

# The E-Commerce Sales Application of Brick

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**Abstract:** Batara is a company engaged in the production and sale of bricks. The high quality makes Batara Partner has many customers. The e-commerce application will greatly help Batara partner to add more customers. Where the purpose of this research itself is to build e-commerce applications that can provide information both for the company and the customers themselves. The methodology used to design this system was the RUP methodology, which is an iterative, architecture-centric, and used case driven software development approach. With the construction of this system can expand sales promotions and facilitate customers who are outside the city to make transactions easily.

**Keywords:** E-Commerce, Batara Partner, RUP Methodology.

## **1. INTRODUCTION**

### **1.1 Background**

Today, technological developments are progressing very rapidly and have a very important role, especially in the business world. Business people can make transactions on a basic online through

internet media anytime and anywhere with people all over the world to save time and money.

Batara partner is a company engaged in the production and sale of bricks. However, with the system running, there are still many problems that occur both on the

vendor's part and on the part of consumers especially those outside the city of Pringsewu. The vendor has not had special media to promote its products and record sales transaction report, it is still done manually only by using existing transaction evidence. The consumers still have to come directly to Batara Partners if they want to get product information and want to order products. Based on the above problems, we need an e-commerce application that provides facilities such as: product catalogs containing images and product information so that consumers can order goods online, and can make reports of sales transactions per month. So this application is expected to be able to help the vendor to promote their products and make sales transaction reports per month. It can also help consumers who want to get information, and order products without having to come directly to Batara Partners.

### 1.2 Research Question

Based on the research background above, the research questions are:

- (a) How to create media to promote products online?
- (b) How to make e-commerce applications to facilitate consumers who want to order products and know the development of production from the order?
- (c) How to make e-commerce applications that can produce monthly transaction report?

### 1.3 Research Limitation

- (a) The scope of research subjects is making e-commerce applications on BataraPringsewu partner.
- (b) The scope of the research object is BataraPringsewu partner.

### 1.4 Research Objective

The purpose of this research is to create an e-commerce application for Batara Partners, which can be used by consumers to find information and transact online via the internet.

### 1.5 Research Benefit

The benefits derived from research is the creation of an e-commerce website that is able to reduce business processes and meet the need for up to date information. So the e-

commerce website strategy can be an alternative for customers to buy products. The benefits of the analysis and design of the system to be made are to strengthen relationships with consumers, expand markets, expand business partner networks, increase efficiency and increase sales.

## 2. THEORETICAL BASIS

### 2.1 E-Commerce

E-Commerce is a dynamic set of technologies, applications and business processes connecting companies, consumers, and certain communities through transactions electronic and trade in goods, services and information conducted electronically (Onno W. Purbo, 2001:2).

Meanwhile, the definition of e-commerce according to Laudon (1998), e-commerce is a process of buying and selling products electronically by consumers and from company to company with computers as intermediaries for business transactions.

### 2.2 Internet

The definition of the internet is a series or network of an interlocking number of computers related. The internet comes from the word interconnected-networking. The internet is a global network connecting a network with other networks throughout the world. Media that connects can be in the form of cables, satellite channels or radio frequencies.

<http://kuliah.imadewira.com/definisi-internet-and-history-internet/>

Internet (interconnection-networking) is all computer networks that are interconnected using the global system standard Transmission Control Protocol / Internet Protocol Suite (TCP / IP) as a packet exchange communication protocol (packet-switching communication protocol) to serve billions of users throughout the world.

### 2.3 Selling

In general, selling has understanding the activities carried out by a company that invites others to buy goods and services offered that can generate income for the company. Many experts differ in defining the meaning of selling, but all have the same meaning. Some of them are according to

Swastha (1999: 8), "selling is a science and art of personal influence by the seller to encourage others to be willing to buy the goods or services offered". Meanwhile according to Mulyadi (2001: 2), "Sales activities consist of sales of goods or services, both credit, and cash."

#### 2.4 Batara Partner

MitraBatara is a company engaged in the production and sale of bricks. Batara Partners located at 1 Pelita Street, PekonBulukarto, Pringsewu.

#### 2.5 The E-Commerce Application for Bricks Sales at Batara Pringsewu Partners

It is a web-based application created by brick company Batara partner to simplify process sales, expanding product promotions, and facilitating outside customers to place product orders.

### 3. METHODOLOGY

#### 3.1 Definition of RUP

RUP (Rational Unified Process) is iterative software development approach, focus on architecture (architecture-centric), more directed based on use cases (use case driven) (Rosa U.S, 2011:105). The 4 stages of the RUP work as follows:

##### 1. Inception Phase

This stage is more about modeling the process of business (business modeling) needed by Batara partner and defining system requirements to be created and implemented.

##### 2. Elaboration Phase

This stage can also detect whether the desired system architecture can be made or not. Detecting the risks that might occur from the architecture created. This stage is more on the analysis and design that focuses on the prototype of the system (prototype).

##### 3. Construction Phase

This stage is focused on the development of system components and features. This stage is more on implementation and testing systems that focus on software implementation in the program code.

#### 4. Transition Phase

This stage is more for deployment or system installation so it can be understood by the user. The activities at this stage include user training, system maintenance and testing to meet user expectations.

#### 3.2 Hardware and Software Specifications

##### 3.2.1 Hardware Specifications

Hardware specifications

It is used in the development of E-Commerce applications at Batara partner as follows :

Table 1: The Implementation of Hardware

No	Hardware	Specification
1	Processor	DualCore 2 Duo 2.8 GHz
2	RAM	2.00 Gb
3	Harddisk	250 Gb
4	VGA Card	1 Gb
5	Monitor	1024x768pixel
6	Keyboard	Standard
7	Mouse	Standard

##### 3.2.2 Software Specification

Software specifications That is installed on the computer system used to create E-commerce applications on Batara Partners is as follows:

Table 1 : Implementation of Software

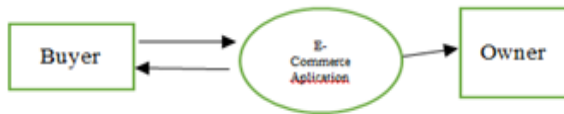
No	Software	Specification
1	Operation System	Windows XP professional SP2
2	PHP	Programming language
3	MySQL 5.0	Storage the database
4	WampServer 2.0	Web server
5	PhpMyAdmin	Interface database
6	Adobe Dreamweaver	Code and display design
7	Mozilla Firefox 3.06	Web browser

### 4. SYSTEM DESIGN AND SYSTEM IMPLEMENTATION

#### 4.1 A Context Diagram

A context diagram is the first step in making DFD, which explains what is made and externally what entities are involved. In the context diagram, there must be a data flow that enters and outgoing data flow.

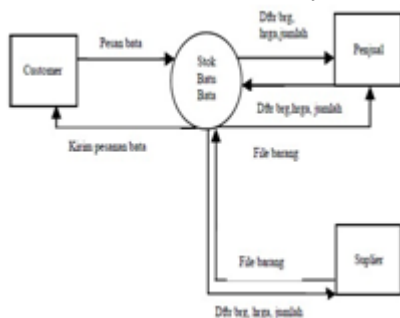
Context diagram that has been made is as follows:



## 4.2 DFD Level 0 and DFD Level 1

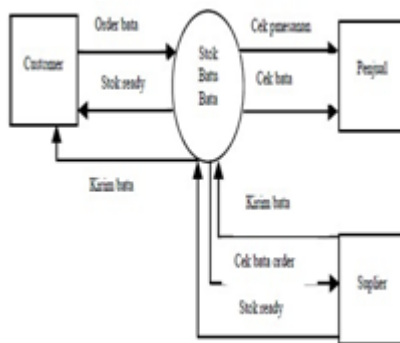
### 4.2.1 DFD Level 0

DFD level 0 is the next step after the context diagram. In this step, described the processes that occur in information systems.



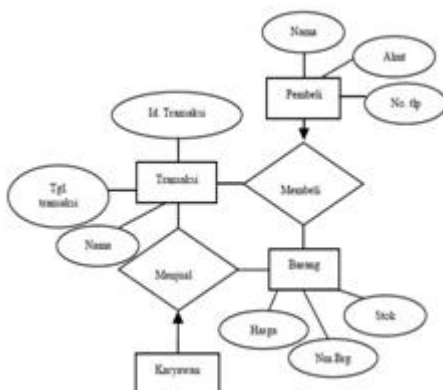
### 4.2.2 DFD Level 1

DFD Level 1 is an explanation of DFD level 0. In this process the process is explained what is done at each the process that is in DFD level 0.



## 4.3 ERD (entity relationship diagram)

Entity Relational Diagram (ERD) is a relation diagram between some entities that is used to design database needed.



## 4.4 Implementation

### 4.4.1 Homepage

This is the home or main page displayed from a website on the internet. This page first appears when the website is accessed. The appearance of the Batara partner homepage is as follows :



### 4.4.2 Profile Page

This is the page that displays a profile of Batara partner including the location, purpose, and management structure of Batara partner.



### 4.4.3 Purchase page

This purchase page contains about how to order brick products. The following is the purchase display page on the brick Batara partner.





#### 4.4.4 Homepage

This page contains news and information about the latest about business, politics, social culture. Example news page views on the Batara partner website as follows:



## 5. Conclusion and Suggestion

### 5.1 Conclusion

Based on the report and the development system carried out by the researcher at BataraPringsewu Partners, the conclusion is:

1. The website built by the author consists of homepage, profile, purchase and news features.
2. With this website, companies can expand product promotions, increase market sales and increase sales turnover.
3. Both companies and customers make it easier to carry out and monitor transactions that have already been carried out.
4. With the website on Batara Partners, companies can introduce products and be more advanced in using IT compared to similar companies.

### 5.2 Suggestion

Based on the analysis result that has been done, the researcher wants to give advice that can develop the system on the PraraewuBatara Partners, there are the suggestions given by the author to the BataraPringsewu Partner:

1. BataraPringsewu partner must provide information to customers so that customers outside the city or within the city can order products.
2. Further development is expected to create a system that can make payment transactions online in order to facilitate customers in making transactions.
3. The appearance of the website needs to be improved so that it can attract the attention of customers so as to increase the number of customers who access this website.
4. It is hoped that this website can be redeveloped by creating sales reports in graphical form.

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