E-commerce information systems as leather marketing in Garut

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Abstract. Garut Regency is one of the cities that has leather craft with good quality that can compete nationally and internationally, the products is leather mat, leather jacket, leather shoes, leather bags, gloves, hats and many other processed leather products. As the development of Garut city, many more businesses are also in the field of leather, ranging from small entrepreneurs to large entrepreneurs. The writer conducted research to increase sales and expand the marketing of Garut leather products through a web-based e-commerce sales information system and use development method using a fast and simple Process. The results obtained in the form of a web site that can be accessed to serve online sales transactions so that to increase sales of processed leather products in Garut regency.

1. Introduction

In this era of rapid information technology development, an organization's business activities are inseparable from the role of information systems and information technology. Where information has become a basic need and new commodities in the digital age. this era of rapid information technology development, an organization's business activities are inseparable from the role of information systems (SI) and information technology (IT). And information has become a basic need and new commodities in the digital age [1]. Ecommerce is a dynamic technological device, including business applications and processes that connect companies, Customers, and a community through electronic transactions, which conduct electronic exchanges of goods [2].

Garut Regency has many products that processed by the people, one of which is leather covering jackets, shoes, sandals, bags, wallets, gloves, and other products made from leather, not only businesses that have large capital but small entrepreneurs take compete in this business.

With the best number of leather business in Garut, people see the quality of products and selling prices to the public, besides that, there are also many new entrepreneurs who sell their products in several social media scattered without regard to quality and price, so they can damage the image of Garut leather products.

By seeing the rapid development of business and technology, of course we must follow the flow of development, by looking at some obstacles and problems in the field, the arrowroot leather e-commerce information system that is triggered by the development of IS / IT is one of the factors that also becomes a marketing application for Garut leather product centrally in regency of Garut. E-commerce information systems are the best knowledge applications that will encourage and create opportunities for development and poverty reduction.

For that reason, the solution is making "E-Commerce Information Systems As Leather Marketing In Garut" so the business leather players in Garut have a clear container to market the leather product, centrally, structurally, and meet product sales standards, so as to provide satisfaction to Customers of the time of transaction.

2. Methods

RUP (Rational Unified Process) is a software development that is done repeatedly (Iterative), focus on architecture (Architecture-centric), more directed based on the use of cases (use case driven), RUP is a software engineering process with a good definition (well defined) and well-structured [3]. According to Shalahuddin and Rosa (RUP has four stages or phases that can be done iteratively. the pictures and stages of the RUP [4].
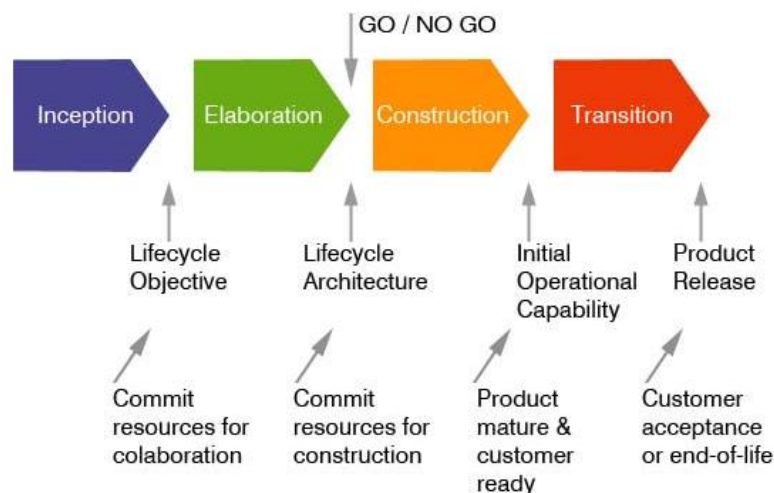

Figure 1. RUP iterative process.

2.1. Inception
This stage models the required business processes (business modelling) and defines the need for the system to be created (requirements).

2.2. Elaboration
This stage is more focused on system architecture planning. This stage can also detect whether the desired system architecture can be made or not. Detecting the risks that might occur and the architecture created. This stage is more on the analysis and design of the system and the implementation of systems that focus on prototype systems (prototypes).

2.3. Construction
This stage focuses on developing system components and features. implementing and testing systems that focus on implementing software code. This stage produces a software product, which is a condition of the initial operational capability milestone.

2.4. Transition
This stage is more on the deployment or installation of the system so that can be understood by the users. This stage a software product, which is a prerequisite for the initial operational capability milestone. Activities at this stage include user training, system maintenance, and testing to meet user expectations.

3. Result and discussion

3.1. Inception

This stage is more modelling the business process required (business modelling) and defining the need for a system to be made (requirements). System development can be seen in the following table:

Table 1. Application requirements.

Actor	Access Rights
Customer	Viewing Products
	Select Product
	Order Product
	Login
	Register
	Payment
	Confirm Pay
	Email Notification
	Product Order History
Administrator	Admin Login
	Manage Products
	Manage Data Orders
	Check Payment data
	Data Orders
	Email Notification
	Daily, Monthly, Annual Sales Reports
	Daily, Monthly, Annual Product Reports
Leader	Daily, Monthly, Annual Sales Reports
	Daily, Monthly, Annual Product Reports

3.2. Elaboration

This stage is more focused on system architecture planning. 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 of systems and system implementation that focuses on the prototype of the system (prototype). The results of this stage can be seen from the following use case design.
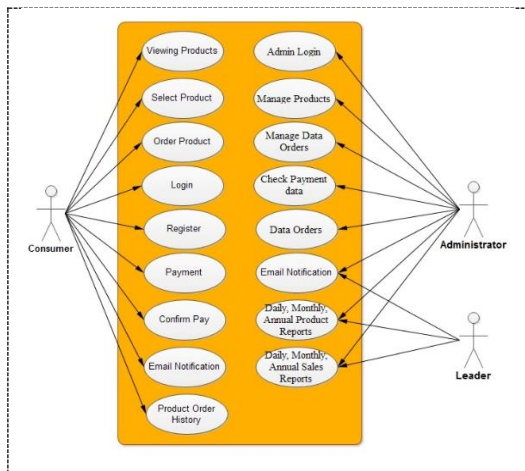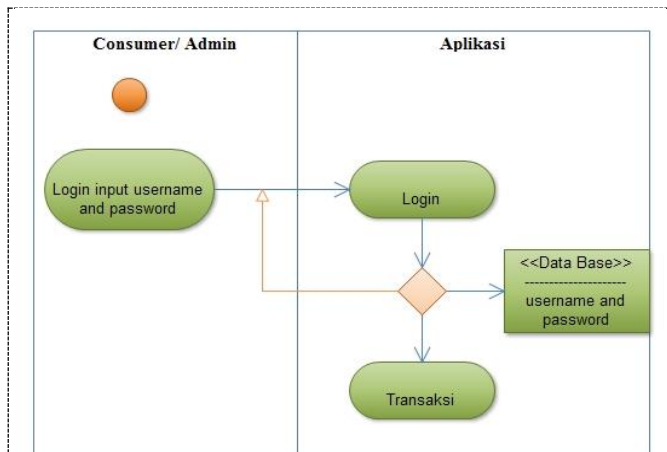
Figure 2. Use Case

Figure 3. Activity diagram for the page login Customer/ Admin

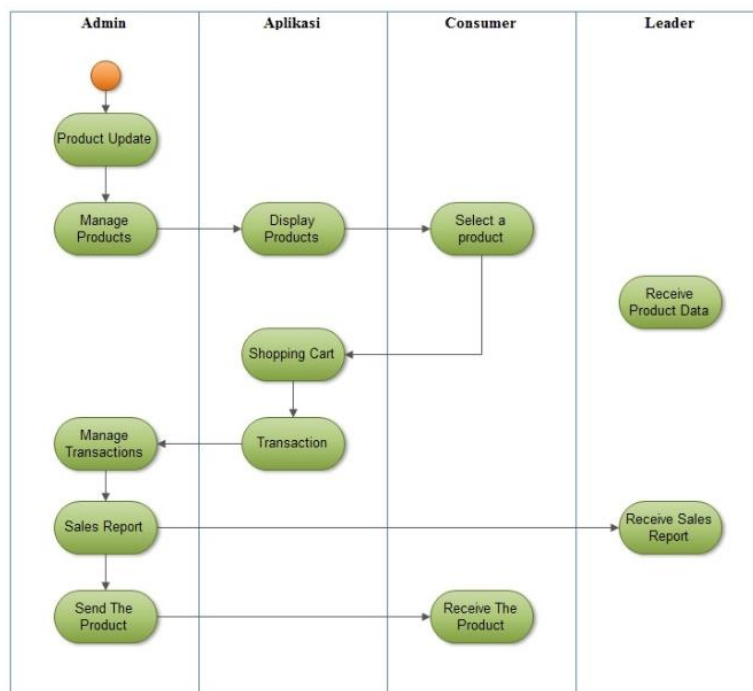*3.3. Display activity diagram of transaction activity*

Figure 4. Activity diagram transaction.

3.3.1. Admin and Customer Login Menu. On this login page, users can set all menu options starting from input and printing.
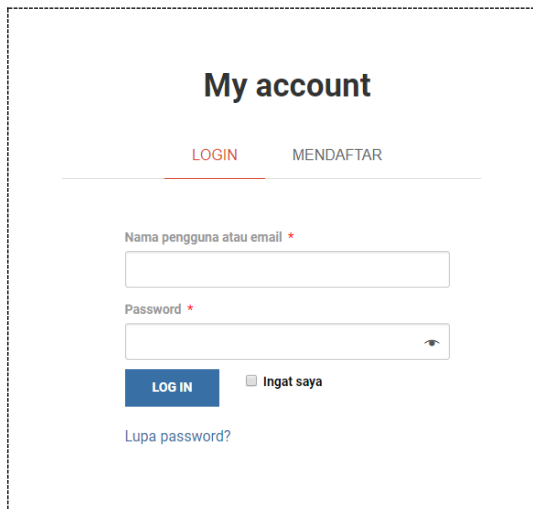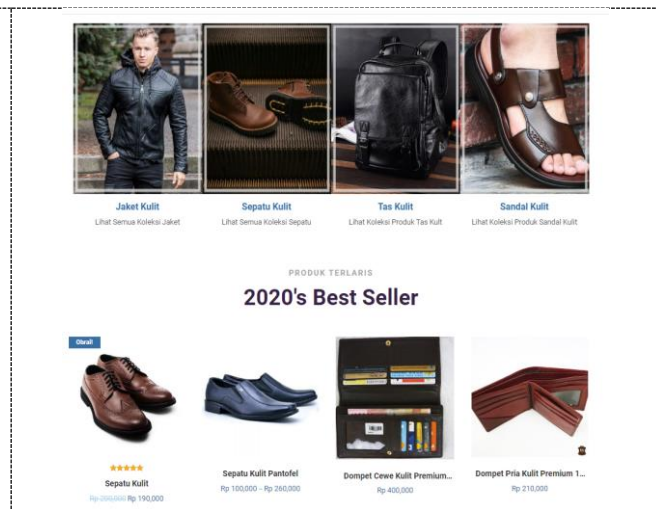
Figure 5. Login page Admin and Customer

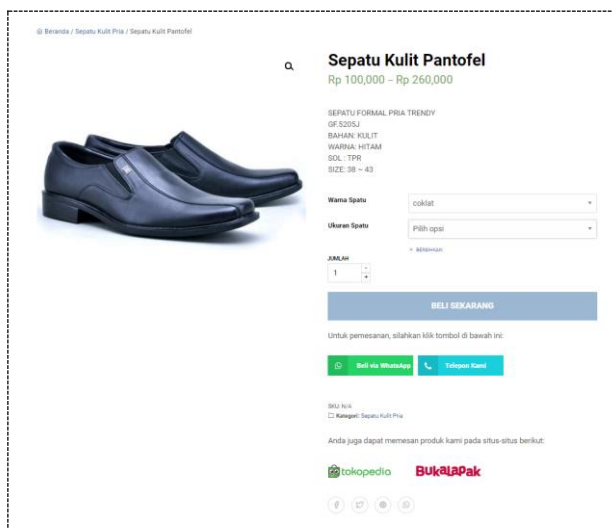**Figure 6.** Main Page Application. This page displays the product being marketed

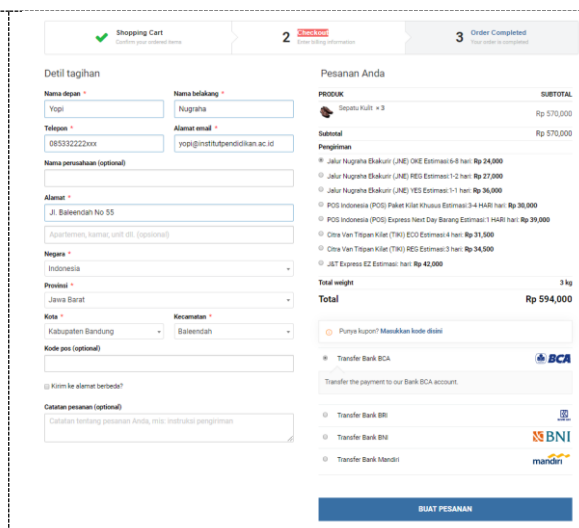**Figure 7.** Product detail page, this page shows product details.

Figure 8. Checkout page, this page displays the total product expenditure and requests to enter a detail address that will receive the product.

3.4. Construction

Transition is the last stage of RUP (Rational Unified Process), where at this stage, application testing is done. Testing is an important part of the software development cycle. Application test results can be seen in table 2.

Table 2. Test results.

Test Case	Procedures performed	Result
Login Admin	Admin enters username and password	Success
Login Customer	Customer enters username and password	Success
Register Customer	Customer data add	Success
Customer Order Product	Click the buy now product menu	Success
Customer transaction Product	Input customer data, input destination location, select shipping courier	Success
Customer Checkout	Select the order button	Success
Customer Notification Order	Order data sent to customer email	Success
Admin Notification Order	Order data sent to admin email	Success
Admin Approve Transaction	admin select the approve customer transaction button	Success

4. Conclusion

We hope that this application can be used by business people in Garut leather, to increase product marketing and to give trust to customers with a centralized sales of Garut leather products, which is hoped that this application will be protected by the Garut regency government. In this journal, there are still many shortcomings, we hope, for constructive suggestions and criticisms for our next journal.

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