


E-MARKETPLACE FOR SMEs IN TOURISM VILLAGES

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ARTICLE INFO	ABSTRACT
Received: Revised: Approved:	<i>The Ngargoyoso tourist attraction area is one of the popular tourist attractions in Karanganyar Regency, especially in Central Java. In this tourist area there are many small and medium enterprises (SMEs) that offer various products, especially original products from Ngargoyoso. The use of information technology to support the marketing and promotion of local products, namely the Electronic Marketplace which is made based on a website with marketing and sales features, is expected to increase income and improve the welfare of the local community. The problem faced by Small and Medium Enterprises in the Ngargoyoso Tourism Village area is that the sales model that is carried out is still conventional and the promotions carried out are still very limited, only limited to the surrounding area. Sometimes tourists who visit don't even know the location of the SMEs in the tourist village of Ngargoyoso. And also many tourists who don't know what products from SMEs and their locations are, considering that currently in the tourist village of Ngargoyoso there is no market or physical store to market souvenirs typical of the products of SMEs in the village of Ngargoyoso. This has resulted in several SME products that have not been exposed to the outside. Even though during the COVID-19 pandemic, such as the current number of tourists visiting the Ngargoyoso tourist village, of course this greatly affects the income value of SMEs in the Ngargoyoso tourist village. Thus, the application of the Electronic Marketplace with a Rule Based Expert System can be used as a promotional media and selling and buying with a wider reach.</i>
KEYWORDS	Tourism, Village, SMEs, COVID-19
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INTRODUCTION

Ngargoyoso tourist attraction area is one of the popular tourist attractions in Karanganyar Regency, especially in Central Java. In this tourist area there are many small and medium enterprises (SMEs) that offer various products, especially original products from Ngargoyoso. Sales and marketing methods that have not been computerized make the

products offered are only recognized and in demand by the public or tourists who visit tourist attractions so that they do not provide significant benefits to business actors.

Based on visitor data published by the Karanganyar Regency Youth and Sports Tourism Office, the number of domestic and foreign tourists who visited the tourist attraction in the Ngargoyoso area until November 2018 reached 98,813 people spread over 5 (five) destinations including Sukuh Temple, Waterfall Jumog, Parang Ijo Waterfall, Grand Forest Park (TAHURA), and Semilir Valley. (www.disparpora.karanganyar.go.id) With the existing tourism potential, it provides broad opportunities for Small and Medium Enterprises (SMEs) in the Ngargoyoso tourist area to promote and introduce Ngargoyoso original products to the public.

visitors both domestic and foreign tourists so that it is expected to increase sales turnover.

Based on data published by the Central Statistics Agency (BPS) of Karanganyar Regency through the official BPS website, it is stated that the calculation of the Gross Regional Domestic Product (GRDP) of Karanganyar Regency since 2010 has always increased from 2,618,384.06 to 3,024,862.36 in 2016. The data is data for the GRDP category of Agriculture, Forestry, and Fisheries. This amount is much smaller than the GRDP in the processing industry category, which has experienced a significant increase every year. Starting from 7,109,965.91 in 2010 to grow to 10,197,089.35 in 2016. (www.karanganyarkab.bps.go.id)

From the problems that have been explained regarding the sale and marketing of SME products in the Ngargoyoso tourist area, it can be improved with E-Commerce so that consumers or buyers can easily get the goods they want without having to come to the place of production. This makes it easier and increases sales, and can help increase the income of the local community.

RESEARCH METHOD

System development method used is RAD. RAD (Rapid Application Development) is one method of developing an information system with a relatively short time.

a. Requirements Planning.

At this stage, the author conducts an analysis and identifies the purpose of the system to be designed and the need to achieve the goal. The design that was analyzed was carried out using the field observation method to find out what the requirements of this system were. This need will also affect the work process, input and output of data processed in the system. In connection with the planning stage, the author conducted a survey directly related to the marketing process of regional products in the tourist area of Ngargoyoso Karanganyar.

b. Design Process (Design Workshop).

At this stage, the author will design a system that includes: system workflow, operating methods, outputs and system displays and others that have been adapted to the needs analysis at an early stage to solve the problem. will be made for further correction by the user regarding any shortcomings of the given design in order to create a system that is suitable for the user. After the user sees the design that has been given and provides corrections to the system design, the author will make improvements to be adapted to user requests. In connection with the design stage, the author designs the system modeling using Use Case Diagrams, Activity Diagrams, Sequence Diagrams, Class Diagrams, and database relations to facilitate further processes.

c. Implementation (Implementation).

In this implementation phase, the analyst works with the users intensely during the workshop and designs the business and non-technical aspects of the company. As soon as

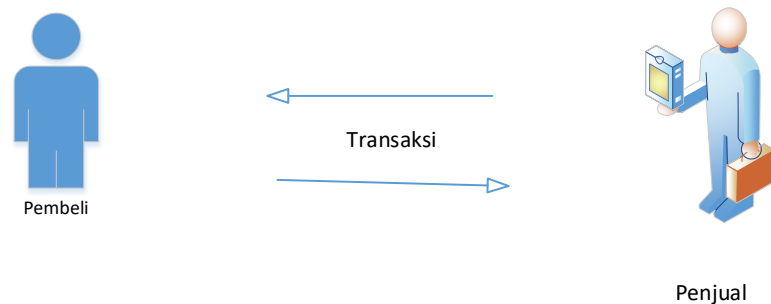
these aspects are approved and systems are built and screened, new systems or parts of systems are tested and then introduced to the organization. In connection with the implementation stage, the authors coded the system application using the HTML, PHP, CSS programming languages and using the MySQL database.

RESULT AND DISCUSSION

Planning Terms

In this stage it is known what the system needs are, namely by identifying information needs and problems faced to determine goals, system boundaries, constraints and also alternative problem solving.

Running System Analysis



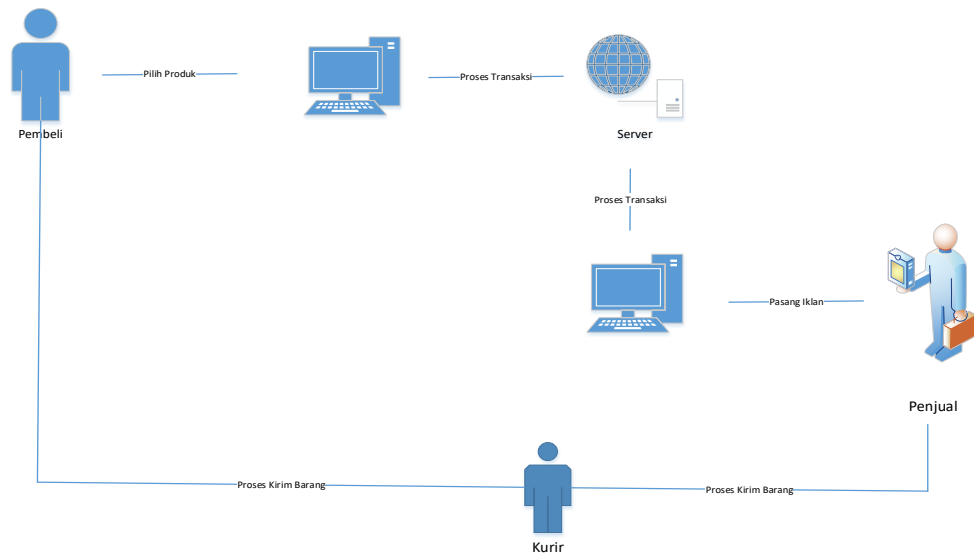
product transaction flow that has been running so far can go through 2 steps. First, prospective buyers can make purchases directly to the seller by going directly to the place of sale, or through pre-orders by contacting the seller through a contact person either by telephone or via direct message by SMS or whatsapp. If the transaction is directly at the place of sale, it will be served immediately, but if you make a pre order first, the seller must check the availability of the ordered goods. If the goods are available, they can be delivered directly either through Cash On Delivery or through a delivery service, but if the ordered goods are not available, the buyer must wait until the goods are available.

System Weakness Analysis

Problems in a system can cause conditions and situations that deviate from the goals of the system being developed, and can even deviate from the goals of an organization that uses the system. To avoid these problems, it is necessary to analyze the weakness of the system which includes analysis of system work, information analysis, economics, control, efficiency level, and service of the existing system. This is important because what appears on the surface is not the main problem but only symptoms of the problem or non-mainstream problem.

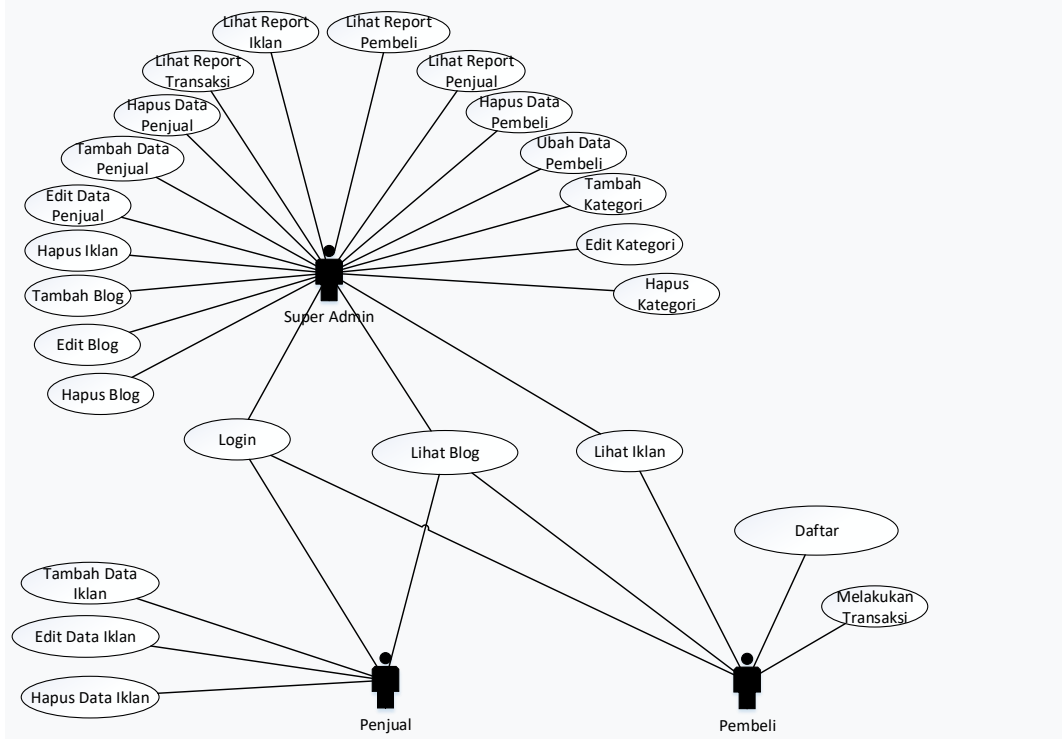
Proposed New System Workflow

The new system is a proposed system design by computerizing product transaction activities in the form of a website



Process Design Using Unified Modeling Language

UML serves to document every block of a software system. Which consists of use cases, activity diagrams, sequence diagrams and class diagrams



CONCLUSION

Conclusions from the process of making a website-based electronic market information system include:

- a. Electronic market information system using the PIECES analysis method and using a database from MySQL and the PHP programming language.
- b. The electronic market information system provides data processing which includes; ad information data, ad category data, seller data, buyer data, blog data, and transaction data. While the reports generated are: transaction reports, advertising reports, transaction invoices, seller reports, buyer reports.
- c. Access rights in the electronic market information system are divided into three, namely users who are administrators and have the right to manage data as a whole, users who become sellers and have the right to manage advertising data and transaction data, and buyer users who can only view advertisements and articles or blogs offered and presented in the form of product information or information about tourist attractions in Ngargoyoso.
- d. Testing this system using the Black Box testing method and user testing using the questionnaire method. The results of user testing show that the system built is free of bugs and in accordance with the expected functions.

REFERENCES

- A. Kallert, B. Belina, M. Miessner, and M. Naumann, "The Cultural Political Economy of rural governance: Regional development in Hesse (Germany)," *J. Rural Stud.*, vol. 87, no. April, pp. 327–337, 2021, doi: 10.1016/j.jrurstud.2021.09.017
- M. P. Diah, "Pembangunan Pedesaan Untuk Mengurangi Kesenjangan Antara Desa Dan Kota Di Indonesia: Peluang Dan Tantangan," *Public Adm. J. Res.*, vol. 2, no. 2, pp. 165–173, 2020, doi: 10.33005/paj.v2i2.45
- D. Reuschke and C. Mason, "The engagement of home-based businesses in the digital economy," *Futures*, vol. 135, no. October 2019, 2022, doi: 10.1016/j.futures.2020.102542
- M. Moghaddam, A. Jones, and T. Wuest, "Design of marketplaces for smart manufacturing services," *Procedia Manuf.*, vol. 39, no. 2019, pp. 194–201, 2019, doi: 10.1016/j.promfg.2020.01.312