



IMPLEMENTATION OF A WEB-BASED CATALOG TO SUPPORT ACCESSIBILITY OF SEBLAK KOBE PRODUCTS IN BONTANG CITY

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Abstract

The rapid development of digital technology requires Micro, Small, and Medium Enterprises (MSMEs) to adapt in providing structured and easily accessible product information. Seblak Kobe, a culinary MSME located in Bontang City, still experiences limitations in presenting integrated digital product information, as its promotional activities are not yet supported by a centralized catalog system. This study aims to design and implement a web-based catalog and to analyze its effectiveness in improving product information accessibility. The research employed an action research method using a One Group Pretest-Posttest Design. The research subjects consisted of the business owner, one employee, one design expert validator, and 30 consumers as respondents. Data were collected through interviews, observations, and questionnaires administered before and after the implementation of the web-based catalog. The data were analyzed using descriptive statistics, the Wilcoxon Signed-Rank Test, N-Gain Score calculation, and EPIC Rate analysis. The results indicate that the implementation of a web-based catalog developed using Google Sites significantly improved consumers' ease, clarity, and speed in accessing product information. Posttest scores showed a significant increase compared to pretest results, with moderate to high effectiveness levels. This study confirms that utilizing a simple web-based platform can serve as a strategic and cost-effective solution to support digital transformation and enhance MSME competitiveness in the digital era.

Keywords: Digitalization, MSMEs, Product Accessibility, Web-Based Catalog



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INTRODUCTION

The current development of digitization has had a significant impact on various aspects of life. In today's digital era, the role of technology is predicted to become an important part of various human activities, including in the business world. Digital transformation has not only changed communication patterns and access to information, but also impacted the way individuals and organizations carry out their daily activities (Afif & Suryanto, 2025). In line with the statement by (Pokhrel, 2024), technology always offers innovations that positively impact the community. With technology, everything becomes easier and provides a new way for people to carry out activities. The use of digital technology enables business actors to expand market reach, improve operational efficiency, and offer convenience for consumers in accessing product information (Kotler et al., 2021). Currently, consumers increasingly rely on the internet to search for product information, compare prices, and shop online. This situation encourages companies to continuously innovate in providing fast, accurate, and easily accessible product information to consumers (Putri et al., 2024). In line with the statement above, this becomes important to improve the efficiency and competitiveness of businesses, including in the Micro, Small, and Medium Enterprises (MSMEs) sector. It shows that MSMEs must adapt to technological developments so as not to fall behind in increasingly intense business competition. Thus, digital transformation is no longer an option but a necessity for businesses to maintain sustainability and increase competitiveness amidst ever-evolving market dynamics (Suvianti et al., 2025). Readiness to adopt digital technology, both in terms of human resources, infrastructure, and the ability to utilize various digital platforms, is a key factor in determining the success of this adaptation. Furthermore, the use of digital technology extends beyond marketing activities to include product information management, customer service, and more accurate data-driven decision-making (Sari et al., 2025).

In Indonesia, MSMEs hold an important position in the national economy, both as employers and as drivers of local economic growth (Harahap et al., 2023). In accordance with Government Regulation Number 7 of 2021 concerning Ease, Protection, and Empowerment of Cooperatives and Micro, Small, and Medium Enterprises (MSMEs), the government has issued policies aimed at providing convenience and cost efficiency in establishing cooperatives and MSMEs (Chalim et al., 2022). These policies include reduced costs for business licensing, assistance with financing and guarantees, simplification of tax administration processes, as well as the provision of support services and legal assistance. Although various policies have been implemented to support the development of MSMEs, the fact on the ground shows that the utilization of digital technology in MSMEs in Indonesia is still uneven (Siregar et al., 2024). Information from www.datagoodstats.id shows that the number of MSMEs integrated into the digital ecosystem in Indonesia from 2020 to 2024 has shown significant growth. In 2020, around 10 million MSMEs were recorded as utilizing digital platforms. This number increased to 16 million in 2021, then rose significantly again to 20.76 million in 2022. This positive trend continued in 2023, reaching around 26.5 million digital MSMEs, and is targeted to reach 30 million in 2024. However, although the digitalization rate has increased, that achievement is still below 50% of the total national MSMEs, indicating that many MSMEs still face challenges in optimizing the use of digital technology, one of which is in providing fast, accurate, and easily accessible product information (Simanjutak, 2025).

One effective strategy to address these issues is that SMEs can utilize various media such as implementing web-based catalogs. These catalogs not only serve as a means of product information but also make it easier for consumers to know product details such as images, prices, descriptions, variations, and product availability that can be updated in real-time (Rosalin & Rayza, n.d.). With this catalog, consumers can access information anytime and anywhere using various devices, without being limited by time and location. In this case, the catalog referred to is an online catalog or website-based e-catalog. According to (Arifiyani & Pramaditya, 2023), an online catalog is an information system about a catalog that contains all

lists of goods or services, brands, types, prices, complete details, as well as the quantity of goods or services offered by a company that can be accessed digitally. It is web-based because websites can be easily accessed by customers through web browsers. This provides ease of access without the need to download separate files or use additional applications (Savitri, 2024). Thus, this system supports increasing the accessibility of product information for MSMEs and encourages the real process of business digitalization (Mariam & Haeba Ramli, 2022).

Seblak Kobe is one of the culinary businesses in the city of Bontang. This business has significant growth potential as it already has three branches in Bontang, located on Jalan Panjaitan (Bontang Baru), Jalan Ks Tubun (Rawa Indah), and Jalan Hayam Wuruk (Berbas), as well as one branch in the city of Balikpapan on Jalan Sepinggan, with a net income of approximately Rp 360,000,000 – Rp 540,000,000 per year for a single outlet. However, product promotion so far has relied on conventional media such as social media, which is unstructured and does not provide complete real-time information. This condition can hinder consumers from obtaining accurate, fast, and easy information, and may potentially slow down purchasing decisions (Baihaqi & Nasution, 2025). Referring to this issue, this research becomes very important to discuss in order to understand how a web-based catalog can be optimized as an effective digital strategy for MSMEs, as in the case of Seblak Kobe. In this context, the implementation of a web-based catalog is expected to support the accessibility of product information at Seblak Kobe. In line with the findings of Irianto et al., (2023) reinforce this urgency by showing that the involvement of digital technology, such as the use of e-catalogs, has a direct impact on improving product marketing and facilitates consumer access to product information. In addition, the implementation of web-based catalogs also has the potential to increase the effectiveness of communication between business actors and consumers (Abdurrosit & Kasim, 2026).

Several previous studies have discussed the importance of digitalization in SMEs, such as (Al Zauhari & Nurfauziah, 2023), who emphasized the importance of e-catalogs as a highly effective digital information tool for use, and (Kanhaya et al., 2025), who discussed optimizing digital platforms to enhance product information accessibility. However, most of these studies are still general in nature and have not specifically addressed the implementation of web-based catalogs in SMEs conducted in the Bontang City area, nor have there been studies directly linking the implementation of web-based catalogs with the practical improvement of product information accessibility in similar businesses like Seblak Kobe. The creation of this web-based catalog uses Google Sites. Google Sites was chosen because it is a free website creation service from Google designed to make it easy for users, both individually and in groups, to present information quickly and collaboratively (Febrian et al., 2024). Thus, in the future, it can make it easier for the owners and employees of Seblak Kobe to use this web-based catalog. The purpose of this research is to provide understanding and contribute to the development of digital business strategies in the culinary sector, particularly in implementing a web-based catalog that can support efficient access to products and services, while also promoting digital transformation for MSMEs.

RESEARCH METHOD

Research Design

This type of research uses the action research method. Tanjung et al., (2024) argue that action research is a method to improve the understanding of social practices through reflection and collaboration. In other words, this research is an intervention carried out in a social context to understand and enhance the quality of actions. Another opinion from (Anggraini & Aziz, 2025) is that action research is a research approach aimed at simultaneously addressing and investigating a problem. The action research approach is collaborative and participatory, where

researchers work together with stakeholders to identify existing problems. This method is intended to create tangible changes that are immediately beneficial for the parties involved.

The testing of actions in this research uses an experimental method with a One Group Pretest-Posttest Design. The one group pretest-posttest design is a research activity that conducts an initial test (pretest) before the treatment, and then after the treatment is applied, a final test (posttest) is given. The research procedure follows the stages of the action cycle applied in this study, referring to Kurt Lewin's model. This model is suitable because it allows researchers to identify obstacles and supporting factors during the implementation of the web-based catalog.

The researcher chose the research location at Seblak Kobe, located on Jl. Mayor Jendral DI Panjaitan, Bontang Baru, North Bontang District, Bontang City, East Kalimantan 75313. This research will take 11 months, from March 2025 to January 2026

Research Target/Subject

As for the subject of this research, namely the owner of UMKM Seblak Kobe, who is the main party in this research, plays a role in providing information related to Seblak Kobe, granting permission, support, and approval in the implementation and evaluation process of the research, as well as providing feedback in the form of suggestions and criticisms on the results of the web-based catalog, one employee as a supporting informant who functions to provide additional information as well as receive directions for updates and management of the web-based catalog, one expert serves as an assessor of the feasibility of the web-based catalog design through filling out a questionnaire based on the EPIC Rate method. The expert's role is to provide evaluations regarding visual aspects, clarity of information delivery, and ease of use of the web-based catalog as material for improvement, and 30 Seblak Kobe customers were selected as research respondents to provide assessments before and after the implementation of the web-based catalog. The measurement technique used was a one-group pretest-posttest design, where the same respondents completed the pretest questionnaire (before implementation) and the posttest questionnaire (after implementation).

All research subjects were selected based on their direct involvement in the implementation process of the web-based catalog, so the data obtained is expected to be comprehensive, relevant, and optimally support the research analysis.

Research Procedure

This study uses the action research method, that is, action research, so the research procedure follows the stages of the action cycle applied in this study referring to the Kurt Lewin model. This model is suitable because it allows the researcher to identify obstacles and supporting factors during the implementation of the web-based catalog. During the planning stage, the researcher conducted an initial introduction to the existing problems at Seblak Kobe by identifying these issues through direct interviews with the owner of Seblak Kobe. In the interview, it was found that there were limitations in information delivery. The information available generally only displays the product name and price without clear images, variations, or appropriate descriptions. Customers often experience difficulties in understanding product variations and descriptions due to the limited information media available. Employees also mentioned that customers frequently ask for details of each product, requiring employees to provide explanations repeatedly, and there are many complaints about Seblak fillings not matching the descriptions, even though this occurs because the catalog or conventional media used cannot be updated regularly. This causes the service process to be less efficient.

Based on the information obtained from the interview, the researcher designed a solution in the form of a website-based catalog implementation using the Google Sites platform, which will contain more complete information. The researcher also prepared three types of questionnaires aimed at 30 customers to obtain feedback regarding information media before the implementation of the web-based catalog. The second questionnaire will also be

given to 30 customers after they use the web-based catalog with the aim of measuring the ease, accessibility of product information, and convenience of accessing the web-based catalog. In addition, the researcher also prepared a questionnaire based on the EPIC Rate model with the aim of assessing the effectiveness of the web-based catalog through four dimensions, namely empathy, persuasion, impact, and communication, as a basis for evaluating the success of implementing the web-based catalog.

In the action stage, the researcher developed a web-based catalog using Google Site as a means of delivering service information for Seblak Kobe. In this stage, the researcher designed the structure of the web-based catalog page, grouped products into relevant categories, and prepared content including photos, names, prices, and product descriptions. In addition, the researcher also paid attention to visual appearance and navigation aspects. After that, the researcher distributed a design feasibility questionnaire based on the EPIC Rate model to three respondents, consisting of the owner, employees, and one expert. This questionnaire is used to assess the effectiveness of the web-based catalog based on four dimensions, namely empathy, persuasion, impact, and communication. In addition to assessment in the form of scores, the questionnaire also includes a conclusion stating that the web-based catalog design can be used without any improvements according to the respondents' evaluation results. The next stage is the distribution of questionnaires to 30 Seblak Kobe customers to measure the ease of use and clarity of product information. The pre-implementation (pretest) questionnaire and the post-implementation (posttest) questionnaire are distributed simultaneously to the same respondents. The pretest questionnaire is used to obtain an overview of the product information delivery condition before customers use the web-based catalog, while the posttest questionnaire is used to determine changes in customer perception after accessing and using the web-based catalog as a product information medium.

Questionnaire data before and after the implementation of the web-based catalog were first subjected to instrument testing to ensure the feasibility of the information obtained. Instrument testing included validity and reliability tests conducted using IBM SPSS Statistics 26 software. Validity testing was carried out to ensure that each statement item could accurately measure aspects of ease of access and clarity of product information, while reliability testing aimed to evaluate how consistent respondents' answers were across statement items through the Cronbach's Alpha value. If all statement items are declared valid and reliable and there are no items that need to be corrected or deleted, then the questionnaire data before implementation is used as pretest data and the questionnaire data after implementation is used as posttest data. Furthermore, the respondents' answers on both questionnaires are converted into a 1–5 Likert scale and processed to obtain the average score (mean), which is used as a reference to compare the situation before and after the implementation of the web-based catalog.

At the observation stage, the researcher observed and collected data related to the implementation results to evaluate whether the web-based catalog successfully supports product information accessibility at Seblak Kobe. Data were collected through a post-implementation questionnaire (posttest) given to the same 30 customers after they used the web-based catalog as an information medium. All respondents' answers were then converted into a 1–5 Likert scale and analyzed to obtain the mean value, which was used to describe customers' perceptions of using the web-based catalog after its implementation at Seblak Kobe. As part of the action evaluation, the researcher compared the pretest and posttest scores of the same respondents. The comparison analysis was conducted using the mean values as well as the Wilcoxon Signed-Rank test to evaluate if there were significant differences before and after the implementation of the web-based catalog. In addition, the level of improvement in usability was analyzed using the N-Gain method to measure the effectiveness of the web-based catalog implementation at Seblak Kobe. Furthermore, the researcher conducted interviews with the owner of Seblak Kobe after the implementation of the web-based catalog as part of the

qualitative evaluation. These interviews aimed to obtain the owner's perspective on the ease of access and use of the web-based catalog, the quality of the design appearance, as well as the impact of the web-based catalog implementation on Seblak Kobe's service process in Bontang City.

The final stage of this cycle is reflection. At this stage, the researcher deeply analyzes the results of expert validation and compares the pretest-posttest questionnaire data. The reflections obtained at this stage are used as considerations for development and improvement in the next stage. If there are still limitations in the implementation of the cycle, feedback from the owner or consumers, or results that have not reached the desired level, the researcher will proceed to the next cycle with a focus on improvements based on the evaluation outcomes.

Instruments, and Data Collection Techniques

The researchers applied various data collection methods deemed appropriate for the objectives and types of data required, as follows: 1. The interview was conducted directly by the researcher with the owner and employees of Seblak Kobe. This method was chosen because it can help the researcher obtain more complete information from the owner of Seblak Kobe. In addition, the interview allows the researcher to build a better relationship with the owner and increase trust and openness. 2. Questionnaire, the researcher distributed questionnaires to 30 Seblak Kobe customers. All of these respondents were used as research samples, provided that only questionnaires that were completely filled out and met the filling criteria were included in the analysis process. In the pretest–posttest analysis, only respondents with complete data at both measurement stages were included as the basis for the research analysis. The questionnaire was delivered directly to the respondents by providing a Google Form link that could be accessed by scanning a QR code, making it easier for respondents to complete the questionnaire quickly and conveniently. The use of this questionnaire is considered effective because it can collect a large amount of data efficiently and assist researchers in analyzing customers' perceptions of the information media used. The data obtained from the questionnaire will serve as the basis for evaluation and decision-making in the next stage of action research. The determination of the number of respondents is based on the characteristics of the research (Nopalia & Dalilah, 2022), which states that a reasonable sample size for research ranges from 30 to 500 respondents.

For the research instruments, the researcher used interview guidelines and questionnaires. The interview guidelines include both general and specific questions that will be asked of the informants (Kamaria, 2021). These interview guidelines are designed to collect in-depth data related to business profiles, digital marketing strategies, operational constraints, and evaluation of the implementation of web-based catalogs at Seblak Kobe in Bontang City. Interviews were conducted in a structured manner with questions covering: (1) Basic information and background of Seblak Kobe; (2) Constraints and access to information before the implementation of the web-based catalog; (3) Assessment of marketing strategies before the web-based catalog and consumer digital expectations; (4) Perceptions of the implementation of the web-based catalog; (5) Appearance and information of the web-based catalog; (6) Benefits, data needs, and expectations regarding the web-based catalog.

In this study, a questionnaire was used to measure the level of product information accessibility both before and after the implementation of the web-based catalog at Seblak Kobe. The researcher measured the level of accessibility based on indicators adapted from the theory (Sri Astuti et al., 2023), which consists of five aspects, namely easy to learn, controllable, flexible, easy to use, clear, and understandable. In this study, the questionnaire instrument was tested through four stages using IBM SPSS Statistics 26, namely validity test, reliability test, normality test, and Wilcoxon test. These four stages were conducted after the questionnaire had been distributed and filled out by 30 respondents.

Data Analysis Technique

Qualitative data analysis in this study applies the Miles and Huberman model, which consists of data reduction, data presentation, and drawing conclusions. The following is a more detailed explanation of each stage: a) Data Reduction, data reduction is the procedure of selection or choosing, directing attention or focusing, as well as collecting all types of information that support the research data obtained and recorded throughout the research process in the field (Zulfirman, 2022). In this study, data reduction was carried out through the method triangulation technique, which involved comparing and examining the results of in-depth interviews, as well as analyzing documents directly related to the research focus. b) Data Presentation, data presentation is an important stage in the qualitative data analysis process, aimed at organizing information in an orderly and meaningful way. This process allows researchers to present research data in a format that is easy to understand, whether through descriptive narratives, tables, diagrams, or graphs that show the relationships between the phenomena being studied (Qomaruddin & Sa'diyah, 2024). This stage allows researchers to identify patterns and correlations between data, as well as facilitates the formulation of conclusions through various forms such as narratives, tables, graphs, or diagrams. c) Drawing Conclusions, drawing conclusions is the final stage of the steps that have been carried out previously. Conclusions are drawn based on data that has been analyzed and verification based on evidence obtained at the research site (Zulfirman, 2022). At this stage, the researcher draws conclusions regarding the results of implementing a web-based catalog as a solution to support product accessibility at Seblak Kobe in Bontang City.

Quantitative data analysis is a research method that focuses on data in numerical form (Dhewy, 2022). This study applies descriptive statistical methods to analyze the quantitative data obtained through questionnaires. According to Sutisna, (2020), descriptive statistics are statistics used to analyze data by describing or illustrating the data that has been collected without aiming to make conclusions that apply generally or generalizations. Within the framework of this study, the evaluation is focused on calculating the mean and the percentage of each indicator of web-based catalog accessibility. The use of the mean is aimed at determining the level of achievement of each indicator, while the percentage is used to see the distribution of respondents' answers. a) Mean, the mean ($\bar{X}$) formula in this study is applied to calculate the average score of each web-based catalog accessibility indicator, based on the responses obtained from respondents through the distributed questionnaire. The calculation of this average value aims to describe the level of achievement or the general perception of respondents toward each indicator. Through this formula, the researcher can determine which indicators are the most significant or vice versa, so that it can be used as a basis for evaluating the effectiveness of the implementation of the Seblak Kobe web-based catalog in a more measurable and objective manner. According to Wahyuni (2022), the following formula can be used to calculate the average:

$$\bar{X} = \frac{\sum X}{N}$$

Description:

- $\bar{X}$ = Average indicator (Mean)
- $\sum X$ = Total score of all respondents per indicator
- N = Number of respondents (30 Seblak Kobe consumers)

b) The Wilcoxon signed test is a nonparametric test used to measure the differences between two paired data groups when the data are not normally distributed (Elsa et al., 2023). This test is used as an alternative to the paired sample t-test when the data do not meet normality. The test results are interpreted based on the Asym. sig. 2 (failed) value. A difference in this test is considered statistically significant if the p-value < 0.05, indicating that a real

difference between the pretest and posttest has occurred. c) N-Gain (Normalized Gain, in this study, the N-Gain (Normalized Gain) test is applied to calculate and classify the level of accessibility that occurs between before (pretest) and after (posttest) the implementation of the web-based catalog. The purpose of this test is to measure how effective or how much improvement the web-based catalog has in supporting access to product information at Seblak Kobe. The following formula was proposed by Wahab et al., (2021).

$$N - Gain = \frac{Skor\ Posttest - Skor\ Pretest}{Skor\ Ideal - Skor\ Pretest}$$

Epic Rate, in assessing the effectiveness of web-based catalogs, the researcher uses the EPIC Rate model which evaluates four dimensions, namely empathy, persuasion, impact, and communication. The purpose of using the EPIC Model is that the strength of the research object can be clearly seen, so that evaluation to determine improvements on the most effectively assessed dimension can be carried out more optimally (Chandra et al., 2022). The formula for determining the EPIC Rate adapted from Ilhami et al., (2025) is as follows:

$$EPIC\ Rate = \frac{Xempathy + Xpersuasion + Ximpact + Xcommunication}{4}$$

RESULTS AND DISCUSSION

Overview of Objects and Catalog

Seblak Kobe is a culinary business engaged in the sale of seblak with various levels of spiciness and diverse topping variants, located at Jl. Mayor Jenderal DI Panjaitan, Bontang Baru, North Bontang District, Bontang City, East Kalimantan. This business was established on August 17, 2020, in the city of Bontang. Currently, Seblak Kobe has four outlets, namely three outlets located in Bontang City and one outlet in Balikpapan City to further expand its reach. With quite rapid growth, Seblak Kobe has become one of the popular spicy culinary choices among the community, especially teenagers and young workers. Seblak Kobe offers a variety of seblak and other foods for its customers. This category includes: (1) Seblak and Baso Aci with various toppings, up to choices of spice level and broth; (2) dry seblak (sebring) and other foods. In daily operations, Seblak Kobe is supported by 5 employees, consisting of three people in the kitchen, one person in service, and one person in cleaning. This division aims to ensure smooth workflow from food and beverage preparation, cashier transactions, to serving and maintaining cleanliness of the place.

Seblak Kobe utilizes digital platforms such as WhatsApp and Instagram as a means to communicate with customers in promoting products online. However, the product information provided often lacks clear and complete pricing and descriptions, so this method still faces several obstacles. This condition requires customers to first confirm with the admin, which in the end can slow down information delivery and reduce the comfort of the shopping experience for customers. This web-based catalog is created using Google Sites as a platform to build and manage the website, and Canva as a medium to design background designs and supporting visual elements. The use of Google Sites allows for easy-to-access, responsive, and practical catalog creation without requiring complicated programming skills. Through the implementation of this web-based catalog, it is hoped to become a solution to improve the quality of product information services to customers. The presence of this web-based catalog is also expected to reduce the burden on employees in answering repetitive questions regarding basic product information, so they can focus more on improving the quality of other services. Thus, this digital innovation is expected to increase customer satisfaction while supporting the operational efficiency of the store.

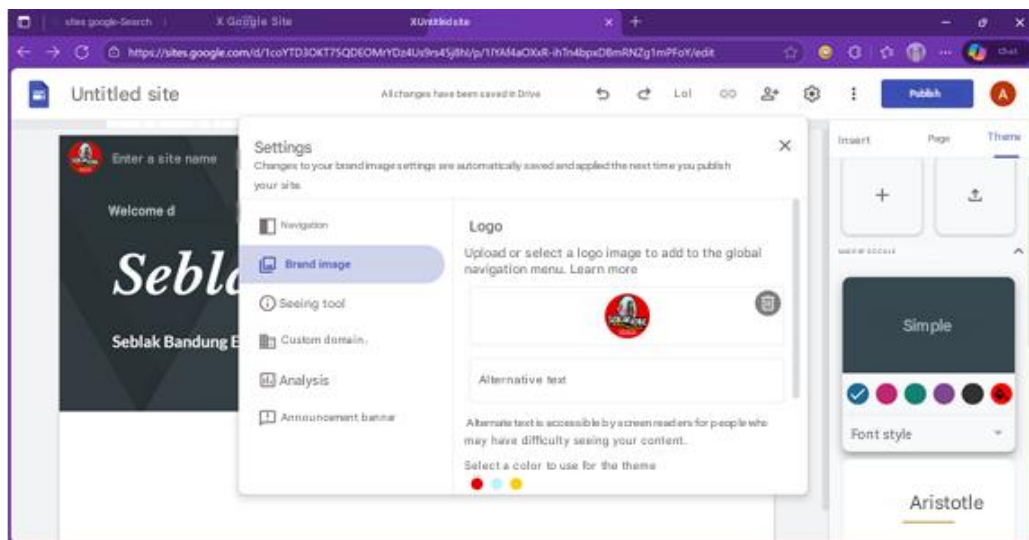


Figure 1. Web-Based Catalog Design

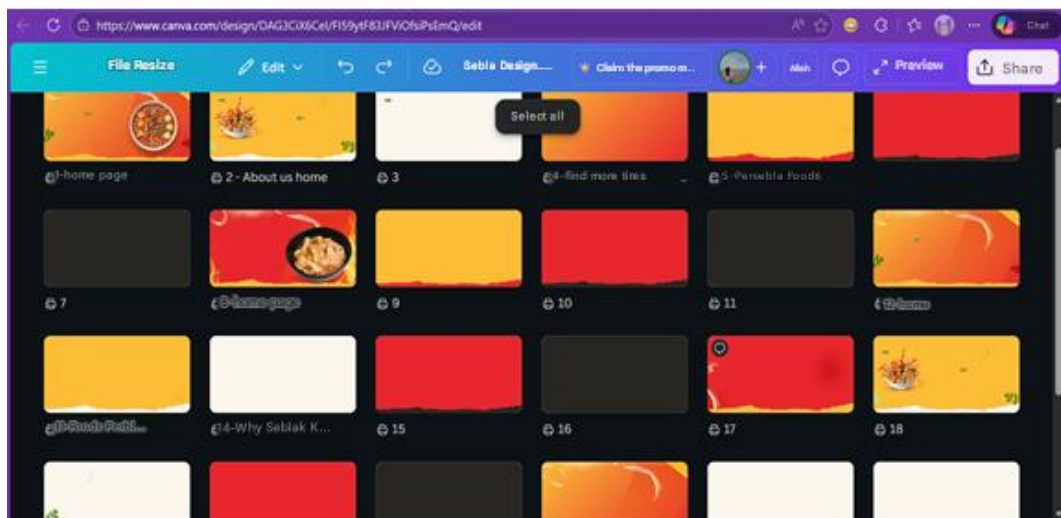


Figure 2. Background Designs Created in Canva

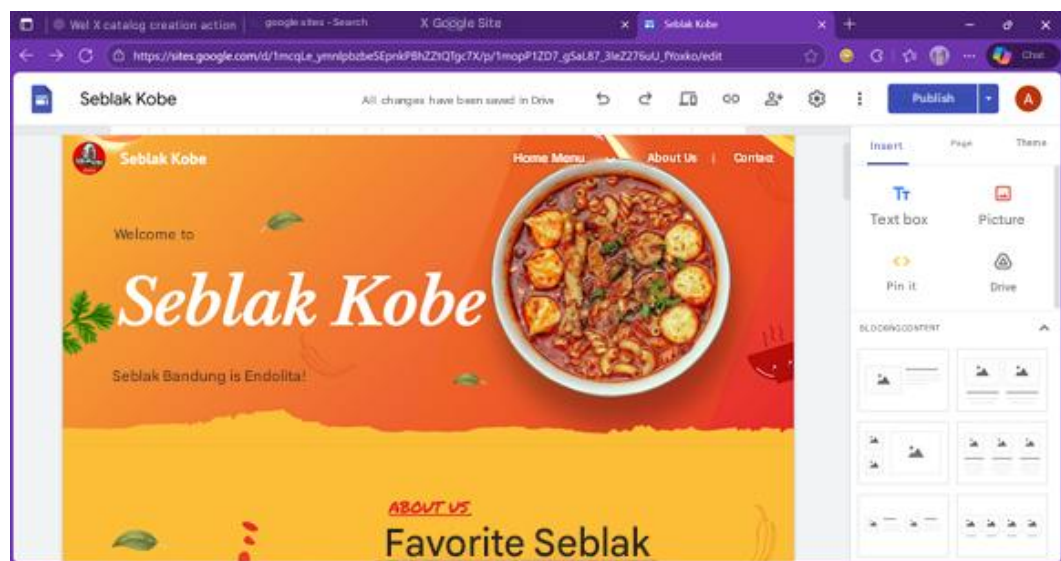


Figure 3. Finalization Stage of Web-Based Catalog Design

Quantitative Data Analysis

Based on data from 30 consumer respondents, the test results showed a significant increase in accessibility: Accessibility Level (Mean) the average score before implementation (pretest) was 2.21 (low category), indicating that consumers had difficulty obtaining structured information. After implementation (posttest), the score increased to 4.13 (very high category).

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
RataRataSebelum	30	1,00	3,00	2,2197	,47443
Valid N (listwise)	30				

Figure 4. Mean Pretest

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
RataRataSesudah	30	3,00	5,00	4,1387	,49426
Valid N (listwise)	30				

Figure 5. Mean Posttest

The Wilcoxon Signed-Rank test results showed a p-value < 0.001 (Sig. 0.000), which confirms a significant difference in the ease of information access before and after the catalog was available.

Test Statistics ^a	
	TotalSetelah - TotalSebelum
Z	-4,783 ^b
Asymp. Sig. (2-tailed)	,000

Figure 6. Wilcoxon Signed-Rank Test Results

Effectiveness Test (N-Gain) The calculation produced an N-Gain value of 0.6820, which means this implementation falls into the moderately effective category for improving information accessibility.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Ngain_Skor	30	,33	1,00	,6820	,18322
Ngain_Persen	30	33,33	100,00	68,1956	18,32243
Valid N (listwise)	30				

Figure 7. N-Gain Test Result

To evaluate the feasibility of a web-based catalog design, the researcher used the EPIC rate model, which consists of four main dimensions, namely Empathy, Persuasion, Impact, and Communication. Each dimension is assessed based on a questionnaire with a 1-5 Likert scale, and then the average is calculated using the following formula:

$$\text{Mean Dimensi} = \frac{\text{Total Skor Dimensi}}{\text{Jumlah Butir} \times \text{Jumlah Responden}}$$

$$\text{Empathy} = \frac{53}{12} = 4,4$$

$$\text{Persuasion} = \frac{41}{9} = 4,5$$

$$\text{Impact} = \frac{39}{9} = 4,3$$

$$\text{Communication} = \frac{55}{12} = 4,5$$

After obtaining the EPIC rate value for each dimension, the next step is to calculate the average EPIC rate value using the following formula:

$$\begin{aligned} \text{EPIC} &= \frac{E + P + I + C}{4} \\ \text{EPIC} &= \frac{4,4 + 4,5 + 4,3 + 4,5}{4} \\ \text{EPIC} &= \frac{17,7}{4} = 4,46 \end{aligned}$$

The table of calculation results is displayed as follows:

Table 1. Epic Rate Calculation Result

Dimensi	Total Skor	Rata-rata
Empathy	53	4,4
Persuasion	41	4,5
Impact	39	4,3
Communication	55	4,5
Total		4,46

Based on the assessment by experts and the owner using the EPIC model, a score of 4.46 was obtained, indicating that the catalog design is very effective in communication and visual aspects.

Implementation Stages through Action Research

The change process at Seblak Kobe follows Kurt Lewin's model (Planning, Action, Observation, Reflection). At the reflection stage, the business owner stated that this catalog is very helpful for operations because product information becomes more transparent and reduces the manual question-and-answer burden between employees and customers. This proves that low-code platforms like Google Sites can serve as an efficient digitalization solution for MSMEs.

Support for Product Information Accessibility

The increase in the mean score from 2.21 to 4.13 indicates that the web-based catalog successfully addresses the main issue at Seblak Kobe, which is the limitation of real-time information. Consumers now have the autonomy to explore menu variations and prices without time constraints. Thus, the web-based catalog created has proven to function as a digital information tool that provides easy access to information about Seblak Kobe products for customers. This discussion aligns with the research results of Sari (2024), which revealed that the implementation of websites using Google Sites yields positive results. This website facilitates access to product information for consumers, increases promotional efficiency, expands market reach, simplifies product data management, and enhances customer trust in the

store. The implementation of a web-based catalog for Seblak Kobe not only serves as product promotion but also as an information medium that presents product details clearly, making it easier for users to understand the types of products available.

CONCLUSION

Based on the results of the research that has been conducted regarding the implementation of a web-based catalog to improve accessibility at Seblak Kobe in the city of Bontang, before the web-based catalog was implemented, product information access at Seblak Kobe in the city of Bontang was in a low category. The total average (mean) score of the questionnaire before the implementation of the web-based catalog was 2.21 on a Likert scale of 1–5, indicating that the product information delivery system used had not been able to provide optimal convenience for customers.

From the media implementation aspect, the web-based catalog at Seblak Kobe was developed through an action research approach using Kurt Lewin's model, which includes the stages of planning, action, observation, and reflection. After the implementation of the web-based catalog, the level of accessibility experienced a significant increase. The average score increased from 2.21 before implementation to 4.13 after implementation, which falls into the high category. The statistical test results using the Wilcoxon Signed-Rank Test showed a significant difference between the conditions before and after the implementation of the web-based catalog ($p < 0.001$). In addition, the N-Gain calculation result of 0.6820 or 68.19% indicates that the improvement falls into the medium category and is quite effective, while the Epic Rate result of 4.46 is categorized as very effective in the website design feasibility test.

Thus, it can be concluded that the implementation of a web-based catalog at Seblak Kobe in Bontang City has proven effective as a digital information medium capable of supporting product information accessibility. The implementation of a web-based catalog not only provides quantitative improvements based on statistical measurement results but also contributes qualitatively to enhancing customer experience in accessing, understanding, and making service choices independently and efficiently.

DECLARATION OF AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this work, the author(s) used Claude and QuillBot solely to assist with text translation. After using these tools/services, the author(s) reviewed and edited the content as needed and take full responsibility for the content of the publication.

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AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; Investigation.

Author 3: Data curation; Investigation.

Author 4: Formal analysis; Methodology; Writing - original draft.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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