



Digital Transformation of Toko Madi MSMEs: Improving Business in the Digital Era
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ABSTRACT

MSMEs, which stands for Micro, Small, Medium Enterprises, have a number of problems, including the lack of use of technology in business development and obstacles in accessing market information. Digital transformation allows MSMEs to utilize technology in developing their businesses, increasing operational efficiency and better accessing market information. This research aims to utilize digital transformation in entrepreneurship in the digital era and its application in the business development of Toko Madi. This research uses a mobile application development approach to create a digital platform for MSMEs "Toko Madi." This application includes a login page, profile settings, item catalog, purchase history, and management features for shop owners, such as stock management, shipping, and sales data. It is hoped that the results of this research can increase the income of "Toko Madi" MSMEs by enabling them to reach customers outside the city and take advantage of the benefits of digital transformation. This digital transformation includes the process of digitizing the business, utilizing mobile applications, and using analytical tools to increase efficiency, productivity, and innovation. In conclusion, digital transformation is an important step for MSMEs in facing challenges and competing in an increasingly competitive global market. With this mobile application, MSMEs can increase their online presence, manage their business better, and adapt to dynamic changes in the digital era.

Keywords: digital transformation for MSMEs, development of MSMEs in the digital era, the influence of digital transformation, digitalization of MSMEs.

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INTRODUCTION

MSME is the abbreviation of Micro, Small, Medium Enterprises. For business actors, MSMEs include businesses or businesses run by individuals, households or small business entities.[1]. In their development, MSMEs face a number of problems, including the lack of use of technology in business development, which makes it difficult for MSMEs to compete with the global market. Apart from that, another obstacle is the lack of access to market information, causing MSMEs to have difficulty presenting products or services in accordance with market needs.

With digital transformation, the problems faced by MSMEs, especially in the use of technology and access to market

information, can be resolved. Digital transformation allows MSMEs to utilize technology in developing their businesses. With easier access to digital tools, MSMEs can increase operational efficiency, improve product or service quality, and even better navigate global markets.

In addition, digital transformation can provide wider access to market information. Through the internet and data analysis tools, MSMEs can understand market trends and preferences better, so they can present products or services that better suit customer needs. With more data and understanding of the market, MSMEs can make more informed decisions in developing their businesses.

In today's rapid technological developments, it cannot be denied that our daily lives have now become easier. In everyday life, we can make various purchases online easily, with just one click using the cellphone in our hands. Apart from that, we also have the convenience of carrying out financial transactions using digital payments, this can help MSMEs manage their business finances better. They can avoid complicated payment issues and increase their financial accountability.

Digital transformation is the process of moving from analog business to digital business so that this process makes MSME activities easier.[2]. Digital transformation refers to the process and methods for MSMEs to use digital technology in order to drastically change MSME activities in operating and serving customers.[3]. This digital transformation is important in the

entrepreneurial world because it can influence various MSME activities, including marketing strategy, operational management, customer interaction and product development. In this way, MSMEs get significant opportunities to develop in facing challenges and competing in an increasingly competitive global market

In this digital era, MSMEs need to have the ability to adapt quickly to various changes, such as urgent launch time pressures, unexpected disruptions in the supply chain and dynamic customer expectations. To stay abreast with technological advances, companies must adopt digital transformation strategies. [4]. MSMEs must be able to think broadly to attract market interest. Not only markets in the city, but MSMEs have to think about how their goods can be sold to international markets. Of course, with this digital transformation, MSMEs can sell their goods outside the city and even to international markets. MSMEs can develop their business in all aspects by utilizing online platforms, analytical tools, artificial intelligence and other technologies to increase efficiency, productivity and innovation.

Based on the above, this article aims to carry out digital transformation of the business of one of the MSMEs in the city of Baubau. where researchers will create a mobile platform design to develop the MSME business so that it becomes digital. With these benefits, researchers hope that the income of MSMEs can increase because they can reach customers not only in the city but also outside the city.

METHODS AND EQUIPMENT

The approach that will be used is to develop a mobile application based on Android Studio using the Java programming language to digitize the Toko Madi MSME business. It is hoped that this application will help MSMEs overcome the challenges they face, increase efficiency in business management, and increase their online presence.

Digitalization

Digitalization, also known as digitization, is a transformative process that changes the way we use technology from analog to digital. If we reflect for a moment on this digitalization journey, we will find that this evolution cannot happen alone, it is supported by other devices and infrastructure that contribute to this progress. For example, the important role of computers and the internet cannot be ignored. The presence of computers and the internet has brought extraordinary innovation to human life, allowing us to

create comfort and convenience through the ongoing digitalization process [5]. Digitalization describes the application of digital technology in business and the shift from conventional business models to digital business models, which in turn leads to the creation of new sources of income. Digitalization is a technological force that combines aspects of globalization in the way economies and cultures operate.[6]

Mobile Apps

Mobile apps, or what are often referred to as mobile applications, are software designed and developed using computer programming to be installed and used on mobile devices such as cellphones, tablets and digital watches. Making a mobile application requires special skills, with the creation process supported by computer software. Every year, this mobile application continues to undergo development and updates to improve its performance.[7]

A well-developed mobile application is usually uploaded to a special platform that contains a variety of mobile applications. For example, Android smartphone users can download applications from the Play Store which is managed by Google Corporation. While iPhone users can get their apps from the App Store managed by Apple Inc. However, some unofficial mobile applications may also be available through other websites on the internet.[7] The benefits obtained from these mobile apps, especially in the business sector, are expanding the market reach that users can use from home.[10]

2.3 Android Studio

Android Studio, an Integrated Development Environment (IDE) which is the result of an official collaboration between Google and JetBrains, is a tool specifically designed to facilitate the creation and development of Android applications that are needed by various users. This tool is the result of the development of IntelliJ IDEA, which is also an IDE made by JetBrains which is famous for products such as PyCharm and PHPStorm. As an IDE, Android Studio is equipped with a very complete variety of components, including a source code editor, debugger, and compiler. Android Studio was officially released on May 16, 2013, and immediately gained significant attention thanks to the comprehensive features it offers.[8]

Java

Java is known for its motto "Write Once, Run Anywhere," which means that Java is a programming language that can be run on various platforms without the need to readjust for each platform. This applies to various operating systems such as Android, Linux, Windows, and many others. Java's advantage in terms of portability lies in the syntax system or programming code that works at the highest level. Java syntax will be converted into platform numeric code (bytecode) by the Java Virtual Machine (JVM), so that Java applications can run smoothly on various devices. In other words, Java is a versatile programming language used in a variety of contexts, including back-end development of software, Android applications, and websites. Its flexibility has enabled Java to run on more than 13 billion devices. Some examples of well-known applications that use Java include Netflix, Spotify, and Twitter.[9]

RESULTS and DISCUSSION

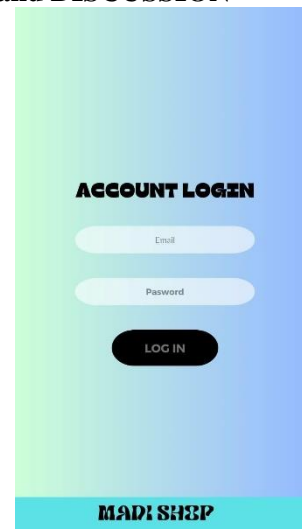


Image 1. Login Page

Login Page

Image 1. represents the login page of the Madi Shop application when a regular user opens the app on their Android device. Here, users can enter their email and password to access the Madi Shop application.



Image 2. Password Change Page

Password Change Page

Image 2. is the password change page This page is used when a user wants to change their password

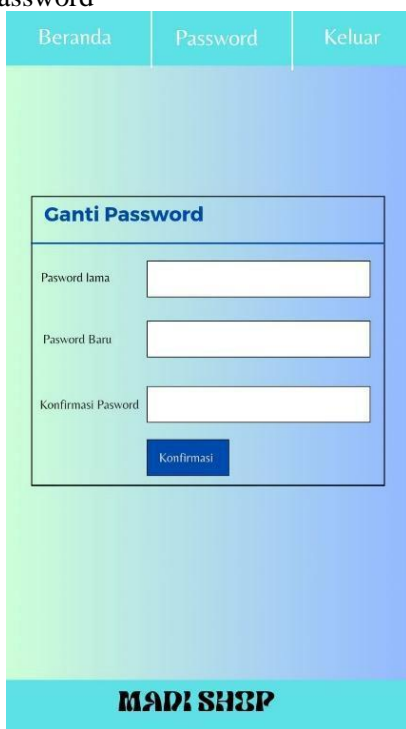


Image 3. Home Page

Home Page

Image 3. represents the home page that appears when a user logs into the application. The home page displays user data, including the user's name and login date. Additionally, this page features a menu that includes options for

the user's profile, catalog, purchase history, security, and logout from the account.

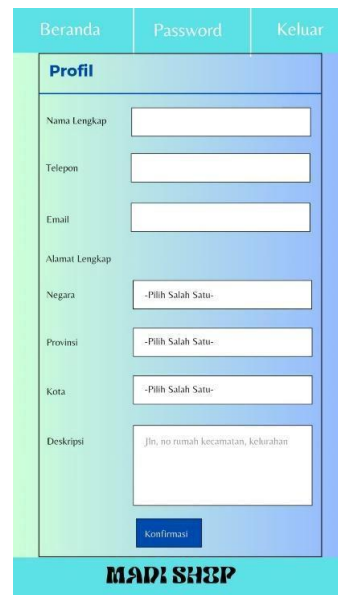


Image 4. Profile Page

Profile Page

Image 4. represents the profile page, which is a part of the application used to display user information. On this page, users will be prompted to complete their profile data to facilitate transaction processes. Users will be required to input their full name, phone number, email, and complete address.

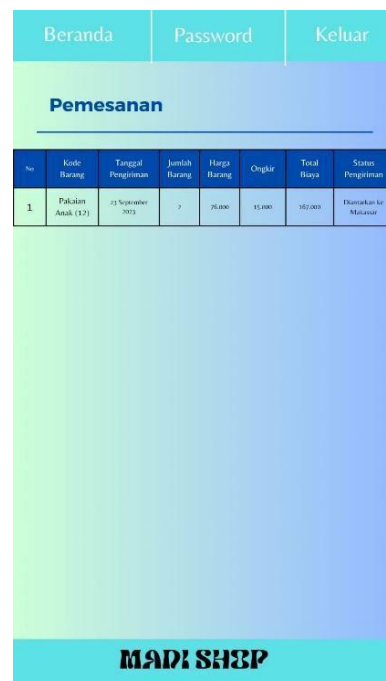


Image 5. Ordering Page

Ordering Page

Image 5. is the ordering page. This page is included in the application for users to obtain information about the products they have ordered.

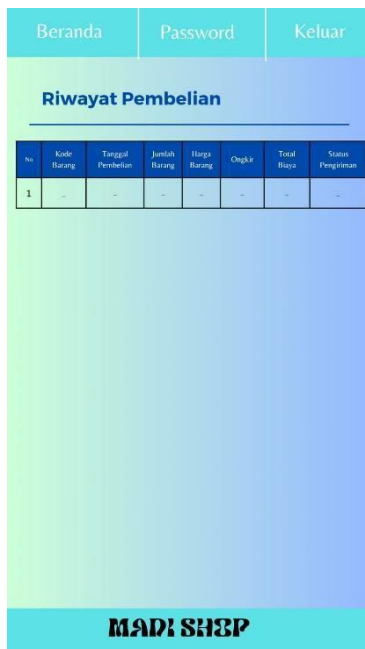


Image 6. Purchase History Page

Purchase History Page

Image 6. is the purchase history page. This page displays the history of purchased items, including products that have been received. It allows users to review the items they have bought from Madi Shop



Image 7. Catalog Page

Catalog Page

Image 7. is the catalog page where users can browse for the items they wish to purchase. Users can search for the type of clothing they desire, and images along with prices will be displayed on this page. Subsequently, users can make direct purchases of the desired items.



Image 8. Shop Owner's Homepage

Shop Owner's Homepage

Image 8. represents the homepage that appears when the shop owner logs into the application. The homepage displays store information, including the store name and address. This page also includes a menu with sections for the store owner's profile, customer data, product data, sales data, and shipping data



Image 9: Customer Data Page

Customer Data Page

Image 9. is the customer data page, accessible to the shop owner. It allows the shop owner to view which customers have an interest in shopping at the store. Additionally, this page enables the shop owner to access data about their customers.

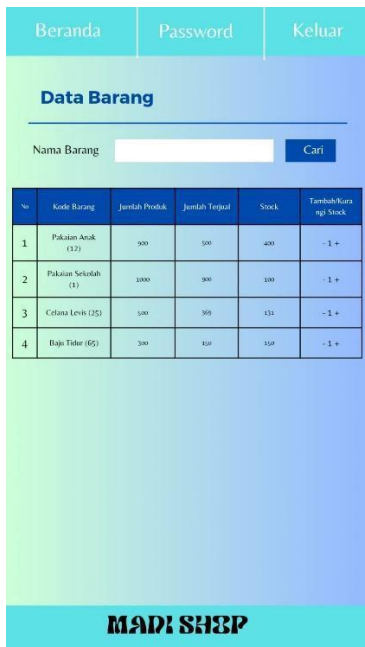


Image 10. Product Data Page

Product Data Page

Image 10. represents the product data page. This page serves the shop owner in monitoring the stock and product sales. Therefore, the shop owner can track which products are in high demand. Additionally, this page is useful for managing and updating the product stock



Image 11. Shipping Data Page
Shipping Data Page

Image 11. is the shipping data page, designed for the shop owner to oversee the shipment of customer orders. This page enables the shop owner to track the status of customer orders and ensure they are shipped in a timely manner.

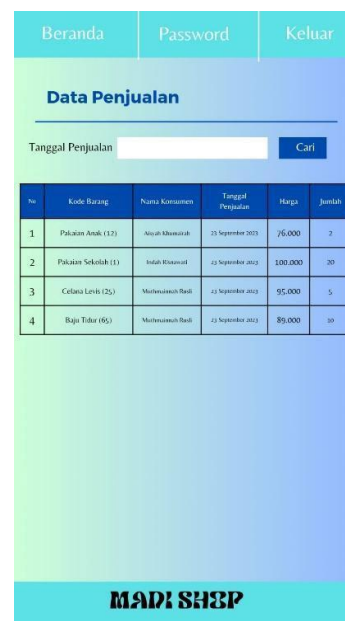


Image 12. Sales Data Page

Sales Data Page

Image 12. displays the sales data page. This page is intended for the shop owner to examine the products that have been sold. It provides insights into the store's sales performance, helping the owner make informed decisions about product offerings and stock management

CONCLUSION

Mobile application development and digital transformation have brought various potential benefits to Toko Madi, an MSME in the digital era. With the mobile application that has been implemented, Toko Madi will be able to expand its online presence, reach a wider range of customers, increase operational efficiency, and make it easier to present product catalogues. Additionally, this application allows better data monitoring and analysis, helps in financial management, and provides opportunities to penetrate international markets. All of this contributes to the possibility of product and service innovation that will keep Toko Madi competitive in an increasingly fierce market.

As an MSME player, Toko Madi has taken relevant steps to adapt to the ever-growing digital era. Thus, Toko Madi has the potential to experience significant business growth and remain competitive amidst increasingly competitive global market dynamics. This digital transformation proves that MSMEs can play an important role in facing the challenges and opportunities that arise in the digital era.

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