

Optimization of Creative Industry Technology through E-Store Development in the MSME Business in the Fashion Sector

¹Puspa Citra, ²Erniyati, ³Prihastuti Harsani, ⁴Endang Suhendar

^{1,2,3,4}Department of Computer Science, Faculty of Mathematics and Natural Sciences, Pakuan University, West Java, Indonesia

Jl. Pakuan, Tegallega. Kecamatan Bogor Tengah, Kota Bogor. Jawa Barat 16143

Email: ¹puspa.citra@unpak.ac.id, ²neni_erniyati@unpak.ac.id, ³prihastuti.harsani@unpak.ac.id

Abstract: Micro Small Medium Enterprises (MSMEs) are the most important pillar of the Indonesian economy. However, with the pandemic in recent years, MSMEs have experienced an impact, namely in their marketing. With increased internet traffic, they have experienced a shift in the consumption pattern of goods and services from offline to online. In efforts to improve or deal with the impact of a pandemic, every MSME must be able to apply technology-based creative industries. Technology-based creative industries are creative industries that do not only rely on manual creativity but include the use of information technology and computers. Currently, technology-based creative industries play an important role in optimizing marketing strategies. One of the SMEs that is growing rapidly is the fashion sector. This research aims to create a web-based application to increase the added value of the MSME economy. Developing this application design involves making applications, trials, outreach, implementation, and evaluation. To know the function level of the observed application, a questionnaire containing aspects of Usefulness, Statistics, Ease of Learning, and Ease of Use was distributed. The average result is 83%, so the application is very feasible.

Keywords: creative industries; e-store; likert; MSMEs; technology

1. INTRODUCTION

Micro, small, and medium enterprises (MSMEs) are one of the business sectors that can develop consistently and stably in the national economy (Halim, 2020). More clearly, the meaning of MSMEs is regulated in the Law of the Republic of Indonesia No. 20 of 2008 concerning MSMEs. The law states that MSMEs follow the type of business, namely micro, small, and medium enterprises. MSMEs are the most critical pillar in Indonesia's pre-economy. Based on data from the Ministry of Cooperatives and SMEs, the contribution of MSMEs to the Indonesian economy includes the ability to absorb 97% of the total existing workforce. It can collect up to 60.4% of total investment (Limansto, 2021). The COVID-19 pandemic has affected the automotive, steel, electrical, textile, craft and heavy equipment, and tourism industries. However, industries that survived the COVID-19 pandemic are 1)—MSMEs that can adapt their business to innovative products; 2. The retail industry has survived, partly due to digital marketing; and 3. Other industries that have been able to stay during the COVID-19 pandemic are industries related to meeting basic needs, such as electricity, clean

water, agriculture, animal husbandry, plantations, fisheries, vehicles, and so on. Food, pharmaceuticals, IT, and communications are sectors that have experienced growth during the COVID-19 pandemic (Rosita, 2020).

Convection innovation requires a variety of creativity to survive amid a pandemic outbreak. One of them is digitizing the marketing system, following fashion trends, improving relationships, providing the best service, working with organizations, and so on (Saepulrohman et al., n.d.). MSMEs must be able to apply creative industry-based technology to deal with the impact of the pandemic because consumption patterns of goods and services have changed from offline to online due to increased internet traffic, which has become the momentum to accelerate digital transformation. There is a solid connection between the Use of technology and an increase in the number of consumers (Mujiastuti & Latifah, n.d.).

Indonesia has a technology-based creative industry. Technology-based creative industries are creative industries that do not only rely on manual creativity but include the Use of information technology and computers (Heryani et al., 2020). Some of the benefits obtained from online shopping transactions include (Andhini & Khuzaini, 2017): 1) can increase market exposure (market share), online transactions that make everyone around the world able to order and buy products that are sold only through computer media and are not limited by distance and time; 2) reducing operational costs, online transactions are transactions in which most of the operations are programmed in a computer so that costs such as showrooms, excessive salary expenses, and others do not need to occur; 3) widening the reach, online transactions that everyone in the world can access are not limited by place and time because everyone can access them only by using a computer intermediary media; 4) increase customer loyalty; this is because the online transaction system provides complete information, and this information can be accessed at any time. Besides that, terms purchase it can also be made at any time even consumers can choose the product they want themselves; 5) improve supply management; online transactions lead to efficiency in operational costs in companies, especially in the number of employees and the amount of stock available to further improve cost efficiency, a better supply management system must be improved. An e-commerce-based marketing system is an action that utilizes promotions to increase the number of customers entering online stores (Suwarni et al., 2022) An E-commerce website can help increase sales by expanding the target market to all corners of Indonesia and abroad (Arief & Novita, 2021).

Entering the industrial era 4.0, support, cooperation, and collaboration in building MSMEs and the nation's children's industries based on appropriate technology must be continuously improved. During the current pandemic and digital era, the involvement of experts and business professionals can help develop MSMEs (Wakhyuni et al., 2021). One of the SMEs that is increasing is the fashion sector. The field of fashion is also constantly evolving following trends. Clothing is an item that is needed by the community, so the business of buying and selling clothes is always busy. Therefore, many MSMEs have opened home clothing businesses. The obstacles MSMEs face are 1) Creative industry technology needs to be optimal in product marketing, 2) Sales and orders cannot be made online 3) Sales recording and reporting are not optimal. Capital,

business experience, product innovation, promotion strategy, and education simultaneously affect the profits of fashion SMEs selling on online marketplaces (Victor & Setiawan, 2020).

Based on this, a web-based e-store application is needed, which is expected to expand marketing and increase sales. The stages in developing this application are designing, making applications, testing, outreach, implementation, and evaluation. In this study, questionnaires were distributed. Questionnaires using the use questionnaire method contained a series of statements that had been grouped into several aspects of Use: ease of Use, ease of learning, satisfaction, and usability. The results obtained for each element of usability, namely the ease-of-use factor received an eligibility of 87%, the ease-of-learning aspect got eligibility of 83%, statistics obtained an eligibility of 78%, and ease of Use obtained an eligibility of 85%, can be tied to applications that are very feasible to use.

2. METHOD

The form of this service activity is as follows:

1. Survey of MSME marketing and sales activities.
2. Development of an e-store system as a user-friendly sales technology. A computer-based store system is prepared through troubleshooting, designing, manufacturing, and testing. The stages of looking for problems are carried out through interviews and observations in the second month. The design and manufacture were carried out at Pakuan University for three months.
3. Outreach to Partners. Activities are carried out by inviting employee/customer representatives to socialize the e-store application. The stages of implementation can be seen in Figure 1.

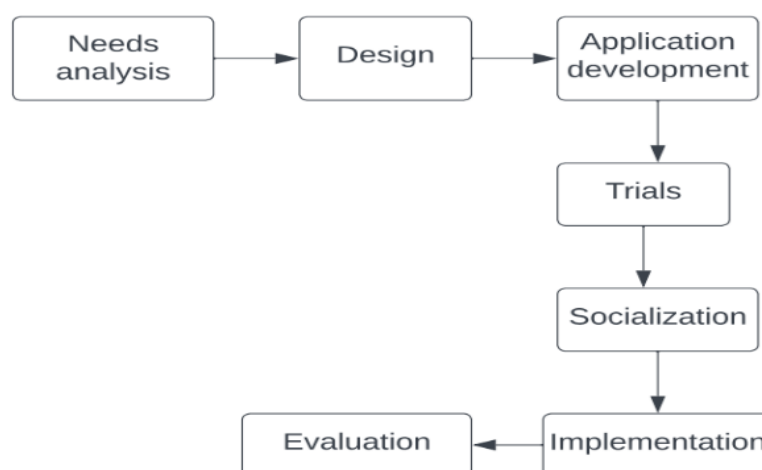


Figure 1. Implementation Stage (Harsani et al., 2022).

4. Needs analysis. This stage analyzes the problems of optimizing creative industry technology in MSMEs. The study was carried out through interviews and observations. The output of this stage is the availability of requirements specification documents related to the application to be developed and implemented by partners.

5. Application Development. One of the outcomes of this activity is creating a web application for sellers and buyers in MSMEs as a means of transaction in ordering products. Besides being used as a means of ordering, this application will be a marketing activity and sales reporting and evaluation of product sales. The stages in developing this application are as follows:

i. Design

Application design is done with three modules, namely:

- a. Database design(FitzGerald et al., 1981; Hartono, 1999; Kustiyahningsih & Anamisa, 2011)
- b. GUI designing, and
- c. reporting design.

ii. Application creation

The application will be provided for ease of access and Use based on the target user.

iii. Trials

The trials carried out at this stage were functional trials and user acceptance level trials. The system improvement process continues after receiving evaluations from both developers and users.

6. Socialization. Application socialization is carried out in MSMEs by inviting employees, customers, and owners. This socialization activity will obtain responses and input for system improvement and determine the partner participation level in the applications provided.

7. Implementation. Implementation is the implementation of the application. Implementation begins with completing product data. Implementation is carried out by involving MSME employees, customers, and owners.

8. Evaluation. Evaluation is carried out after one month of implementation activities carried out. Based on the review, the level of sales will be obtained. The development that will be carried out will also be obtained through the evaluation. Evaluation is carried out through the distribution of questionnaires, interviews, and direct observation.

3. RESULT AND DISCUSSION

At the application design stage, it is carried out to determine the design of the system to be built. After analyzing the running system and identifying problems, it can be concluded that MSME Owners need an application system to make it easier, more effective, and more efficient. An overview of the system to be developed can be seen in Figure 2.

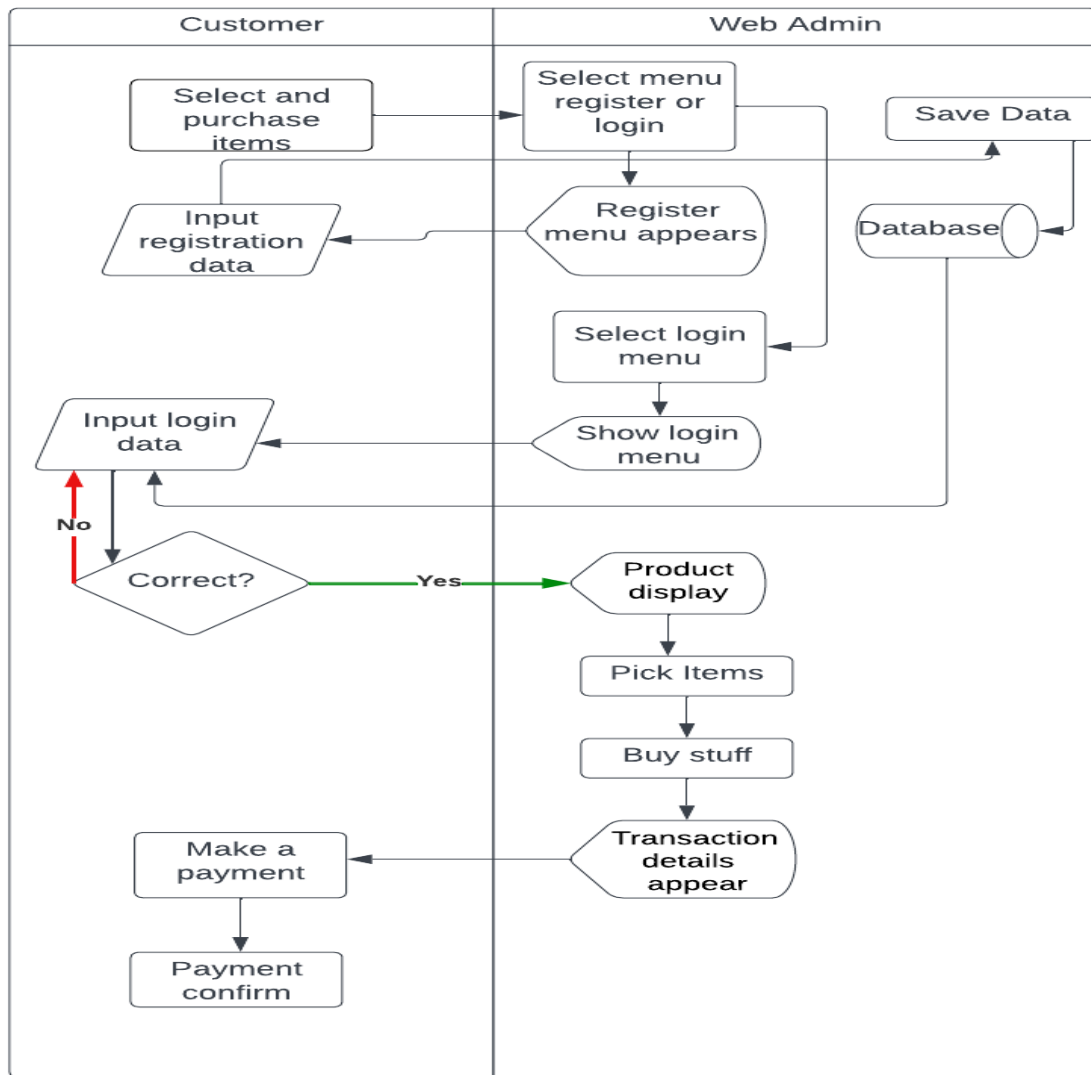


Figure 2. The developed system

An overview of the system flowchart can be seen in Figure 3.

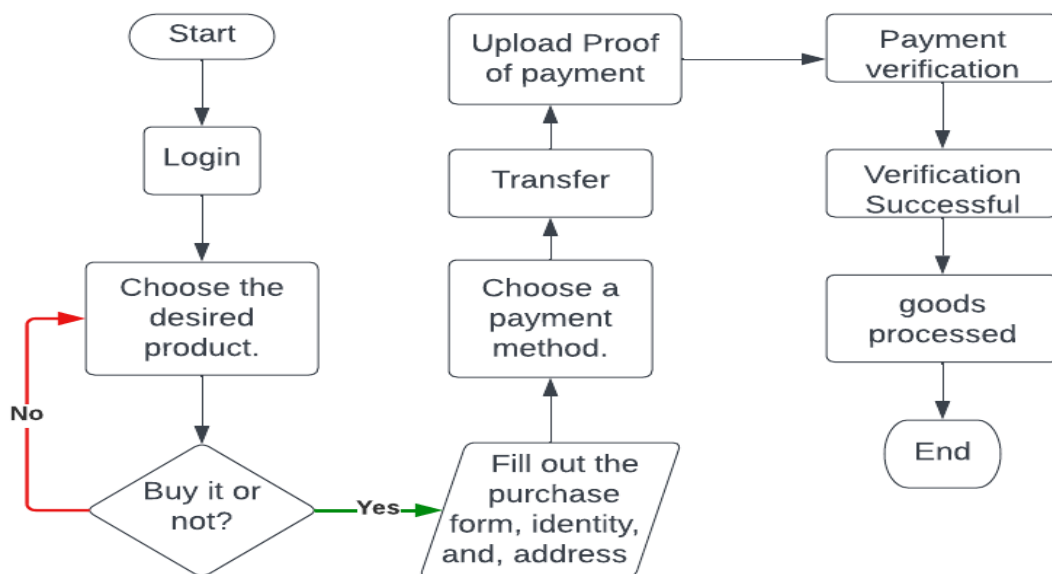


Figure 3. Front-end flowcharts

In the results and discussion stages, menus and forms will be displayed to implement the system application design. Before a customer purchases an item, they must log in by registering a customer account. There is a Username and Password form on the customers' login form page. An overview of the design of the customer login form can be seen in Figure 4.

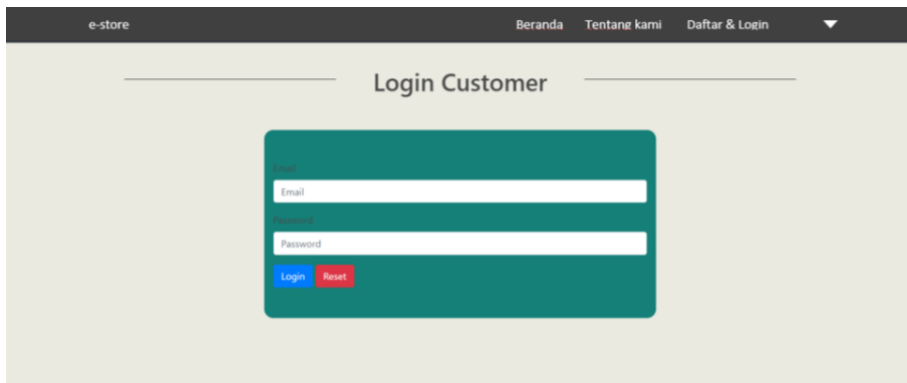


Figure 4. Customer login form

After the customer purchases goods, the customer can view transaction details. A detailed description of customer transactions can be seen in Figure 5.

Detail Transaksi

Silahkan Cetak Halaman [Ini](#) Untuk Mengingat Detail Transaksi Anda

Berikut Adalah Detail Pembelian Dan Pengiriman

Status Menunggu Pembayaran

Tgl Transaksi 14 Dec 2022 10:35

Id Transaksi 8

Daftar Product	Product	Harga	Qty	Subtotal
	Keleja Pendek PDH	Rp.219,000	1	Rp.219,000
Total Harga		Rp.219,000		

Informasi Pengiriman

Nama Penerima fauzan

Kurir JNE
Akan Diterima Sekitar : 2-4 Hari

No Resi Belum Dikirim

Alamat Pengiriman jalan kusnan


Informasi Pembayaran

Total Harga Rp.219,000

Ongkos Kirim Rp.9,000

Total Pembayaran Rp.228,000

Silahkan Transfer sebesar Rp.228,000 Ke Rekening Dibawah Ini:

 **BCA**
12321321
a.n Supriyadi

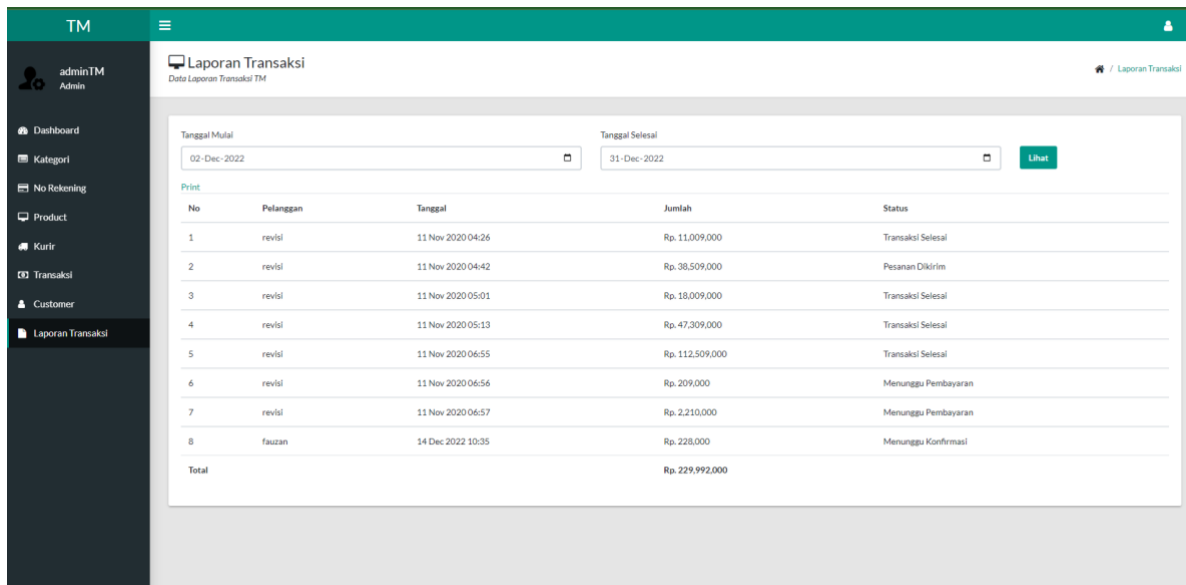
Cantumkan Id Transaksi : 8 Pada Berita Transaksi

Upload Bukti Transaksi

Upload Bukti No file chosen

Figure 5. Customer Transaction Details

The Admin Owner can view sales transaction reports on the application system. An overview of sales transaction reports can be seen in Figure 6.



No	Pelanggan	Tanggal	Jumlah	Status
1	revisi	11 Nov 2020 04:26	Rp. 11,009,000	Transaksi Selesai
2	revisi	11 Nov 2020 04:42	Rp. 38,509,000	Pesanan Dikirim
3	revisi	11 Nov 2020 05:01	Rp. 18,009,000	Transaksi Selesai
4	revisi	11 Nov 2020 05:13	Rp. 47,309,000	Transaksi Selesai
5	revisi	11 Nov 2020 06:55	Rp. 112,509,000	Transaksi Selesai
6	revisi	11 Nov 2020 06:56	Rp. 209,000	Menunggu Pembayaran
7	revisi	11 Nov 2020 06:57	Rp. 2,210,000	Menunggu Pembayaran
8	fauzan	14 Dec 2022 10:35	Rp. 228,000	Menunggu Konfirmasi
Total			Rp. 229,992,000	

Figure 6. Sales transaction report

Every time a customer orders a product, it will be recorded in a transaction report so that the admin can see the status of the customer who has called the product; the order status consists of information, namely waiting for payment, waiting for confirmation, order canceled, packaging process, order sent, and the transaction completed. A trial run was carried out beforehand, then an evaluation stage for the application to be ready. Usability testing needs to be done because it is necessary to assess success in the usability aspect of an information system application while also knowing whether the application can be appropriately used and by its function or not for user needs. This test was carried out using the USE Questionnaire method using four aspects of testing. The four aspects tested are Usefulness, ease of Learning, Satisfaction, and ease of Use (Sufandi et al., 2022).

At the evaluation stage, a questionnaire was distributed. The contents of the questionnaire were:

a) . Easy to use.

- 1) Is the application easy to use?
- 2) Is the application easy to understand?
- 3) Can the application easily avoid errors in its Use?
- 4) Users do not see any inconsistencies while using the application?
- 5) Is the application user-friendly?

b). Easy of learning

- 1) Is the application easy to learn how to use it?
- 2) Is the application easy to remember how to use it?

c). Satisfaction

- 1) Is the e-Store application as expected?
- 2) Is the e-Store application comfortable to use?
- 3) Is the e-Store application fun to use?

d). Usefulness

- 1) Is the e-Store a practical application for users?
- 2) Does the e-Store application have the capabilities and functions as expected?
- 3) Does the e-Store application meet the needs?
- 4) Does the e-Store application help you to be more effective?
- 5) Does the e-Store application help you be productive?
- 6) Can the e-Store application save time when you use it?

Respondents as a sample amounted to 50. The data taken in this study is quantitative, resulting from the questionnaire's answers. The questionnaire used in the study adopted the questions on the USE Questionnaire, which contained aspects of Usefulness, Statistics, Ease of Learning, and Ease of Use.

The Likert scale measures a person's perception of opinion in research that the researcher has specifically determined. The answers to each instrument item (questionnaire) on a Likert scale, from very positive to very negative, are in the form of words and are given a score as shown in Table 3. (Geisen & Bergstrom, 2017; Sugiyono, 2013)

Table 3. Likert Scale

Answer	Score
Strongly agree/always/very positive	5
Agree/often/positive	4
Undecided/sometimes/neutral	3
Disagree/rarely/negative	2
Strongly disagree/never	1

The results of the questionnaire can be seen in Table 4.

Table 4. Results of the questionnaire

No	STS	TS	RG	S	SS
Easy of Use	0	0	16	150	134
Easy of learning	0	0	4	76	20
Satisfaction	0	0	32	94	24
Usefulness	0	2	39	128	131

To determine the level of usability of the observed applications, namely a) numbers > 21 (very unfeasible), b) 21-40 (not feasible), c) 41-60 (enough), d) 61- 80 (decent) e) 81-100 (very decent). The results of each measurement aspect viz

$$\text{Ease of Use} = \frac{(1 \times 0) + (2 \times 0) + (3 \times 16) + (4 \times 150) + (5 \times 134)}{5 \times 50 \times 6} \times 100\% = 87\%$$

$$\text{Ease of learning} = \frac{(1 \times 0) + (2 \times 0) + (3 \times 4) + (4 \times 76) + (5 \times 20)}{5 \times 50 \times 2} \times 100\% = 83\%$$

$$\text{Satisfaction} = \frac{(1 \times 0) + (2 \times 0) + (3 \times 32) + (4 \times 94) + (5 \times 24)}{5 \times 50 \times 3} \times 100\% = 78\%$$

$$\text{Usefulness} = \frac{(1 \times 0) + (2 \times 2) + (3 \times 39) + (4 \times 128) + (5 \times 131)}{5 \times 50 \times 6} \times 100\% = 85\%$$

Overall, the results of usability testing obtained a feasibility of 83%.

4. CONCLUSION

Based on the results obtained, the percentage level of application usability feasibility using the USE questionnaire tools shows a proper classification of the statistics aspect (satisfaction). In contrast, ease of learning, ease of Use, and usefulness show the category is worth it. From the results of the usability feasibility percentage, namely 83%, it can be concluded that the application is very feasible. The development of the application should be added comments from the customer.

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