



## Development of Web-Based Advertisement Media on Sahrul Home Car Care

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### Article History

Received

20 July 2023

Received in revised form

27 July 2023

Accepted

29 July 2023

Published Online

30 September 2023

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### Abstract

Amidst the ongoing Covid-19 pandemic, non-essential activities have shifted mainly to the safety of people's homes. This includes remote work (Work From Home) and shopping for basic needs online. However, service workers, particularly those in the service sector like Muhammad Sahrul, have faced significant challenges navigating the pandemic's impact. Sahrul, who owns an all-brand car repair shop, experienced a decline in customers visiting his workshop due to the outbreak. Recognizing the need for a fresh approach, Sahrul created "Sahrul Home Car Care," offering car repair services at customers' residences. To support this initiative, a team of researchers proposed technology-based solutions to improve his advertising strategy. The researchers developed a user-friendly digital portal, [www.sahrulhomecarcare.com](http://www.sahrulhomecarcare.com), showcasing Sahrul's services and implementing an appointment booking system. Additionally, they guided leveraging digital marketing channels to expand his outreach. Thanks to these digital innovations, Sahrul's business gained traction, attracting more customers and positive feedback. Embracing technology proved instrumental in overcoming the pandemic's challenges and ensuring the continued success of "Sahrul Home Car Care" in this ever-evolving digital era.

**Keywords:** Web, Advertisement, Home Car Care, Marketing, COVID-19

**DOI:** <https://doi.org/10.35145/jabt.v4i3.138>

## 1.0 INTRODUCTION

During the current Covid 19 pandemic, almost all less essential activities are expected to be done from home. Not only will work be done from home (Work From Home), but other activities, such as shopping for basic needs, can be done online. Currently, there are many digital portals and marketplaces that offer primary and secondary needs that can be purchased online. On the other hand, many people working in the service sector have ways to survive the huge systemic impact of the Covid 19 pandemic. Similar to online purchasing of daily necessities, service sector workers face the challenge of offering their services online as well. Laundry services, motorcycle and car washes, and motorcycle and car repair shops, for example, may have been able to offer their services in their respective workshops in the past, but during the Covid 19 pandemic, they were unable to provide their services as they used to because many customers were afraid to leave. Stay at home and still want to stay at home, according to the government's advice, which is often broadcast on television and social media. One of the businesses affected by the Covid 19 pandemic is the repair shop for cars of all brands owned by Muhammad Sahrul. Before the pandemic, quite a lot of customers came to the house, which also served as a workshop. However, with the outbreak of the Covid 19 virus over the past two years, it seemed that customers simply disappeared, and the workshops automatically became empty of customers. Even though many customers are satisfied with the work of Muhammad Sahrul's workshop, the service fees are not only thorough in identifying vehicle problems, but also quite favourable to customers' wallets. Moreover, the standard operating procedure (SOP) carried out by "Sahrul" workshop is not inferior to the official workshops for any brand of cars. After conducting interviews with the partners, there were several problems related to its advertising strategy. Muhammad Sahrul felt that he needed to provide a more optimal car service to his customers due to the Covid-19 pandemic. In today's digital age, the use of technology should be carried out by business players in every sector, be it retail, service or manufacturing.

Based on the need for more customers to come to the workshop in Jl. Cakarwesi Raya RT. 39 RWs. 14 Ex. Tosaren Kec. Pesantren, Kediri City, Muhammad Sahrul has been trying to find other alternatives to continue his business through the provision of a service that comes to the house under the name of "Sahrul Home Car Care". So far, more advertising has been done through Facebook's social media. However, as we all know, one of the weaknesses of Facebook is that if you want to see someone's wall or homepage, you have to become friends with them first. This means that the car service photos posted on Mr. Sahrul's Facebook homepage can only be seen by his colleagues who are already friends. This, of course, does not reach the larger market share that Mr. Sahrul wants, which is the entire Kediri Residency, which includes Kediri City/Regency, Nganjuk Regency, Blitar City/Regency, Tulungagung Regency, and Trenggalek Regency.

The research about applicable information system was conducted by (Bakhtiar et.al, 2021) who create web-based portal for marketing in kiranahandmade-soap.com to overcome the problem many people do not recognize about the product kirana handmade-soap eventhough it has quality with good planning, while izzah et. al develop a website containing business information or what is popular as a Company Profile as a media that can store information on Al-Barkah products and also can be seen without a duration of time. This media is also expected to be connected with WhatsApp that has been used for marketing before (Izzah et.al.2021). Another research focused on crafting marketing strategies and job opportunities using digital services, the research revolved around the practical implementation of website-based digital marketing to support the growth and success of Erna Sari Catering's business by harnessing the potential of digital technology (Ely Suhayati et al, 2022). Sri Dewi Anggadini conduct research which aims to integrate zakat institutions operating at the provincial level in West Java, Indonesia, along with their branches at the district or city level. The main focus of this integration is to bring about positive effects on the business continuity of Micro, Small, and Medium Enterprises (MSMEs). By establishing a seamless and efficient system, the study seeks to enhance the overall support provided to MSMEs through zakat contributions, ultimately contributing to their growth and sustainability. (Sri Dewi Anggadini et al, 2023).

## 2.0 METHODOLOGY

In this works, the proposing team offers several information technology-based solutions to address partner problems described in the previous chapter. The leading solutions include solutions in the field of digital technology-based business product marketing. In brief, the following is a scheme of the solutions offered to address partner problems:

**Table 1. The Problem and Solution**

<b>Problems</b>	<b>Solutions</b>
Efforts to show the public about the "Sahrul Home Car Care" business	Creation of a digital portal kedirihomecarcare.online
Digital technology-based advertising efforts	Assistance in advertising activities using digital portals

To carry out this community service, the proposing team and partners have discussed making the stages of implementing the activity. This stage aims to solve problems faced by partners in the field of marketing. The scheme of the stages of implementing community service activities can be seen in the following figure:

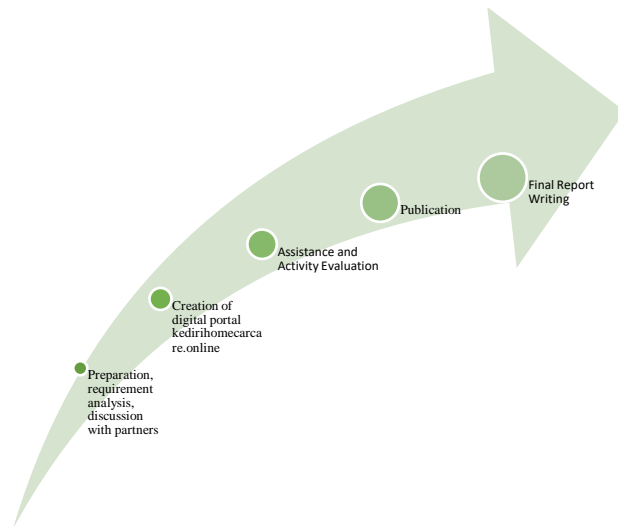


Figure 1. Stage of implementation of activities

The following are specific steps to implement the solutions offered to the partners problems:

1. Preparation, requirement analysis and discussion with partners

In this phase, the proposer will collect data and references related to software development and service data for "Sahrul Home Car Care" In this phase, the proposer will also discuss the requirements for the system to be developed with the partners. The created design will be described in use case diagrams, system architecture diagrams and entity relationship diagrams to facilitate the development. Figure 2 shows the created use case diagram. In this design, the web enterprise profile has two actors: the administrator and the customer. Then, the two actors are described as use cases by the performed needs analysis.

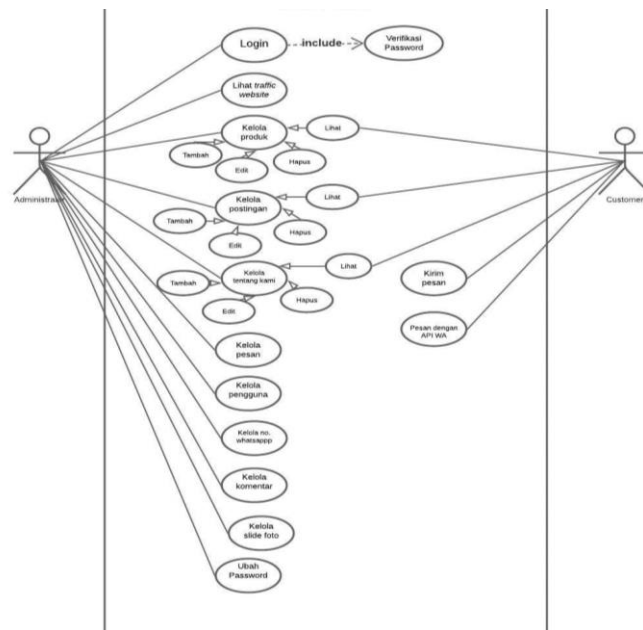
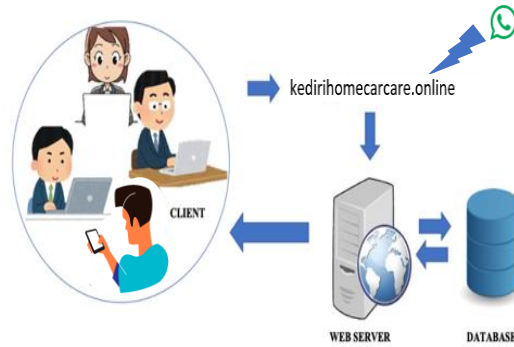


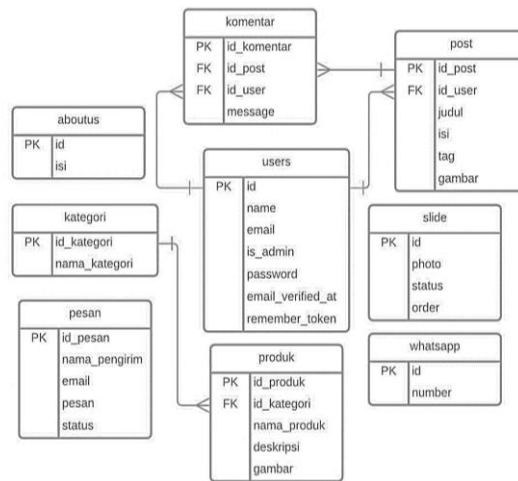
Figure 2. Use case diagram

Next is the design of the system architecture shown in Figure 3. The figure shows that clients can access the company profile web integrated with the WhatsApp API using desktop and mobile devices.



**Figure 3. System Architecture**

The final system design consists of designing a data storage space or database. From the analysis performed, it appears that the data that needs to be stored in this system requires nine entities, namely users, products, categories, posts, slides, WhatsApp numbers, About Us, comments, and messages. The relationship between these entities is shown in Figure 4.



**Figure 4. Entity Relationship Diagram**

## 2) Creation of a digital portal kedirihomecarecare.online

The analysis, design, implementation, and testing stages must be passed through in software creation. These stages correspond to the software development method according to the waterfall method. This section describes an analysis of the system requirements that partners need to develop web profiles, including:

- Admin can add, delete and modify home content
- Admin can add, delete and modify our products
- Admin can add, delete and modify announcements
- Admin can add, delete and modify gallery content
- Visitors can view our home menu-content
- Visitors can view our product menu-content
- Visitors can view the contents of the Announcements menu
- Visitors can view the contents of the Gallery menu.

## 3) Mentoring and Evaluation of Activities

After the training is held, the proposing team will work with partners to see the impact of the activities that have been implemented. Evaluations included calculating the increase in the number of portal visitors and followers on social media accounts.

## 4) Activity Publication

After the activity evaluation is carried out, the proposing team compiles activity publications in the form of scientific publications in journals with ISSN and articles in the mass media.

## 5) Final Report Writing

Writing the final report is the final stage of a research programs. The final report follows the Guidelines for Writing Research Grants and Community Service compiled by UPT P2M State Polytechnic of Malang.

### 3.0 RESULTS AND DISCUSSION

The company profile creation is divided into the phases of system implementation and system testing.

#### 1. Main Page

The main page or home page is located on the front end. On this home page, some information is conveyed, starting from the packages, services, address cards, and packages offered.

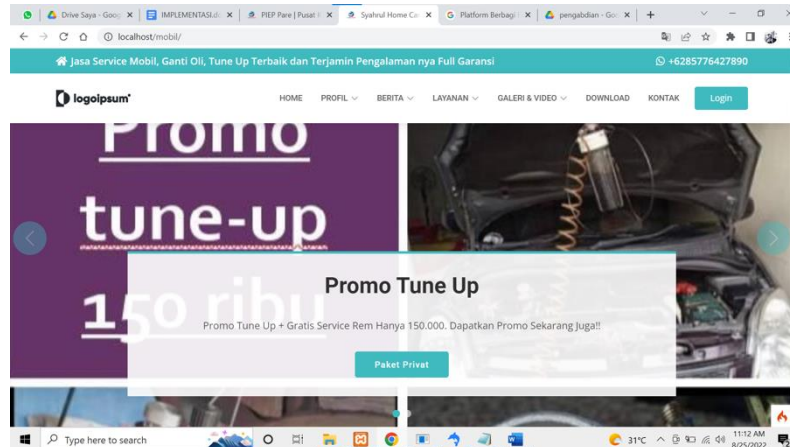


Figure 5. Front End Home Page Display

#### 2. Profile Page

The profile page is a page that explains everything related to the agency, starting from its history, then who the team is, and what is the organizational structure.



Figure 6. Profile Page Display

#### 3. News Page

A news page is a page that provides information or news that has been carried out by the relevant agency, starting from news from the community and news from the agency.

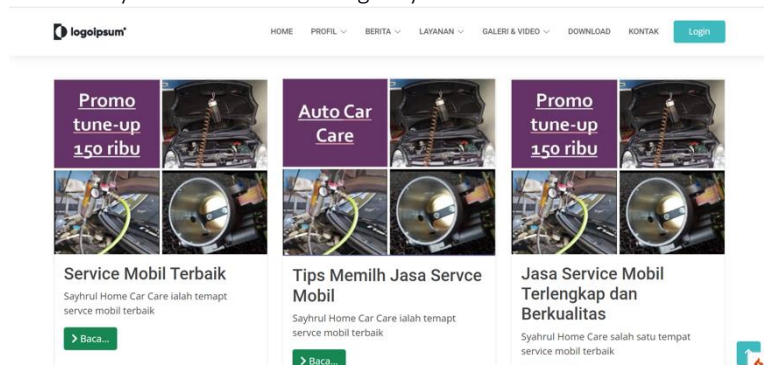


Figure 7. News Page Display

4. Service Page

A service page is a page that provides information about what the relevant agency provides services. Starting from course services to other services.

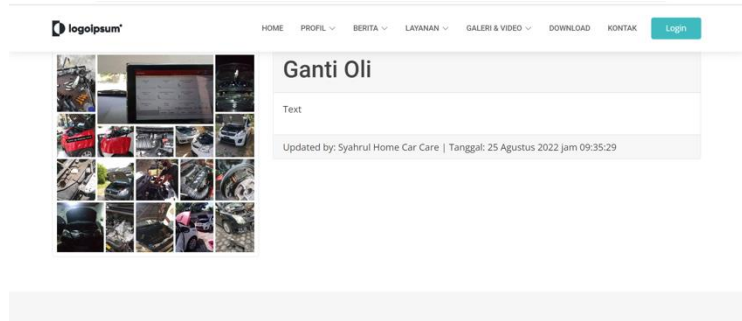


Figure 8. Service Page Display

5. Gallery Page

The gallery page is a page that conveys information on documentation of activities that have been carried out, starting from photo documentation and video documentation.



Figure 9. Gallery Page Display

6. Download Page

The download page is a page that provides information related to the agency in the file format provided in the form of a pdf file. This page can be used via a pdf file for a complete agency presentation.



Figure 10. Download Page Display

7. Contact Page

The contact page is a page that provides agency-related information, starting from the agency's address and contacts.

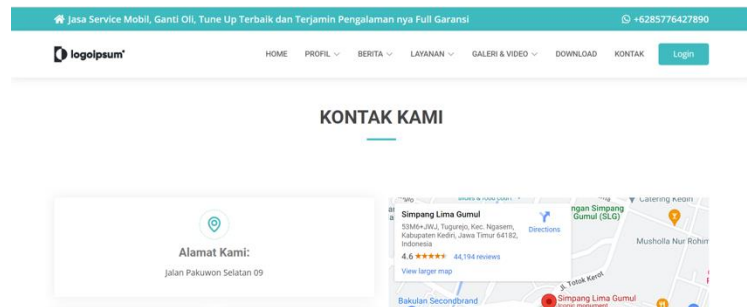


Figure 11. Contact Page Display

8. Admin Profile Page

The contact page is a page that provides agency-related information, starting from the agency's address and contacts.



Figure 12. Contact Page Display

9. Dashboard Page

The dashboard page is a page that shows what information is on the website system, starting from the number of users, the number of news, graphs, visitors, and other information.

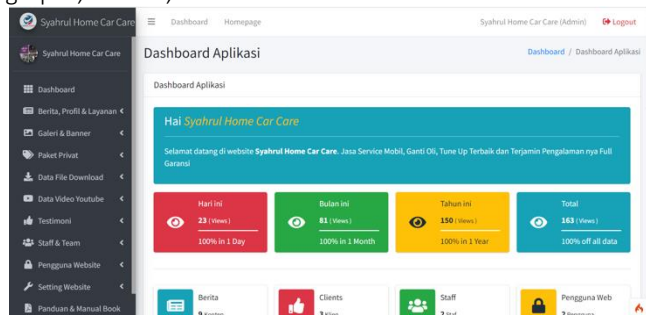


Figure 13. Dashboard Page Display

10. News, Profile and Service Page

News, profile, and service pages provide information related to news and services that will be provided on the front-end website. On this page, you can add, edit or delete existing news content.

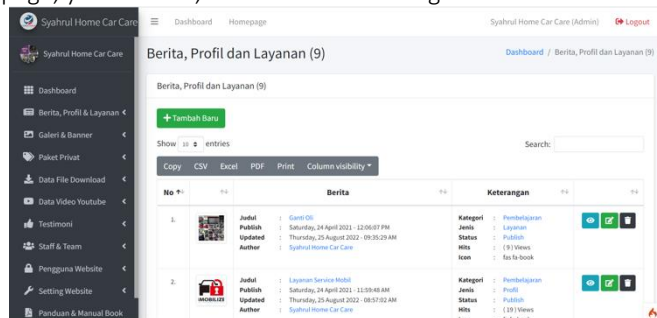


Figure 14. News, Profile and Service Page Display

11. Added News, Profile and Survive Page

The added news, profile, and services page is a page for adding news content to be displayed on the front-end website.

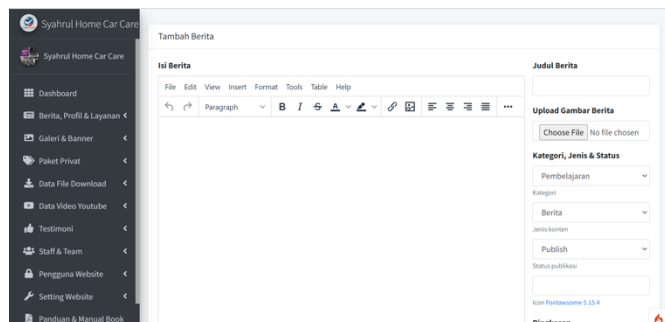


Figure 15. Added News, Profile and Service Page Display

In conducting testing and implementation, the results of the tests are as follows:

No	Testing Scenario	Result
1.	Login Page	1. Can fill in username and password 2. Can log into the system
2.	Admin Page	1. Can display admin data. 2. Can manage the news. 3. Can Manage Profile. 4. Can manage products. 5. Can manage users. 6. Can manage orders. 7. Can manage reports
3.	User Page	1. Can see the product 2. Can manage Profile. 3. Can order.

#### 4.0 CONCLUSION

The digital portal kedirihomecarcare.online has been successfully designed and created for the "Sahrul Home Car Care" service. Features such as managing news, products, profiles, orders, and reports can run well from the tests obtained. This digital portal has helped partners increase marketing and transactions after the slump during the pandemic.

#### Acknowledgement

The author would like to thank P2M Malang State Polytechnic for supporting and funding this research.

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