CUSTOMER ACCOUNT INFORMATION SYSTEM PDAM

(Case study at PDAM Tirta Rangga Jalancagak's Branch Earing Regency)

By:

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FOREWORD

1.1 Problem background

One each company have wish for can give service most better to consumer. Amongst those is PDAM as one firm that have task for can give fresh water accessibility to society and shall also can give tall service zoom to wend to positive customer satisfaction. Information technology (TI) constituting answer for PDAM what does want to give service satisfaction for customer. It is enabled because Information Technology can give various information that berkenaan with customer and also presto other services and accurate. All data and information each mutually integrated so will give komprehensif's ala information to management to make manajerial's decisions in accurate figure and making easy staffs executor performs its daily tasks. It obviously will give positive impact to consumer.

Base fact whatever available currently at PDAM Tirta Rangga Jalancagak's Branch stills there are some about problem in Account data management Customer where customer account printing PDAM Tirta Rangga Jalancagak's Branch stills to be done at home office so monthly account process printing customer becomes long time remember far distance among branch office with home office. Monthly account process printing customer is done at home office because of haven't marked sense monthly account processing application customer at branch office. A part subscription relationship is still do customer data registry and detail's data deeps water monthly account bind books manual that enables to happen data duplication and unstructured data with every consideration. Such too with accounts paying process monthly customer whatever available be computerized, a part cashier stills to have look for paying account data in account cover manually it makes the duration monthly account payment processes. detail's customer and data data monthly payment account that is made at subscriptions subjective part utilized by a part cashier to process monthly account payment. From keterhubungan data that is at subscription relationship part and data at sectioned cashier was required by application that gets client's basis that server performance fires an employee every a part can more maximal and more efficient.

Base background already being described above, therefore needs to be built ***"Account Data Processing information system PDAM'S Customer "*** one that take case study at corporate Drinking Water Region (PDAM) Tirta Rangga is Jalancagak's Branch Earing Regency.

1.2 **Problem identification**

By points on background upon, therefore in this research will identify problem how build account data processing Information System PDAM'S customer.

1.3 Intentions and To The Effect

This observational intention is done which is to build *Account Data Processing information system case study Customer at PDAM Tirta Rangga Jalancagak's Branch Earing Regency "*

There is aim even final task research this is:

a. Making easy pendataan's process PDAM Tirta Rangga's customer
b. Helping monthly account process printing customer

c. Helping accounts paying process customer

1.4 Problem Limitations

Base background, therefore research is drawn the line as follows which is:

1. Case study for system what do will build to do at PDAM Tirta Rangga Jalancagak's Branch Earing Regency.
2. On this application in a bind just customer already been registered as customer and accounts customer monthly account which its state be still active at PDAM Tirta Rangga Jalancagak's Branch Earing Regency.
3. Stated customer not active or available temporary foreclosure if paying liabilities nonpayment account up to 3 months in a row.
4. Data who can at o which is: Branch data, Territorial data, Merk's data, Gauge data, Faction data, Faction Rate data, Customer data, Responsible Position data, Officer data, User data, Account data, Detail's data Account
5. Process that is done: Process Branch Data Processing, Process Territorial Data Processing, Merk's Data Processing process, Gauge Data Processing process, Faction Data Processing process, Rate Data Processing process Faction, Customer Data Processing process, Responsible Position Data Processing process, Officer Data Processing process, User Data Processing process, Paying Account Data Processing process
6. Resulting information which is:
   a. Information that visually: Branch information, Territorial information, Merk's information, Gauge information, Faction information, Faction Rate information, Customer information, Information Responsible Position information Officer, User information, Account information, Detail's information Account
   b. Information that is printed: Customer Data reporting, Account Data reporting, Card conducts Customer, Monthly Paying account.
7. This information system building to utilize modelling most structure with *tools Flow's data diagram* (DFD) and data modeling utilizes *Entity Relationship is diagram* (ERD).
8. System who will build to get basis *client is server* . User who utilize this application is A Part Subjective Subscription and PDAM Tirta Rangga's Cashier Part
9. Software specification(*software*) one that is utilized deep build account data processing Information System PDAM'S customer which is:
   a. Supportive operating system is *Windows XP's Microsoft*
      1. Borland Delphi.7
      2. SQL'S Microsoft server as *System's database management* (DBMS).

1.5 Observational Methodologies

Observational methodology that is done in this final task is as follows:

1. **Data Collecting phase**

   Methodic data collecting that is utilized in this research which is:

   a. ***Studi is Literature***

      Constituting data collecting tech by gathers literature, journal, book and reading that corresponds to research title.

   b. ***Observation***

      Constituting data collecting tech by undertaking research and sighting directing to object about problem which is taken, in this case is corporate Drinking Water Region (PDAM) Tirta Rangga is Jalancagak's Branch Earing Regency.

   c. ***Interview***

      Constituting data collecting tech with arrange interview face to face with narasumber that bound up with about problem which is taken, in this case is Fire An Employee Drinking Water Region firm (PDAM) Tirta Rangga is Jalancagak's Branch Earing Regency.

2. **Software Makings phase**

Observational methodology in builds " *Account Data Processing information system Customer "* which is by use of method *waterfall* .

Following will be worded about system's development phase by use of method *waterfall.*

a. ***System Engineering***

Form a part of system the greatest in workmanship builds a software, which is started by establishes various requirement of all needful element system and allocates it into formation software.

b. ***Analysis***

Constituting menganalisis's phase needful things deep builds one software amongst those is functional requirement of one system.

c. ***Design***

Constituting phase design of software design actually with follow multi's process steps that gets focus on data structure, software architecture and representasi interface with intent software which will easy build apprehended by user(*User Friendly*).

d. ***Coding***

Constituting data translation phase or trouble-shooting already being designed into given programming languages.

e. ***Testing***

On this phase, one that is done is by undertaking system examination at a swoop to secure that system stipubting was accomplished. Besides, system examination also been done to anticipate its happening glosses over ones maybe extant of system already be built.

f. ***Maintenance***

Constituting phase where system already being built gets to experience change or function increase correspond to to see dammed hell first *user.*

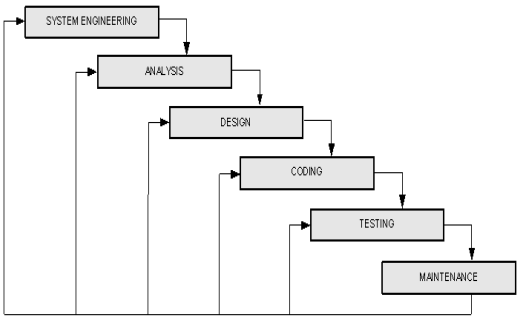


Image 1.1 *Waterfall's method*

[**Source** : Jogianto, H.M. *Analisis and Design Is Approaching Information System most structure,* Yogyakarta.

1.6 **Sistematika is Writing**

Sistematika is this writing is arranged for the purpose give common picture about research which is done. There is sistematika even writing it is as follows:

CHAPTER I FOREWARD

Describe about background, problem formulation, intention and to the effect, problem limitation, observational methodology that is utilized and sistematika is writing.

CHAPTER II. REVIEWS LIBRARY

Work through about firm scope various base concept and theory that get bearing with observational topic that is done and beneficent things.

CHAPTER III ANALISIS'S AND DESIGN OF SYSTEM

Work through about phase to identify software requirement, functional model makings and design of system which will be built by aim to make easy on coded phase.

CHAPTER IV. IMPLEMENTATION AND SYSTEM EXAMINATION

Work through about software and examination implementation to software already diimplementasikan.

CHAPTER V CONCLUSION AND TIPS

Work through about conclusion which is formulated from chapter study result previous chapter and suggest one constitutes follow-up of conclusion that as recommendation required just for succeeding system development.

3.1 **Analisis is System**

3.1.1 **Analisis is Problem**

1. Customer account process printing is still to be done at home office so causes delay forwarding customer account remember distance that adequately goes away among home office and branch office.
2. If fault happening in paying account printing, branch office that mengkonfirmasi shall rego to home office for paying account reprinting customer which beget PDAM Tirta Rangga's employee performance Jalancagak's Branch Earing Regency less optimal has to wait confirmation of home office.
3. Accounts paying process monthly customer at PDAM Tirta Rangga Jalancagak's Branch Earing Regency is still manual be kept at deep paying account covers so complicates cashiers in seeking customer account.

3.1.2 **Analisis Procedures that be walks**

a. Customer registration procedure

Customer registration which is service user candidate PDAM Tirta Rangga who propose application as customer PDAM Tirta Rangga. Implicit procedure can be seen hereunder:

Procedural flowing description New customer proffering in shaped flowmap tersaji in draws 3.1

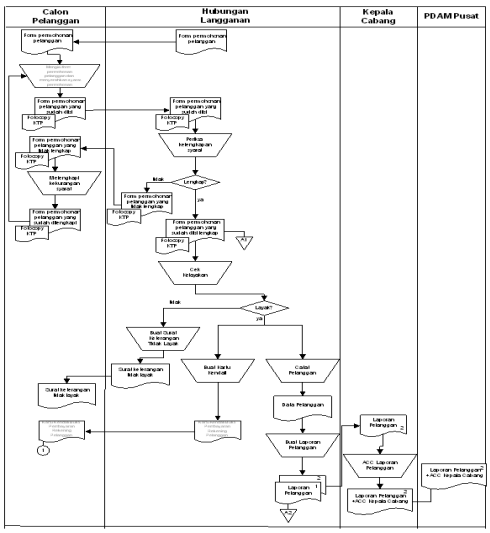


Image 3.1 *flowmap* customer registration

b. Paying Account Makings procedure

Paying Account makings which is paying Account Makings Process that present walking at PDAM Tirta Rangga Jalancagak's branch Earing Regency. Makingses flowing description tersaji's customer account in draws 3.2

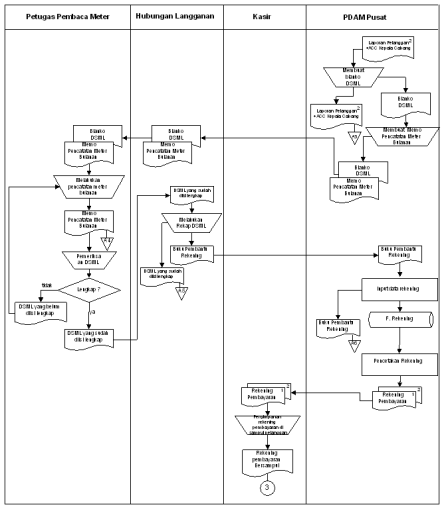


Image 3.2 *Flowmap* paying account makings

c . Accounts paying procedure customer

Customer Account payment which is account payment process customer every month that present walking at PDAM Tirta Rangga Jalancagak's branch Earing Regency. Paying flowing description tersaji's customer account in draws 3.3

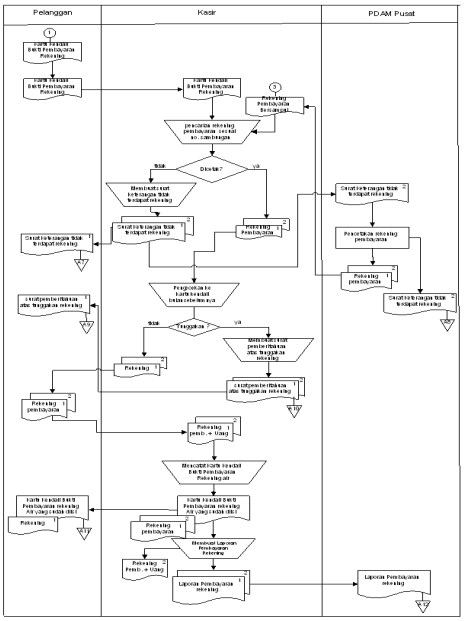


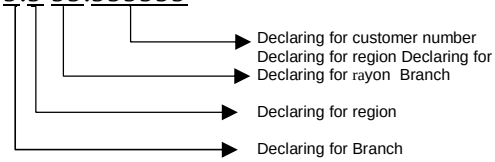
Image 3.3 *flowmap* paying account payment

3.1.3 **Analisis is Coded**

There is coded even aught on customer account application PDAM Tirta Rangga Jalancagak's Branch Earing Regency

1. Thread number coded

   9.9 99.999999

   Example: 8. 101. 008789
   Information:
   8 : Declaring for Branch
   1 : Declaring for region
   01 : Declaring for rayon
   008789 : Declaring for customer number

2. Branch coded

   Branch data coded this bases total branch data that is at firm .

   9

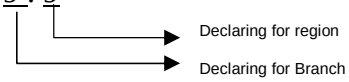
   

   Example: 8
   Information:
   8 : Declaring for branch

3. Territorial coded

   This territorial coded bases total territorial data that is at every branch PDAM Tirta Rangga .

   9 . 9

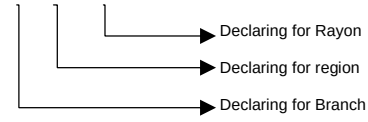
   

   Example: 8. 1
   Information:
   8 : Declaring for branch
   1 : Declaring for region

4. Rayon coded

   This rayon coded bases total rayon data that is at every branch PDAM Tirta Rangga .

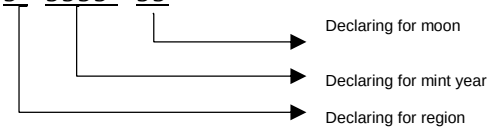
   9 . 9 99

   Example: 8. 101
   Information:
   8 : Declaring for Branch
   1 : Declaring for Region
   01 : Declaring for Rayon

5. Number coded Prints Account

   9 - 9999 - 99

   Example: I. - 2009 06
   Information:
   I : Declaring for region
   2009 : Declaring for mint year
   06 : Declaring for mint moon

3.1.4 **Analisis is Data Basis**

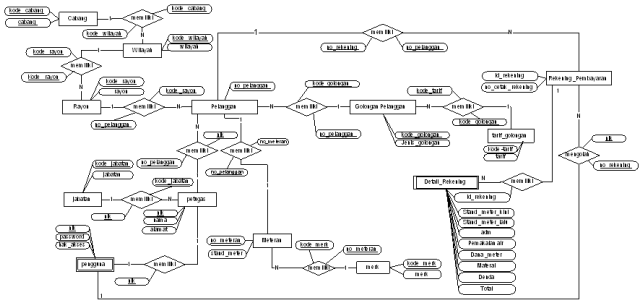


Image 3.4 *ERD* PDAM Tirta Rangga is Jalancagak Kab's branch. Earing

Data dictionary of ERD'S image customer account data processing PDAM upon is as follows:

1. User data :{ nik, password, hak_akses}
2. Branch : { kode_cabang , branch}
3. Region : { kode_wilayah , region}
4. Rayon : { kode_rayon , rayon}
5. Merk : { kode_merk , merk}
6. Gauge : { kode_meteran , gauge}
7. golongan_pelanggan : { kode_golongan , faction}
8. Tarif_golongan: { id_tarif, 0 – 10m3, 11 – 20m3, 21 – 30m3, >30m3}
9. Customer : { no_pelanggan , , no_sambungan, name, address, RT, RW, No_Telp.}
10. Responsible position : { kode_jabatan , responsible position}
11. Officer : {nik, name, address, No_Telp}
12. Rekening_Pembayaran: { id_cetak , no_cetak_rekening}

13. Detail_Rekening : {id_detail,
pemakaian_air,
stand_meter_kini,
stand_meter_lalu,
dana_meter, adm, materai,
fine, total}

3.1.5 **Analisis is Functional requirement**

3.1.5.1 **Context diagram(** ***Context is diagram*** **)**

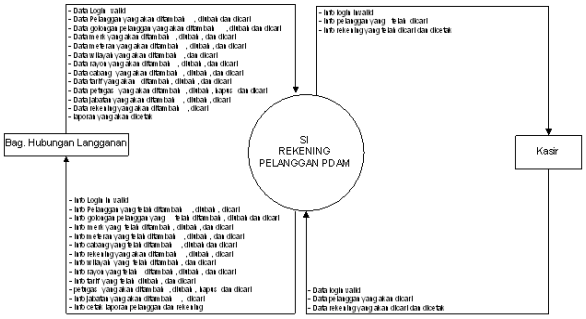


Image 3.5 ERD

3.1.5.2 ***Flow's data diagram*** **(DFD)**

3.1.5.2.1 ***DFD Levelled***

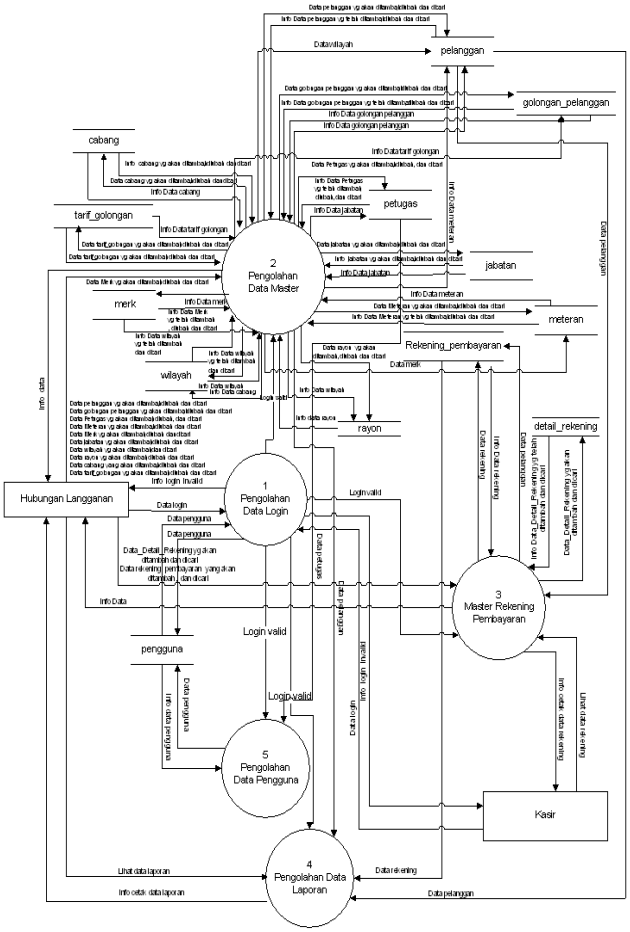


Image 3.6 DFD is Level 1

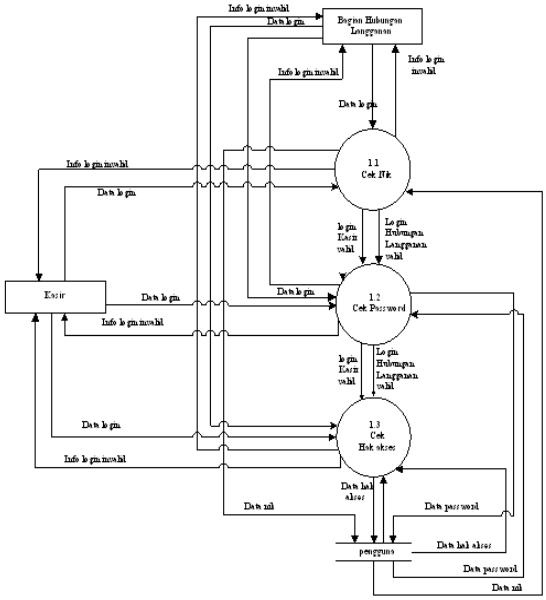


Image 3.6 DFD is Level 2 1Login's processes

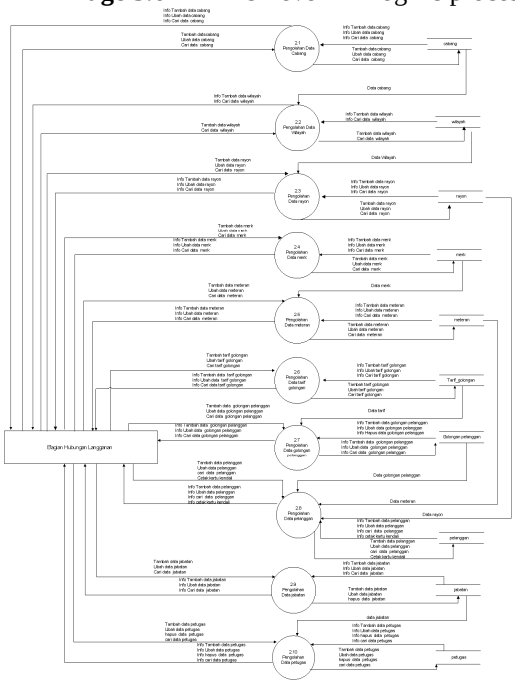


Image 3.7 DFD is Level 2 process 2 Master's Datas

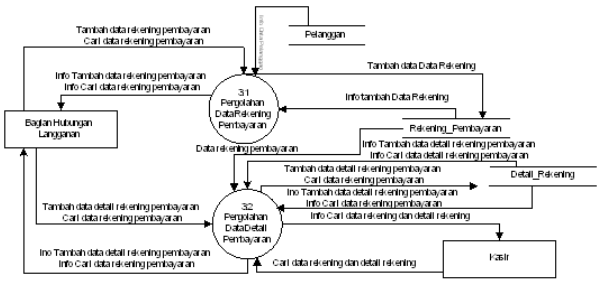


Image 3.8 DFD is Level 2 process 3 Master's Data Processings Accounts

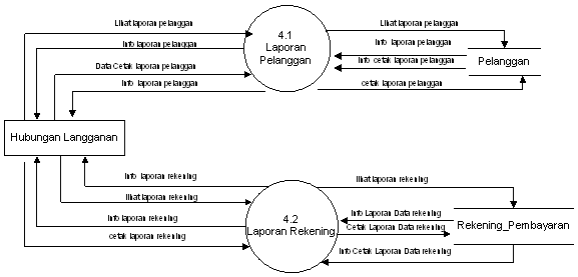


Image 3.9 DFD is Level 2 process 4 Write-up Data Processings

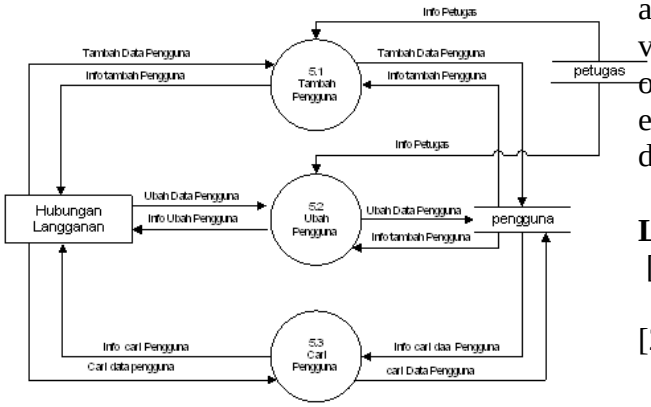


Image 3.10 Write-up data processing

3.2.1. 1 Relationship Scheme

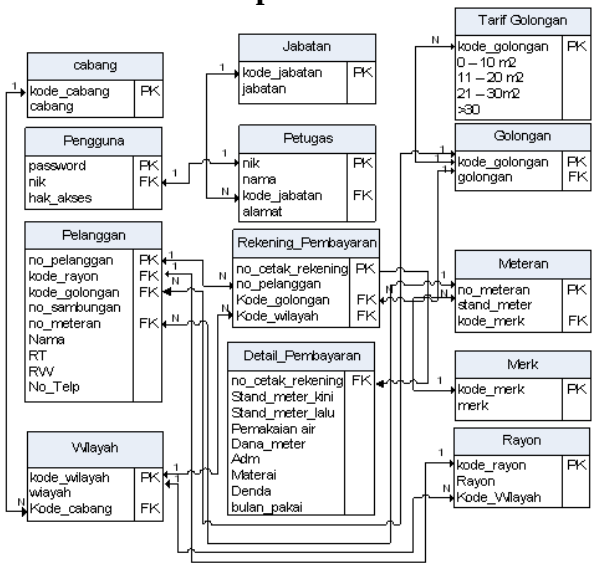


Image 3.11 Relationship scheme

CONCLUSION AND TIPS

a. Conclusion

a. Customer Account information system PDAM can help to water down pendataan PDAM Tirta Rangga's customer.
b. Customer Account information system PDAM can help monthly account process printing customer at PDAM Tirta Rangga Earing Regency.
c. Customer Account information system PDAM this was assessed gets to help account payment process customer.

b. Tips

Base conclusion upon, therefore tips which is done which is, done a data processing Information System development customers paying account, so its existence can more *user friendly* , arranged by development to procedure and verification equipment assesses inputan or option on programs that is built as to establish preserve which fledged to asset data.

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