Abstract: Development in the information technology field, especially information system, has brought ease and precision in the world of work. However, currently PT. Asuransi Jiwa Generali Indonesia in receiving the member data is still using Ms. Excel for processing data and email as a method of delivery especially insurance group team. For constraints that occur when there are deficiencies in the delivery of such participant data, errors in the email name, or Ms. Excel file is not sent properly. With making a delivery information system, I am as a researcher wished the member’s data can be received well and fast, and ease the company in managing membership data. This application is designed by using Java and processed by using the MySQL database.

Keywords: Asuransi Jiwa Generali Indonesia, Group Business, Data delivery system

I. INTRODUCTION

Group insurance is insurance which intended for a group of people who are members of a company or institution. And the company has been bound by a contract with the insurance with the agreed period. In that period, the insurance company must provide coverage for unexpected events from participants such as death, injury or illness, can be managed through the Insurance Group. Every company or client has an insurance sales team to help the insurance participant data.

And in that period the Sales can send an email to the client's latest customer service data such as adding and subtracting participants. The current condition is in sending changes to participant data, Sales send participant data in the form of Excel data via email to Customer Service, after the Customer Service team receives the data and then
sends it back to the data change team or Policy Owner Service admin for processing. For this condition the sales team does not get information on the extent to which the data has been sent. In addition to sending emails sometimes there are errors in the purpose of sending data.

A. **Problem of Analysis**

   Based on the problems that broken down in the background, it can be concluded the problem:

   a) How to build an information system to send group business insurance data Java Desktop based?
   b) How can the sales team knows the status of changes in participant data that has been sent?
   c) How to design and build a system that can facilitate the processing and searching of employee data?

II. **RESEARCH METHODOLOGY**

A. **Waterfall Model**

   Waterfall model, sometimes called the classical life cycle, shows a systematic, sequential approach to software development that starts with customers specifying desired requirements and takes place through planning, modeling, construction, and deployment, culminating in ongoing support from software that has been finished. (Pressman, 2010, P.39).

   ![Waterfall Model](image)

   Picture 1. *Waterfall Model*

   The phases of the Waterfall Model reflect the points of development activities:

   a) Communication (Requirements gathering)
      Services that provided by the system, system limits, and any objectives are set after consulting with system users. All things are defined in detail and made as specifications of the system.
   b) Planning (Estimating, scheduling, tracking)
      At this phase, planning is carried out. Planning for build a system involves identifying and explaining of system abstraction and its relationship, estimated processing time.
   c) Modelling (analysis design)
      At this phase, designing system that want to make.
   d) Construction (Coding and system test)
System design starts at this phase into a programming or program unit. Then testing the unit that carried out, involving verification to ascertain whether each unit meets the system specifications.

e) Deployment (Delivery, support, feedback)

Implementing system and testing. Maintenance involves the correction of errors not found in the previous phase, improving the implementation of the system unit and improving the services provided by the system as new necessary are found. As well as providing assistance to users who experience problems.

B. Java

Java was developed by the Sun Microsystem company. Java by definition from Sun Microsystem is the name for a set of technologies for creating and running software on standalone computers or in network environments. Java 2 is the second generation of java platform. (Rosa A.S dan M.Shalahuddin, 2014:103, Rekaya Perangkat Lunak. Jakarta: PT Elex Media Komputindo)

Java is an object-oriented language for the development of standalone applications, internet-based applications, applications for intelligent devices that can communicate via the internet or communication networks. Through java technology, it is possible for home audio stereo devices to be connected to a computer network. Java is no longer just making applets that command web pages, but java has become the language for developing large network-based enterprise scale applications. (Bambang Haryanto, 2011:2,Esensi-esensi Bahasa Pemrograman Java. Yogyakarta: Andi).

From the above definitions, it can be concluded that Java is an object-oriented programming language that can be used to create and run software on computers and various platforms.

C. Database

According to Priyadi (2014:2), The database is a set of facts in the form of table representation that are interconnected and stored in digital storage media. In relational database terminology, known such as:

a) Table
The table states two dimensional form which represent a similar group of data.

b) Field
Columns or fields are sequential data which containing information vertically.

c) Record
Rows or records are data which arranged horizontally.
III. RESULTS AND DISCUSSION

A. Proposed System Development

From the results of the analysis of the problems described before, I try to propose the design and development of information systems based on the diagrams that I present in the form of use case diagrams, activity diagrams, class diagrams of employee information systems.

![Use Case Diagram](image)

**Picture 2. Use Case Diagram**

1) Activity diagram

1. Making Submission Activity Diagram

![Activity Diagram Making Submission](image)

**Picture 3. Activity Diagram Making Submission**
Below are explanation of the activity diagram to make a submission:

a) The Sales selects additional and terminate menus and the system will display the menu from additional and terminate.

b) The process continues with sales filling in the biodata field of the insurance participant to be submitted. If the participant's biodata has complete, the participant's data will be sent if the system has not refused the delivery and the salesman must complete it again.

2. Activity Diagram Receive and Submission process

![Activity Diagram Receive and Submission process](image)

Picture 4. Activity Diagram Receive and Submission process

Below is an explanation of the Activity Diagram Receiving and the Submission process

a) Admin select the assignment menu and the system will display a list of participants that have been sent by the sales.

b) The next process is the admin selects a list of participants that will be processed with status; success and disapproval.

c) The system will display the message that the participant’s submission has successfully processed.
3. **Activity Diagram Participant Status Check**

![Image of Activity Diagram Participant Status Check](image)

**Picture 5. Activity Diagram Participant Status Check**

Below is an explanation of activity diagram of Participant Status Check

a) The actor chooses the status menu and the system will display all lists of insurance participant transactions.

b) Then the actor can see all transactions that are being processed, rejected, and succeeded. Completed with the transaction date.

4. **Activity Diagram Report check**

![Image of Activity Diagram Report check](image)

**Picture 6. Activity Diagram Report check**

Below is an explanation Activity Diagram Report check

a) The actor selects the report menu and the system will display the report menu

b) The process is continued to the stage of filling in the check report category such as the search report based on no. batch, transaction type, and transaction date

c) Then the system will display the report and the actor can save the report on the computer.
2) Class diagram

![Class Diagram]

Picture 7. Class Diagram

B. Application

Below are some of the results of the implementation of the running application:

![Login iclick page]

Picture 8. Login iclick page
Picture 9. User Admin Page

Picture 10. User Sales Main Page

Gambar 11. Additional & Terminate Menu Page
Gambar 12. Assignment Menu Page

Gambar 13. Status Menu Page

Picture 14. Report Menu Page
C. Testing

In testing the application, delivery participant data information system, I use the Black Box method which this method is carried out only by observing the results of execution through test data and functional checking of the software.

Table 1. Table of Testing

<table>
<thead>
<tr>
<th>No</th>
<th>Testing Scenario</th>
<th>Expected results</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Add insurance participant data (not null), then click process</td>
<td>System has successful for inputting insurance data and displaying the message &quot;Process policy member 10000895BNI, DENI succeeded&quot;</td>
<td>VALID</td>
</tr>
</tbody>
</table>

Test Case:

![Test Case Image]

Picture 15. Download Report Display
2. **Change the participant’s status (nothing is empty), then click update**

   **Test Case:**
   
   ![Image of test case 1](image1.png)

   **System has successful changes the status of participants and displays the message “Change status 20182711AD003 Name DENI successful status”**

   **Test result:** VALID

3. **Shows the status of participants who have previously been processed in the status menu**

   **Test Case:**
   
   ![Image of test case 2](image2.png)

   **The system displays the status of participants who have previously been processed in the assignment menu**

   **Test result:** VALID

4. **The system can display a report based on no. batch, then click the Document process**

   **Test Case:**
   
   ![Image of test case 3](image3.png)

   **The system will display a transaction report based on no. requested batch**

   **Test result:** VALID

5. **The system can display reports based on the type of transaction, then click process by type**

   **Test Case:**
   
   ![Image of test case 4](image4.png)

   **The system will display a transaction report based on the type of transaction that requested**

   **Test result:** VALID
Test Case:
The system can display the report based on the date of the transaction, then click the process by date

Test result:
The system can display the report based on the date of the transaction, then click the process by date

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

Based on the description and discussion in the previous chapters, the following conclusions can be drawn:

a) By using this participant's data transmission information system, the process of sending data is faster because the sales team no need to send email to customer service that takes too long time.

b) The Sales Team can know the delivery status summary of the insurance participant data.

c) And the Sales Team can also find out the report for Key Performance Indicators (KPI).

d) Facilitate the admin and sales in the daily process because there is a report available every transaction that has been done.
B. Recommendations

To complete the conclusions above, there are several things that can be suggested to improve the development of this application as follows:

a) Development of transaction claim status and premium payment for insurance participants.
b) Development of outpatient care or inpatient registration at Asuransi Jiwa Generali partner providers.
c) Development of features for consultation with specialist doctors.

REFERENCES