ENDLESS

DIGITAL TRANSFORMATION USING WEBSITES TO IMPROVE ACCESSIBILITY AND EFFECTIVENESS IN SMALL MEDIUM ENTERPRISE

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ABSTRACT

This study aims to analyze the role of the web in helping MSMEs reach a wider market, improve operational efficiency, and strengthen brand image. This study is a qualitative study. The sample of this study was 112 micro, small and medium enterprises in Lengkong Kecil. Data were collected through a survey by distributing questionnaires. Data analysis used descriptive statistical analysis. The results of this report contain the development and implementation of the web that has been created for MSMEs to increase business visibility, facilitate transactions, and provide a better customer experience. In addition, challenges such as lack of digital literacy and limited resources are obstacles that need to be overcome with the right strategy. With optimal use of the web, MSMEs can be more adaptive to technological changes and increase competitiveness in the digital era.

ABSTRAK

Penelitian ini bertujuan untuk menganalisis peran web dalam membantu UMKM menjangkau pasar yang lebih luas, meningkatkan efisiensi operasional, dan memperkuat citra merek. Penelitian ini merupakan penelitian kualitatif. Sampel penelitian ini adalah pelaku usaha mikro kecil menengah di Lengkong Kecil sejumlah 112 usaha. Data dikumpulkan melalui survei dengan menyebarkan kuesioner. Analisis data menggunakan analisis ststistik deskriptif. Hasil dari laporan ini berisi tentang pengembangan dan implementasi web yang telah dibuat untuk UMKM untuk meningkatkan visibilitas bisnis, memudahkan transaksi, dan memberikan pengalaman pelanggan yang lebih baik. Selain itu, tantangan seperti kurangnya literasi digital dan keterbatasan sumber daya menjadi kendala yang perlu diatasi dengan strategi yang tepat. Dengan pemanfaatan web yang optimal, UMKM dapat lebih adaptif terhadap perubahan teknologi dan meningkatkan daya saing di era digital.

INTRODUCTION

Now the development of technology is not only used as a means of information and communication, but nowadays technology is widely used as an online transaction. The rapid advancement of technology and information today encourages people to be more familiar and connected to the internet. If in the past the internet was considered a temporary technological innovation, it has now become part of the reality that shapes modern lifestyles, supported by various devices such as cellphones, netbooks, laptops, and other gadgets. One of the new lifestyles that has emerged is online shopping, also known as e-commerce. Based on research in Australia Burges (2013) described by Silalahi et al. (2022), there are several factors that influence business people in utilizing e-commerce, namely: (1) the use of computers and information technology by businesses, (2) the current application of e-commerce and future development plans, (3) the obstacles faced in the application of e-commerce, and (4) the level of staff expertise in information technology. [1] If utilized properly, information technology can help the buying and selling process, especially in MSMEs (Micro, Small and Medium Enterprises).

The development of this technology has a huge impact on entrepreneurs because it can be a competitive medium in marketing products through digital platforms. One of the MSMEs known to many people is the MSME located on Jalan Lengkong Kecil, West Java. Lengkong Kecil is known to many people because it is a gathering place for MSMEs in the Bandung area. According to the results of questionnaires and observations made directly, the author obtained the results of the questionnaire that had been carried out with the question "Are you interested in utilizing digital technology to expand your business?" 35 respondents answered "Yes" and 0 (zero) answered "No".

However, there are various barriers experienced by MSME players in the application of this technology. The main barriers include knowledge about digital technology, lack of capital, and limited competent human resources (HR). Some MSME players also have the perception that the use of technology requires high costs and face inadequate infrastructure constraints. As a solution to overcome the obstacles faced by MSMEs, the application of appropriate information technology is a strategic step. One of the efforts that can be made is through the development of a website specifically designed for the needs of MSMEs. This website is expected to increase the accessibility and effectiveness of MSME operations, so that they can take full advantage of opportunities in the digital era. The developed website will help MSMEs to promote their products and services more widely, reaching a larger market without geographical restrictions. Through features such as product catalog, online ordering system, and digital-based customer service, the website will make it easier for customers to access information and transact with MSMEs. This will directly increase accessibility, as customers from various locations can easily find and interact with the products or services offered.

Through this solution, it is hoped that MSMEs can be better prepared to compete in the digital era, increase competitiveness, and ensure the sustainability of their business. The website created is not just a promotional tool, but also a tool that supports the overall digital transformation of MSMEs. Thus, MSMEs can utilize technology to grow and develop more effectively and efficiently. The purpose of this paper is to analyze MSMEs' understanding of the use of websites as a business platform, create a user-friendly website to help MSMEs increase the accessibility of their products and services to consumers, and create a website that can increase the effectiveness of MSME operations and product marketing.

Figure 1. MSME Website Questionnaire

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

System Design and Programming Language

System design is a set of procedures used to create a system with logically organized work stages, starting with collecting information needed for design implementation. Furthermore, the collected data will be examined to determine the designed system's limits (Surianti & Banyal, 2022). According to Mohammad Ahmadar et al. (2021), system design is the selection of processes and data required by a new system, whether computer-based or not. If the system is computer-based, the design can include specifications for the equipment. System design is used to achieve the intended goal (Ahmadar, 2021). A programming language is a basic instruction from a programmer or programmer to a computer to perform a task or from a programmer to a computer to do something. To understand all programmer commands, the computer comprises words consisting of many lines (Anggraeni et al., 2024). Based on the explanation above, system design is an activity or process to create a system design compiled through data collection and analysis. System design is used to develop new information systems based on the data and analysis needed.

Micro Small Medium Enterprise

Micro, Small, and Medium Enterprises (MSMEs) are economic businesses run by individuals or individual business entities that are in accordance with the MSME benchmark (Rahmah et al., 2022). According to Aliyah, Micro, Small, and Medium Enterprises (MSMEs) are economic businesses that play a vital role in the Indonesian economy. MSMEs are very useful because they can increase the country's economic growth and become a source of community income (Farisi et al., 2022). Based on the explanation above, MSMEs or Micro, Small, and Medium Enterprises are independent economic businesses owned by individuals or groups. MSMEs can survive hefty business competition and increase productivity with more efficient labor. In addition, they also play a role in supplying raw materials to large businesses, opening up new jobs, and becoming a source of income for many people.

Development of Information Technology

Information technology is a tool to manage data to produce relevant, accurate, and timely information. The information obtained is accurate and factual because it can be used in personal life, business, and government and plays an important role in decision-making (Munti & Syaifuddin, 2020). According to Riyoko & Lofian (2020), technological developments can assist MSMEs in marketing products to consumers, expanding consumer reach, and maximizing the sales process. Information technology has five primary roles: increasing efficiency, effectiveness, communication, collaboration, and competition. Using the Internet in business allows companies to exploit marketing opportunities regarding customers and potential customers (Syukri & Sunrawali, 2022). Therefore, using websites in trade has advantages that positively impact entrepreneurs, such as: (1) targets can be set according to demographics, domicile, lifestyle, and habits; (2) results are quickly visible so marketers can take corrective action or change if they

feel something is wrong; (3) cost is much cheaper than conventional marketing; (4) wider reach as it is not geographically limited; (5) results can be measured, e.g., the number of site visitors and the number of consumers making online purchases (Hazmin & Wijayanti (2022).

Based on the advantages of information technology above, there are also several ways that MSME players can maximize the sales process by utilizing information technology, as follows. First, social media can be used to strengthen relationships with customers. This can be done by actively interacting with consumers through comments and direct messages and responding to questions or input from consumers quickly and kindly. Second, using e-payments to increase sales. By providing a wide selection of electronic payment methods, such as OVO, Gopay, Dana, credit cards, and m-banking, it will be easier for customers to make transactions according to their preferences. Third, build and manage a user-friendly and responsive website or e-commerce platform. Creating a user-friendly website can make it easier for customers to find and buy products, facilitate transactions, and increase the number of website users. Based on the explanation above, the development of information technology is very influential for society. The more technology develops, the broader things can be achieved. The development of information technology must be appropriately utilized because it can affect various fields of life.

Digital Transformation

According to Hazmin & Wijayanti (2022), digital transformation is a significant process that involves using existing resources, including available digital technologies, to improve organizational outcomes and create new experiences. The utilization and development of digital technology are now inevitable. The digital transformation process is not limited to switching from offline to online or paper-based to computer-based. Its implementation also requires alignment in mindset, strategy, and success (Fidri et al., 2022).

Effectiveness

Effectiveness generally describes the extent to which predetermined goals can be achieved. According to Fidri et al. (2022), effectiveness is a measure that shows how well targets can be met in quantity, quality, and time. The greater the percentage of targets achieved, the higher the level of effectiveness of a thing. Effectiveness serves as the leading indicator for evaluating success in achieving planned goals. In other words, effectiveness reflects efficiency and accuracy in accomplishing activities to achieve the desired results (Anita et al., 2021).

Accessibility

According to Anita et al.(2021) accessibility refers to the extent to which a person can obtain necessary goods and services. Access is utilizing the benefits of something, including material objects, individuals, institutions, and symbols. In the context of property theory, the focus is more on the ability to utilize such resources rather than mere ownership. This approach emphasizes the social relations that enable one to access resources without prioritizing only the ownership aspect (Suparman et al., 2023).

Figma

According to Suparman (2023), Figma is a design application that can be accessed on Windows to create application prototypes and various other designs. This application is generally used by professionals in UI / UX, web design, and related fields. UI (User Interface) and UX (User Experience) refer to the visual appearance of applications or digital media, such as websites, which play a role in improving the brand image of a business or company (Senjaya & Basri, 2023).

Bootstrap

According to Senjaya & Basri (2023), Bootstrap is a CSS framework that provides various basic web interface components that can be used simultaneously. Built with HTML and CSS technology, Bootstrap allows users to design page layouts, tables, buttons, forms, navigation, and other elements on a website easily by calling CSS classes available in HTML files (Koloay et al., 2020).

PHP
According to Klaudio, PHP (Hypertext Preprocessor) is an open-source programming language commonly used to build web applications. PHP uses a server-side system, a programming language whose scripts/programs will be run by the system. PHP is widely used because it is easy to use, simple, and easy to learn. The PHP programming language can help develop complex web-based applications.

RESEARCH METHOD
In this study, the quantitative method is used to analyze the effect of digital transformation through websites on the accessibility and effectiveness of MSMEs. Data was collected through a survey distributed to MSME players in *Lengkong Kecil* who have not used a website to understand their challenges and needs related to business digitalization. In addition, direct observation of MSME operations was conducted to identify barriers to business accessibility and efficiency without website support. The data obtained is statistically analyzed to evaluate the benefits of website implementation for MSMEs and provide recommendations that suit their needs.

RESULT AND DISCUSSIONS
Market Analysis
The following is the concept of STP (Segmenting, Targeting, and Positioning), along with its relationship with data obtained from BPS (Central Bureau of Statistics). Number of MSMEs (Micro, Small, and Medium Enterprises) based on data obtained from BPS (Central Bureau of Statistics), the latest data on the number of MSMEs based on Regency / City show that there are 41,220 MSMEs in Bandung and a total of 667,795 MSMEs in West Java Province. Given the many MSMEs in West Java Province, there is significant potential to develop websites designed explicitly for MSMEs. Data from the Coordinating Ministry for Economic Affairs shows that 27 million Small and Medium Enterprises (MSMEs) have been integrated with digital platforms. Creating a website specifically for MSMEs can be one strategic step to encourage more MSMEs to utilize digital technology. Data from the Central Statistics Agency (BPS) released in June 2022 shows that in 2020, there were 11,223 culinary businesses in Indonesia. Of these, 71.65% are restaurants or eateries, 2.40% are caterers, and the rest fall into other categories. The majority of customers of these culinary businesses are residents around the place of business, with a percentage reaching 60.11%. This information indicates that most Indonesians are highly interested in culinary, especially traditional food and regional snacks. Based on a survey conducted by the Central Statistics Agency (BPS), only 17.62% of culinary entrepreneurs in Indonesia conduct online sales through websites. Instead, 61.69% use third-party ordering services such as GoFood, GrabFood, and ShopeeFood, while 49,69% utilize social media for online sales.

Table 1. Segmenting, Targeting, and Positioning

Segmenting	Targeting	Positioning

1. Demographics Female/male age range 12-65 years old
2. Geography
  a. All Micro, Small, Medium Enterprises (MSMEs) in the Lengkong Kecil area, Bandung.
  b. Society
3. Psychographic
All business owners in Lengkong Kecil who are ready to utilize technological developments in running their business.
	1. Consumers who have an interest in the unique culinary world.
	2. Providing a place where food recommendations can involve segmentation based on unusual or specific food preferences.
	3. Creating a tool for MSME players in how to promote and attract customers.
	4. Creating a website that is a means for MSMEs in Lengkong Kecil to conduct online sales.
		1. A user-friendly website with a rating valuable feature for customizing each user's taste.
		2. Simple and easy-to-use navigation, with clear menus and well-organized categories, so users can quickly find the information they need.
		3. Provides accurate information on location, address, and operating hours.
		4. Provides inspiration that opens the minds of MSME players to increase visibility online.
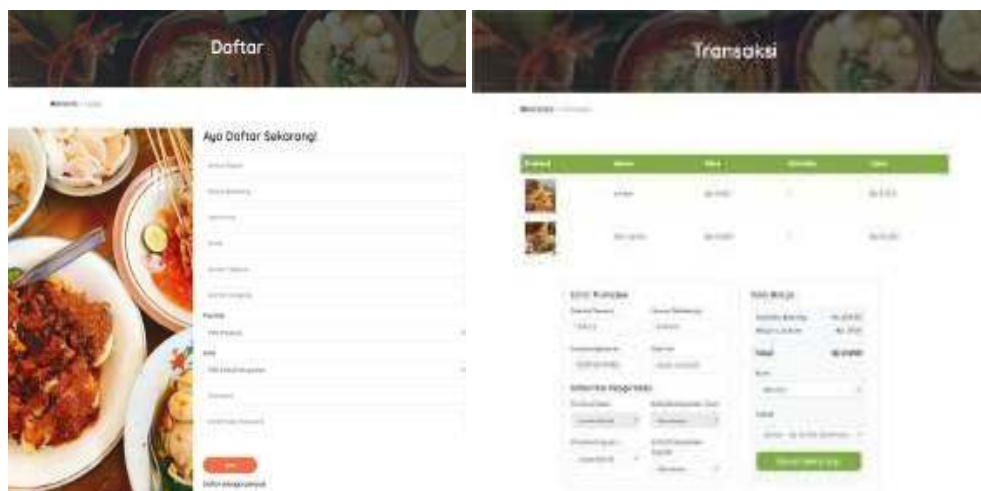
Figure 2. Website Display For Consumer

This information shows that the use of websites for sales and promotion in the culinary industry is still relatively low compared to other platforms. This indicates an opportunity for culinary businesses to increase their digital presence through website creation and optimization, which can help expand market reach and increase sales.

Potential Customers

Potential customer analysis is important to understand the market size and ensure product suitability to user needs. The following is a description of potential consumers based on official data. A significant number of culinary MSMEs There are more than 11.000 culinary businesses in Indonesia, with 71,65% of them being restaurants or eateries. In West Java Province alone, there are 667.795 MSMEs, which shows excellent potential for culinary businesses to utilize digital platforms such as "*KulinerYuk*." Most Indonesians are highly interested in culinary, especially traditional food and regional snacks. This creates a growing demand for new places to eat, which can be discovered through recommendation platforms—

low Website Usage by Culinary Entrepreneurs. Only 17,62% of culinary entrepreneurs use websites for online sales, while many rely on third-party services such as GoFood and GrabFood. This shows an excellent opportunity for "*KulinerYuk*" to fill the market gap by providing a digital platform for culinary businesses without a website. Based on the data obtained, the "*KulinerYuk*" website can expand its market reitsespecially for culinary entrepreneurs who have not maximized the benefits of digitalization.

How to Use The Website For Users (Consumers)
Users register by filling in the registration data on the KulinerYuk web. If they already have an account, they can log in directly. On the KulinerYuk website, there are various MSME products from Lengkong Kecil that users can buy. Once the user has an account, they can directly carry out the transaction process. Starting from searching for products you want to buy to the process of selecting couriers and payments.

How to Use A Website For Msmes (Sellers)
MSMEs need to register their business first to become a seller on the KulinerYuk web. MSMEs are also required to agree to the terms & conditions if they want to join the KulinerYuk web. After successfully registering, MSMEs will get a confirmation email whether confirmed as a seller or not. If confirmed as a seller, the business must make a registration payment to be able to use the seller web.

Figure 3. Website Display For Seller

There are also premium features with various benefits such as: adding unlimited products, products displayed on the main page of the KulinerYuk web, product advertisements on the KulinerYuk web. With a fee of IDR 15,000 / month, MSMEs can enjoy premium features. If you have made a payment, then the seller can use all the features of the seller's web, one of which is adding products. On this web, sellers can also monitor user transactions. There is an option to confirm product delivery status.

CONCLUSION
Based on the research conducted, it can be concluded that the development of information technology has a significant impact on the sustainability and competitiveness of MSMEs. The utilization of technology, especially in the form of websites, can improve the accessibility and operational effectiveness of MSMEs, allowing them to reach a wider market and increase their competitiveness in the digital era. However,

there are still some major obstacles faced by MSMEs in adopting digital technology, such as the lack of understanding about the use of websites, limited competent human resources, and the perception that the use of technology requires high costs. As a solution, developing a user-friendly website is a strategic step in supporting the digital transformation of MSMEs. This website not only functions as a promotional tool, but also as a transaction tool that can increase business effectiveness. Through features such as product catalogs, online ordering systems, and digital-based customer service, MSMEs can more easily reach and interact with their customers. With this solution, it is hoped that MSMEs can be better prepared to face challenges in the digital era and utilize technology to grow their businesses more effectively and efficiently. Digital transformation is not only about implementing technology, but also increasing the understanding and readiness of MSMEs in facing the changes.

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