

SALES ADMINISTRATION SYSTEM

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ADMISSION

I admitted that this project title name of
SALES ADMINISTRATION SYSTEM

is written by me and is my own effort and that no part has been plagiarized without
citations.

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DEDICATION

This project is a special dedication to my beloved parent, as they had put so much efforts on supporting me on my studies. What they have gave are precious and i am really appreciate it. As the completion of this project, thanks for their patience and love towards me that really encourages me. I have been away from home for a period of times because of the project. I really appreciate them for their kindness and understanding for me.

Secondly, i would like to give my appreciation to Madam Choo Yun Huoy for being my supportive supervisor. She gave me a lots of guidaince and directions from the beginning of the project planning until the completion of the project. Encouragements and supports are greatly given by her as a supervisor to ensures that i can complete this project in proper. I am very thankful to have Madam Choo as my guide and light to my path to complete this project.

Thirdly, i would like to show my appreciation to Lead System (M) Sdn. Bhd. for allowing me to simulate the company's need into this whole project. This project contains none of the copany's confidential data. This project was given opportunity to test run on it's server without any charge applied. Again, i wish to thank LSM for been so kind to me and this project.

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Last but not least I wish to thank all my colleagues from KUTKM and also others that may not have been mentioned here. Without any of these supports, I would not have completed my training program successfully.

ABSTRACT

The project is called Sales Administration System (SAS). It is meant to solve the problems that arise hand-in-hand to the organization's daily operations. It is an online web portal, which will be developed by using HyperText Preprocessor (PHP), MySQL, HTML & JavaScript. It could be categorized as an Enterprise Resource Planning (ERP) application which is developed to help the organization to solve its' enterprising problems. The methodology for the application to be developed is Framework for the Application of Systems Techniques (FAST). The approximated completion duration for the application is six months or 180 days. There are 3 modules for the SAS application; they are Counter Sales Summary, Stock Control & Dealer Sales Summary. The application will be developed according to the modularity, which can help to reduce the dependency of the applications to the sub-modules. It could help the system's users to handle the system just within a short period of time but not downgrading its' functionalities.

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LIST OF ABBREVIATIONS

1. SAS Sales Administration System.
2. LSM Lead System (M) Sdn. Bhd.
3. PHP HyperText Preprocessor.
4. ERP Enterprise Resource Planning.
5. FAST Framework for the Application of Systems Techniques.
6. CMM Capability Maturity Model.
7. GUI Graphic User Interface.

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CHAPTER I:

INTRODUCTION

1.1 INTRODUCTION

Sales Administration System (SAS) has been developed for Lead System (M) Sdn Bhd, as it did not have any proper system that could handle the on growing sales activities. SAS is a three-tier web-based portal created by PHP and MySQL. This new system will handle all the sales data and generates summary reports according to organization's needs. It is responsible to gather all the required data from all of the organization's counters throughout the peninsular Malaysia.

The SAS has enhanced the current system, which has minimized workloads for the system's users. Processing time for the sales administration tasks needs has been reduced so that the fully so that the resources can be fully utilized. Real time sales summary reports could be generated daily compare to three days delayed for the current system. By reducing the processing time, the organization's decision making could be done faster and more effectively.

An user-friendly system has reduced the time for the new users to gain the ability to control the system. This system has covered all the sales data and stored it into the database. Reports and summaries could be generated according to the users' requirements. Real-time reports with accurate data have been achieved in SAS. Users can retrieve the required information from the system according to the organization's needs.

SAS has centralized all the sales data under one database. Remote access has been made available for branches and counters to access the system. By developing it as a web-based system, it is able to bridge all the remote users into one single system SAS has been taken over all the works that are done separately currently. All the major calculations, filters, sorting, etc. has been done automatically by the system to reduce the human errors that may cause the data to be inaccurate.

This system has been replacing the current system step-by-steps after a few trial runs after the completion of the system development. Enhancements have been made to make sure SAS runs smoothly and achieves the goals for this project. Logically, SAS system is a very useful system for the organization. But, as time goes by, improvements and maintenance are needed to improve the system to be more effective.

1.2 OBJECTIVES

The SAS has been designed to achieve a few objectives that were mainly the weaknesses of the existing system. The solutions have been the goals for SAS to be developed. So, here are the objectives for the system.

1.2.1 To automate the report generating process.

The current system has been taken quite a lot of time to generate the required reports. It may takes up to 3-7 days of processing periods for reports. So, it is time consuming. The SAS has reduced the processing time to less than one day. It is possible to be done because generating reports has been automated. The current system generates the reports manually and it has wasted a lot of time. So, the SAS has automated report generating processes to reduce the processing times to the minimum.

1.2.2. To centralize all the sales and non-sales data

The SAS has been designed to centralize all the data and reports into one single system. Compare to the current system that is done separately according to regions (Northern Region(NR), Central Region(CR) & Southern Region(SR)), the SAS could stores all the data entries into the database and then process the required reports accordingly. This could help to reduce the problem of various versions of data entries and improper format of reports generated.

1.2.3. To make it remote access for the users

Since Lead System (Malaysia) Sdn Bhd (LSM) has many branch office and counters throughout Malaysia, users may logon to SAS remotely from all over the world. As long as they can obtain the accessibility to connect to the Internet, they can access to the system with their authorized password respectively. Even if they do not bring along their PC or laptops with them, they can easily access to the system by just using any computers that can connect to the Internet. Users' accessibilities has been controlled by user names and passwords assigned for each account. Each user has been assigned different user levels according to their positions. The access of the system has been tidely controlled because of the security features that have been implemented.

1.2.4. To achieve a high reliability of data accuracy.

There are a lot of mistakes and human errors occurred in the current system. Human errors are inevitable but can be reduced by controlling the input methods and data limitations, since data accuracy is very critical and important for generating sales reports. SAS has been equipped with control methods that can detect human errors and trace particular errors to reduce the mistakes level to the minimum. Faults would be reported to the system administrator so that the bugs could be fixed within a short period

of times. The SAS has been tested for a few months together with the current system to ensure the reliability of data accuracy of the system before fully implemented.

1.2.5. To develop an user friendly system

Many errors occurred because of the system that was not well designed when come to data handling. A user-friendly system needs a good data handling control and easy-to-use interface. A good interface can help the user to input the data correctly and reduce the errors. Complicated interface are not encouraged to be used because it could lead to confusions. Simple and easy interface are encourage to be designed to help the users to handle the system within a short period of times.

1.2.6. To increase the data security of the system

Commercial data are definitely confidential. Security issues had been the most critical one in database design. The current system does not include any form of protection to the data storing in its' database. Controllable password does not include in the current system. Therefore, the vulnerability to expose the data is very high. For SAS, enhancement on security feature has been included through password protection and also the data encryption for important data such as, every page has been protected by session control.

1.3 SCOPE

The proposed SAS will replace the current system that involves the sales personals, sales clerks, executives and the management as the system's users. It has covered the sales administration tasks for the company's Besta products in whole Malaysia. Basically, it involved sales department only for the first phase before it completely replaces the current system. In the future, it may extend to Sales Department, Administration Department and Finance Department.

SAS was designed to get the data from users input. Sales data has been collected from the sales personals and store into the database. Then, these data would be double checked by sales clerks before approve it. The tasks for sales clerk in SAS would be more on checking the data entered by the sales personals. In SAS, the sales clerks' tasks such as calculations, sorting and filters has been automated.

The processes involve in this system are majorities in generating summary reports by using SQL statements through PHP. Data input is the first process. Data handling and error checking has been the second process of the data flows. Then, reports has been generated according to approved data. The reliability of the reports generated has been a crucial portion of the system because it contributes to the organization's decision making process.

The SAS system provides different level of assessment to different types of users. There are 6 levels of assessment with 6 different lining menus/ user interfaces. The SAS system will prompt the suitable interface adaptively according to the log in ID and the password. There were 3 modules to be developed, they were Stock Control, Counter Sales Summary & Dealer Sales Summary.

Various techniques has been used in the system's implementation, such as PHP Session features, JavaScript client side script data validations, MySql database controls, hidden URL through frameset using, etc. PHP Session has been used to control the illegal access of different user levels pages. It was also used to pass the variables across the web pages. JavaScript has been used to perform the data entry validation before the data was passed to the server. This could help to reduce the server's processing task and time. MySql database controls have been used to protect the database so that it would not be exposed or hacked by intruders. Hidden URLs has been implemented through frameset using and scrolling text on the status bar.

A system development methodology is a very formal and precise system development process that defines a set of activities, methods, best practices, deliverables, and automated tools for system developers and project managers to use to develop and maintain most of all information systems and software. It could help the development process to be done in an easier way. Framework of the Application of Systems Techniques (FAST) has been used as the methodology for the system to be developed.

1.4 SIGNIFICANCE OF THE PROJECT

This project was to provide the solutions to the problems faced by LSM currently. By aligning the goals which had been set for the project to achieve, it helped the organization to solve their problems with the appropriate ways that would not affect the organization's interest. SAS has helped to solves the problems, and at the same time the database has been protected in a more secure way.

The current system has been taking a lots of time to generate the required sales reports. Delayed reports may cause the delay on the organization's decision making on stocks ordering. SAS has reduced the processing time by doing the report generating tasks automatically daily and monthly according to the reports required. Real time sales

reports would help LSM to make their decision on stocks ordering faster and more accurate.

The SAS has centralized all the data and reports into one single system. Compare to the current system that is done separately according to regions (NR, CR & SR), SAS could store all the data entries into a database and then process the required reports accordingly. This could help to reduce the existing of different versions of data entries and improper format of reports generated.

Since LSM has many branch offices and counters, users may logon to SAS remotely all over the world. As long as they can access to the Internet, they can access to the system with their authorized password respectively. Even if they do not bring along their PC or laptops with them, they can easily access to the system by just using any computers that can connect to the Internet

There were a lot of mistakes and human errors occurred in the current system. Human errors are inevitable but can be reduced by controlling the input methods and data limitations. SAS has been equipped with control methods that can detect human errors and tracing errors to reduce the mistakes level to the minimum. So, data accuracy is very critical and important for generate sales reports.

Microsoft Excel is needed in the current system. It costs a few hundreds of Ringgits to purchase the single user license. For each user that use the current system, they need to purchase the license respectively. Actually it cost more than five thousands of Ringgits for the company to purchase the license only. So for SAS, it is expected to be run in web-based. This could help the company to reduce the expenses on software licensing.

Commercial data are definitely confidential. Security issues had been the most critical one in database design. For the current system, there is no protection at all. No password control is included. So, the vulnerability to expose the data is very high. For

SAS, security protection has been fully equipped with password protections and has included the data encryptions for certain data. The access to the system has been protected and logged. Every page has been protected by session control. Explorer's toolbars has been deducted as well.

1.5 CONCLUSION

SAS is a very essential system that not just only suitable for LSM to apply it but it is suitable for all the Small Medium Enterprises (SME) which shares the common problems of LSM. The efficiency of SAS could make it one of the most prestige business solution for local SMEs where lower costs to be paid for and the quality is high above any other system that existed in Malaysia.