



# South Sumatra Business Showcase; Development South Sumatera Traditional Products Information System

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**Abstract.** Entrepreneurs must figure out how to serve clients fast and give them the information they need without being constrained by space, time, or distance when they run a firm. Because variables like the company's location, operating hours, and lack of product information may lower sales and even force clients to switch to better alternatives. In order to promote sales of various batik and culinary specialties in the South Sumatra region, this study aims to design a web-based E-Commerce Application system called the South Sumatra Business Storefront. This system will contain product data list features, data input, and available product information. The waterfall technique, which includes stages for system design, development, integration, operation, and maintenance, is the research methodology employed. MySQL serves as the database and PHP programming language. Data collection techniques using observations, interviews, and literature study. The output of this study resulted in a Business Storefront that is embodied in the form of a storefront portal web which has an MSME account and a compathatn who supports the marketing of MSME products and monitoring the performance of using the storefront portal. Through the South Sumatra business storefront, Indonesian people can access transaction information on sales of Batik products and traditional South Sumatran culinary delights.

**Keywords:** Information System · Business Storefront · E-Commerce · MSME

## 1 Introduction

Especially since the crisis hit Indonesia, the role of SMEs in the Indonesian economy has increased significantly. The crisis has proven that the resilience of small businesses is stronger than that of most large companies. His one of the biggest problems facing his MSME Entrepreneur (Micro/UKM) in Indonesia is marketing. In fact, his inexperienced MSMEs do not yet have a large market reach and reliable marketing capabilities. These trusted marketing skills can be improved with the guidance of a scientist. Universities apply the principles of joint commerce or joint marketing, so they can help marketing for MSMEs. In collaborative commerce, MSMEs, academics are called coaches in this

case, and customers work together to buy and sell. Collaboration is done by building a web portal or website that can be accessed by third parties. South Sumatra has 4 local governments and 13 district governments. Tie-dye is a region-specific product found in every city and region. Tie-dyeing is a product of local wisdom as each region and city has its own unique style, such as Jupuri B Palembang Batik, Duren Le Buklingau Batik, Gumbo Banyuasin Batik, Musi Banyuasin Sake Batik. This batik has various patterns and motifs. However, the presence of Kabu/City Batik in Sumatra is very important.

At that time, the people of Indonesia, especially those of South Sumatra, did not know much about the batik trade in the South Sumatra region. Out of this research effort, the South Sumatra Business Showcase is the development of an informational business application to showcase batik varieties from four regions of South Sumatra, three typical food types of the South include: Regional Sumatra, Pemppek, Kempran, Crackers, and many different types. The typical cake of Palembang. This his website is part of the MSME storefront web portal. UMKM web portal has two types of accounts for him: MSME account and coach or research team. In addition, MSME accounts have features that support MSME marketing. Coach accounts, on the other hand, have the ability to monitor MSME usage in the storefront portal. The Indonesian community can access transaction information through the South Sumatra Business storefront. Hence, the title of this article is Designing a Business Storefront Information System for Traditional Product Storefronts in South Sumatra.

## 2 Literature Study

### Definition of Business Storefront

According to [1] buyers can quickly view an online store's homepage or feed, so that the online storefront can determine if a product works. Therefore, the appearance of online shops on social media should be made more attractive.

### Information Technology Approach

In [2] said that business circles widely use the information technology approach to boost the sales business. In fact, [3] the importance of IT is increasingly being acknowledged and used, particularly in advancing marketing techniques, one of which is the website [4].

### Definition of E-Commerce

According to [5] the findings of earlier studies conducted by [6], the results of a previous study conducted by the Informatics Research Program at the University of Surakarta were: "A solution to the problem from a PHP and MYSQL-based online shop application (E-commerce). published a journal titled Businesses already have websites but do not yet have online stores, resulting in poor marketing of their products. [8th place]. So are the programming language PHP and the MySQL database. This program was created using the waterfall process. This study investigated user application acceptance rates using experimental and quantitative methods.

It can be inferred that this application is functioning well based on the Unified Modeling Language (UML) tool is used as the modeling language in the system development

technique [6, 7]. This study creates a website-based marketing platform with an online store for CV. Cakcuk Surabaya so that the available consumer communication channels are more effective. Interactive as an information medium for waste processing so that it has android-based economic value.

According to [8], Information Systems Study Program, Faculty of Engineering and Computer Science, Universitas Islam Indragiri, in Its publication, E-Commerce Sales of Clothing on Web-Based Mariati Stalls, examines sales reports and transactions, simplifying the transaction process for vendors and purchasers in addition to disseminating sales data in the form of reports both in the form of reports.

Consumers can browse products and product information, providing sellers and buyers with transaction convenience. E-commerce also means advertising, selling and providing the best support and service through his webshop 24 h a day for every customer, according to Garner [4, 9], is the process of purchasing and reselling goods and services via online consumer services on the Internet. The letter e, which is short for electronic, has gained popularity as a prefix for other terms related to electronic transactions. According to [3, 10], the concept of e-commerce in question is the buying and selling of goods and services through the Internet using online computer services.

### **Micro, Small, and Medium Enterprises (MSMEs)**

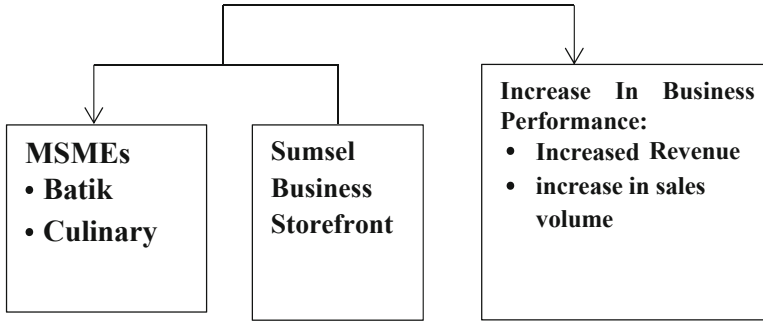
The government has always prioritized the MSME business unit as it still causes problems. According to Law No. 20 of 2008 on MSMEs, MSMEs are defined as follows a micro business is a profitable business owned by individuals and small businesses that follows the legal definition of a micro business.

The law [11] states that the value of net worth, the value of assets excluding land and buildings for business premises, or annual sales revenues are the criterion used to define MSMEs. Using the following standards:

- a. A business is considered a micro business if it meets the following requirements: a) Net assets not exceeding IDR 50,000,000.00 (50 million Rupiah) (excluding land and buildings used as a place of business)
- b. Sales of up to IDR 300,000,000.00 each year (three hundred million rupiah).
- c. The requirements for small businesses are as follows: Net assets of at least IDR 50,000,000.00 (50 million rupiah) and up to IDR 500,000,000.00 (500 million rupiah), excluding land and buildings used as a place of business; Generate annual sales. (2.5 billion rupiah).

### **Definition of Information**

“Information is data managed and processed to produce meaning and support decision-making” write [12] explains that “Information is data that has been structured, has had applications, and has been beneficial.” Given the two definitions given above, it is clear that information has the connotation of a managed set of data with applications and advantages in decision-making.



**Fig. 1.** Frame of mind

### Definition of Information System's

“An information system is a system that is arranged methodically and consistently From a network of connected information flow each aspect a system that facilitates communication between functional sections or units,” state Agus Irwan et al. (2016:8). According to [9, 12], information systems are structured methods of gathering, entering, processing, and storing data as well as storing, managing, and regulating information in order to help an organization achieve its objectives. An information system is a system that is systematically assembled from a network within an organization that connects each part. This organization supports the operation function in data collection, entry, processing, and storage by delivering information reports so that there is communication between functional parts or units and can accomplish the goals that have been set.

### Data Flow Diagram (DFD)

DFD, according to [10, 13], is a logical model that describes what happens throughout data processing, from the origin and use of the data, to the location of the data and the processes that created it, to the interactions and processes that take place within the data.

### The frame of mind

The frame of mind in this study is shown in Fig. 1.

## 3 Research Methodology

### 3.1 Analysis Method

The descriptive analysis technique of research was used in this study to gather data, analyze it, and investigate potential issues in order to gain fresh understandings that may be used to guide policy.

### Tools and Materials Needed in making a website

- Laptop/Computer: used to make coding and publish a website.  
Laptop/Computer: Internet network: used so that a laptop or computer can access online search engines because in publishing a website, an internet network is needed to make coding and publish a website.

- Domain: the function of the domain is to provide an identity to a website so that there is no duplication and its nature is unique. Therefore, the purpose of using hosting is to store information and data belonging to the website.
- Hosting: The main function of hosting is indeed to store data. The data you want to display to visitors must be uploaded and stored in the hosting so it can be displayed. Because hosting serves as storage space
- Search Engine: a search engine application such as Chrome, Mozilla, Microsoft Edge, and so on that is used to access pre-hosted websites.
- Other supporters:
- Xampp: Using the Apache HTTP Server software as a stand-alone server (localhost), or, to put it another way, one that is reachable even when offline. PHP is a programming language used to create the MySQL database and the translation language.
- Visual Studio Code: used to research code (Coding) in website creation, be it creating an interface page or creating code in each action on each button so that it can be saved into the database
- PHP: programming language used in website creation

### 3.2 Object of Data Collection

According to the title chosen, the partners were the proprietors of MSME of South Sumatra batik fabrics and traditional gastronomy in South Sumatra, who were employed as the object of data collection, which became the topic of research., consisting of Mr. Potato (Palembang), Wong Kito Gallery (Musi Banyuasin), Linggau Batik Studies (Lubuklinggau), Dipa batik juju (Muara Enim), Kemplang Crackers 519 Mackerel Cap, Dapur Ita Business, and pempek Rayhan.

### 3.3 Design of Data Collection

The waterfall model framework of the SDLC (Software Development Life Cycle) was employed in the study's design. This approach is frequently referred to as the lifeline classic or the linear sequential model (Sequential Liniear) (Classic Life Cycle). The System Development Life Cycle (SDLC), as defined by [11, 18], is the process of creating or updating a software system employing models and methodologies that have previously been used to create software systems (based on best practices or well-tested methods). The waterfall model offers a sequential or sequential approach to the steps of analysis, design, coding, testing, and support in the software life cycle.

## 4 Results and Discussion

### Research Implementation

1. Identify problems, opportunities, and research objectives.

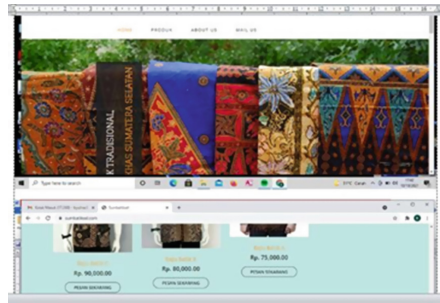
At this stage researcher tries to examine the problems that exist in the community and tries to solve these problems which will later become the research objectives. The problem that will be solved by the researchers is the lack of marketing media

for MSME of South Sumatera's batik and culinary products which affect to limited scope of marketing from the MSME products with good quality. So in this study the researchers try to solve these problems by offering solutions in the form of making e-commerce named as South Sumatera Business Showcase to increase the income of the MSME subjects.

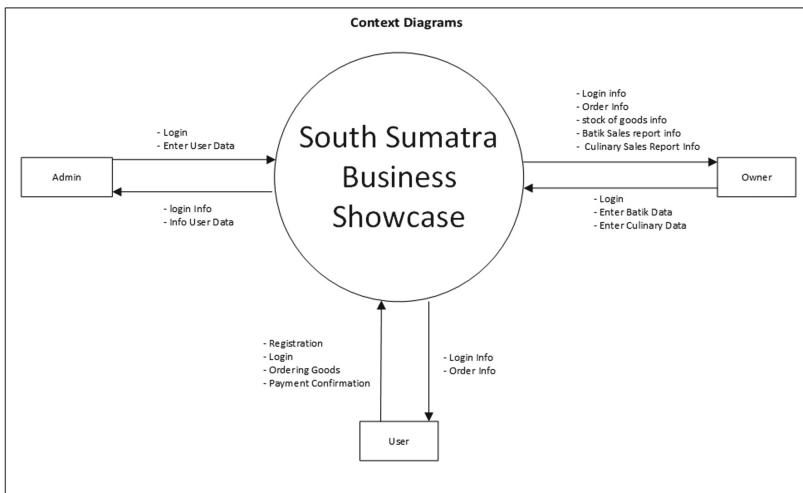
2. Conducting a literature study, while based on the problems found previously, several theoretical basis were obtained.
3. Analyzing functional requirements.

At this stage the researcher tries to make e-commerce specifications. The functional requirements for e-commerce applications are as follows:

- a. Accounts, in general accounts in the application are divided into 3 types of users related to system access rights, namely: buyers who are the consumers of products, sellers who are the MSME in the Malang Regency of Economic Enterprise and Micro Business, and system administrators who are the member of Malang Regency of Economic Enterprise which functions to verify the buyer and seller accounts in order to make sure that the whole sellers are the MSME subjects located in Malang Regency.
  - b. Home page, serves to display information related to user accounts that contain user identities such as names, contact number, address, email address, and bank account number.
  - c. Dashboard, is a feature that serves to display information about the summary of user account. For buyer and seller accounts it contains a list of transaction and balances, which consist of active balance and withdrawal balance, while for the system administrator accounts contains a summary of all transaction that occur in self-trading, number of buyers, number of sellers.
  - d. Transaction, is a feature that serves to display information about transactions that occur. In this transaction feature, the buyer can monitor whether the request for goods or services is received by the seller, and from the seller's point of view, the seller can approve the request for the transaction for goods or services.
  - e. List of Goods, this feature mainly owned by the seller, it serves to display a list of goods or services being sold, provide prices, has the ability to input the number of the goods and add information of the goods or services by the form of photos, specification, and additional descriptions.
  - f. Feedback is a feature that allows users to rate the effectiveness of transactions involving goods or services sold by MSME subjects. With this feature, it is believed that the quality of goods and services would increase and that it will be simpler for customers to decide which items and services to buy.
  - g. Settings, this feature serves to further manage the account to be detailed, such as changing email addresses, mobile phone numbers, or changing profile pictures.
4. Designing the system that would be recommended, as shown in Fig. 2. The Business Showcase application is an integrated system of digital sales media and MSME partners which is described in Figs. 3 and 4.



**Fig. 2.** South Sumatra Business Showcase



**Fig. 3.** Context diagram

The system designed in the application consist of users which detailed as follows:

1. Use Case Diagram

In general, there are three actors in usage diagram design, namely system administrators, sellers from MSME, and buyers.

In the system administrator use case diagram, system administrator users can verify seller and buyer accounts, they can also view buyers and sellers data, and view dashboards by logging in first (Fig. 5).

In the seller’s use case diagram, the seller user can perform several activities such as registering requirements in order to be able to login into the system and access the system, updating product data, updating transaction, updating seller’s info, and viewing dashboard (Fig. 6).

In the buyer use case diagram, the buyer can perform several activities such as registering requirements in order to be able to login into the system and access the

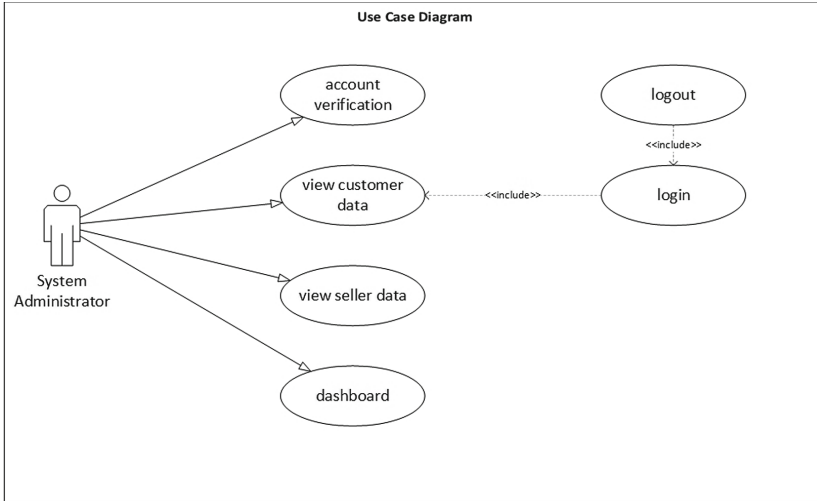


Fig. 4. Use Case of System Administrator

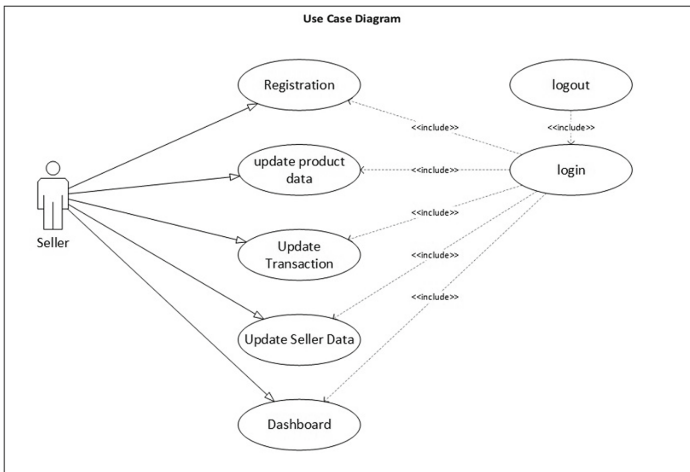


Fig. 5. Use Case of Seller

system, viewing product, updating transaction, updating buyer’s info, and viewing dashboard (Fig. 7).

### User Interface Design

The result of the Business Showcase information system design shows the appearance of the application created is shown in Figs. 8, 9, 10 and 11.

A web-based marketing medium with an e-commerce system called South Sumatra Business Showcase is the result of the study as a more effective way of communicating with customers. The advent of electronic commerce, also known as e-commerce, has



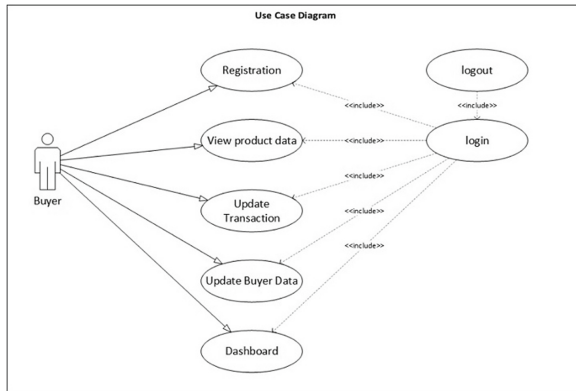


Fig. 6. Use Case of Buyer

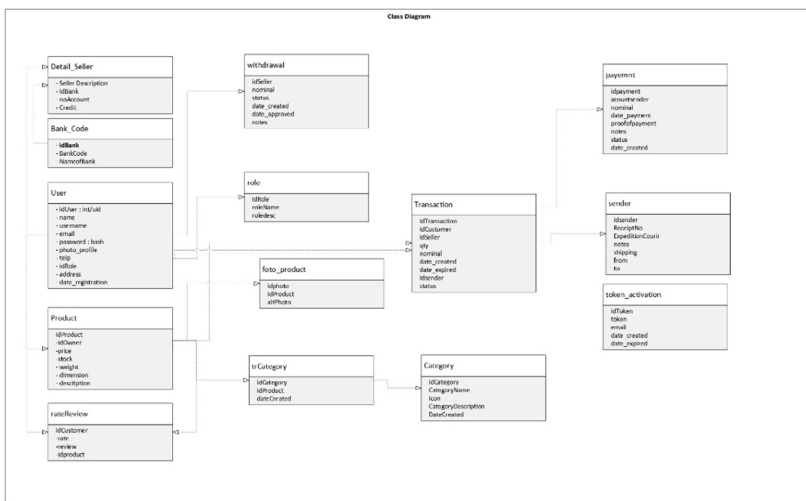


Fig. 7. Class Diagram

forced his MSME tie-dye and cookware manufacturer in South Sumatra to make great efforts to improve performance and expand existing applications.

This is consistent with and lends support to research by [6, 7], which discusses the need for more effective and efficient information systems in order to expand and speed up the promotion and marketing process.

E-commerce, as defined by [14], is the exchange of goods, services, and information over computer networks, most of which are the Internet.

With the use of this website, vendors may effortlessly advertise their goods to a larger audience. In addition, it should be mentioned that, in accordance with the findings of [6, 7]. This information system requires strong system security and development in a more professional direction in order to provide high quality information. Regular data

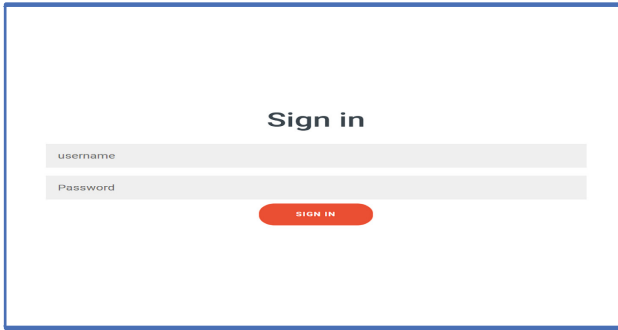


Fig. 8. Login Page

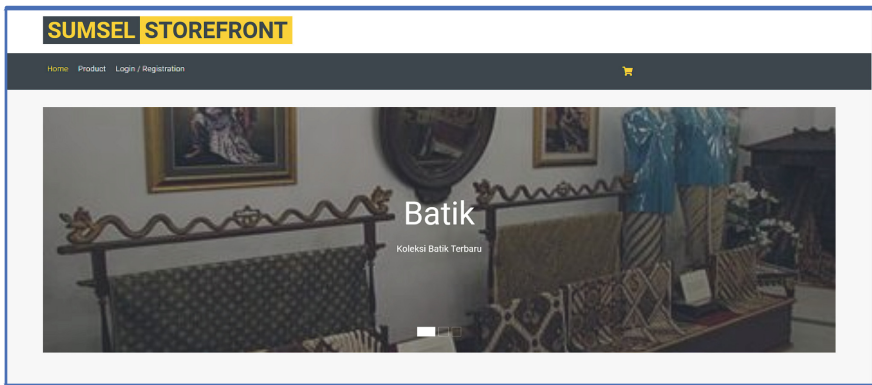
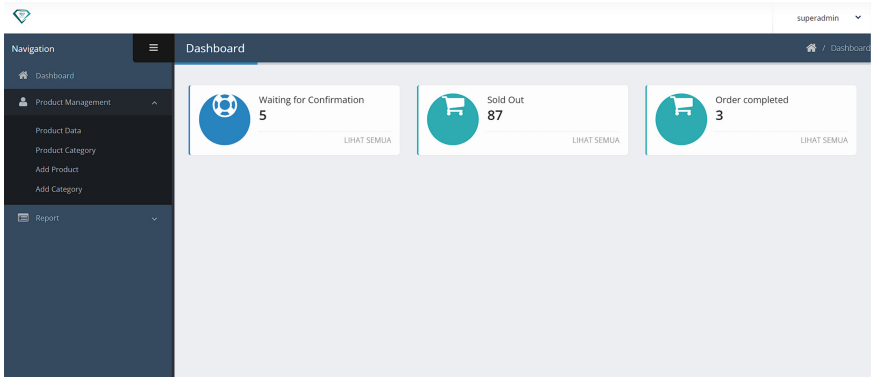


Fig. 9. Dashboard



Fig. 10. Shopping Feature



**Fig. 11.** Showcase

backups are also necessary in the event that the Web server crashes or is lost. On the web safety page, it is advised to perform routine monitoring to prevent unpleasant things from happening. To optimize the interface, the web page's appearance needs to be upgraded. Regular maintenance must be performed on both the hardware and the software.

## 5 Conclusion

Researchers can make several conclusions based on the information provided previously, that the existence of a website can improve the service and quality offered by technological advances. Product marketing on the Sumbatiksel website makes it easier for customers to shop, find out what items they want to buy, save time when making reports so it doesn't take long.

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