



DEVELOPMENT OF E-FASHION DIGITAL MARKETING APPLICATION FOR THE CREATIVE FASHION INDUSTRY WEST SUMATERA

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Abstract

This research was conducted to determine the digital marketing needs of fashion industry products in the province of West Sumatra. Conducting needs analysis based on current marketing conditions of the fashion industry products provides direction for the development of digital marketing applications that are needed. The analysis in this study uses a data mining algorithm and will produce an integrated digital marketing application for fashion industry players in West Sumatra. So that the fashion industry has a container based on digital marketing to accommodate all products and market it. This will provide greater opportunities for these fashion products to be known by the community and will increase the pattern of product marketing.

Keywords: : e-fashion, digital marketing, creative industry, data mining

INTRODUCTION

The development of the creative fashion industry in West Sumatra province can be said to be good, this can be seen from the increasing number of boutiques or fashion houses of local West Sumatra fashion designers. Fashion shows are also often carried out by fashion designer associations with ethnic and modern themes. These creative industry players must follow the development of information technology, especially in terms of marketing, which is known as the concept of digital marketing. Digital marketing is the application of information technology in the field of marketing including web-based marketing, social media, email and so on [1]. With the marketing of web-based songket silungkang products, it provides opportunities for businesses to market their products well and be able to

maintain good relationships with consumers [2]. The use of digital marketing is currently carried out independently and mostly using social media. Social media has a very real influence in digital marketing, but here sometimes consumers need integration or service in one place to find out, compare the desired product [3].

Digital-based marketing can help increase financial returns for hotels through diversion of revenue sharing [4]. Social media marketing is one of digital marketing that is currently [5], widely used in various sectors to improve customer-company relationship skills which have been shown to be positively related to customer relationship performance [6]. The application of social media is very important in digital marketing today [7]. By understanding and maintaining good relationships with dynamic consumers that require the



support of information technology devices [8]. Consumers will be able to see an increase ([9]. To find out the extent to which the impact and influence of social media in marketing a product can be done by analyzing the use of emotion stickers in chat applications, to the extent that people's behavior in exchanging files, images and stickers, from one person to another, or one person to many people or the opposite [10].

Most of the fashion industry in West Sumatra uses social marketing by utilizing social media such as Instagram, Facebook, whatsapp chat applications and others. Apart from social marketing in digital marketing, there are several more media, including web marketing, email marketing, video marketing, advertising marketing [11]. Only a few players in the fashion industry take advantage of other types of digital marketing. Sense, feel, think and act variables have a significant influence on a person's desire and interest to visit or enjoy a product or service [12]. So this encourages researchers to develop digital marketing that is integrated in an application. So that all creative fashion industry players can promote and market their products in the application that was built [13]. So that marketing using digital devices is able to increase the marketing of products or services owned [14]. To see the level of digital marketing needs that are suitable for the fashion creative industry players in West Sumatra, an analysis is carried out using the K-means data mining algorithm, which produces several clusters or groups of existing types of social media [15]. The cluster that is formed is a warehouse of knowledge for various kinds of corporate decision making [16].

RESEARCH METHODS

This research uses a combination method, where this research begins with identification of the problem then performs data collection and preliminary data analysis stages, data analysis uses data mining algorithms, the results of data analysis are used for reference in developing e-fashion / digital marketing applications, then the application is tested so that ready to be implemented, for more details, the research stages can be seen in Figure 1.

The problem under study is the use of digital marketing from a fashion business or business in West Sumatra province. From the data obtained through the West Sumatra creative economy book in 2018 and conducting searches on the internet media about websites, social media and other aspects of digital marketing. After the data is collected, an initial analysis is carried out, the process of conducting this initial analysis aims to determine the type of digital marketing that is most widely used by fashion industry players in West Sumatra. After finding the type of digital marketing that is widely used, the next step is to see how many attributes of the digital marketing tool are used, such as the number of interactions, posts and likes, comments obtained. The results of this initial data analysis will be used for further analysis to determine which clusters or groups are determined. The results of this analysis are used as a reference for the development of integrated digital marketing applications.

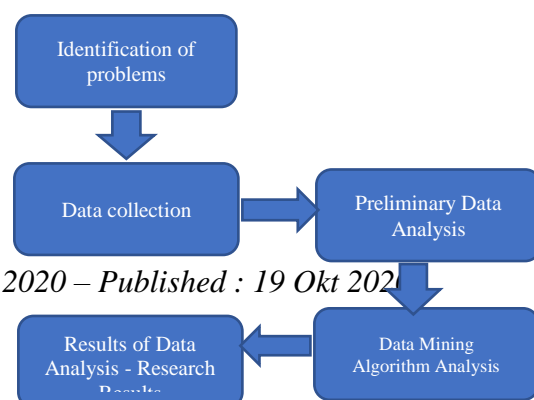




Figure 1. Research Framework

RESULTS AND DISCUSSION

Data analysis was carried out to process data on the use of digital marketing by West Sumatra fashion industry players, the first data carried out was to collect data on West Sumatra fashion industry players, data was taken through field surveys and also from the 2018 West Sumatra Creative Economy Performance Report Book, then carried out tracking 6 types of digital marketing are used, then selected the type of social media that is most widely used by the Sumaterabat fashion creative industry. The most widely used digital marketing is social media, then analyzing and collecting data using social media which includes data on the number of posts, likes, followers, comments and the number of social media used. The data obtained is selected to be processed into information that is easier to understand. The results of initial data analysis are then processed using the K-means data mining algorithm. The process of determining the position of the new centroid (C_k) by

calculating the average value of the data in each of the same centroid is done 6 times, because the results of the fifth and sixth stages are the same, the calculation process is stopped. The results of the clusters that were formed were 2 very active using social media, 12 active and 2 creative industry players were in the less active group using social media, with an error rate of 3.37%. From the results of this analysis, an integrated digital marketing application was developed as shown in Figure 2 to Figure 5.

Display of Digital Marketing Application

Figures 2 to 5 show the appearance of the e fashion application that has been developed

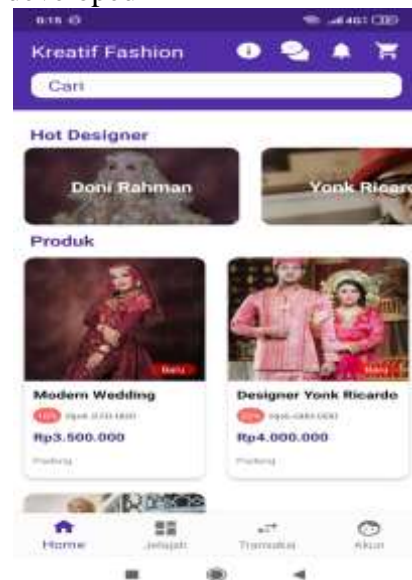


Figure 2. Main page of e-fashion



Figure 3. The e-fashion list page

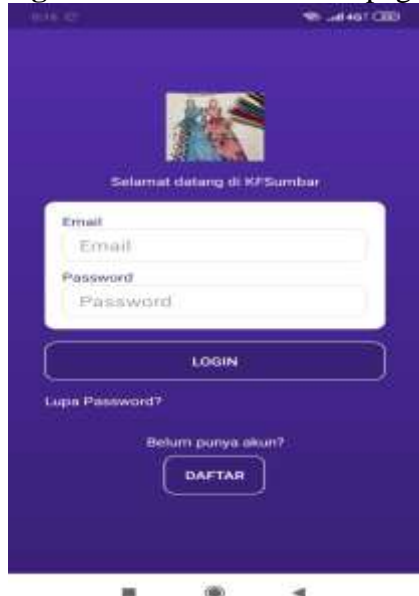


Figure 4. The e-fashion login page

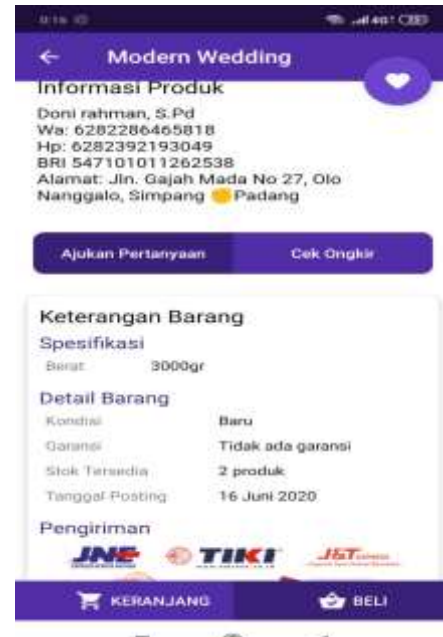


Figure 5. Product Detail Page

CONCLUSION

This research was conducted on the type of marketing of the fashion creative industry in West Sumatra province, data on fashion industry players were obtained from the Creative Economy Book published by the Tourism and Creative Economy Office of West Sumatra Province in 2018 and supported by other supporting data from social media web and marketing media. there is. The first analysis shows that the fashion creative industry players use social marketing more than other types of digital marketing (web, email, video, advertising, search engines). Therefore, a clustering analysis is performed using the K-Means data mining algorithm. And produce 3 clusters. The development of this analysis is carried out by developing an integrated web-based and mobile-based digital marketing application, which can connect consumers with creative industry players in one place, which makes it easier for



consumers to choose and determine the desired fashion industry products.

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