or read in a magazine, or observed in the grocery store? Be alert for revelations.
- 12. Meditation. Allow employees to rest, reflect, meditate, and renew. Creative revelations occur when staff are physically and mentally rested, and have time to think, plan and be creative.

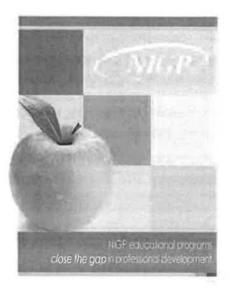
In recent years, about 60 percent of office staff have contributed almost 200 recommendations, 75 percent of which have been implemented. These ideas have significantly improved the office's performance.

CONCLUSION

It is possible to quickly improve an organization's efficiency and productivity by as much as 20 percent by following the four steps tried, tested, and fine-tuned

by the Dallas County Tax Office. Constantly focus on the mission; hire and empower the right people; develop 3-5 measures that monitor whether the mission is being achieved, and reward quality performance; and implement a program that helps the organization continually fine-tune its procedures. Remember that it's about the mission. Period. I

DAVID CHILDS, PH.D., was tax assessor/collector for Dallas County, Texas, for 20 years. He is currently chief executive officer of Fit for Service (www.fitforservice.org), a quality management and performance improvement company. Childs speaks at numerous conferences and seminars, teaches MBA courses in systems thinking and transformational leadership, and is an examiner for Texas Quality. He can be contacted at fitforservice@verizon.net.



Close the gap.

When the economy takes a turn, who will you turn to you?

CPPO and CPPB certified procurment professionals have the education and experience that makes doing more with less simply business as usual. NIGP's profession-specific, certificationsupporting educational programs ensure that your purchasing and contracting department will help close your budget gap.

Go to www.nigp.org/educate/classlst.htm

② 2008, NIGP is the National Institute of Governmental Purchasing. For over 60 years, developing, supporting and promoting the public procurement profession. nigp.org.

Splitting a database might take a long time. You should notify users so that they do not use the database while you split it. If a user changes data while you split the database, the changes will not be reflected in the back-end database.

TIP: If a user does change data while you split the database, you can import the new data into the back-end database after you finish.

- Although splitting a database is one way to share data, everyone who uses the database must have a version of Microsoft Office Access that is compatible with the file format of the back-end database. For example, if the back-end database file uses the .accdb file format, users cannot access its data by using Access 2003.
- You might want to use an earlier Access file format for the back-end database if you use features that are no longer supported. For example, if you use data access pages (DAPs); you can continue to use them if the back-end database is in an earlier file format that supports DAPs. You can then use the new file format with the front-end database so that your users have access to the benefits of the new format. Note that you cannot change data in a Data Access Page by using Access 2010. For more information, see the See Also section.

Top of Page

Split the database

- 1. On your computer, make a copy of the database that you want to split. Start with the database file on your local hard drive, not on the network share. If the database file is currently shared from your local hard disk drive, you can leave it where it is.
- 2. Open the copy of the database that is on your local hard disk drive.
- On the Database Tools tab, in the Move Data group, click Access Database. The Database Splitter Wizard starts.
- 4. Click Split Database.
- 5. In the Create Back-end Database dialog box, specify a name, a file type, and a location

Was this information helpful?

Yes

No

X

NOTES:

- Consider using the name that Access suggests. It preserves the original file name, and indicates that the database is a back-end database by inserting _be into the name, just before the file name extension.
- Do not change the file type unless some users will use an earlier version of Access to access the data.
- You can enter the path to the network location in the File Name box, in front of the file name. For example, if the network location for the back-end database is \\server1\share1\\ and the file name for the back-end database is MyDB_be.accdb, you can enter \\server1\share1\MyDB_be.accdb in the File Name box.
- The location that you choose must be available to everyone who will use the database. Because drive mappings can vary, you should specify the UNC path of the location instead of using a mapped drive letter.
- 6. When the wizard finishes, it displays a confirmation message.

Your database is now split. The front-end database is the file that you started with (the copy of the original shared database), and the back-end database is located in the network location that you specified in step 5 of this procedure.

Restrict changes to the design of the front-end database

To restrict changes to the front-end database that you distribute, consider saving it as a compiled binary file (an .accde file). In Access 2010, a compiled binary file is a database application file that has been saved with all the Visual Basic Access (VBA) code compiled. No VBA source code remains in an Access compiled binary file. Users cannot change the design of objects in an .accde file.

- 1. Open the front-end database file (.accdb) that you want to save as a compiled binary file (.accde).
- 2. On the Database Tools tab, in the Database Tools group, click Make ACCDE.



3. In the **Save As** dialog box, browse to the folder where you want to save the file, type a name for the file in the **File Name** box, and then click **Save**.

Top of Page

Was this information helpful?

Yes

No

Distribute the front-end database

After you split your database, you distribute the front-end database to your users, so that they can start to use the database.

CAUTION: To protect your data if your database has multiple end users, it is recommended that you do not share copies of a database that contains links to SharePoint lists, including links to lists within a published web database. If you link to a table that is a SharePoint list, it creates a possibility for any malicious user to change the target of the link and potentially modify permissions on the SharePoint site as the connection information for linked tables is unencrypted.

Do one of the following:

- Send an e-mail message to the database users and attach the front-end database file to the message. Include any instructions that will make it easier for your users to start to use the front-end database immediately.
- Save the front-end database file to a network location that all database users can access, and then send your users an e-mail message that specifies the network location together with any other instructions they might need in order to access the database.
- Distribute the front-end database file by using removable media, such as a CD-ROM or a USB thumb drive. If you install the file yourself, you can test it to make sure that it works. If users must install the file, you should include a document that explains to them what they must do to install the file, and who to contact if they encounter difficulties.

Top of Page

Change which back-end database you use

You can move your back-end database, or use a different back-end database, by using the Linked Table Manager.

If you want to move your back-end database, first make a copy of it to the new location, and then follow this procedure.

1. On the Database Tools tab, in the Database Tools group, click Linked Table Manager.

Was this information helpful?

Yes

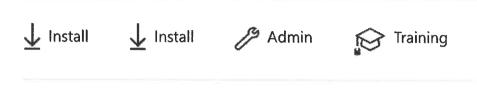
No

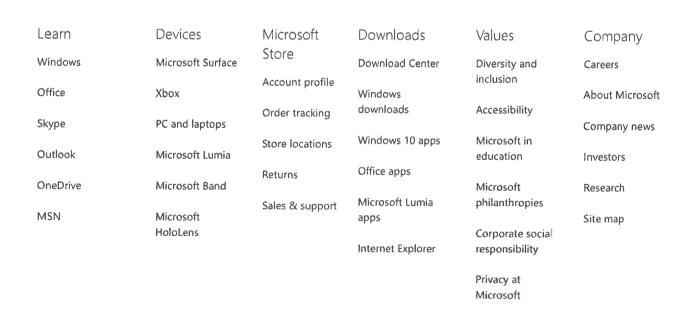
X

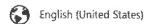
TIP: If you have not linked to any other databases, click Select All.

- 3. Select the Always check for new location check box, and then click OK.
- 4. Browse to and select the new back-end database.

Top of Page







Was this information helpful?

Yes

No

Home (../../index.html) / MS Access Developer Center (../developer/index.html) / Database Splitter

Microsoft Access Split Database Architecture to Support Multiuser Environments, Improve Performance, and Simplify Maintainability

(../products.asp)Provided by Aparna Pophale, Quality Assurance Specialist

Microsoft Access lets you easily create databases to store and present your data in forms and reports. When starting, a database may be very simple and trivial, but over time, it may become more important as you add data, features, and even share it with others. It gains a life of its own and the overall design becomes critical.

One of the most important architectural designs is splitting the database into a front-end and back-end database. This is how Access is designed to let you support multiuser databases and significantly simplify how you enhance the application over time.

Separating your application and data databases enables you to support multiple users and upgrade the application without wiping out their data. Assuming the application doesn't change that often, the separation also makes it easier to just backup the data database since only that is changing everyday.

A Split Database Design: Front-End/Back-End Databases

Splitting a database is a relatively simple concept. You take an existing Access MDB/ACCDB database with its tables, queries, forms, reports, macros, modules, etc. and divide it into two databases:

- The "Back-End" database just contains the tables
- The "Front-End" database contains the application objects (everything except the tables) and links to the tables in the back-end database

This design is especially useful in multi-user environments where the back-end database is stored on a network and contains the shared data. Each user then has a copy of the front-end database on their desktop pointing to the shared database.

In multi-user environments, the front-end database can also contain tables that are private to the user. These local tables can store the user's settings, selections, temporary or intermediate tables for processing data or reports, etc.

Reasons to Split a Microsoft Access Database

Here are some of the major reasons to use a split database architecture:

Multiuser Support

Each user has the application and private tables in their copy of the front-end database. They share the backend database without locking it exclusively.

With temporary tables for each user in their front-end database, conflicts and collisions among multiple simultaneous users are avoided.

Deploy Updates without Worrying about Data

Application enhancements are simplified since they are made in the front-end database without worrying about changes to the data in the back-end database. Releasing new versions and bug fixes becomes much easier since only the application part needs to be distributed which automatically uses the current data. Of course, if you modify table structures or add/delete/rename tables, you'll need to apply those changes to the back-end database.

Without a split database architecture, when you create a new version, you'll need to update the database AND any data your users changed since your last copy.

Improve Performance and Minimize Database Corruption

Performance can be significantly enhanced and network traffic reduced when the user has a copy of the frontend database installed on their desktop rather than running it off the network each time they use it.

Without splitting a database, multiple users running the same database on the network increase the chance of database corruption. The split database design minimizes this problem and avoids code corruption from impacting data corruption.

Simplify System Administration and Maintenance

Since the data is stored centrally and can be backed up and compacted, database administration is simplified. A single master front-end application database is copied to each user's machine, but is not necessary to back up.

Scalability

The split database architecture provides an opportunity to expand a database size beyond the 2 GB limitation of Access since the front-end database can link to multiple back-end databases if necessary.

This also sets the stage for migration to SQL Server (or SQL Azure). If the application evolves to need the features of SQL Server, you can still use the front-end database and link to data stored in SQL Server.

How to Split Your Microsoft Access Database

You can manually split your database by:

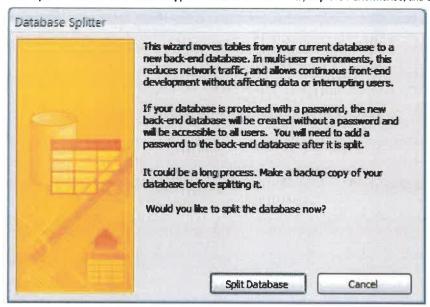
- 1. Copying it
- 2. Deleting all the non-table objects from one of them and make that your back-end database
- Delete all the tables from the other "front-end" database, then link to the tables in the back-end database.

Or, you can use the Microsoft Access Database Splitter Wizard to split the Access database. Consider this example:

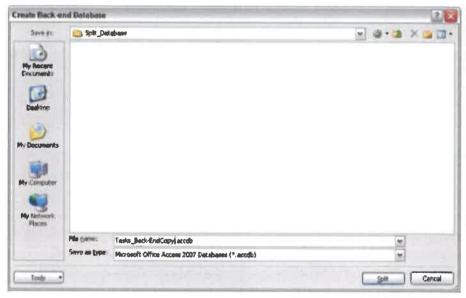
Open a Tasks template form Microsoft Access. The Tasks database is designed with tables, queries, forms and reports. The database contains three tables Contacts and Tasks (2007 version also have Filters). To open a Database Splitter, select Database Tools tab from Access ribbon and in the Move Data pane, click on Access Database option.



Database Splitter wizard starts.



Click on Split Database button and it opens the Save dialog window. Provide name for back-end copy.

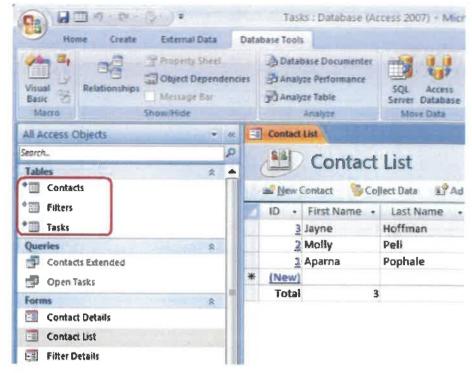


So "Task_Back-EndCopy.accdb" name is provided here for Tasks database. This back-end database copy can be saved on a network to share among multi users and front -copy can be available to each user separately at their own desktop.

When the confirmation message box shows, click the OK button.



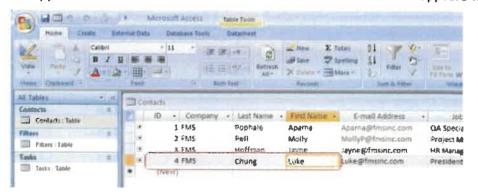
Now take a look at the tables in the Navigation pane, which show small arrows at the left side of the table names. This indicates that these three tables are now linked to the Tasks database, and resides in the Back-end database.



So this way the front-end copy will have all forms, reports and queries (no tables). Data changes made in the front-end copy will also update the back-end copy, which stores only tables. Now add a new record to the Contact List, save and close the database.



If you open back-end copy of the database and select Contacts table. This new record appears in the table.



This way all users work on the same database using their own front-end copy, and data changes reflect in the back-end database. Split database architecture gives a look of Client-Server database technology by storing database tables at back-end server and all programming part such as forms, function, queries at front-end client side.

Access databases can link to older versions of Access database formats. So even if the front-end database is in an Access ACCDB format, the linked back-end database can be an MDB in Access 2000 or 2002-2003 formats or an ACCDB.

Keeping Private Tables

If you want to have private tables in the front-end database, you'll want to import them into your front-end database and remove them from your back-end database. One of the amazing and powerful features of Microsoft Access is its ability to use data from a local or linked source in its queries, forms, reports, macros, and modules. If you need to change the table's location later, you can move it without impacting the objects that depend on it.

One caveat is that if you have tables with field lookups to other tables, those tables should be in the same database. Otherwise, if you open that source database and that table, its lookups won't appear which can cause data entry and data integrity issues.

Relinking Microsoft Access Tables

Tables can be relinked interactively with the Linked Table Manager or programmatically via VBA.

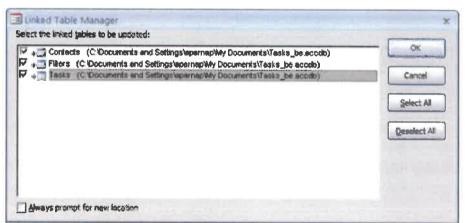
Linked Table Manager

Once the database splitting procedure is finished, you can relink the linked tables using Linked Table Manger.

- In Access 2010 and 2013, from the External Data ribbon, select Linked Table Manager
- · In Access 2007, it's on the Database Tools ribbon
- · In Access 2003 and earlier, it's under Tools, Database Utilities



Select the table names which you want to update and click on Ok button. If you want to link to a database located in another drive or folder, check the Always prompt for new location box. This is common if you develop the front-end database on your local drive with a local copy of your back-end database (to avoid testing on the live data), then need to deploy it.



Always make sure that links are correct before you distribute them. It shows message for successfully linking.

Relinking Tables Programmatically using VBA

You can also write some VBA module code to update a linked table (from our royalty-free source code library Total Visual SourceBook (../SourceCodeLibrary.html)):