

THE COMBINATION OF TRANSACTION PROCESS AND DESIGN OF ACCOUNTING INFORMATION SYSTEM THROUGH ENTERPRISE RESOURCE PLANNING (ERP)

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ABSTRACT

This research aims to make the system design of accounting information in a single effort by the method of Enterprise Resource Planning (ERP). ERP is an integrated information system technology and used in improving organizational performance because the role to integrate business processes that deal with aspects of the operations, production and distribution in any organization. Implementation of the ERP would help in planning and useful functions for designing implementations as well as reduce the negative impact. Each organization has a uniqueness in ERP implementations. For it gradually need to evaluated the needs and capabilities of organizations including human resources and capabilities of the organization. With this method, organizations can access the database on the add, modify or delete data quickly and easily. The system was designed to provide ease, can improve the efficiency and effectiveness of performance time, precise and accurate in receipt of information, addressing the weaknesses that exist in business. Users can also access the database and modify or delete data. In the implementation of an ERP system there are a few very important thing which becomes the key to successful implementation of ERP systems and should be improved with the company or developer of ERP systems, namely the commitment of the management and training of the use of ERP systems. Management commitment required to ERP systems have been developed and applied in a company that used the most thoroughly, so that the functions of an ERP system can run correctly. The training factor becomes important because users get information about how to use all the functions of the existing ERP system to improve and strengthen the effectiveness of the resources that exist in the company.

Keywords: Accounting Information System, Transaction Process, Enterprise Resource Planning

Introduction

Background

Today's business world have increasingly competitive and uncertain business experienced pressure that is causing the market, technology, social pressures, the rigors of competition in the business world, in short the life cycle of the goods and services offered, as well as the increasing demands of consumer tastes toward products and services offered. The existence of this shift led to the development of information technology in various fields. This development gave rise to the existence of a need for information that is increasingly quick, accurate, transparent, and easily accessible. In practice, there are still many many organizations that use old data that was not up to date. If left unchecked, this surely will mislead the users of such information. Computer-based information system is a set of hardware and software that is designed to mentranformasikan the data into useful information. Later on this research will be developed using the approach to Enterprise Resource Planning (ERP).

ERP is an integrated information system technology and used in improving the performance of an organization. This technology plays a role to integrate business processes that deal with aspects of the operation, production as well as distribution in each organization. The concept of ERP is a system that integrates processes each line in management that have high accountability (Yasin, 2013). This is one of the main prerequisites for becoming a business. As for the benefits of ERP is to integrate the business overall, flexible in organization and enhance better by using the latest technology. On its own ERP system from conventional changes towards the use of information technology that is more integrated information flow more smoothly. To conduct a successful ERP implementation, ERP is actually aimed at bringing together all divisions and all functions in the organization that monitored through computerized systems and served with a system that minimizes the cost of computerized processes with efficiency (Maharsi, 2005). Although it will be helpful in planning and function that can predict anything, surely has a requirement to arrive at the ideal point. In the course of implementation there are negative or positive effects for users and companies, so that be done is to design implementation as well as to reduce the negative effects. But to keep in mind is that each such organization has its uniqueness in the implementation of ERP. It was very good to do so by gradually while evaluating the needs and capabilities of the organization including its human resource capabilities by looking at whether the organization is able to implement it.

Based on the background which has been described previously, then the problem can be formulated in this research on how the combination of transaction processing and designing accounting systems using Enterprise Resource Planning (ERP). The purpose and benefits of the research goals are expected in this research is the creation of model/prototype and Enterprise Resource Planning (ERP) that are able to integrate production processes, logistics, distribution, stock inventory, invoicing, financial and akuntansinya. While the benefits for Researchers is to add insight and more knowledge about the design of accounting information system. While the benefit for the company is as input for the organiasasi that by using the methods of Enterprise Resource Planning (ERP) can improve the efficiency and effectiveness of the Organization's performance and can be

used as a strategy to help achieve the vision and mission of the company and improve the quality of the organization. With the ERP system is expected to integrate the majority of existing business process, process the entire transaction the company's organization, as well as database data storage.

LITERATURE REVIEW

Basic Concepts Of Accounting Information Systems

Information systems is a system within an organization that meet the needs of daily transaction processing, supporting the operation, activities and strategies of the managerial nature of an organization and provides a certain outside parties with the necessary reports. Accounting information system is a system that meproses of data and transactions to generate useful information for planning, controlling and operating the business (Romney,2015).

The system development process is a collection of activities, methods, practice – presentation of best practices, automated tools and used by stakeholders to develop and maintain systems and software information continuously. As for the stages in the design of the system consists of: (1)The stage of the investigation, that is to identify the problem clearly, so that the obtained assuming the correct assumption – to be able to solve problems; (2) Phase analysis of the issue, which consists of two parts, namely: a) the determination of the list of business needs b) pinpointing results increase in system 3. The design phase, consisting of: 1) Creation interface 2) manufacture of form 3) Making code 4) Making project 4. Stage of implementation, which is the process of the implementation of the program on corporations, generally still takes a period of transition from the old system to the new system. 5. Stage of the evaluation, i.e. the user can memberikakan feedback to developers as an evaluation system.

Small medium Enterprise

This development of small and medium enterprises (SMEs) always gets serious attention from both the Government and the wider community, mainly because of the many business units group accounted for job opportunities and become an important source for earn income. SMES are found in all sectors of the economy, including the manufacturing industry and trade each year continues to grow. Many small business administrators who do not get used to make complete notes about activities going on in his efforts. Transaction data, finances, inventory, sales, the consumer is very limited. Not infrequently the order also be forgotten because it was not recorded properly . The production process being hampered due to not only note that the inventory of materials is up because of the absence of records of warehouse or production. Stewards rely solely on memory with a little note to support policies that will take. In modern management principles, notes about all the business activities is absolutely necessary. Policy effort can only be taken with the right if there is enough data to support.

This data comes from research results (evaluation) over the course of a business. If the event log is not available, then attempt the evaluation cannot be carried out properly. The recording of all business activities that are indispensable for the smooth running of business and management is the administration. That task includes recording of data transactions, finance, production, and inventory that affects the smooth running of the business. In principle all the things and happenings that are important for the management of the business must be noted (Barletta, 2004). Registration forms and models of all kinds, and that needs to be required is entry must be neat, systematic, orderly and as simple as possible so that it is easily inspected and controlled. To find out things that should be noted, need to be traced to all business activities and then dikelompok-kelompokkan according to type of activity.

In addition, the traceability also other things that affect the operation of the business. Furthermore the data can be done with supervision towards the operations of the company and can be taken decisions of the management of a rational and convincing. Depending on the type of data recorded and business activities as well as what information is needed so that companies can operate efficiently. The recording process can be started with making a list of inventory (Mulyadi, 2010). Then the daily events in the business are recorded in a diary, which was later made good overview.

Enterprise Resource Planning (ERP)

ERP systems typically handle the manufacturing processes, logistics, distribution, inventory and accounting. This system helps control the business activities such as sales, delivery, production, inventory management, and quality management and human resources. It's not just the big companies who can use ERP, SMES can now use the ERP-based systems (Romney, 2015). Small and medium businesses often have unique requirements for ERP Software that demands the ability complete system but can be used with ease. The need is great technology will be unavoidable. This is required in the process of data collection, data analysis and forecast performance based on existing data based on IT. With the use of ERP it will be able to provide a complete and detailed reports (sales, purchases, inventory), so there is no manual report which resulted in a report is not valid and actual, easy to operate, sleek in the preparation of data, easily in pengaksesannya because of all of the data and the report can be accessed anywhere, as well as providing facilities interactive market via the Internet (marketplace). The program to be created, then data about sales, system inventory, debt, debts, as well as cash and banks should be retrieved or traced.

In companies that implement ERP has happened changes the paradigm of conventional system a versatile insulated towards the use of information technology that is more integrated information flow more smoothly at the departmental or organizational level. In General an ERP system provide impact positif to the user's performance as the number of jobs and the quality of work in accordance with specified standards, knowledge about the work and things, whatever be his responsibility, the company being creative to create solutions to problems that arise in the work, as well as the unconscious in completing his work.

Advantages of ERP implementation, among others: (1) the existence of integration of financial data. In the ERP, all data is stored centrally, so that company executives gain the data up to date and can arrange finance company with better; (2) the existence of a standardization Process operations. ERP system implement standards, where all divisions will use the system in the same way. In

doing so, the company's operations will run more efficiently and effectively; (3) the existence of the standardization of data and information. Centralized database will form a standardization of data, so that the information can be retrieved easily and flexibly to all divisions that exist within the company.

RESEARCH METHODS

Based on the scope of the research will be examined, then this type of research is a field research to investigate whether or not there are evaluative basis about the impact of the implementation of the ERP performance against businessmen in Ketapang Semarang. The type of data source over the research is primary data in the form field data obtained from interviews, surveys and observations directly to the data source. The technique of data collection is done is to use the interview in an open and profound to the businessmen who felt the experience before and after using ERP.

ANALYSIS AND DISCUSSION

The results of the identification of a problem, can be drawn the conclusion that the development of the trading system requires the calculation of the net profit of the sale of the new base by using information technology (computers). Information on the inputs, the process, and the results produced in the venture are as follows: input in detail, the data required as input to create a computerized system in the form of the design trade.

Table 1. Data Input

No.	Form	Data Input
1.	Major	Masuk atau keluar program
2.	Customer	Customer Code; The Name of Customer; The Address Of Customer; Phone number
3.	Goods	Item code; Name of goods; Type of goods; Type of goods purchase price; Sale price
4.	Income	Nota Number; Date; Customer Code; Selling Price; The Purchase Price
5.	Expenditure	Reference Notes; Date; Type Of Expenditure; Total cost
6.	Loss-Profit	Income; Purchase Price; Fees; Profit (Loss)

b. Process

On the next step is the creation of a database and do the design of the prototype system. The structure of the database used is as follows:

a. Data Assets

Table 2. Data Assets

No.	Field Name
1.	Number
2.	The name of assets
3.	The value of assets
4.	Accumulated Depreciation
5.	Account number

b. Data Items

Table 3. Data Items

No.	Field Name
1.	Item Code
2.	Name Of Goods
3.	Type Of Goods
4.	Stock
5.	Packaging
6.	Price
7.	Profit
8.	Date

c. Data load

Table 4. Data Loads

No.	Field Name
1.	Number
2.	Salary
3.	Expense
4.	Date
5.	Account number

d. Data Customer

Table 5. Data Customer

No.	Field Name
1.	Customer Code
2.	The name of Customer
3.	Address
4.	City
5.	Telephone

e. Data Cash

Table 6. Data Cash

No.	Field Name
1.	ID
2.	Account Name
3.	Account Number
4.	Cash

f. Data Supplier

Table 7. Data Supplier

No.	Field Name
1.	ID
2.	Supplier Name
3.	Address
4.	Telephone

g. Data Purchases

Table 8. Data Purchases

No.	Field Name
1.	Date
2.	Transaction Code
3.	Item Code
4.	Amount
5.	Price
6.	Payment
7.	Supplier
8.	Item

h. Data Sales

Table 9. Data Sales

No.	Field Name
1.	ID Goods
2.	Name of Goods
3.	Item
4.	Price

i. Data Stock

Table 10. Data Stock

No.	Field Name
1.	Date
2.	Item Code
3.	Price
4.	Sign in
5.	Sign out
6.	Status

j. Data Sales Return

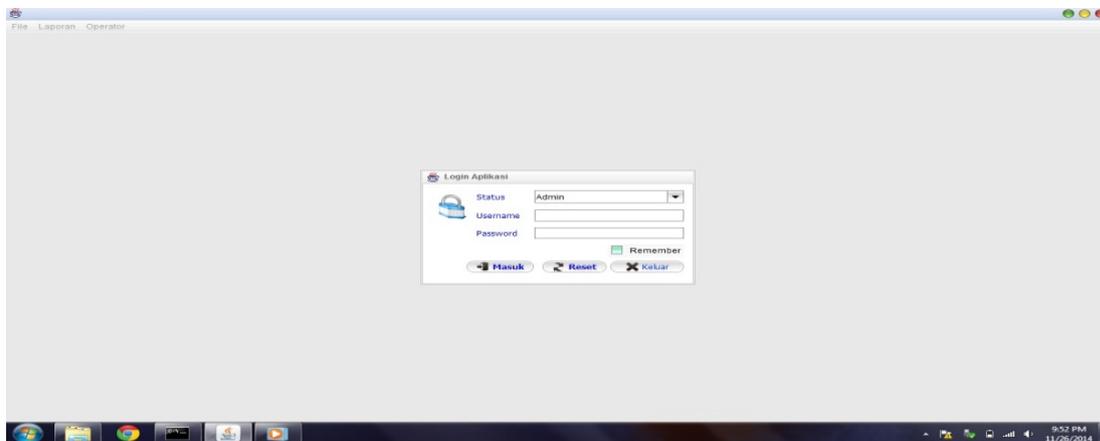
Table 11. Sales Return

No.	Field Name
1.	Invoice Number
2.	Customer
3.	Address
4.	Telephone
5.	Sales
6.	Item Code
7.	Name
8.	Total
9.	Price

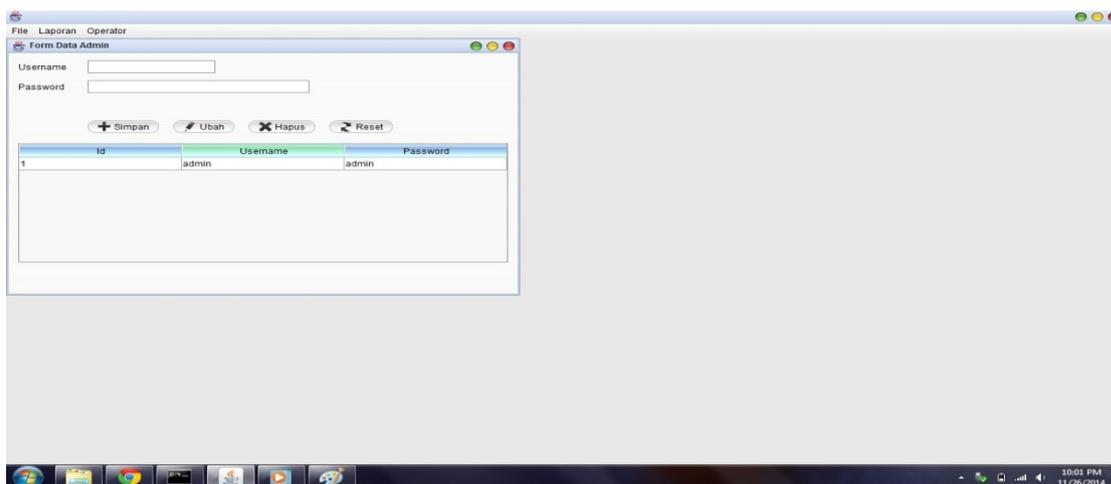
After you create the prototype, then carried out the development of a new system procedure to adjust between the prototype with the real conditions in the field. This stage is done by doing a up date system as well as an adjustment to the practice of the company. In the stage of system implementation carried out the transition from the old system to the new system. At this stage, consider the hardware and any software used to run the systems that have been developed.

c. Output

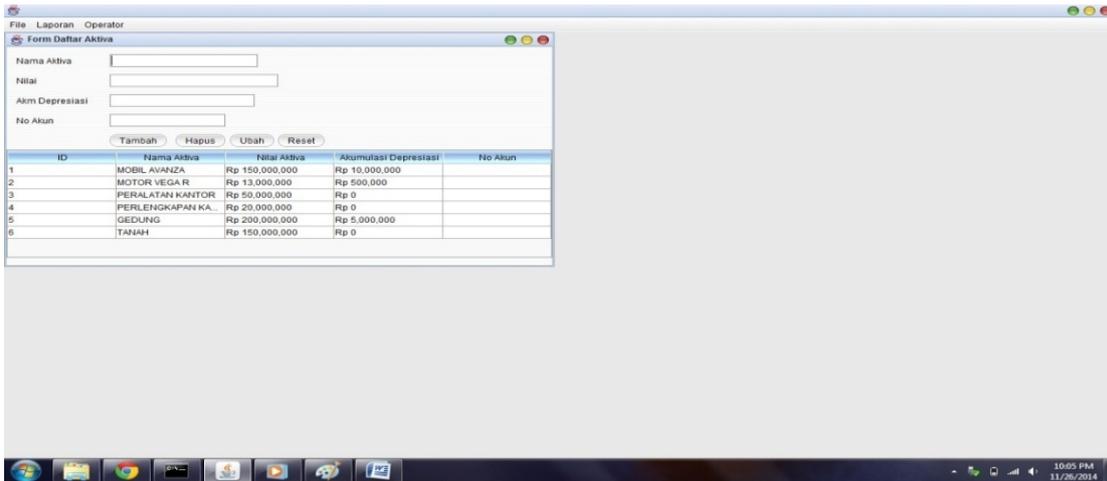
The output is generated in this study are described in the form of a report or form, namely a report on customer data, sales data, pembeliam, and expenditure data, supplier statements, balance sheet, as shown in the following example:



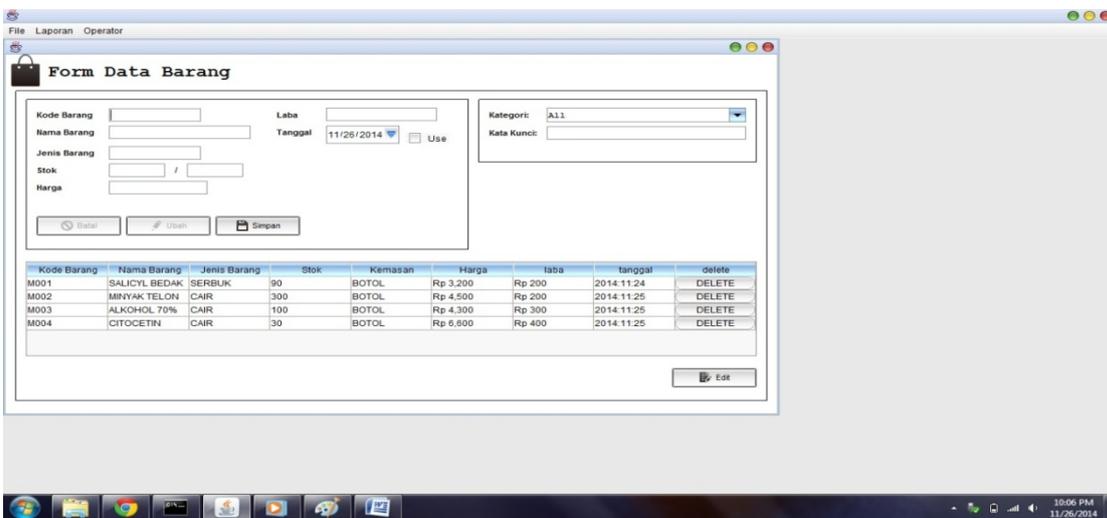
Picture 1. Log In



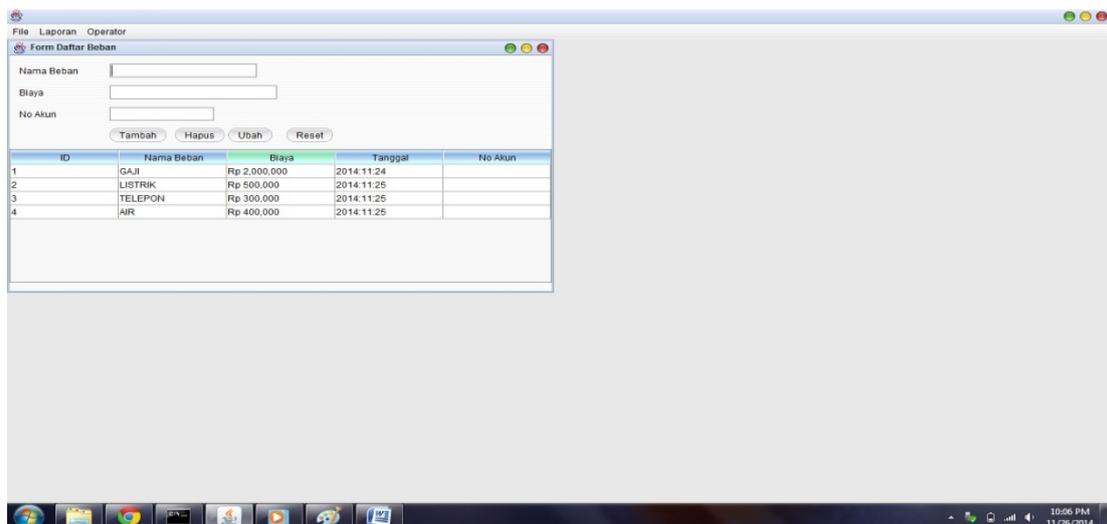
Picture 2. Data File



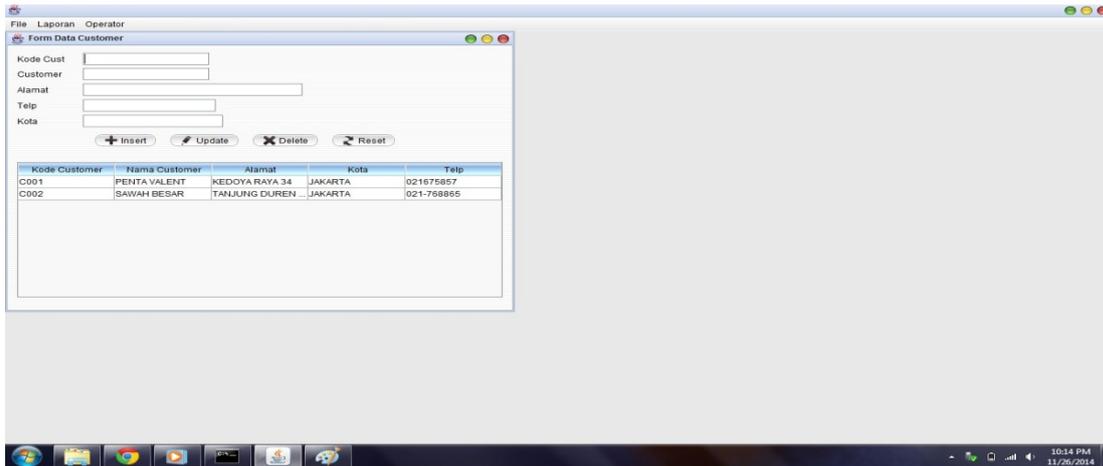
Picture 3. Data Aset



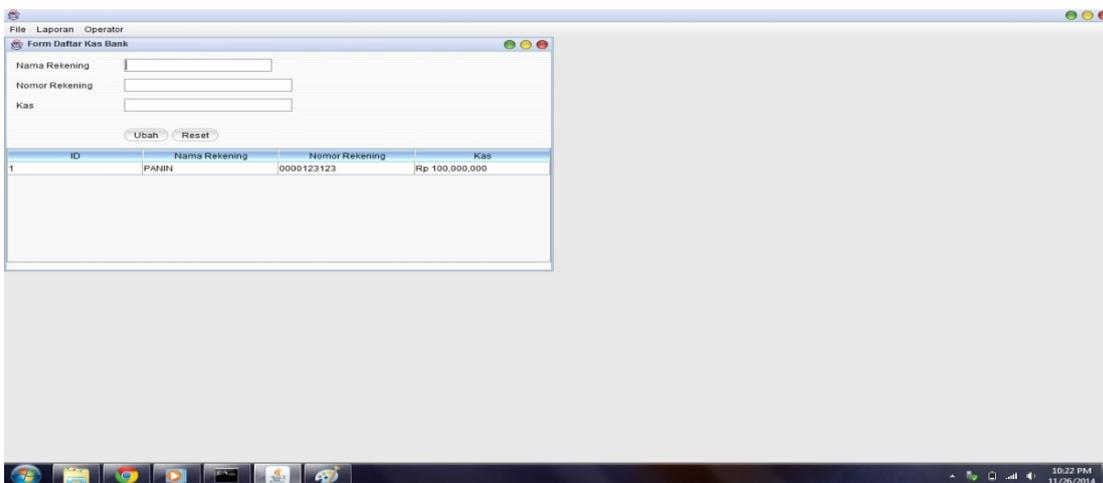
Picture 4. Data Items



Picture 5. Data Loads



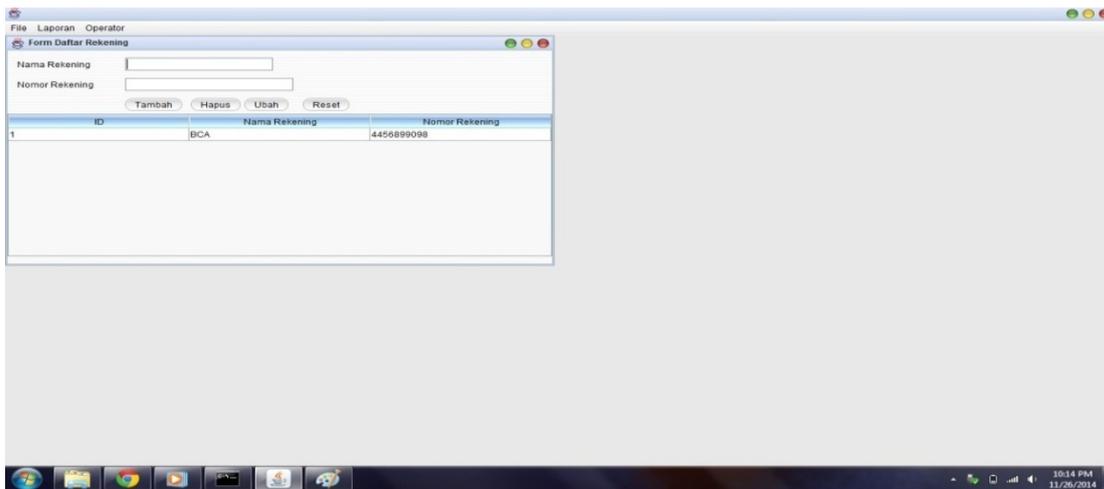
Picture 6. Data Customer



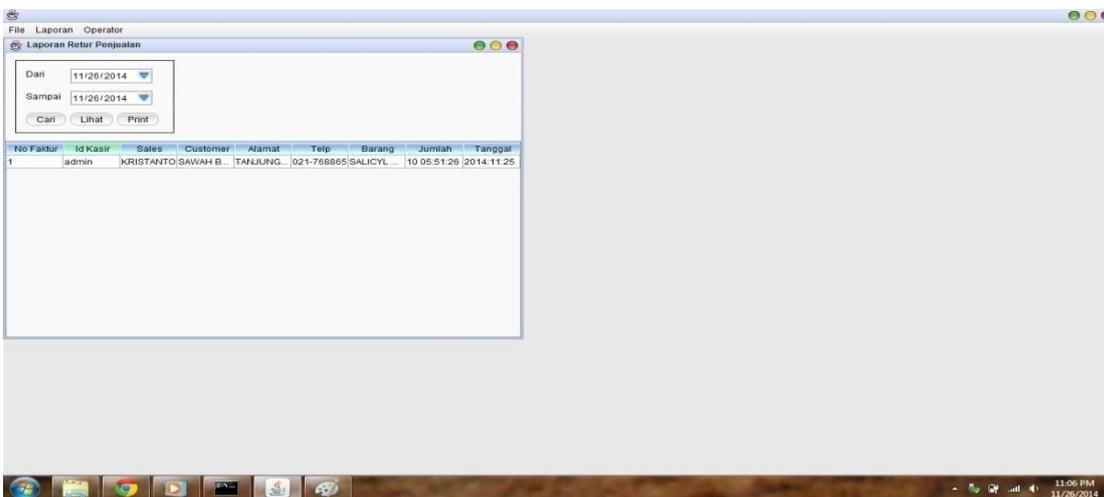
Picture 7. Data Cash



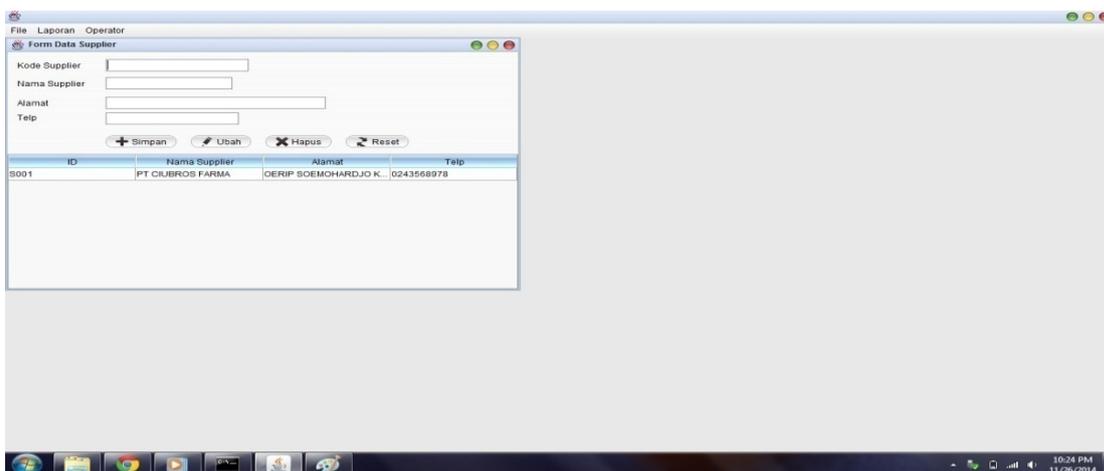
Picture 8. Accounts Receivable Reports



Picture 9. Bank Account



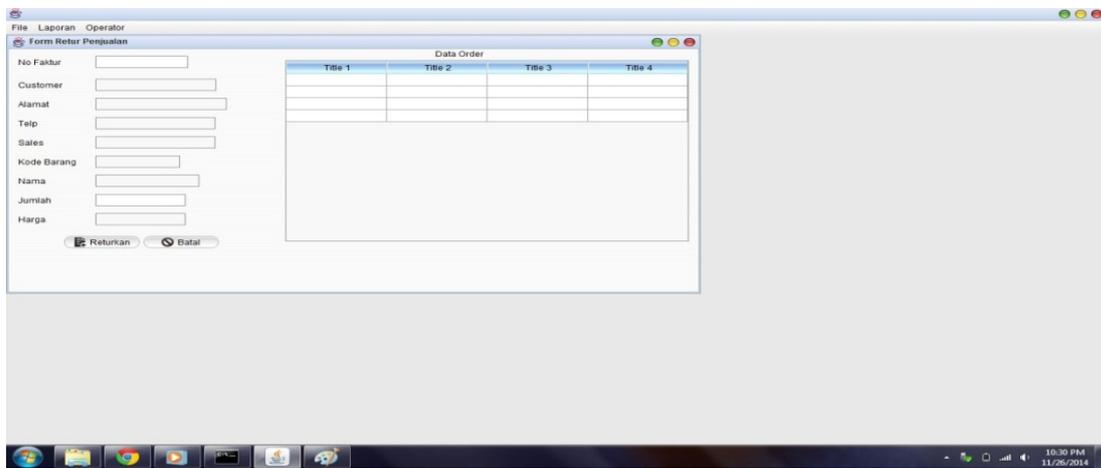
Picture 10. General Journal Report



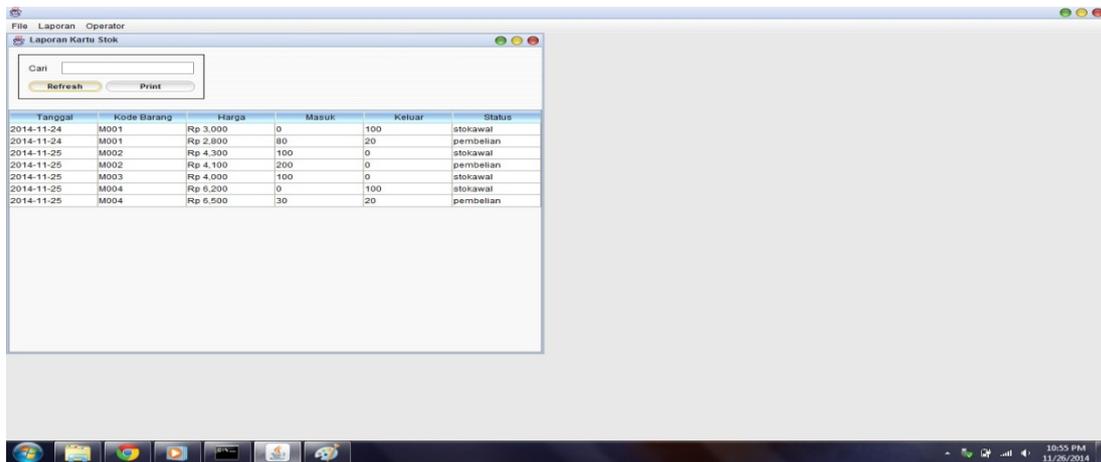
Picture 11. Data Supplier



Picture 12. Form Sales



Picture 13. Form Sales Return



Picture 14. Card Stock

Nama Barang	Saldo Awal	MUTASI		BALDO	
		Unit	Unit	Unit	Unit
ALKOHOL 70%	100	0	0	100	100
CITOCETIN	100	50	120	30	30
	200	50	120	130	595,000

Picture 15. Stock Report

PT. Hermon Anugerah Laporan Laba Rugi Periode: 01/01/2015 - 31/03/2015	
PENJUALAN	
Penjualan Buku	74.000,000
Penjualan Peralatan	0
Penjualan Perbaikan	0
Penjualan Meja	70.000,000
HARGA POKOK PENJUALAN	
Total	64.000,000
Labas Bekerja	1.000,000
SEBESAR OPERASIONAL (BIAYA OPERASI)	
SEBESAR TRANSPORTASI	1.000,000
SEBESAR BAYAR PENJUALAN	1.000,000
SEBESAR GILAS	300,000
Total Beban Operasional	2.300,000
Labas Admin & Umum	
SEBESAR GAJ	2.000,000
SEBESAR LISTRIK	400,000
SEBESAR TELEFON	200,000
SEBESAR PERLENGKAPAN	300,000
SEBESAR AIR	200,000
SEBESAR ADMINISTRASI LAIN	200,000
Total Beban Admin & Umum	3.300,000
Total Beban	6.000,000
Labas Bekerja Berjalan	6.000,000

Picture 16. The Output of Income Statement

PT. Hermon Anugerah NERACA Per 01/01/2015			
ASSET LANCAR		LIABILITAS JANGKA PENDEK	
100.01 KAS	42.200,000	700.01 HUTANG GAGASAN	40.000,000
100.02 KAS BANK PANIN	700.000,000	TOTAL LIABILITAS JANGKA PENDEK	40.000,000
300.01 HUTANG GAGASAN	5.000,000	LIABILITAS JANGKA PANJANG	
300.02 PERSEDIAAN	170.000,000	000.01 HUTANG BANK	800.000,000
TOTAL ASSET LANCAR	817.200,000	TOTAL LIABILITAS JANGKA PANJANG	800.000,000
ASSET TETAP		Ekuitas	
400.01 TANAH	200.000,000	000.01 MODAL SAHAM	578.700,000
400.02 BANGUNAN	200.000,000	000.01 LABA DITAHAN	8.000,000
400.03 BAHAN PERAGAAN	8.000,000	000.02 LABA RUGI BERTERAKUN	8.000,000
400.04 MESIN MESIN B	180.000,000	TOTAL EKUITAS	594.700,000
400.05 MESIN MESIN C	12.000,000		
400.06 MESIN MESIN D	300,000		
400.07 MESIN MESIN E	12.000,000		
400.08 MESIN MESIN F	150.000,000		
400.09 MESIN MESIN G	2.000,000		
400.10 MESIN MESIN H	140.000,000		
TOTAL ASSET TETAP	822.700,000		
Total Asset	1.639.900,000	Total Liabilitas & Ekuitas	1.639.900,000

Picture 17. The Output of Laporan Balance Sheets

This ERP system will integrate and handle production processes, logistics, distribution and stock inventory, invoice and akuntansinya. This system is an application that helps you control transactions and daily business activities such as sales, delivery, production, inventory management, quality management and human resources. That way, every sales order exists, then it will automatically be known when to be posted by the warehouse. Similarly, the financial part will be knowing when cash will go from customers. Reduced number of goods in the warehouse automatically known by the part of production planning. If the number of items reaches a certain condition, the system will create a demand for production. And so on, so that the overall flow of the business process in the company is very efficient. The changes that occur in one part can be anticipated well by other associated parts. In other words, the ERP will be able to integrate financial data so that financial performance can be monitored better, the standardization process of the operation so as to improve productivity and product quality, and decrease inefficiencies. Moreover the ERP can also create uniformity of reporting.

Although the implementation of the ERP would help in planning and function that can predict anything, surely has a requirement to arrive at the ideal point. In the course of implementation there are positive effects as well as negative for businessmen, so that can be done is to design implementation as well as to reduce the negative effects. But to keep in mind is that each such organization has its uniqueness in the implementation of ERP. It was very good to do so by gradually while evaluating the needs and capabilities of the organization including its human resource capabilities by looking at whether the organization is able to implement it. As for the factors of success and failure factors in ERP implementation is (1) the ability to streamline business processes or operations; (2) the success of the project team, supported by management; (3) the existence of a sustainable training when the padaorganisasi ERP implementation; (4) adjust to the culture of the Organization; (5) the planned costs at the time of implementation and development of ERP to avoid discharging costs that exceed the capabilities of the Organization; (6) testing system that is proven to be successful for some of the elements of the Organization and direct cause of the failure of ERP implementation in the organization. While some of the causes of the failure of the implementation of the ERP is to (1) change management and training. The difficulties lie in the changing practice of the job done. Training that involves a lot of modules should be implemented as early as possible; (2) poor planning; (3) a bad project management; (4) the low involvement of leadership; (5) the resources not optimal; and (6) organizational culture change, and the change from the old system which has high flexibility.

Conclusion

The conclusion that can be drawn from this research is a system that has been designed can give ease, improving the efficiency and effectiveness of performance time, precise and accurate in receipt of information, addressing the weaknesses that exist in the business. Entrepreneurs can also access your database, and modify or delete data. In the implementation of an ERP system there are a few very important thing which becomes the key to successful implementation of ERP systems and should be improved with the company or developer of ERP systems, namely the commitment of the management and training of the use of ERP systems. Management commitment required to ERP systems have been developed and applied in a company that used the most thoroughly, so that the functions of an ERP system can run correctly. Then the training factor becomes important because users get information about how to use all the functions of the existing ERP system to improve and strengthen the effectiveness of the resources that exist in the company.

Recomendation

1. We encourage parties to businessmen continue to apply and implement a computerized system to address existing shortcomings.
2. The selection of ERP can be adapted to the needs of companies in the development of its business information.
3. In the future can also be done up date system if required the addition of an existing database.

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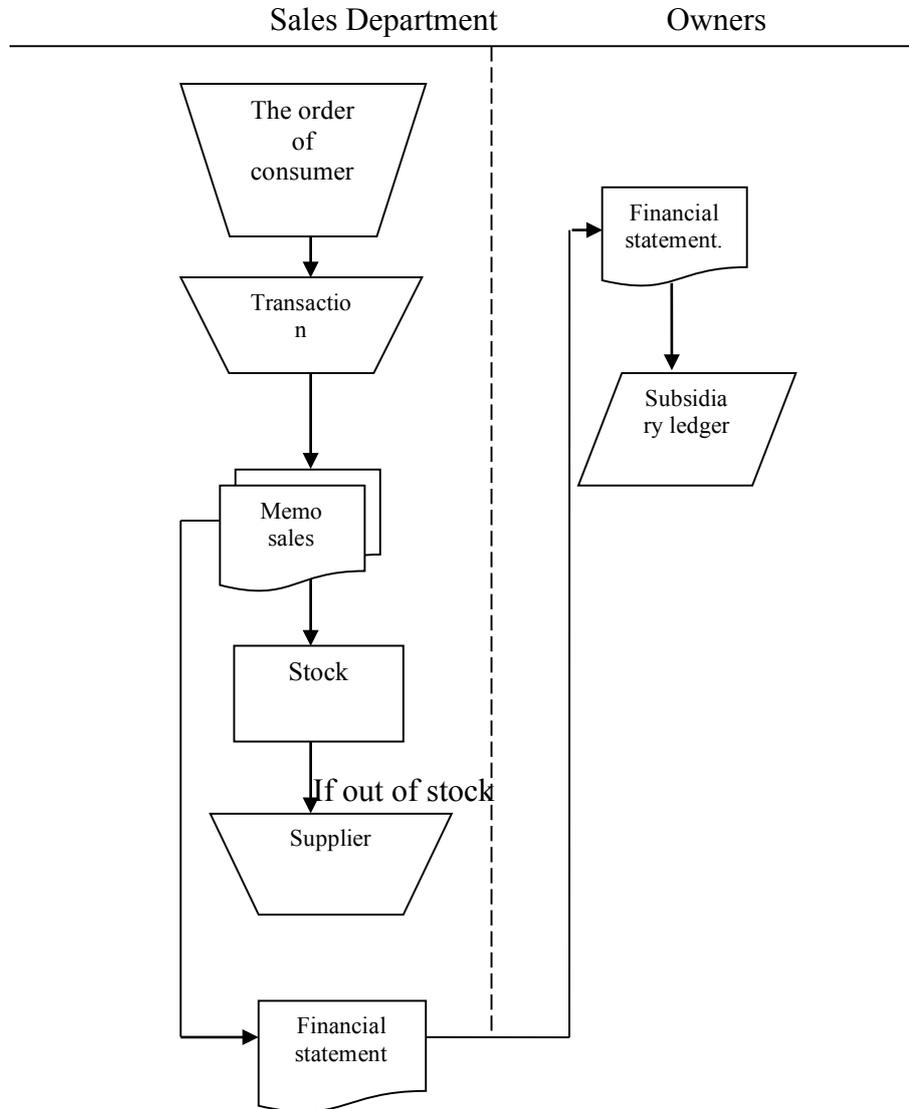
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APPENDIX

Picture Flow Chart 1



Picture Flow Chart 2

