

# E-Commerce Web Development in Wiga Art

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**Abstract:** *Information technology is widely applied as a website for online product sales, where the products can be accessed all over the world. Therefore, a lot of services offer e-commerce application for product sellers on-line that its features are created to the needs of the online store itself. So it can increase sales automatically. Consumers can easily access any intended products quickly, efficiently and of course safely. This application allows all people to shop, just in front of the computer and Internet easily. The process is quite easy and painless. For the payment of goods purchased, the buyer can pay off by transferring it to any intended bank, then the items purchased will be delivered.*

**Keywords:** Web E-Commerce

## 1. Background

The current development of Information Technology has been progressing very quickly. Information technology has proven capable of integrating every detail herein has been previously considered impossible is reached, such as the information speed, efficiency and effectiveness. Many information technologies applied as a website for online sale of products, where these products can be accessed all over the world.

Therefore a lot of services offer e-commerce web applications for product sellers on-line, of which the features are created to the needs of it's own online store in order to increase the sales automatically. Consumers can easily access any required products quickly, efficiently, and of course safely.

### 1.1 Problem

Every day, Wiga Art markets their products conventionally. With the conventional sale system, marketing area is very limited.

### 1.2 Purpose

- To Generate Wiga Art web commerce.
- To increase sales of products with media that can be accessed by consumers.

### 1.3. Benefits

- To market a products in local markets to worldwide.
- To improve the quality of services to consumers.
- To enable customers to conduct transactions.
- To Enable customers to make contact or interaction with companies or stores.
- To expand the marketing and to increase the sales of products.

## 2. Overview

Wiga Art is a place selling accessories made from agate stone or natural stone decorated with copper wire with wirework

techniques. This handicraft was initially as a side job for teenagers and it turns out to be more profitable. Wiga Art was founded in 2012, after these craft accessories from wire were well known, they got training from the Department of Cooperatives and Industry of Pacitan.

The development of the creativity of artisans is quite good , but the development of product marketing is still difficult because of the limited scope . Wiga Art can be as a platform for creativity and handmade art from around the teenager's place of business.

Wiga started just as a side job that was done by the owner who was still a student , but after knowing the considerable business opportunities, Wiga art will be developed. Wiga art management is managed by the owners themselves. With a good cooperation between the pioneering small businesses will expand its business with healthy competition and mutual help, and the family will remain intact . In this part, it can be beneficial to both parties and not to feel offended each other. The marketing of Pacitan products is carried out just around a narrow coverage area. To market the products outside pacitan, the marketing is done through friends who happen to be outside the city (through mouth to mouth information) , the medium used is only by phone or MMS. If consumers want to see the products, they must directly come to Wiga art in Donorojo, Pacitan district.

Sale revenue is uncertain because the coming of consumers is uncertain too, depending on the orders. The advantage of this business is that, there are not many competitors, or if there are, they do not make much effort. The drawback in marketing is quite difficult due to the limited ability of marketing and consumer interests who do not understand the products. For excess products, because this is a handmade product, the models amounted to one product only, so it cannot be reproduced with the same model , which can be made the same as in the catalogue.

## 3. Basis Theory

1) **CMS (Content Management System)**. CMS is a system that can create, manage, distribute, publish, and maintain information of companies or institutions, where the

- administration does not have to know HTML tag to run ( Bambang Eka Purnama , 2013) .
- 2) Understanding Website. Website is a location on the internet which presents a collection of information with respect to the profile of the site owner. Website is a page that makes the web sites on the internet page that serves as a medium to deliver information, communication, or transaction. (Jasmadi and Daniel H. Purwadi , 2004). Website is divided into two categories: static website and dynamic website . ( Bambang Eka Purnama , 2013)
- a. Static Websites ( Static Website )**  
Static websites are websites whose content is static or unchanging . Static websites such as brochures , flyers are printed and distributed differently while in host static website and is accessed via the internet. .
- b. Dynamic Website (Dynamic Site)**  
Dynamic websites are websites whose content changes. Application of dynamic websites is often found on the internet, for example in a news portal, blogs, social networking sites and so forth.
- 3) Domain and Hosting. The elements that must exist in the provision of the Website or the site include the following
- a) Domain naming is an identity in the Internet world as a global network that is memorable for a variety of purposes such as the tiger to make a website, create email , protect trademarks and so forth (Bambang Eka Purnama , 2013) . Domain is a unique address in the virtual world (internet) which is useful to find a website. Generally URL sold by people with an annual rental system. To choose a domain name that is easy to remember so that users can easily find the website. Guides to the domain suffix (Bambang Eka Purnama, 2013, p 15)
- b) Hosting is derived from the host - Computers connected in a network. Utilizing the facilities available in a computer that is connected to the network. Hosting provides resources to rent servers to enable organizations and individuals to put information on the internet, hosting server consists of a combination of server - server or a server that is connected with high-speed internet network. (Bonafide Nugroho 2008)
- c) Web Hosting is the storage media on the Internet server program that has been equipped with a web server and connect to the internet for 24 hours continuously. Placement of files are placed on the hard disk of a computer server on the internet in order that the web page can be accessed by anyone, anytime and anywhere through the internet ( Rozi , 2010) Web hosting services provide a practical and inexpensive solution to the given web site owners, it will need an extremely high costs and high technical skills needed to manage their own internet server (Rozi, 2010)
- d) Choosing a web hosting requires some consideration, namely : price of rent, large storage capacity (space), the amount of data traffic quota which can be done by the web site (bandwidth), the features offered (number of database, email, hosting management features, etc.) as well as support for the programming that will be used (PHP, MySQL databases , etc.) (Rozi,2010)
- 4) Store Manager. Store Manager is used to manage products including : Product List , to display the product for sale on the website . These features include:
- a) SEO (Search Engine Optimization), serves to make it easier for search engines like google, yahoo, etc.. In indexing the content of our web and get a high rating in the search . (Bambang Eka Purnama, 2013)
- b) Custom Field, serves to determine their own product columns that will be included, according to the admin's desire. If the product being sold has different specifications, Example : mobile phones , cars, houses , etc. . Because earlier products have different specifications .
- c) Multiple Images , serves to insert a picture of the product is more than one image. Examples would like to display a variety of products from different sides.
- d) Optional template, function to display the Product List page & Product Details with a variety of different views.
- e) Multiple Prices, every product has two different prices for the different ends, and the price for visitors and members without login. .
- f) Price Range Manager, this facility allows the system administrator to determine the price of products to be purchased by visitors based on the number of products purchased. For instance, buying 1 piece has a different price from buying 10 pieces.
- g) Product Protection, to protect the product that does not appear when the user does not log in. Products can only be seen by members who have logged in only.
- 5) Order Management , is a place where admins manage the order which had entered from the ends ,These features are available :
- a) Inventory Management for stock settings. Because every direct purchase from consumers can reduce the stock available at that time. This facility is optional so it can be turned off
- b) Auto calculation of Shipping costs added the delivery by consumers who have previously entered. This facility also supports a variety of shipping companies .
- c) Product Inquiry with special request required by visitors to this facility can help consumers to request a product with a special request .
- d) Multiple Currencies, this website has 12 price entries of each currency (eg. US dollars). Then the price will be converted by the system into 12 different currency rates based on visitors' choice.
- 6) Internet is a network of computers around the world which are interrelated or interconnected . Afriani (2003 ) say the Internet is a loose network of thousands of computer networks that reach millions of people around the world . The original mission was to provide a means for researchers to access the data from any number of computers. But now Internet has evolved, becoming a very effective means of communication, so that it has got strayed far from the beginning. (Soemirat , 2003, p 188 )
- 7) Online store. Online store is a website that displays merchandise like a store or a supermarket that is available in natural shopping cart or tap the function which holds the items to be purchased by visitors. Online store is an

innovative web application to which you sell online on the internet. (Bambang Eka Purnama, 2013, p 54)

8) SMO (Social Media Optimization). SMO is an online promotion strategies undertaken to optimize social media tools and platforms (rather than optimizing search engine / search engine). Tools and social media platforms themselves are the various media used by Internet users to share their opinions, experiences, and views of other internet users. Social media platforms can include Facebook, Twitter, Ym, MySpace, and others. Application of SMO strategy is as important as the application of SEO. (Bambang Eka Purnama, 2013, p 81)

9) E - Commerce. Electronic commerce as a means of doing business using a computer network, has already been known since 20 years ago, between 1970s and 1980s. E-commerce (electronic commerce) as part of the electronic business (businesses that use electronic transmission). In general, e-commerce can be defined as any form of trade goods or services using electronic media. (Kotler and Armstrong, 2001, p 318) E-commerce is a dynamic set of technologies, applications, and business processes that connect businesses, consumers, and specific community through electronic transactions, and trade in goods, services, and information that will be conducted electronically. (David Baum, 1999)

### 3.1 Library Studies

Trading activities on the Internet through web pages is also known as e-commerce, to facilitate transactions between producers and consumers (Indra Susilo, Berliana Kusuma Riasti, Making E-Commerce in Kiosk Batik A. Rahman By Open Cart Base, Chrysanthemum Unsa FTI 2012 Volume 1)

In 2011, Muhammad Ilyas examines Analysis And Design Media Promotion And Website For Sales At Stores Batik Patimura, Bangkalan, Madura. The problems discussed by Muhammad Ilyas is Patimura Bangkalan Madura Batik Shop which is engaged in the field of business written in the form of batik handicrafts which still use a traditional way to perform such promotion through brochures, business cards, from mouth to mouth to the exhibition of muludan event that does not require low expenses. The sale process can only be done by coming directly to the customer's batik shop Patimura which of course takes time and high travel costs, especially from customers outside Madura.

In 2012, Widodo researching on Analysis and Design Website For Media Promotion And Sales Selfish Cloting Company E-Commerce or electronic marketing is one of the marketing strategies that use electronic media such as websites for marketing products or services. E-commerce is a way of marketing that does not require the high cost however has a very wide range of marketing. Selfish Clothing Company is a company engaged in the apparel industry in the city of Yogyakarta.

Online store is a store that sells a variety of items online (connected to the internet). Online store is a website that functions like kiosks, shoppers can order items selected and

purchased by way of sending money through a bank account. Then the ordered goods will be delivered to the destination address (Roni Jefricha Pradani, Adri Gautama, Information Systems Development Online Shop Tupperware, Chrysanthemum Unsa FTI 2012 Volume 1) By Andrie Basten (2011) in his journal entitled Web-Based Applications Online Sales In CV.Monreal. Competition among companies in the sale of shoes, encouraging entrepreneurs vying to create something new so they do not lose customers. CV.Monreal realizes that the current means of the internet into people's lifestyles who want everything fast-paced and practical.

## 4. Implementation

Implementation stage is the implementation stage of the design phase, it is written in chapter III to web pages ready to be accessed. **The first thing to do** to open an e-commerce web is to fill in the URL address in the address bar of the web browser by writing <http://wigaart.net/>. Then pressing enter will display the start screen or home.

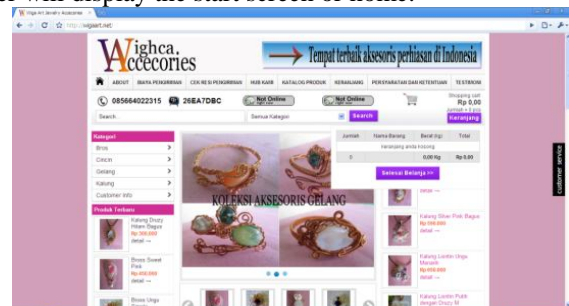


Figure 3.1: Display home

Home page contains the entire content of the website.



Figure 3.2: Display of product categories

To select a product category that is in the category menu there is a wide-range of categories available. If **one wants to see the products** from one category, click on the desired category eg. clicking Bross.



Figure 3.3: Views about

“About” menu provides information about the Art, if anyone desires Wiga, just directly place Wiga Art.



Figure 3.4: Display shipping costs

Shipping menu contains information about cost of shipping goods to consumers via freight agent.



Figure 3.5: Display check delivery receipt

Delivery receipt menu contains the receipt of goods that have been delivered; so the consumer can check whether the goods that he has ordered have been delivered or not.



Figure 3.6: Display our hub

Menus and menu testimonials contact us about suggestion or advice on consumer complaints to Wiga Art about products and services. Via e-mail, sms, or bbm.

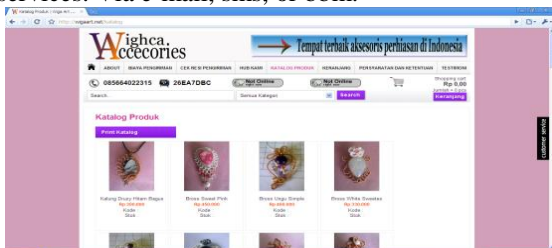


Figure 3.7: Display product catalog

Menu product catalog contains the products that are provided by Wiga art and can be printed or downloaded.

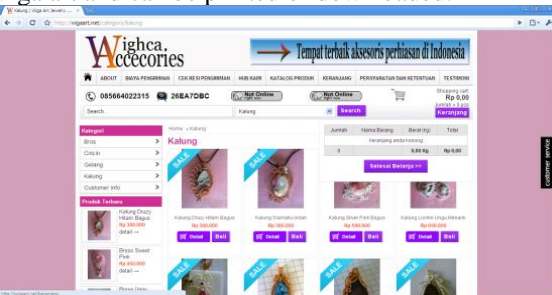


Figure 3.8: The initial view shopping cart

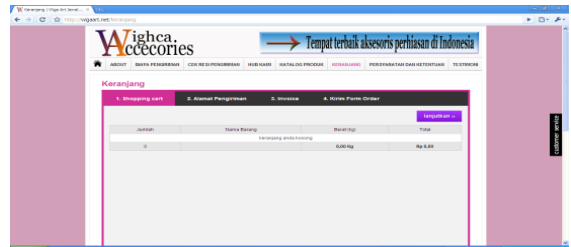


Figure 3.9: Display cart

Menu “basket” is for shopping or ordering products, ranging from the number and price of the goods.



Figure 3.10: Display terms and conditions

The menu contains the terms and conditions on the terms and conditions in order goods, payment, delivery address to customers.



Figure 3.11: Display testimony

Testimony serves the same menu as the menu our hub facilities given to consumers who Wiga Art tesmony menu is used to give criticism or message to Wiga Art for Art Wiga further development.

#### 4.1 Trial

Testing e-commerce web Wiga art on the user or consumer is in the following image.

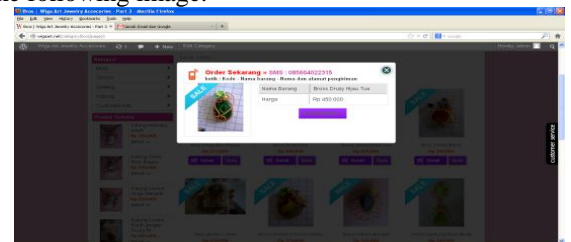


Figure 4.1: cart

Figure 4.1 which displays the cart page after clicking the “buy” button, the page will appear as figure 4.1 and click on “see detail”.

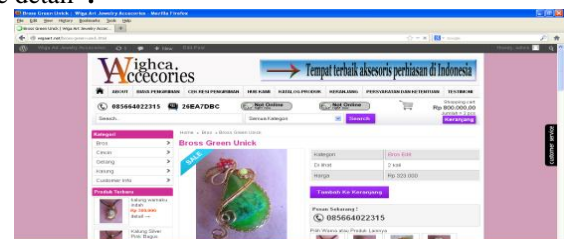
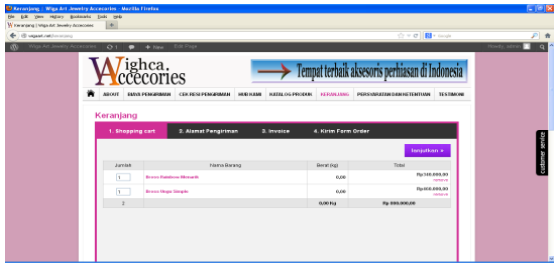


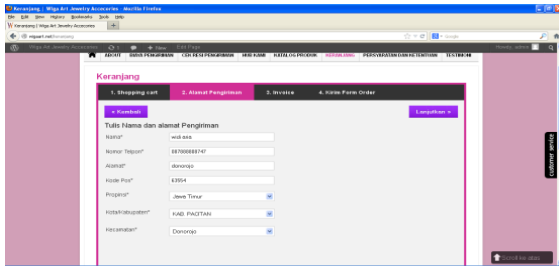
Figure 4.2: Details products to be purchased

Figure 4.2 displays the page after clicking the detail view, to proceed to the basket page click the add to cart button.



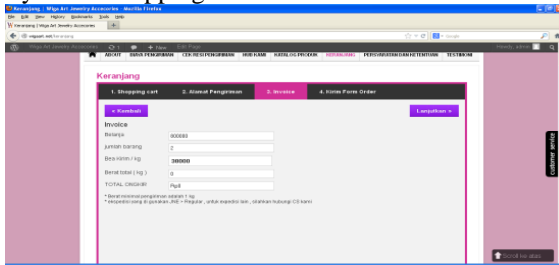
**Figure 4.3:** cart shopping cart

Figure 4.3 cart page that contains a number of items to be purchased, after checking the product to be purchased click on continue.



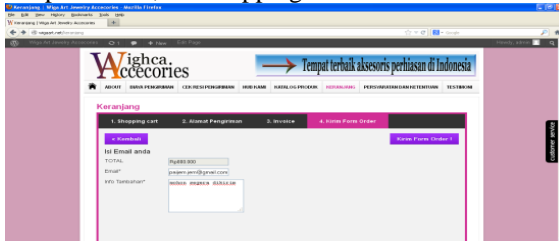
**Figure 4.4:** Shipping addresses basket

Figure 4.4 describes the product shipping address that is already in the shopping cart.



**Figure 4.5:** invoice basket

Figure 4.5 invoice that contains spending, the amount of product purchased, and shipping costs.



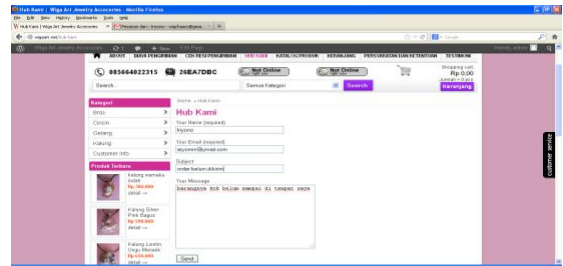
**Figure 4.6:** cart send order form

Figure 4.6 send order form containing the total expenditure, email, and message. After that, click on send order form.



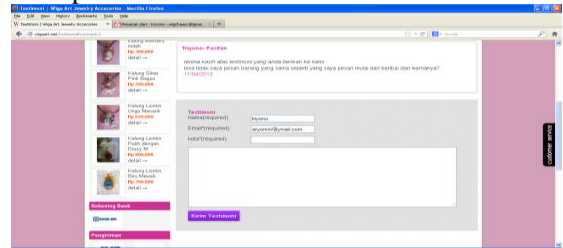
**Figure 4.7:** order has dikirim

Figure 4.7 is the page that the form order has been shipped.



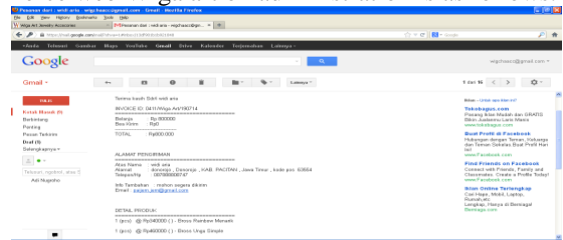
**Figure 4.8:** our hub page

Function menus contact us to interact with the admin user or consumer or to the interests of the parties Wiga art-related products - products that are sold or marketed.



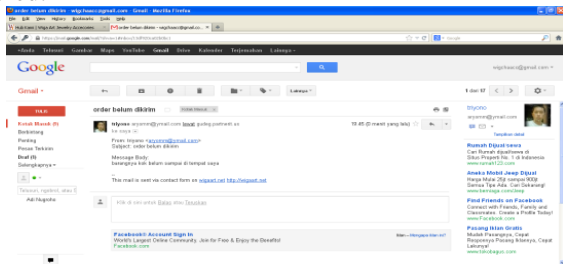
**Figure 4.9:** testimonials page

Testimony menu functions the same as contact us menu that is a medium of communication or interaction with the user or consumer Wiga art to provide suggestions, criticisms, questions about the products of Wiga art. Testing e-commerce web Wiga art on administration is as follows.



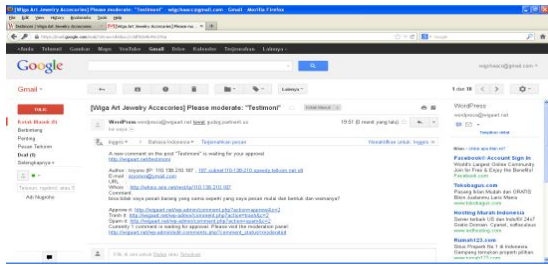
**Figure 4.10:** email ordering

Figure 4.10 displays the page email product that has been ordered.



**Figure 4.11:** hub email us

Figure 4.11 shows emails received from our hub page that has been sent by the user or consumer.



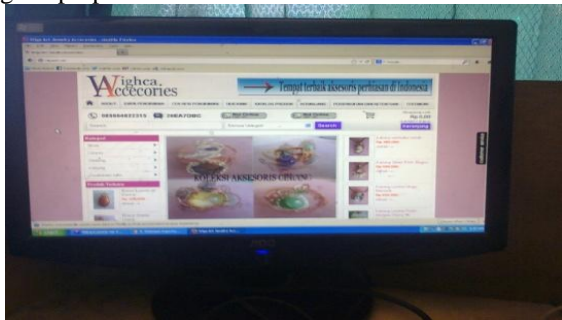
**Figure 4.12:** testimony email

Figure 4.12 shows received testimony from pages that have been sent by the user or consumer.



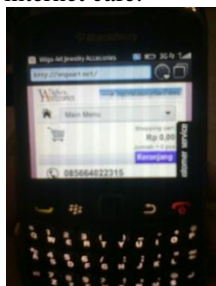
**Figure 4.13:** Testing with Laptops

The image above shows the test of e-commerce on Wiga art using a laptop.



**Figure 4.14:** trial using a computer

Picture above shows that e-commerce in Wiga art can be accessed through an internet cafe.



**Figure 4.15:** picture trials using a mobile phone

Figure 4.15 proves that the e-commerce web of Wiga art can be accessed via mobile phones.

**Table 4.2 Test Trial Table**

Test table describes the menus available in the e-commerce web of Wiga art weather it can be successfully displayed or not.

**5. Conclusion**

- a. E-commerce applications of Wiga Art have a host of services that facilitates the consumer in the transaction.
- b. Enable customers to shop without having to come to the place reasonably direct sellers in an online fashion anytime and anywhere.
- c. With e-commerce web, marketing and outreach to interested buyers wider.

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