Aqua Bill Store Mineral Water Sales Application Program

B. Ayshwarya, Phong Thanh Nguyen, Fahmi Al Bazar, Nur Aminudin, K. Shankar, Wahidah Hashim, Larisa N. Gorina, Andino Maseleno

Abstract: *Technology development is faster. Technology is also increasing to be used by large and small companies. But it's different from the Aqua Bill Store located at Pringsewu Regency. This store has not used the sales application program, so that they experience obstacle in making sales report and need an application to sell mineral water. This research aimed to design an application for the mineral water sales at Aqua Bill Store. System is designed using Visual Basic 6.0 programming language. The result of this study was this application system that helps employees in the process of making sales reports and data storage besides that it also eases for business owners to check items so they can avoid depletion of goods stock.*

Index Terms: *application, sales, mineral water.*

I. INTRODUCTION

A. Background

The development of information technology is able to change human perception of information systems role, especially companies as part of productivity [1-4]. Information Technology as a key for company to gain competitive advantage [5-8]. Computer is reliable processing data aids. Not only speed but accuracy for processing big data. Computer has become main technology in data processing and information presentation [9-12].

Rapid development of technology and informatics science encourage society both groups and individuals, agencies both government and private to utilize technology and informatics science [13-16]. Database Management System (DBMS) is a system that provides solutions and convenience in processing data and maintenance to the data secret [17-20]. Computer is a device needed for data processing presentation, so that the processed data can provide an information needed by the leader or a company [21-24].

Indonesian National Standard Agency (BSNI) namely the Government Institution with the duties setting goals, making procedure for publication, reproduction (reproduction), distribution, copyright and licensing of SNI publications and derivative products, there are several quality requirements of bottled mineral water, which is attached in attachment 2, regarding the requirements of bottled mineral water.

Aqua Bill is mineral water distributor business located in Pringsewu Lampung and has five mineral water trademarks. In daily data processing it uses Microsoft excel for data transactions and sales. But it still has problems from various sides. From transaction side, errors often occur in sales data recording especially in product purchase and product stock quantity because there are many files in Microsoft Excel so when making recapitulation of transaction data to calculate total sales issued every day takes a long time and also difficult to calculate the profit earned from the sales of mineral water in a day

From the sales side, it still uses sales record note, so mistakes are often occurred in writing and calculation which can give loss. In terms of making reports such as sales reports, purchase reports, stock item reports also takes long enough time, because we have to calculate the data one by one and often occurs delay in giving reports to leader. Based on the above problems, the author tries to conduct a research, to overcome these problems it should be designed mineral water sales applications with the title "aqua bill store mineral water sales application program using visual basic 6.0"

B. Problem Formulation

Based on above background it can be formulated: How to design mineral water sales application in Aqua Bill Store.

C. Objectives

The research conducted by author had objectives among others :
1) To analyze problem occurred for good stock and mineral water sale in Aqua Bill Store.
2) To design goods stock data processing, mineral water sales using visual basic programming language.

D. Benefit

The benefit obtained from this goods transaction and

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B. **Ayshwarya**, Department of Computer Science, Kristu Jayanti College, Bangalore-560043, India.

Phong Thanh Nguyen, Department of Project Management, Ho Chi Minh City Open University (HCMCOU), Vietnam.

Fahmi Al Bazar, Department of Information Systems, STMIK Pringsewu, Lampung, Indonesia.

Nur Aminudin, Universitas Aisyah, Pringsewu, Lampung, Indonesia.

K. Shankar, School of Computing, Kalasalingam Academy of Research and Education, Krishnankoil, India.

Wahidah Hashim, Institute of Informatics and Computing Energy, Universiti Tenaga Nasional, Malaysia.

Larisa N. Gorina, Togliatti State University, Russia

Andino Maseleno, Institute of Informatics and Computing Energy, Universiti Tenaga Nasional, Malaysia. E-mail: andimaseleno@gmail.com.

sales data processing application among others :
1. Application is designed and can be used to check goods stock
2. Designed application can be used to view the transaction data in a day

II. THEORETICAL BASE

A. Application
Software application is a subclass of computer software that utilizes direct computer ability to conduct an expected task by user [25-28]. Application is useful component as media to process data or other activities like creating or processing document and file. Application is a software that is charge as front end in system used to proccess various data so to be useful information for its user and also for related system [29-33].

From the description above it can be concluded that the application is a subclass of computer software that utilizes computer ability directly to do a task that is wanted by user, a software which serves as a front end on a system used to manage various kinds of data so that it becomes useful information for user and also system related [34-38].

B. Sales
Sales is an activity that intended to find buyers, influence, and give instructions so buyers can adjust their needs with the production offered as well entered into an agreement regarding the beneficial price to both parties.

Sales is a transaction income, namely goods or services sent to customer for a cash reward obligation to pay.

Sales is a social process within individuals and groups get what they need and want by creating, offering and freely is valuable product with other parties.

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C. Mineral Water
Mineral is natural compound formed through geological processes. Mineral term including not only chemical composition ingredients but also mineral structures. Minerals included in the composition of pure element and salt with simple to very complex silicates with thousands of known forms. To make it can be classified as true mineral, the compound must be solid and has a crystal structure. This compound must be formed naturally and has certain chemical composition. The previous definition does not include such minerals compound derived from organic derivatives organic.

Mineral is an element or compound in normal condition has crystal element and formed from geological process result.

Mineral water (also called excavated water) is water that contains mineral or other dissolved ingredients that can change the taste.

III. RESEARCH METHOD

A. Research Framework
To assist the preparation of this research, it is necessary to arrange the framework with clear steps. This framework contains steps that will be carried out in progress issues to be discussed. As for the framework
the research work used was as follows :

1. Problem Identification
    In this step author identify the problem occured in Aqua Bill Store Pringsweu and find solution needed in solving occured problem.
2. Literature Study
    In this step, it was done theoretical base browsing from some books and from internet related to design, application, data processing, production, sales, to complete treasury of concept and theory, so it has base and appropriate and good knowledge.
3. Data Collection
    In this step, it was done data collection by using interview method to obtain data and information related to data processing and data sales in Aqual Bill store.
4. System Development
    In this step author made application using waterfall method because the application of this method is more systematic and more effective in creating information system. .
5. System Test
    In this step author made application by using Visual Basic programming language.
6. Report Making
    In this step, author made journal entitled aqua bill store mineral water sales application program using viusal basic. Writting journal is useful to clear up the design made by learning existing theories and designing data processing program of sales of goods at Aqua Bill Store Pringsewu.

B. System Development Method
Author used waterfall model in system development step because the application was easy and systematic. As for waterfall model used.
Need analysis – System design – Implementation and Unit Test – System Test – Maintenance

C. Context Diagram
Consumer (product info, price info, trademark info, product type info), (name data, address data, product type data, product mark) → Aqua Bill Store Sales Application (sales report, purchase report, goods stock report) -→ owner. Employee (login info, employee name info, password info, user info, address info) (login data, employee name data, password data, user data, address data)

D. Flow Data Diagram

Owner – Login invalid – 1 login – login valid - mineral water data – input data – 2 mineral water data processing – invoice data process – input data – 3 invoice data processing – 4 data check – report – consumer – login valid.

E. ERD Design

Modelling tool is used to illustrate the relation between entity occurred that contains entity components and relationship that each of them is completed by attributes representing all facts from real world.

Product (code, name, type, price, production date, total, ex date) → (processing) → (user) → (type_user) (id_user) (password) (username) –(possesing) – consumer (id, name, address, telephone number, gender, [product_id]).

IV. IMPLEMENTATION

A. Main Menu Display

Figure 1 shows main menu display.

Figure 1. Main Menu Display

B. Goods Data Input Menu Display

Figure 2 shows goods data input menu display.
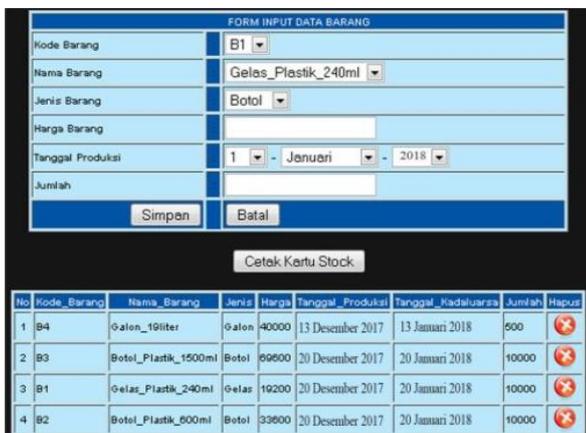
Figure 2. Goods Data Input Menu Display

C. Customer Data Display

Figure 3 shows customer data view.

Figure 3. Customer Data View

D. Transaction Menu Display

Figure 4 shows transaction menu display.

Figure 4. Transaction Menu Display

E. Monthly sales report page display

Figure 5 shows monthly sales report page display.

Figure 5. Monthly sales report page display

F. Payment Receipt Display

Figure 6 shows monthly sales report page display.

Figure 6. Sales Receipt

V. CONCLUSION

Designed application can help Aqua Bill store in checking goods and accelerate in making monthly report. The thing expected in the future is this application can be further developed with larger and wider data processing, so this application really can be used as data producer and more accurate and fast information.

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