

Design and Development of Web-based Commerce for SMEs in East Jakarta

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ABSTRACT

This activity is a “Design and Development of a Web-Commerce-based Strategy for Promotion of Micro, Small and Medium Enterprises for SMEs in the East Jakarta Region.” This is motivated by various obstacles experienced by SMEs when they are not sufficiently competitive with competitors in the market. The disruptive era has driven changes in various aspects of life, including market behavior. It is undeniable that business digitization plays a very important role in business activities. This program aims to make SMEs especially those in the East Jakarta area able to be competitive through the designed Web-Commerce, which is named Lapaksenggol.com. Lapaksenggol.com is a promotional media that can be used optimally by SMEs in the East Jakarta area to expand the market and accessible to consumers. In addition, in the long term, the existence of Lapaksenggol.com will increase consumer awareness of the existence of SMEs, build networking with other business units, and increase market confidence in SMEs. As a result of the collaboration with the East Jakarta Regional Cooperative, SMEs, and Trade Sub-Department, the soft launching of Lapaksenggol.com was carried out on June 22, 2021, and the socialization to SMEs in East Jakarta on August 19, 2021.

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INTRODUCTION

Micro, Small and Medium Enterprises (SMEs) is a general term that refers to productive economies both owned by individuals and business entities by the criteria set out by Law No. 20 of 2008. SMEs also have a very important role inequitable distribution of the community's economy. This is because the management of SMEs is carried out by individuals or individuals as well as small business entities, which are more often referred to as micro. Thus, SMEs are spread throughout Indonesia and can be used by the community as a source of income and a decent living.

The empowerment of SMEs has proven to be a driving force for the national economy with its contribution and role in absorbing more workers than other business entities, proving that SMEs can reduce the unemployment and poverty rates (Gunartin, 2017). The Organization of Economic Cooperation Development (OECD) survey shows that the Micro, Small, and Medium Enterprises (SMEs) sector absorbs the most workers in Indonesia. This sector absorbs 70.3 percent of the workforce (OECD, 2018).

In addition, data from the Ministry of Finance shows that SMEs have contributed to the economy. It is noted that SMEs have contributed 60.3 percent to the Gross Domestic Product (GDP) and 97.2 percent of employment, in the Indonesian economy (Kemenkeu, 2016). However, the contribution of SMEs to GDP in 2020 was the lowest since 2010 at 37.3 percent. This contribution decreased by 38.14 percent compared to the previous year. As you can see in Figure 1.

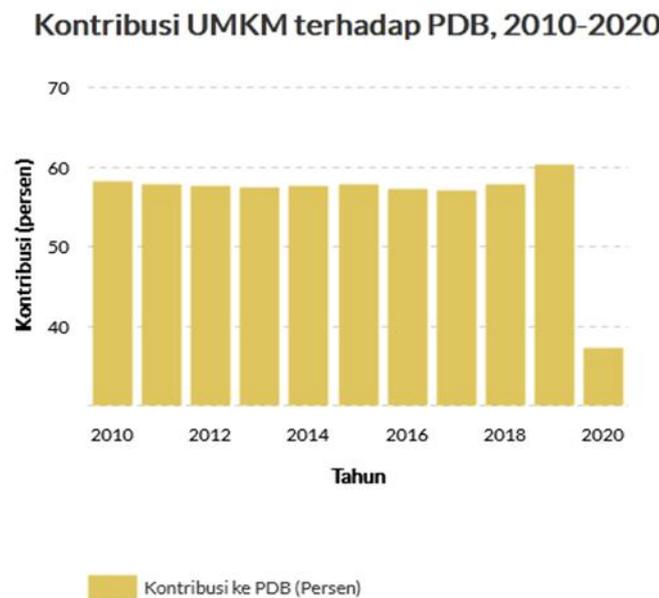


Figure 1.

Contribution of SMEs to GDP 2010-2020

Source: KEMENKOP (2020)

With its strategic role, the development of SMEs is one of the keys to driving national growth. The co-operation of various parties is very important so that SMEs will have more competitiveness to encourage quality economic growth in Indonesia. Some of the obstacles faced by Indonesian SMEs, one of which is access to marketing, access to capital, and networks. These problems cause Indonesian SMEs to be less competitive with neighboring countries. The Minister of Cooperatives and SMEs said the same thing that the Indonesian SMEs sector is still far behind compared to its competitors. Currently, Indonesia has only exported around 14.5% of SMEs products while China has exported SMEs 70%, Korea 60%, Japan 55%, and Thailand 35% (Media Indonesia, 2020).

In facing the obstacles and challenges to expanding SMEs, the government needs to innovate. The government needs to prepare business models that can make SMEs expand their market, one of which is by collaborating through partnerships with large-scale business actors through digitalization. There are so many benefits that SMEs will get if they can transform using digitalization, one of which is the creation of efficiencies that make it easier for SMEs to run their business, such as efficiency in production costs, transportation, warehousing, and even promotions are enough to do through social media Facebook, Instagram, and Twitter. and others but must be packaged as well as possible.

Digitalization is needed to expand the marketing network so that it can expand to various regions or other countries, related to certain products and access to marketing can be expanded. Digitization also plays a role in changing basic consumer behavior. The development of the Internet and smartphone adoption has proven to be successful in becoming a stimulant in changing consumer behavior in the era of digitalization. Consumer shopping behavior, which was originally done manually by visiting stores to buy goods, turned into an online shopping style through e-commerce applications. The digitization trend is indicated by a note from Bank Indonesia (BI) that e-commerce transactions in the second quarter of 2020 rose nearly 40% to 383 million, compared to the first quarter of 2020 of 275 million. This shows that people who previously did not shop online, have started targeting e-commerce.

Changes in consumer behavior in shopping need to be realized by marketers (SMEs) so that the strategy set in developing a business can be compatible with the desires and needs of customers. Recognizing and understanding consumer behavior in the digital era is indeed a challenge for entrepreneurs. However, because consumer behavior has changed towards digital, SMEs players inevitably need to have more creativity to meet these needs.

Various efforts have been made by the government to help SMEs survive in the era of digitalization. In addition, the current pandemic is engulfing the entire world, and technology adoption is urgently needed to maintain the existence of SMEs in reaching consumers. The opportunity for digitization is currently very wide open. However, in reality, there are obstacles for SMEs in entering digitization. Lack

of digital literacy, lack of online business knowledge of how to market through digital platforms, and lastly, the lack of readiness of the experts.

According to the Asia Pacific Foundation of Canada (APFC, 2019), the majority of SMEs owners in Indonesia are residents aged over 35 years with the last education level of High School. These characteristics of the population tend to be more reluctant to adopt digital technology which is developing very quickly.

Another challenge that also affects the level of digital technology adoption is the readiness of supporting digital infrastructure in various regions. One of the basic infrastructures needed is the internet. Internet penetration in Indonesia is still experiencing significant disparities between regions. According to a survey from the Indonesian Internet Service Providers Association (APJII), internet penetration is still concentrated in Java with a ratio of 41.7% to the total population. Meanwhile, penetration in other areas is still below 20% with the lowest ratio being in Maluku and Papua at 2.2% (APJII, 2020).

In addition, the issue of marketing and brand promotion is still one of the biggest obstacles for micro-enterprises (SMEs) in increasing their business scale in Indonesia. This is in line with the statement of the Minister of Cooperatives and SMEs Teten Masduki who said "the success of Micro, Small and Medium Enterprises (SMEs) in the context of digital marketing is still low at 4-10 percent (Liputan6.com, 2020). Several factors make it difficult for SMEs to compete in the digital market, namely products and their promotional or marketing strategies that are still weak and have not been able to attract large public interest and the lack of optimal promotional media that can bridge the SMEs and the market.

LITERATURE REVIEW

SMEs Go Online!

Micro-enterprises are productive businesses owned by individuals and/or individual-owned business entities that meet the criteria for micro-enterprises as stated in Law no. 9 of 1995, namely the maximum assets of 50 million rupiahs and a turnover of 300 million rupiahs. Meanwhile, small businesses are productive economic businesses that stand-alone, which are carried out by individuals/business entities that meet the criteria for small businesses, namely having assets between 50 to 500 million rupiahs and a turnover of 300 million to 2.5 billion rupiahs. Furthermore, medium-sized businesses are productive economic businesses that stand alone, both in the form of individual businesses and business entities that meet the criteria for medium-sized businesses with a net asset of 2.5 billion rupiahs and a turnover of 2.5 to 50 billion rupiahs (Goukm, 2016).

According to Lathifa (2019), SMEs are classified into four groups, including 1) Livelihood activities are small and medium businesses that are used as job opportunities to earn a living, which are generally known as the informal sector, for example, street vendors; 2) Micro-enterprise, namely small and

medium-sized businesses that appear to have the characteristics of craftsmen, such as local restaurant entrepreneurs, laundry, local construction, or clothing traders; 3) Small dynamic enterprise, namely small and medium enterprises that have demonstrated entrepreneurial criteria and can accept subcontract and export work; 4) Fast-moving enterprises are small and medium enterprises that already have entrepreneurial criteria and have the potential to transform into large businesses.

Based on its development, SMEs have contributed to Indonesia's Gross Domestic Product (GDP) with a projected growth of 5% throughout 2019, or 2,395 trillion rupiahs. This growth prediction is indicated by the contribution of novice entrepreneurs who run their businesses through digital platforms (Syarizka, 2019).

The factors that encourage the growth of SMEs in Indonesia are: 1) Utilization of technology, information and communication facilities. SMEs are expected to be able to utilize technology optimally in the implementation of their business, so that they can be competitive. Some digital applications can be used as promotion and marketing (e-commerce) media. Referring to the statement of the Ministry of Cooperatives of the Republic of Indonesia that has grown about 8 million SMEs or 14% of the total 59.2 million SMEs that were established in Indonesia in Go-Digital format in 2017. This number is expected to continue to increase and make Indonesia the Digital Energy of Asia in 2020 (Lathifa, 2019); 2) Ease of borrowing business capital. The Financial Services Authority (OJK) appealed to SMEs to take advantage of the ease of providing business capital loans from financial technology (fintech). However, you still have to be careful in choosing a fintech that has been officially registered with the OJK. There are four stages that SMEs must take when applying for a business capital loan at fintech, namely: membership registration, loan application, loan implementation, and loan repayment. Even a fintech company can disburse a business capital loan of up to 2 billion rupiahs (Dinata, 2019); 3) Decreasing final income tax rates. Minister of Finance Sri Mulyani Indrawati revealed that the priority of PP 23/2018 is to develop the business world while making it easier for taxpayers to fulfill their tax obligations. The reduction in tariffs from 1 percent to 0.5 percent is believed to reduce the tax burden so that business actors can increase their economic capacity to develop their respective businesses (Putra & Djumena, 2018).

The Ministry of Communication and Information explained that currently a movement of 100,000 Micro, Small, and Medium Enterprises (SMEs) Go Online has been launched simultaneously in 30 cities/districts in Indonesia. This was initiated based on the vision expressed by the President of the Republic of Indonesia, Mr. Joko Widodo, to make Indonesia the Digital Energy of Asia. The movement, which was held at the Creative Space Gallery Indonesia Wow, SMESCO UKM Jakarta Building, aims to facilitate and provide opportunities for SMEs in various regions to be ready to compete in a wider market. Likewise, the Minister of Cooperatives and Small and Medium Enterprises (SMEs) Mr. Anak

Agung G.N. Puspayoga said that the government has made efforts to mobilize SMEs, one of which is the support of partial financing for SMEs through the People's Business Credit of 9%, as well as the establishment of a Revolving Funding Fund Institution (LPDB). It is hoped that through these programs SMEs will be able to increase their competitiveness and productivity (Viska, 2020).

Web-Commerce Platform Design and Development

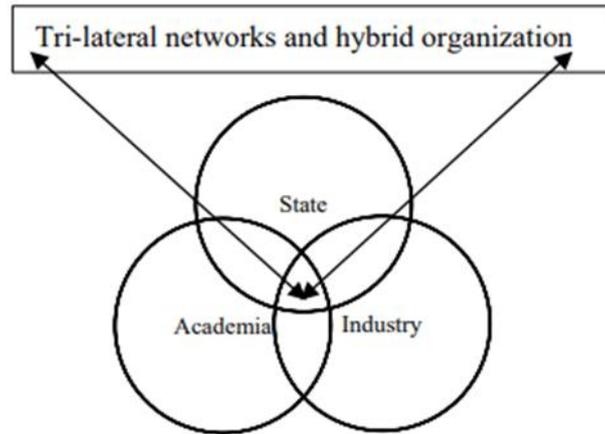
Electronic Commerce (e-Commerce) based on the Organization for Economic Co-Operation and Development (OECD) 2009 is the sale or purchase of goods/services, which are carried out through computer networks with methods specifically designed for the purpose of receiving or placing orders, but payment and delivery The main goods/services do not have to be done online. E-commerce transactions can occur between businesses, households, individuals, governments, and other private or public organizations. This includes ordering through website pages, extranets, as well as Electronic Data Interchange (EDI), e-mail, social media (Facebook, Instagram, and others), and instant messaging (Whatsapp, Line, and others).

Website is an interconnected web page, which generally contains a collection of information in the form of text data, images, animations, audio, video or a combination of all of them, which are usually created for personal, organizational, and corporate purposes. In this case, the proposed solution for the SMEs group in the East Jakarta area is to design web-commerce as a medium for promoting SMEs' products. This means that through the web, SMEs can promote their respective stores/products. This is intended so that in an integrated manner, the public, in this case, consumers, can see SMEs' products as a whole, and even information about the existence of their stores (SMEs) will be visible on the web-commerce.

It is hoped that through this web-commerce, SMEs will be able to increase their competitiveness. Apart from being a media and branding strategy, this website is considered quite effective in growing consumer awareness of SMEs' products/services/brands. In the long term, if consumer confidence grows, the tendency to buy SMEs products will occur sustainably. This kind of ecosystem is expected to grow through web-commerce.

Triple Helix Cooperation Model as the Key to Success for SMEs Go Online through Web-Commerce

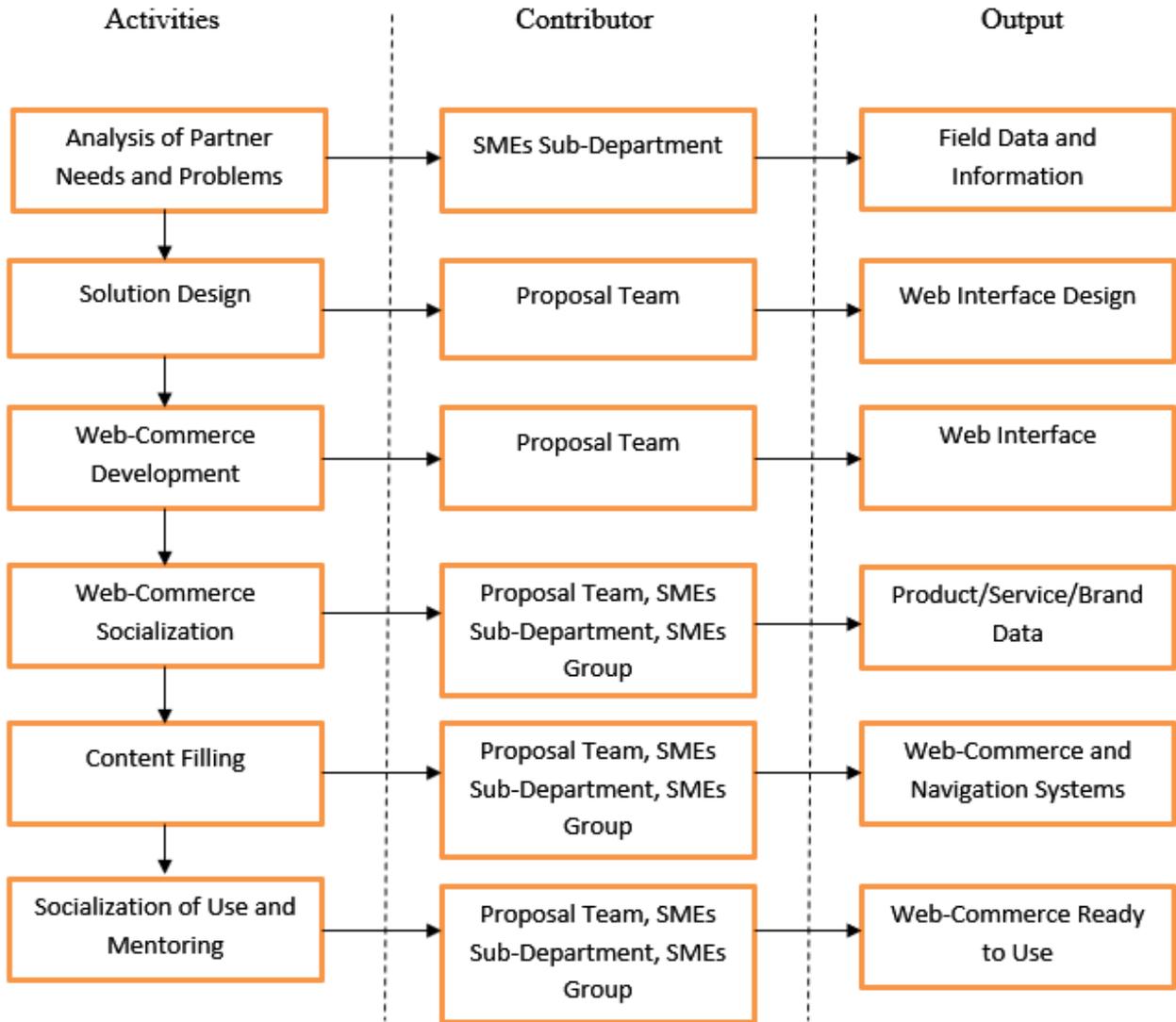
Programs launched by the government cannot necessarily be realized easily without cooperation/synergy between related parties (Puangpronpitag, 2019). In this community service activity, the program has been carried out well thanks to the support from the East Jakarta Regional Cooperatives, SMEs and Trade Sub-Department, the Community Service Team, Faculty of Economics, Universitas Negeri Jakarta, and the East Jakarta SMEs group. As you can see in Figure 2.



Tri-Lateral Networks and Hybrid Organization of Triple Helix, adapted from Etzkowitz and Leydesdorff (2000, p.111).

Figure 2.
Triple Helix Cooperation Model

The following is the flow of program activities that have been implemented



MATERIAL AND METHOD

Needs Analysis

The following are the needs of the East Jakarta SMEs group based on data and information received from partners (East Jakarta Cooperatives, SMEs, and Trade Sub-Department): 1) The need for transformation of conventional SMEs formats towards business digitization, because SMEs are not yet competitive enough; 2) The need for assistance for SMEs from the side of Educational Institutions and the Government that can act as a catalyst for the transformation process towards business digitization; 3) The need to create an ecosystem in the scope of SMEs that supports each other, where web-commerce platforms can mediate both B2C and B2B.

Instructional Design

The following is an instructional design that has been prepared by the FE UNJ community service team:

1. Web-Commerce Design and Development



Figure 3.
Activity Concept Design

Target Participants

The target participants in this community service activity are groups of SMEs in the East Jakarta area. Where the implementation has been well organized through the use of Zoom Meeting media.

The program is proposed to be implemented until the 2nd year, with the 2nd year program design, which is as follows:



Figure 4.
Program Development Plan in Year 2

RESULTS AND DISCUSSIONS

Community service activities have involved the East Jakarta Cooperatives, SMEs, and Trade Sub-Department as partners. There are several stages of implementing the activities, including:

1. Preparation stage

At this stage, the community service team has prepared a web-commerce design that will be launched during the implementation of the activity. Some technical preparations for web-commerce design, namely: a) Collaborate with external parties as a website design service provider; b) The team coordinates together in terms of determining domain names, designing logos, and designing interface designs (website front pages), features, and content. Furthermore, the team also coordinated with partners to determine the time for the implementation of the activity, which was then followed up by sending an invitation addressed to the Head of the East Jakarta Cooperatives, SMEs, and Trade Sub-Department. As for the implementation, considering that we are currently in a Covid-19 pandemic condition, the activity is held online with the Zoom Meeting media.

2. Implementation stage

This community service activity was implemented in the form of "Launch Web-commerce lapaksenggol.com", which was held online on Tuesday, June 22, 2021, at 10.00 WIB and was attended by Mr. Parulian Tampubolon as Head of the Jakarta Cooperative, SMEs, and Trade Sub-dept. Timur and his staff and teams from the sub-districts in East Jakarta. At this launch activity, apart from inaugurating lapaksenggol.com as a medium for promoting SMEs in East Jakarta, the community service team has explained several things such as: a) Access the website; b) Register as a seller/buyer; c) Fill out online store content (product photos, product descriptions, prices, and other information); d) View transaction data; e) See the sales volume and profits obtained.

3. Follow-up and finalization stage

This stage is a follow-up to the launch of lapaksenggol.com. At this stage the community service team coordinates with the East Jakarta Cooperatives, SMEs, and Trade Sub-Department to gather East Jakarta SMEs players, then the team will socialize lapaksenggol.com as well as provide tutorials on the use of lapaksenggol.com to increase digital literacy for East Jakarta SMEs players. The socialization activity was held online on Thursday, August 19, 2021.

4. Stages of reporting the implementation of activities

At this stage, the community service team always coordinates in compiling reports on the implementation of activities progressively, by the stages of implementation.

5. External publication stage

Some of the outcomes that will be targeted at this community service activity include:

- a. Web-commerce lapaksenggol.com (already implemented)
- b. Publication of the implementation of the activity "Lapaksenggol.com launch through several digital media (already implemented)
- c. lapaksenggol.com Electronic Guide Book (already implemented)
- d. Publication of scientific articles in the Sinta Indexed National Journal (already submitted to the journal in question)
- e. HKI (submission process)

CONCLUSION AND RECOMMENDATION

The Covid-19 pandemic in Indonesia has been going on for almost two years. Various policies to minimize the transmission of the virus have been pursued by the government. one of them is through various programs related to the limitation of social mobility. This condition is, of course, quite a challenge for SMEs players, where there is a decline in sales so that business operating expenses are increasingly not covered by non-optimal revenues. Digitization can be said to be an alternative solution so that

SMEs can survive during a pandemic. Through the use of digital media, SMEs players can continue to sell and promote their products to the general public. Even though digital media, consumers can easily access their needs without having to move out of the house. Some of these things are the main reasons that encourage the community service team of FE UNJ to make designs as a medium for promoting SMEs products.

Meanwhile, lapaksenggol.com was launched on June 22, 2021, and invited the East Jakarta Cooperatives, SMEs, and Trade sub-departments and their staff as partners. The next activity was the socialization of lapaksenggol.com to East Jakarta SMEs, as well as the handover of the lapaksenggol.com Electronic Guidebook to East Jakarta SMEs as an effort to assist digital literacy for SMEs.

It is hoped that through lapaksenggol.com, East Jakarta SMEs players can continue to promote and sell, so they can survive even in a pandemic situation. Even SMEs players register at lapaksenggol.com for free (no registration fee), so it is not burdensome for new players or ultra micro SMEs. Of course, the performance of lapaksenggol.com is still far from perfect, so various feature and facility improvements will always be carried out regularly and systematically to achieve optimal goals.

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