# Design And Development Of An E-Marketplace-Based Digital Platform In Coffee Product Management In Semarang District

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#### **Abstrak**

Perkembangan teknologi informasi telah membawa era perekonomian kreatif baru yang berbasis digital. Kebutuhan masyarakat yang semakin meningkat ini juga didukung oleh kemajuan layanan internet yang digunakan dalam berbagai keperluan salah satunya untuk keperluan bisnis dan perdagangan, salah satu pemanfaatan internet dalam keperluan bisnis dan perdagangan adalah pemanfaatan berbagai media pemasaran yang ada, seperti marketplace. Kelompok Petani kopi di Kab. Semarang, mereka masih memasarkan produknya secara sederhana dengan cara menjualnya secara langsung ke tengkulak ataupun di titipkan ke warungwarung terdekat sehingga pemasaran akan produk kopi masih sebatas lokal dan sedikit yang mengetahui. Berdasarkan permasalahan yang ada, maka perlu dibangun sistem Platform Digital Berbasis E-Marketplace guna memperluas jangkauan pemasaran produk UMKM Kelompok Petani Kopi. Penelitian ini menggunakan pendekatan observasi dan wawancara. Tujuan dari penelitian ini adalah membangun suatu sistem informasi pemasaran berbasis digital agar dapat lebih memperluas penjualan.

Kata kunci: E-Marketplace, UMKM, Online

#### Abstract

The development of information technology has brought a new era to the digital-based creative economy. The increasing needs of the community supported by the advancement of internet services used for various purposes, one of which is for business and trade purposes. One of the uses of the internet for business and trade purposes is using different existing marketing media, such as marketplaces. The Coffee Farmers Group in Kab. Semarang still markets its products by selling them directly to intermediaries or placing them in the nearest stalls. So, the marketing of coffee products is still limited to locals, and few people know. Based on the existing problems, building a marketplace-Based Digital Platform system is necessary to expand the marketing reach of MSME products for the Coffee Farmer Group. This study used an observation and interview approach. This research aims to build a digital-based marketing information system to expand sales further.

**Keywords:** E-Marketplace, MSMEs, Online

## 1. INTRODUCTION

Technological development cannot be avoided from this life because technological advances will go hand in hand with advances in science. This development has an impact on human life. The more technology develops, the more significant human needs will be, giving rise to new technologies to answer these needs. This increasingly rapid development is utilized by various parties to maximize the function of this technological advance (Hidayat, 2021).

One crucial strategy for companies to compete with rivals is to incorporate information technology into business processes. One such strategy is to use the marketplace to support



marketing expansion (Darwis et al., 2020). A marketplace is a digital market that serves the same purpose as a physical market by bringing buyers and sellers together to complete transactions. The Marketplace is distinct in that it is more computerized and uses a network to serve a requirement in order to efficiently provide updates, information, and services for various merchants and customers (Betty, 2017). Most people would anticipate transparency in terms of product availability, price, and quality (Smith, Bailey, and Brynjolfsson, 1999).

Slamet et al. (2016) explained that many MSMEs in Indonesia still have limitations in using information technology infrastructure, difficulties in getting skilled workers, and SMEs have not reached a broader market, not to mention the limited funds they have. Therefore, the presence of an existing e-marketplace can be an opportunity for MSME entrepreneurs to develop their sales without having to have more effort into forming their website or application. The number of e-marketplaces in Indonesia continues to increase, as well as the number of sellers or online shops in the e-marketplace. Currently, those who sell using e-marketplaces are not only MSMEs but also large companies that have the status of official stores/malls in e-marketplaces. MSME entrepreneurs must know the right marketing strategy to compete with other sellers in the e-marketplace. In addition, business people must also determine the right place to sell, for example, products on top e-marketplaces that people in Indonesia use most widely.

I-price, a meta-search site operating in 7 countries around Southeast Asia, has published a report on the results of research on marketplace maps in Indonesia and sorts them by monthly web visitors, Appstore rankings, and Playstore rankings. The following table shows the top 5 e-marketplaces in Indonesia as of Quarter 3, 2021.

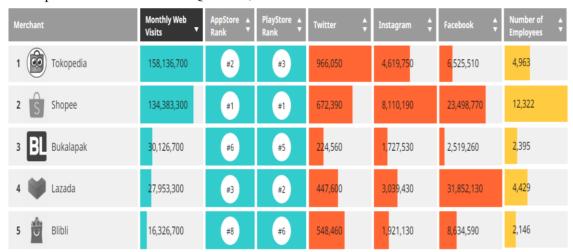


Figure 1. Top 5 Marketplaces in Indonesia.

Jambu District's productivity of 466.79 Tons in 2017 is the second largest coffee-producing area in Semarang Regency. Coffee farmers produce robusta coffee from Mount Kelir Jambu, Semarang Regency. The residents of Bedono village are determined to promote their coffee farming products as superior regional products. Supported by the contours of the land, the type of soil, and the area's altitude, this village is suitable as a coffee producer. With this verification, it is hoped that the Indonesian people are expected to recognize Jambu hamlet as a center for coffee plants.

Based on the interviews conducted in the coffee farmer group in Kab. Semarang still markets its products simply by selling them directly to intermediaries or placing them in the nearest stalls. So, the marketing of coffee products is still limited to locals, and few people know. The problem in the field is that there are still difficulties in marketing the coffee farmer groups in the district. Semarang, this is due to public ignorance of the products offered, related to market opportunities, selling prices and locations, and various other factors. So we need an appropriate technology to overcome these problems.

Therefore, this study will discuss the Design of an E-Marketplace-Based Digital Platform for the Marketing Development of Coffee Farmers Group Products in Semarang Regency. The

results of this study can be used as recommendations to the community, especially coffee farmers' groups or coffee processing business actors in Semarang Regency, as a medium to market their products.

#### 2. LITERATURE REVIEW

This section contains supporting theories of the proposed method for solving a problem and/or the development of the method, which is based on clear references (books, journals, proceedings and other scientific articles).

# 2.1 E-Marketplace

An E-marketplace is an inter-organizational information system where buyers and sellers in the market communicate information about prices and products and can complete transactions through electronic communication channels. An e-marketplace represents a social structure, the concept of a market economy, and the use of technology. E-marketplaces can provide opportunities for business and transactions through electronic channels, usually on internet-based platforms (Rahmadi, 2016).

E-marketplaces benefit from expanding networks and increasing sales, especially for small and independent businesses with medium to low capital or new entrepreneurs starting a trade or business. Because it does not require high costs and creating a physical market, the e-marketplace is not limited by time, and geographical conditions can be accessed anywhere and anytime, so it is perfect for increasing sales and product introduction in a broader scope (Raharjo, 2017).

According to (Laudon and Traver, 2017), there are two types of e-marketplaces: 1. Horizontal E-Marketplaces are Categorized based on general functions or products offered by companies for general industry and lower transaction costs. 2. E-Marketplaces Vertical is Defined as a market used for initiatives that meet the specific needs of each sector, and a strategy is needed to optimize e-marketplaces.

# 2.2 Digital Platform

The scattered and interconnected character of the digital platform with regard to institutions, markets, and technology makes it a difficult research object (de Reuver, Srensen, and Basole, 2018). Parker, Van Alstyne, and Choudary (2016) offer a variety of viewpoints on how platforms alter economies and business models, as well as organizations and whole industries.

Social media platforms like Facebook have changed the way people interact and share experiences. Payment platforms like PayPal, ApplePay and Square are disrupting the financial industry. The emergence of digital peer-to-peer platforms such as Uber, Airbnb and TaskRabbit has created the so-called sharing economy. Competition is no longer about managing the value chain, but about attracting platform-related production activity (Spagnoletti, Resca, & Lee, 2015).

Arrange impacts or externalities happen when a stage brings together numerous client bunches. Organize externality implies that the ease of use of the innovation increments as the introduced client base develops (Hanninen and Paavola, 2020). The esteem of the stage depends on the number of clients inside the same client bunch. H. The esteem of the Items is expanded by others obtaining, interfacing to, or utilizing the same Stage or Administrations advertised through the Stage. Social media is an illustration of a coordinate organize impact that increments in esteem as more end-users connect the gathering (Basole and Karla, 2011).

# 2.3 Marketing

According to (Kotler, 2005), "Marketing is a social process by which individuals and groups obtain what they need and want by creating offers and freely exchanging products and services of value with others." According to (Daryanto, 2011), "Marketing is a social and managerial process by which individuals and groups obtain their needs and wants by creating, offering and exchanging something of value with each other." The company's marketing activities must be able to satisfy consumers if you want a good response from consumers.



# 2.4 Marketplace Shopee

The rapid development of information technology has brought new effects that have never been imagined. Indonesia has been ranked high, with the most significant number of internet users, around 30% of the total population of Indonesia. E-commerce can be a golden area for some people who want to enter the world of online business. Shopee is an application engaged in buying and selling online and can be accessed easily by using a smartphone. Shopee comes in the form of an application that makes it easy for users to do online shopping without using a computer.

Based on research data conducted by iprice in Q2 2019, Shopee became the e-commerce with the most significant increase with the addition of 16 million visitors. Shopee continued this positive achievement in the third quarter and ranked second by controlling 21 percent of the market share. This number increased by 3 percent compared to the previous quarter, where Shopee held 19 percent of the desktop version of the market share of e-commerce visits. According to the iPrice report, the average Shopee website visitor in Q3 2019 was 55,964,700. And shopee also controls and has become one of the e-commerce representatives representing the Southeast Asia (Gilang Karisma, 2019).

# 2.5 Marketplace Instagram

Business Instagram is a feature provided by the Instagram page for users who use the platform as a stall to run a business. In other words, business Instagram is a tool that can be used as a business marketing technique.

Instagram is a popular social media platform that can also serve as an excellent business marketing tool. Create a business Instagram account, then use photos, live videos, and hashtags to market your business and reach customers. Advertise your business through Instagram ads and use the platform's sales function to sell products.

## 3. RESEARCH METHODS

The purpose of this study is to analyze and describe the obstacles faced by MSME stakeholders in coffee farmer groups in product marketing, and to design an e-market-based digital platform for expanding the MSME product marketing network. This study used an observation and interview approach. An interview was conducted with the MSME Coffee Growers Group. Observations are made by observing the marketing techniques used and product sales to buyers/consumers.

# 3.1 LOCATION AND TIME OF RESEARCH

Research in the implementation of this research program was carried out in the Jambu area, Kab. Semarang, with coffee farmers as respondents. This research was conducted for six months.

#### 3.2 RESEARCH STAGE

The stages carried out in this research are:

- 1. Preliminary research stage: This phase begins with a literature review, finding common issues from previous research and general goals, and thoroughly examining the situation on the ground.
- 2. Preparation phase: In the preparation stage, we identify the problems and information obtained in the pre-research phase, narrow down the problem, select the problem, determine the research goal, and prepare an appropriate method.
- 3. Needs analysis phase: From an analysis of product marketing network constraints, we formulate and describe the needs of MSME partners. This will be used as the basis for creating an e-market-based digital platform design model.
- 4. Electronic market-based digital platform design phase: Based on the needs analysis results, we will design an e-market-based digital platform model. During the digital marketing information system model design phase, the proponent and partner discuss and evaluate the digital marketing information system model that will be implemented according to the partner's needs.



5. Reporting stage: At this stage, the research report writing process is carried out. Information consists of documentation of preparation, production and socialization processes.

#### 4. RESULTS AND DISCUSSION

The results of activities in research on MSME coffee farmer groups in Kab. Semarang, researchers who have assisted in mentoring and making sales labels for coffee farmers groups in Kab. Semarang, creating more creative content on social media, loading websites, and creating a marketplace (shopee).

# 4.1 Label Making Coffee Farmers Group In Kab. Semarang

The label is part of the product in the form of a description of images and words that function as a product and seller information source, according to Tjiptono (1997:107). The label is part of a product that conveys information about the product and the seller. Labels are not only a means of sharing information but also function as advertising and branding of a product.

Based on the results of the identification and assessment of the packaging and product design in several MSMEs. So there are things that need to be improved, namely related product labels that are not following existing label standards. Such as not including the expiration date, the name of the MSME that made it, to the absence of the PIRT number and the halal logo.

IRT food labels must comply with the provisions contained in Government Regulation Number 69 of 1999 concerning Food Labels and Advertisements or their amendments; food labels must at least include: a) Product name according to the type of food b) List of ingredients or composition used c) Net weight or net contents d) Name and address of IRT e) Date, month and year of expiration f) Production code g) P-IRT number.

It is necessary to update the design itself based on the monitoring that has been done. Because apart from being the selling point of a product. The procedure is also used to wrap, protect, ship, issue, store, identify, and differentiate an effect on the market (Klimchuck and Krasovec, 2006).



Figure 2. Labels of Coffee Farmers in Kab. Semarang

#### 4.2 E-Marketplace With Social Media

Social media like Instagram does have a solid appeal to making more friendships. But in addition to posting personal life, it is better for business or business promotion purposes.

Instagram is the most chosen social media promotion instrument. The reason, this social networking application allows its users to share photos and videos. Moreover, free Instagram and can be accessed by anyone is used as a promotional medium, especially by business people looking to build their own business.

This social media has advantages in posting photos; this media provides quality and good photo display, so it is very suitable to be used as a promotional media that usually relies on product photos. In addition, this digital platform also has a fast-paced timeline. The following



According to a survey from Facebook Inc, 62% of users are attracted to a product after seeing it from an Instagram ad. It's not wrong if Instagram is now the most promising platform for business promotion, compared to Facebook or Twitter, considering Instagram has advantages from its visual elements. The following are various features on Instagram that can be used to maximize MSME business.

# 1. Instagram Ads

Advertising products and services on Instagram is one of the easiest and most effective ways in this digital era, let alone being able to determine the maximum budget. Uploaded photos, Stories, and videos can be used as advertisements, and even ads can appear on the Explore page. What's more, it can also determine the audience or audience you want to reach, starting from location, demographics, interests, behavior, and known customers based on email addresses or phone numbers. Instagram Ads are not only suitable for brand awareness but also increase business sales.

# 2. Instagram Shopping

Instagram Shopping is a service in the form of a shop window that contains a complete product catalog. This feature will be connected directly to the website, allowing the audience to quickly purchase the products they want. Customers can also explore products or services on Instagram Shopping from their Instagram profile, homepage, or Stories.

# 3. Instagram Live

Instagram Live is a live broadcast feature that is a forum for question and answer sessions, discussions, entertainment, or promotions. And can use this service as Live Shopping.

## 4. Instagram Stories

A video feature with a maximum duration of 15 seconds makes Instagram Stories still the prima donna as a digital marketing tool. The advantage of Instagram Stories is that it is easy to measure the results of marketing campaigns carried out on Instagram.



Figure 3. The front page of Kopi Kab. Semarang

# 4.3 E-MARKETPLACE SHOPEE

A marketplace is a location, such as a website or a mobile application, where buyers and sellers can connect online. You can find a wide range of products for any need in the marketplace, including used goods as well as food, gadgets, and clothing. You can use Marketplace to conduct financial transactions after finding the needed item.

Nowadays, people are no strangers to online shopping; besides being accessible, the prices of goods offered are usually lower than buying in stores. But there are tons of online shopping sites. One of them is Shopee. Every online shopping website must have its advantages that they offer to consumers.

At this time of the Covid-19 pandemic, everyone is required to stay at home. With the existence of e-commerce marketing through marketplace places in buying and selling online



to make it easier for sellers and buyers to make transactions online, the public or consumers do not have to leave the house to transact or buy products, transact online; this research activity has produced several market places. Namely, Shopee so that it can make it easier for MSMEsFarmerCoffee in the District. Semarang to sell their products.

A marketplace called Shopee launched operations in Indonesia in 2015. The marketplace with the largest number of users in Indonesia is Shopee, which is owned by Sea Limited. This is possible as a result of the aggressive promotion in numerous media. Due to the product prices being somewhat lower than those of competitors and the availability of free shipping, users choose to shop at Shopee. Users can also purchase inexpensive minor products through Shopee, such as clothing, when they want to. The benefit of Shopee is its extensive product selection. Its shortcomings include a bad user experience and the rise of rogue merchants who sell things that aren't necessarily legitimate.

Some features used by business people who sell on the Shopee marketplace include ShopeeLIVE, sales assistants, and chatbots. In comparison, Shopee's advantages include: being able to bargain, many choices of "delivery services," many options, easy, simple, and hits, and lots of promos.

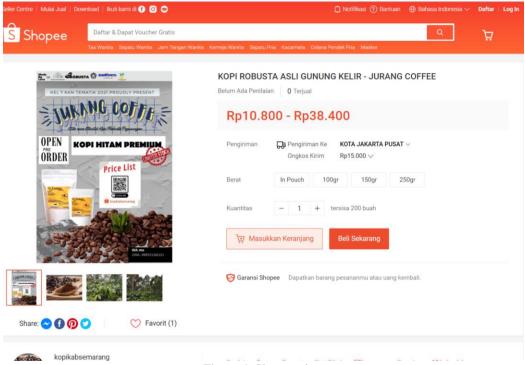


Figure 4. Shoppe view

#### 5. CONCLUSION

Based on the research, application design, and implementation results, it can be concluded that the creation of various kinds of e-marketplace platforms is expected to be MSME Coffee Farmers in Kab. Semarang can take advantage of this online platform with e-marketplace digital marketing to survive, increase and expand sales reach. As well as actively using social media in marketing MSME products from Coffee Farmers in Kab. Semarang and in creating content on e-commerce, both social media, websites, and marketplaces, are expected to be more creative in creating content ideas to attract consumers.

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# **Biodata Penulis**



*Drs. Budi Prasetya, M.Si.*, Magetan, 17 November 1961. merupakan salah satu dosen senior di jurusan Administrasi Bisnis. Sebagai dosen Bahasa Inggris, ia lebih dekat dengan pengoptimalan penggunaan berbagai media pembelajaran. Tidak mau ketinggalan dengan perkembangan teknologi informasi, ia juga mempelajari berbagai

media pembelajaraan saat ini, salah satunya yaitu Google Classroom. Serta fokus penelitian di bidang pengembangan UMKM.



*Dina Yeni Martia*, *SST.*, *M.Sc.*, Pati, 15 Januari 1992. merupakan dosen Keuangan pada program studi Analis Keuangan Jurusan Akuntansi di Politeknik Negeri Semarang sejak tahun 2016 setelah menyelesaikan program magister Keuangan di Perguruan Tinggi Luar Negeri. Dina memperoleh beasiswa BPPLN Dikti calon dosen

Vokasi untuk menyelesaikan Pendidikan magister nya di National Yunlin University of Science and Technology, Taiwan. Dina menyadari bahwa sebagai dosen, ia harus terus berinovasi dan upgrade informasi dan pengetahuan terbaru terutama terkait bidang keuangan dalam pelaksanaan kegian belajar mengajar. Oleh karena itu, ia berkeinginan untuk mulai dan terus menulis untuk berbagi pengalaman, ilmu, dan juga sebagai media pembelajaran untuk dirinya sendiri.

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lulusan Undip tahun 2014. Aktif dalam mengukuti penelitian dan pengabdian yang bersumber dari berbagai macam. Penelitian berfokus pada manajemen dan akuntansi.



*Kenneth Pinandhito*, *S,ST.*, *M.Sc.*, Magetan, 4 April 1990, seorang dosen di Politeknik Negeri Semarang. Ia menyelesaikan pendidikan magister nya di jurusan Information Management di salah satu universitas di Taiwan yaitu Chang Gung University dengan memperoleh beasiswa BPPLN Dikti. Topik penelitian yang digeluti

saat ini yaitu berkaitan dengan e-learning, e-marketplace, metode dan media pembelajaraan terutama berbasis online. Ia juga meluangkan waktunya berbagi pengalaman dan ilmu nya dengan menjadi pembicara di beberapa workshop, dan artikel ilmiah.