COMPUTER MAINTENANCE AND REPAIRING INFORMATION SYSTEM SERVICE DIVISION OF MEDIATOUCH COMPUSHOP

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ABSTRACT

*The application of Information technology is hardly require to be implemented at Divisi Service Mediatouch Compushop especially by building Information system to facilitate in process and management service. This information system expected able to replace stripper system having the character of manual and able to increase performa system as a whole. Thereby, the Information System that builded can give the output expected that is facilitating business actor of Service Division Media Touch Compushop in serving costumer and process the administration of Division Service.**Key Word** : Information Technology, Information System, Business Actor, Service.*

1. PREFACE

In line with the development of information technology, human beings increasingly facilitated in obtaining some information. Almost all human activities ranging from work activities, household, sports, shopping, and others did not escape the application of information technology, in connection with work activities, use of information technology to facilitate in resolving various types of work, reduce errors, improve efficiency of time and financial.

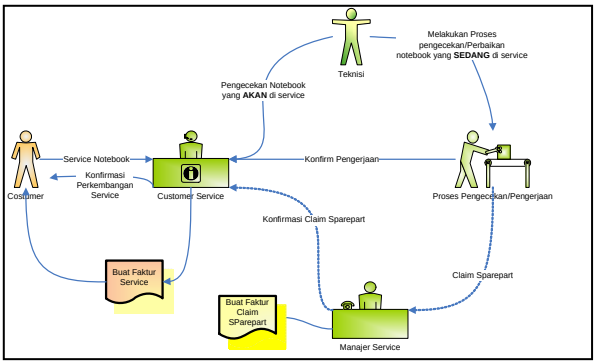
In the process, any application of information technology is necessary to be implemented in the Service Division of Mediatouch Compushop especially Information System development primarily to facilitate the process and management service. This Information System is expected to replace the old system which is manual, and expected to improve overall system performance.

Thereby, the Information System that builded can give the output expected that is facilitating business actor of Service Division Media Touch Compushop in serving costumer and process the administration of Division Service.

2. SYSTEM ANALYSIS

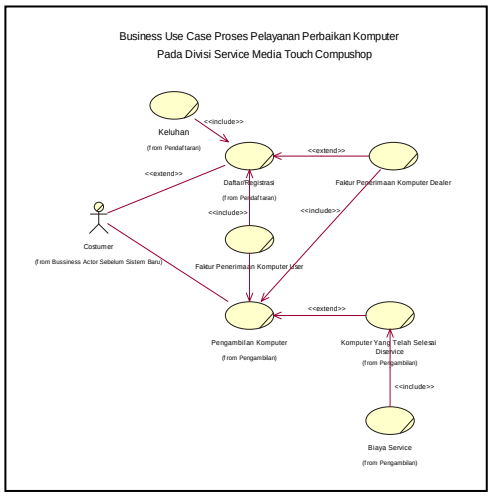
2.1 OLD SYSTEM ANALYSIS

Here is a picture of the process business from the old system:



Picture 1. Old system business process

Here is a business use case from the old system:



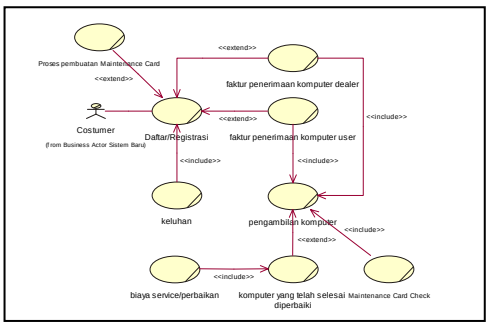
Picture 2. Old System Business Use case

Based on the above systems analysis can identify some of the weaknesses of the old system. These weaknesses include:

1. The whole administration process Service Division from receipt of repair, warranty claims to the dealer and monthly recapitulation done manually, which is inefficient.
2. Difficult in monitoring and tracking of work if there are problems
3. human error is still occurs
4. Log report computer repaired to be written by a technician manually and given to the costumer cervice periodically, so that sometimes hinder the work being done.

2.2 NEW SYSTEM ANALYSIS

Below is the business case Use from the new system:



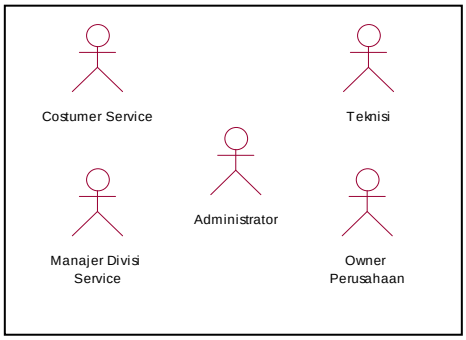
Picture 3. Businees Use case from new system

Based on the new system design, it is expected that the new system will fix all the weaknesses of the old system was running, where the new system is expected to have advantages as follows:

1. Reduce or even eliminate the possibility of human error.
2. Facilitate business workers in providing reports on all service processes are underway.
3. Simplifying work process monitoring by service managers.
4. Simplifying process of tracking error.

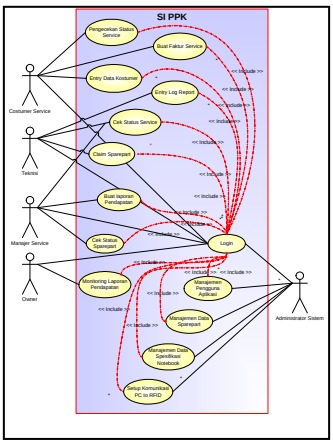
2.3 SYSTEM DESIGN

The design of the system were performed using object-oriented approach using a visual modeling language standards and Rational Rose is a visual modeling tool is used.Berikut adalah aktor dalam sistem baru :



Picture 4. SI PPK's actors Applications

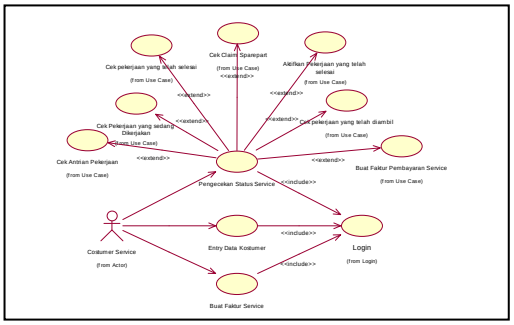
Here is a picture of SI PPK Use case Application:



Picture 5. Use case of SI PPK

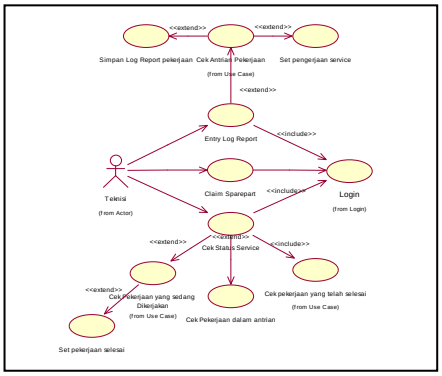
based on the Use case model picture above, can be described more description Use case models based on each actor listed in the system:

1. Use case Modul CS



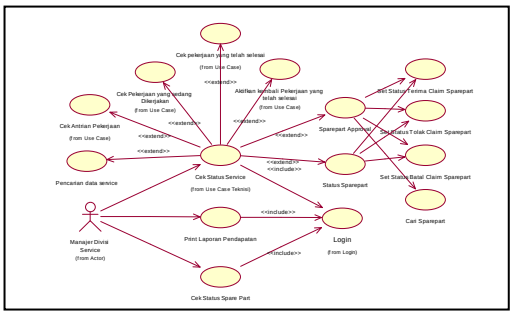
Picture 6. Use case Modul CS

2. Use case Modul Teknisi



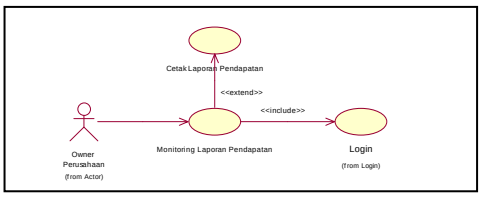
Picture 7. Use case Modul Teknisi

3. Use case Modul Manajer Service



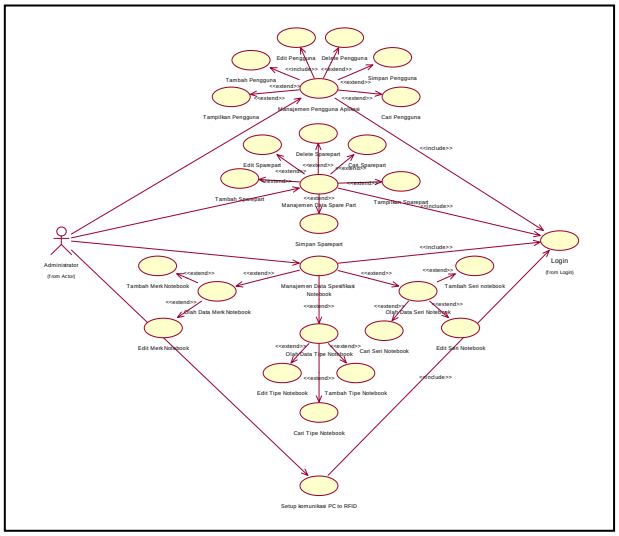
Picture 8. Use case Modul Manajer Service

4. Use case Modul Owner



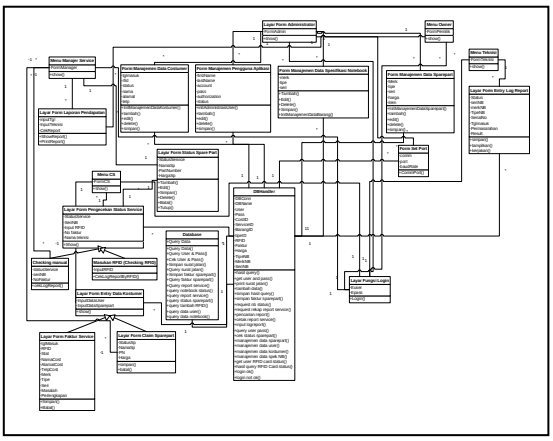
Picture 9. Use case Modul Owner

5. Use case Modul Administrator



Picture 10. Use case Modul Administrator

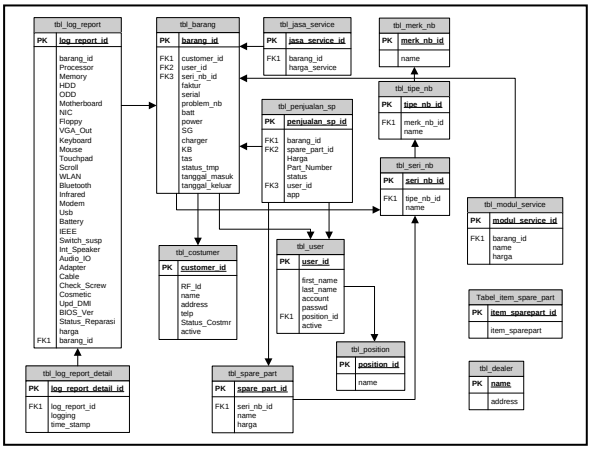
Based on the above modules, can be described Class Diagram of SI PPK Application as follows:



Picture 11. Class Diagram of SI PPK

2.4 DATABASE DESIGN

The data used in the development of this software is stored in a MySQL database that consists of tables which is used to store user data, log report data, Costumer data, data goods, spare part data, position data, sales data, Brand, type , series of notebook data, and data specifications notebook.



Gambar 12. Skema Relasi Database

3. SYSTEM IMPLEMENTATION

3.1 HARDWARE IMPLEMENTATION

Hardware used for testing the system HP Compaq Notebook 2710P, which NoteBook has the following specifications:

Table 1. Client's Computer Spesification

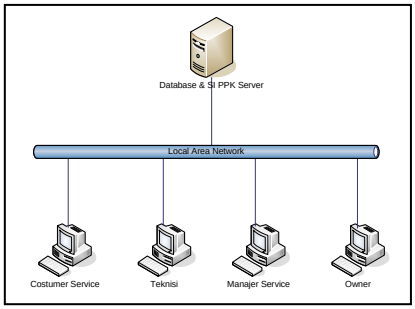
ipe Prosesor	:	ntel Centrino vPro Core2 Duo .2Ghz
tandard Memory	:	GB DDRII
lardisk	:	0GB
)ptical Drive	:	)VD-RW (Docking)
letworking	:	Vireless LAN
)isplay	:	4,1 WXGA Wide TFT LCD

Table 2 Server's Computer Spesification

Prosesor Type	:	Intel Pentium 4
Prosesor Onboard	:	Intel® Pentium® 4 Processor 630 (3.0 GHz, FSB 800, Cache 2MB)
Standard Memory	:	512 MB ECC DDR2 SDRAM PC-3200
Tipe Video	:	Integrated ATI RN50 (ES1000) 16 MB
Floppy Drive	:	Internal 1.44 MB
Hardisk	:	73 GB SATA U320 10K Fixed by Acer
Optical Drive	:	48X CD-ROM
Interface Provided	:	4x USB2.0, 1x Serial, 2x PS/2
Network	:	Integrated Two Gigabit Ethernet (10/100/1000 Mbps) ports
Cooler System	:	Embedded Easy Deploy Fan Cooling
Power Supply Type	:	Acer fixed 400w
Keyboard Type	:	Acer Keyboard
Device Input	:	Acer Mouse
Type		
Dimension (WHD)	:	186 424 x 477 mm

3.2 NETWORK CONFIGURATION

Configuration scheme can be seen in the following figure:



Picture 13. Network Configuration of SI PPK

Application

3.3 APPLICATION INTERFACE OF SI PPK

The following is a form table on the application SI PPK.

Tablel 3 main forms of SI PPK

Form	Deskripsi	Nama file
Form Home	Screen Opener	ComSetform.dfm
Login	Login as a user application.	Form_login.dfm
Form Costumer Service	For costumer data entry, create invoices and claim service and spare part monitoring log report from technicians	Form_CS.dfm
Form Technician	In order to log entry notebook repair report	Form_teknisi.dfm
Form Service Manager	To monitor log report from the technician, monitoring spare part, making sales report..	Form_manajer.dfm
Form Owner	To monitor service	form_pemilik.dfm
Form Application Admin	To perform service management processes	form_admin.dfm

To clarify the form of implementation of the interface above, here are a few displays programs that have created.

a. Form Home



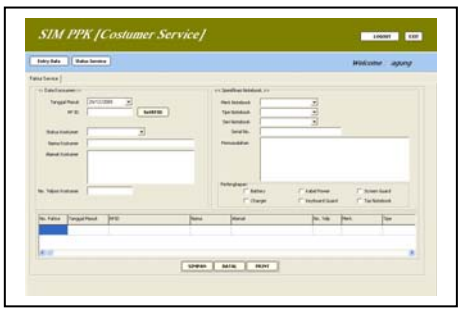
Picture 14. Form Home

b. Form Login



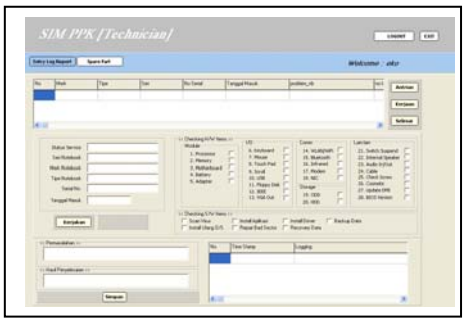
Picture 15. Form Login

c. Form Costumer Service



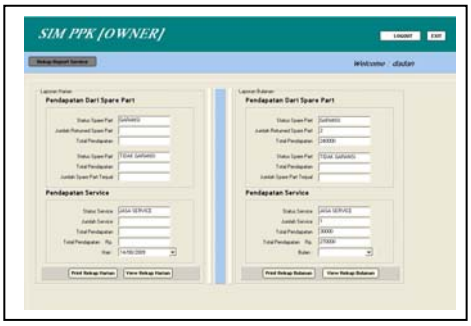
Picture 16. Form Costumer Service

d. Form Technician



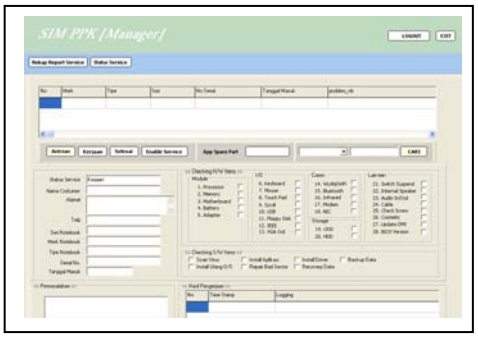
Picture 17. Form Technician

e. Form Owner



Pciture 18. Form Owner

f. Form ServiceManager



Picture 19. Form Service Manager

g. Form Admin



Picture 20. Form Application Admin

4. TESTING

to test the new system is using Black Box testing method that is more focused on the functional requirements of software

5. CONCLUSIONS AND RECOMMENDATIONS

Based on description and discussion of test analysis that has been done, it can be concluded for the development of Computer Maintenance And Repairing Information System Service Division Of Mediatouch Compushop is as follows:

a an SI PPK application can help operational of Mediatouch Compushop's Service Division in providing services to customers and reporting service so it can reduce the workload of workers.Aplikasi SI PPK

b can help reduce the possibility of mistakes made by human error in providing services to customers and in making service reports.

Based on the above conclusions, the suggestions to be made in order to be input and considerations for the maintenance of the system development can be done is as follows:

a. System Maintenance
b. Database backup and pruning should be done regularly to ensure the speed of query access to the database application and prevent situation that are not desirable.
c. System Development
    1. Interface can be made more attractive for the future so as to make this system more User Friendly.
    2. The data will be processed as check data log reports, equipment status data notebooks and others are expected to be dynamic, meaning that the data can be altered so expect more flexible system.
    3. There should a format for notebook serial number corresponding to each notebook series, to facilitate the identification and entry of goods.
    4. Development of the system can be done by expanding capacity and adding features such as:
        a. SI PPK Applications can be accessed SI KDP using the Internet to facilitate the repair process if done in the Branch Store
        b. Additional applications are available that can allow customers to directly check the condition of the service notebook via a computer terminal using RFID (such as ATM).

There are many other facilities that could be developed in this software. Developers can create new ideas to improve the quality of software that better meet the demands.

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