

PAPER • OPEN ACCESS

Design of Web-based Sales Information System on Fashion Shop in Bandung, Indonesia

To cite this article: D S Soegoto and C Cica 2018 *IOP Conf. Ser.: Mater. Sci. Eng.* **407** 012023

View the [article online](#) for updates and enhancements.

You may also like

- [Variational quantum one-class classifier](#)
Gunhee Park, Joonsuk Huh and Daniel K Park
- [Preface to the Proceedings of the 10th Asian Physics Symposium \(APS\) 2023](#)
- [Interaction decompositions for tensor network regression](#)
Ian Convy and K Birgitta Whaley



ECS
The
Electrochemical
Society
Advancing solid state &
electrochemical science & technology

DISCOVER
how sustainability
intersects with
electrochemistry & solid
state science research

Design of Web-based Sales Information System on Fashion Shop in Bandung, Indonesia

D S Soegoto^{1*} and C Cica²

¹ Departement Managemen, Universitas Komputer Indonesia, Indonesia

² Departement Teknik Dan Ilmu Komputer, Universitas Komputer Indonesia, Indonesia

*dedi@unikom.ac.id

Abstract. The purpose of this study is to design the system of online sales information in Fashion shop in Bandung, Indonesia. This research used a descriptive method for analyzing how this company can sell its products to a customer. Data collection methods used consist of field research conducted by observation, questionnaire, and interview, while the method of development used system development life cycle method. The results showed that when making a modern business concept, the company will strive to do its best in order to provide good waiter for customer and all people who like fashion world, to make it easier and can be accessed wherever the customer is located and not necessarily go directly to the store then this fashion shop will create a web-based sales information system. In making this web-based sales information, system can begin with a search process to identify and analyze the needs related to the content and features required. This activity was conducted to obtain all the information needed for business process; thus, the application model and sales procedures are in conformity with conventional business processes.

1. Introduction

Fashion shop is one of the most popular business in society due to its high cycle sales.[1] Sales are a company's main activity in generating revenue, both for large companies and small companies. Sales are the ultimate goal of marketing activities, because in this section there are price fixing, negotiations and handover agreements, as well as agreement on payment methods agreed by both parties, to achieve a point of satisfaction.[2] one of the ways of selling is to use web-based sales. This web-based sales can increase the amount of profits.[3,4]

Zellweger described about the forces contributing to the transformation of buyer behaviour when buyers use the World Wide Web for making purchase decisions. [5] These forces include trends in the market place. The condition makes the products to be more complex and plentiful, and the emergence of web-based marketing gave great functions for making better market. Interestingly, the interactive nature of web-based marketing, creates this type of sales significantly different from its traditional ways. Sales on the Web shape buyers' perceptions about products, the decision making process, and the marketplace, resulting in buyer behaviour this paper defines as the cognitive Buyer. Technical developments like secured transactions and improved access methods like catalog content menus will address buyers' uncertainties and provide marketers with a better understanding of their buyers. As this



new sales channel develops, this type of market will create a demand for itself using knowledge systems to organize information.

Lee and Whang described that advances in information system technology such as web-based market have had a huge impact on the evolution of supply chain management. [6] As a result of such technological advances, supply chain partners can now work in tight coordination in how to optimize the chain-wide performance. The supply chain partners need to realize about sharing, the information includes. From above references, there is no information about applying web-based sales on fashion shop. Here, this study designed the system of online sales information in Fashion shop in Bandung, Indonesia. We used a descriptive method for analysing how this company can sell its products to a customer. As we know, sales must be calculated carefully to predict economy condition of the business.[7-10] For collecting the data collection, we used methods consisting of field research conducted by observation, questionnaire, and interview, while the method of development used system development life cycle method. The results showed that when making a modern business concept, the company will strive to do its best in order to provide good waiter for customer and all people who like fashion world, to make it easier and can be access wherever the customer is located and not necessarily go directly to the store then joy collection will create a web-based sales information system. In making this web-based sales information, system can begin with a search process to identify and analyze all needs related to the content and features required.

2. Method

Research method used in this research is descriptive method. Data collection methods used consist of field research conducted by observation, questionnaire, and interview, while the method of development is by using System Development Life Cycle (SDLC) method. System Development Life Cycle (SDLC) method has many types but this online store used prototype analysis. Prototyping is a model building process showing the features of a proposed product, service, or system.

Prototyping is an excellent tool in system development. Most IT specialists (source) use prototyping in SDLC from a technical blueprint. In self-sourcing, however, you can often continue to refine the prototype until it becomes the final system. The prototyping process for both cases is equal to one point; only the result is different. Regardless of who is doing prototyping, the prototyping process involves four steps:

1. Identify basic requirements: During the initial step, you gather the basic requirements for a proposed system. These basic requirements include the desired input and output information and, possibly, some simple processes. At this time, you are usually unconcerned with the rules of editing, security issues, or end-period processing (for example, producing a W-2 payroll system by the end of the year).
2. Develop an Initial Prototype: After identifying the basic requirements, you then set out to develop an initial prototype. Most often, your initial prototype will only include user interfaces, such as screens and data entry reports.
3. And user review: step 3 start the process is really iterative prototyping. When the first user initiates this step, they evaluate the prototype and suggest changes or additions. In the next step to step 3 (after step 4), they evaluate the new prototype version, it is important to involve as many end users as possible during this repetitive process. Assistance will help overcome differences in areas such as terminology and operational processes.
4. Revise and propose prototypes: the last sequential step in the prototyping process is to revise and apply prototypes according to the end user's suggestion. In this step, you make changes to the current prototype and add new terms. Next, you go back to step 3 and ask the end user to review the new type; then step 4 again, and so on (See Figure 1).

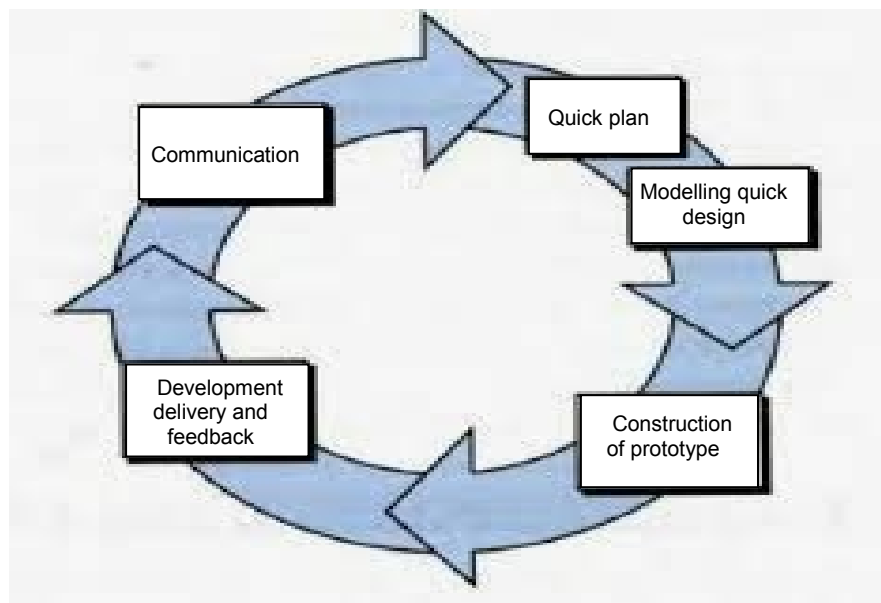


Figure 1. Prototype.

3. Results and Discussion

Business activities on this online store are done online through the help of e-commerce. This store expects with this system then the competition in the business world, especially in the field of fashion will not be left behind. This system can help this fashion shop in promoting and selling the latest and updated collections. As for the right target marketing to offer the product collection is for those who like updated fashion, by this web-based information system, it will be easier for customer to accept advertising or promotion directly through their respective accounts customer.

In making this web-based sales information system begins with a search process to identify and analyze all needs related to the content and features required. This activity obtains all the information needs of each business process, so that the application model and sales procedures are in conformity with conventional business processes.

Groove on System Design This online sales information starts from a customer that connects to both e-commerce service servers and applications via a computer network connection (Internet or intranet) and uses an intermediate application, such as a web browser. Then the buyer login to the system and do the registration first. The system in e-commerce will store data registration and registration verification (including login verification into the system).

Next after confirmation about the customer obtained from the system, then customer perform the process of searching the desired product on the online catalog provided by joy collection. Provided a virtual shopping cart to help the online customer in choosing and putting the products he wants. After that electronic payment process is done by the customer to the system that handles payment problems on this e-commerce website.

The purpose of this sales information system design is to build an online store with the help of e-commerce where products to be sold such as clothes, pants, jackets, shoes, bags, accessories, and others. With this system is expected to customer joy collection can be easier to buy products from home through the internet media. System creation in joy collection using object oriented system modelling through use case diagram, sequence and class diagram. The use case diagram shows some use cases in the system, some actors in the system, and the relationships between them. As we know, use cases are high-level pieces of functionality that will be provided by the system. An actor is someone or something that interacts with the system to be built. [6] In a system it is possible to have more than one use case diagrams which are groups of use case diagrams that are organized with a

specific purpose. Groups of use case diagrams can be done by creating packages, e.g. packages arranged based on business processes, where a business process described with a business use case may be supported by multiple use cases as automated procedures Admin function in the website is to be able to login to the administrator page, admin can perform activities to manage the purchase that contains explanation how to do transaction, manage admin module containing bank data, manage password change, manage product management that add, delete and change product data and product categories, manage comments and manage incoming transaction menus

The next class diagram to display some classes and packages that exist in the system / software used and the relations that are in it. The class diagram shows the interactions between classes in the system.

The following diagram shows the sequence diagram to find the desired product. Search by fill in the information needs. The sequence diagram for ordering the product shows the interaction between the admin and the system. Begin by logging in first. Admin manipulates product order data and checks the completeness and availability of the product. Furthermore the ordering information will be saved to the database and display the order page. To make the purchase process, visitors can buy by simply clicking the buy button and following the specified steps. Furthermore the system will send payment information to the account customer who have done the registration.

Here is a description design web-based sales information system design on Joy Collection. This system will illustrate how the customer can register itself as a member of the store until the customer orders the product from the collection joy and its payment process, all done online to facilitate the customer in the shopping.

The opportunity to build an online business is no longer a barrier. Through a web-based sales information system provides many opportunities and opportunities of market expansion so as to improve its competitiveness compared with other trading businesses that sell the same goods but do not have this online sales system.

The design of web-based sales information system on this store can be described as follows: Detailed system design aims at explaining the shape of the components of the system. Physical system design is intended to describe the form clearly for users both Admin and customer.

In this design, it will appear as the main page design, member registration page, member page, ordering page goods, Admin login page, and ordering goods reporting page.

Based on the description of the design of Information Systems Online sales web based On Joy Collection, we can see the following information:

1. Main Page

The Main Page is the First Page when the customer opens the Joy Collection website, where the main page view is the login icon, the member registration and so on. Who can access the Joy Collection website is a candidate member Joy Collection and admin (See Figure 2).



Figure 2. Main Page.

2. Member Registration page

Member Registration page is a page where customer will register itself as a member of the store. At the time of opening the member registration menu page view there is a login icon, before entering on the Member registration page, customers are expected to fill personal data correctly like username, password, full name, and phone number. After the data is filled correctly, then customer should save the data and registration member will be automatically stored into database. Member can login to page ordering goods (See Figure 3).

A screenshot of the 'JOY COLLECTION' member registration page. The browser address bar shows 'http://www.JoyCollection.com'. The page layout includes a 'Login' button, a search bar, and a 'Selamat Datang Member Joy Collection' (Welcome Member Joy Collection) message. The registration form contains the following fields: 'Username' (with 'Enter Text' placeholder), 'Password' (with 'Enter Text' placeholder), 'Nama Lengkap' (Full Name, with 'Enter Text' placeholder), 'Alamat' (Address, with a multi-line text area), and 'No Hp' (Phone Number, with 'Enter Text' placeholder). A 'Save' button is located at the bottom right of the form.

Figure 3. Member Registration in page 1.

Member Registration Page is a page where members can choose which fashion to be ordered before entering the ordering menu items, in this menu member can choose the fashion according to taste and enter into the trolley as a temporary storage medium. for next member will menchekout and enter into ordering data of goods (Figure 4).



Figure 4. Member's Page 1.

3. Ordering Item Page

This is the page where the customer will order the goods through the web store. At the time of ordering the member is expected to fill the Order Format Available on the ordering page of goods in accordance with the goods to be ordered (Figure 5).

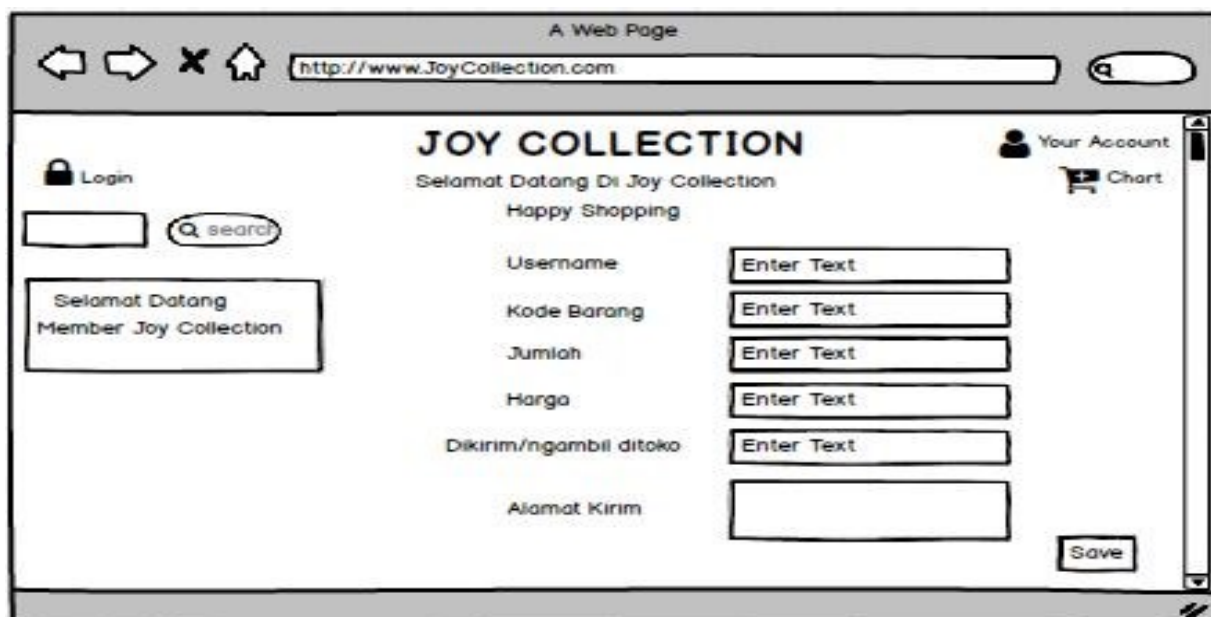


Figure 5. Ordering Item.

4. Admin Login Page

Admin Login Page is a page where a requirement if the admin is willing to go to Joy Collection Website (See Figure 6).

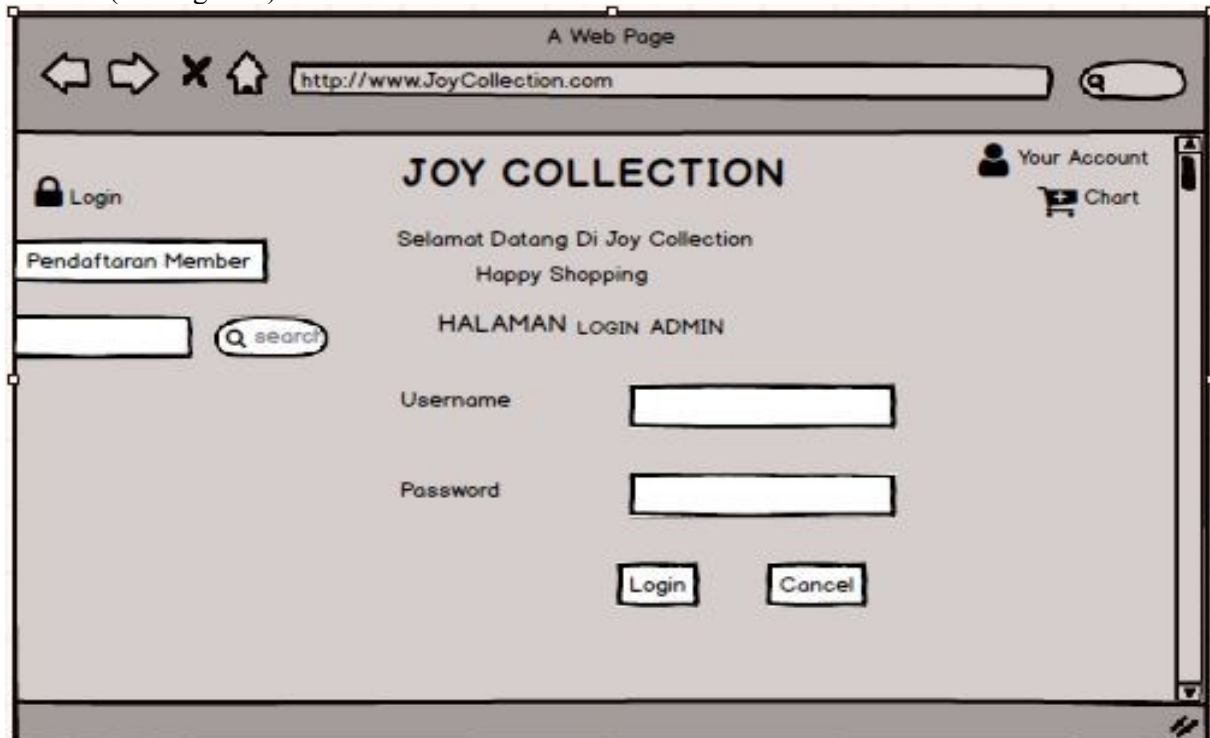


Figure 6. n versus characteristic temperatures curve.

Admin page is a page where admin can see the order member. In this menu, admin can see the ordering details of goods that have been ordered (See Figure 7).

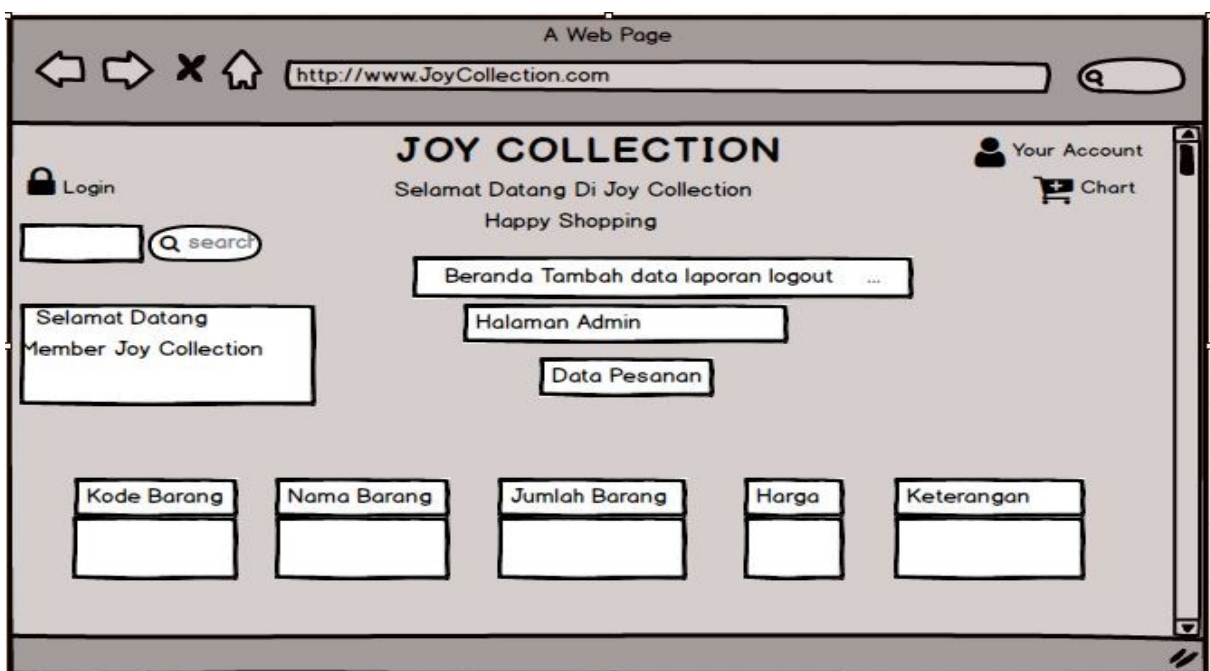


Figure 7. Admin page.

5. Goods Order Report Page

This is a page where it contains all about Booking goods ordered by customer (See Figure 8).



Figure 8. Goods report page.

4. Conclusion

We have investigated whether the web-based sales can improve the quantity of sales. For example, one the fashion shop showed that the business must have a modern business concept in order to keep up with developments in the business world. Therefore, the shop will strive to do its best quality in order to provide good waiter for customer and all people who like fashion world, to make it easier and can be access wherever the customer is located and not necessarily go directly to the store then joy collection will create a web-based sales information system. In making this web-based sales information system begins with a search process to identify and analyze all needs related to the content and features required. This activity to obtain all the information needs of each business process, so that the application model and sales procedures are in conformity with conventional business processes.

References

- [1] Setiyadi, A., & Triyono, R. A. (2013). Pembangunan Website E-commerce Dengan Sistem Informasi Transaksi Berbasis SMS Gateway pada Toko Aska. *IJNS-Indonesian Journal on Networking and Security*, 3(2) pp. 32-41
- [2] Acheson K 1977 Revenue vs protection: the pricing of wine by the Liquor Control Board of Ontario. *Canadian Journal of Economics*, **10**(2) pp. 246-262.
- [3] Arwiedya M R & Sugiarto S 2011 *Analisis Pengaruh Harga, Jenis Media Promosi, Resiko Kinerja, dan Keragaman Produk Terhadap Keputusan Pembelian Via Internet Pada Toko Online (Studi Kasus Pada Konsumen Toko Fashion Online yang bertindak sebagai Reseller yang ada di Indonesia)* (Doctoral dissertation, Universitas Diponegoro).
- [4] Susianawati H, Tjandrarini A B, and Wulandari S H E 2017 Design of Web-Based Sales Information System at CV Gemilang Indonesia. *Jurnal JSIKA*, **6**(1) pp. 1-10.

- [5] Zellweger P 1997 Web-based sales: Defining the cognitive buyer. *Electronic Markets*, **7**(3), pp. 10-16.
- [6] Lee H L and Whang S 2000 Information sharing in a supply chain. *International Journal of Manufacturing Technology and Management*, **1**(1), pp. 79-93.
- [7] Camerer, C., Loewenstein, G., & Weber, M. (1989). The curse of knowledge in economic settings: An experimental analysis. *Journal of political Economy*, *97*(5), 1232-1254.
- [8] Altman, E. I. (2000). Predicting financial distress of companies: revisiting the Z-score and ZETA models. *Stern School of Business, New York University*, 9-12.
- [9] Edmister, R. O. (1972). An empirical test of financial ratio analysis for small business failure prediction. *Journal of Financial and Quantitative analysis*, *7*(2), pp. 1477-1493.
- [10] Fernández, P. (2007). Company valuation methods. The most common errors in valuations. *Research paper no, 449*, pp. 1-10.