

# Digital Marketing to Support the Micro, Small, and Medium Enterprises (MSME) in Tuksono Village, Sentolo, Kulonprogo, Yogyakarta

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## ABSTRACT

The poverty rate in Indonesia is still at 7.60% or equivalent to 26.50 million people, which is still relatively high as of September 2021—women are the vulnerable subgroup among the impoverished and are often inevitably stigmatized. On the contrary, women's tenacity to face an economic crisis following their capacity to sustain the household economy is an ineluctable fact. This is proven by the productive business ventures that have survived the economic crisis, founded and managed by Indonesian women. Household economic resilience may significantly impact a community's economic resilience. Thus, women in households' empowerment in the economic realm are notably crucial. Looking for the best strategies to strengthen households' economic resilience and upgrade the ability to compete in an intense economic rivalry becomes urgent. Micro, Small, and Medium Enterprises (MSME) empowerment is one of the most efficient ways to develop a community. Tuksono Village is one of the villages with a high poverty rate in Kulon Progo, Yogyakarta. Yet, based on early observations, several MSMEs exist in Tuksono Village, although Covid-19 has severely impacted most since early March 2020. Based on the latest MSME situation in Tuksono Village, The analysis indicates that various issues must be addressed immediately. Some problems were that most MSMEs are not currently competitive, unstable offline marketing progress due to the pandemic, and the absence of indicators to measure the effectiveness of household economy's products marketing. This activity aims to design an information system and digital marketing platform for MSME products in Tuksono Village.

**Keywords:** Digital Marketing, Information System, MSME

## 1 Introduction

The National Medium-Term Development Plan aims to improve the country's human resources pool to compete better in the global economy as of 2020–2024. This policy is a follow-up to the 2014-2019<sup>th</sup> development plan, which emphasizes the relatively low living quality and women's role, partially due to low levels of education and economic instability. However, this crisis has triggered women's fearlessness and capacity to contribute to the household economy. One of the pieces of evidence is proven by the productive business ventures run by women, which have survived the economic crisis. Women are more likely to run their own enterprises than men, as shown by statistics from Susenas in 2014. Household economic resilience's level may also contribute to a significant impact on the economic resilience of a community; thus, women empowerment in households is crucial. Establishing a household industry is a viable option to expand micro-businesses.

Cottage industries, governed under Regulation No. 2 of 2006 [1] issued by the Minister of Women's Empowerment and Child Protection, aim to encourage families' well-being by giving women more economic independence. The term "cottage industry" refers to a production method in which a product is



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made by adding value to a set of raw materials at home rather than at an exclusive facility (e.g., factory), utilizing relatively basic manufacturing equipment. Individuals, ventures, or cooperatives own the infrastructure, and other production equipments are used throughout manufacturing. Cottage industry products can be categorized as handmade goods, one-of-a-kinds, goods typically connected with local expertise and specialized technology, and IR (*industri rumahan* or household industry) goods. These are also reasons why household industries are often considered micro firms, which are a part of the informal sector of many nations. In most cases, household industries are not recognized by law as separate legal entities or excluded from the corporate taxes system. Most of these industries are run by family members, except those considered to use sophisticated technologies and industrial management. There is a close equivalence between household industry and the concept of cottage industries, which can be described as a group of people who have formed an informal and adaptable commercial partnership in which they all conduct their operations from their own homes [1]. Establishing cottage industries aims to develop creative industries (which then become women's strength in household industries) and help encourage the strength of household industries' networking, along with increasing family income through productive activities carried out at home with the help of family members [2].

2018 began the attempt to push household industries' performance and productivity in Tuksono Village by cutting subsidies for the existing city housing sector. Tuksono Village is a home for both agricultural and non-agricultural home industries—also home to several food-related businesses, e.g., rice, sugarcane, tempeh, soybean, *angkringan* (traditional food stall), catering, *tempe gembus*, *emping garut*, *jamu gendong* (herbs), etc. Home-based industries other than food-related ones produce products made from batik in bags, shirts, and other kinds of handicrafts (including the ones made of bamboo). As a part of the year's budgeting activities in 2018, a stimulus planned to be spent on manufacturing equipment for household industries was also carried out. At the International Conference on Community Engagement and Education for Sustainable Development (ICCEESD), held on November 7th and 8th in Yogyakarta, the results of the 2018 community development program were presented and published entitled "Business Model Canvas (BMC) among Household Industries in Kulon Progo Regency".

89% of Indonesia's population is familiar with using the internet, which currently its usage spans many generations. In Industry 4.0 and Society 5.0, equal to the current digital age, digital marketing can be considered an effective and efficient marketing strategy [3]. Digital marketing offers the benefits of swiftly communicating between producers and consumers without being constrained temporally and spatially. This method is also less expensive and easier to implement than traditional marketing. As seen by the initiative for MSMEs to be accessible digitally, the government actively promotes the domestic industry's entry into the digital economy ecosystem. This digital marketing strategy will also be established in Tuksono Village as a community service. Digital marketing will be designed with the most appropriate and suitable strategy for Tuksono Village using Porter's Value Chain business process analysis and Business Process Analysis. This strategy was taken into consideration of the village's value chain, marketing research to obtain information on the advantages and disadvantages of household industry products, analysis of digital marketing development needs, design and implementation of information systems, and training on the usage of this digital marketing method. Several best practices have been used in this digital marketing, including the use of social media (Facebook, Tiktok, etc.), Search Engine Marketing with optimization, the contributions of Influencers or Endorsers to promote the products with prominent personalities, and Over the Top (OTT) platforms as of Google, Youtube, etc. Selecting the most suitable method will be a hurdle during this implementation. In addition, Tuksono Village has already owned a website including information on village activities (<http://tuksono-kulonprogo.desa.id>), which may be adapted as a publishing and marketing platform for the village's cottage industry items and their profiles. Concerning digital

marketing, household industries are encouraged to transact digitally by joining the digital economy ecosystem, which includes marketplaces (Tokopedia, Bukalapak, GoFood, Shopee, etc.), distribution systems, and technical requirements for maintaining the quality of delivery services. The development concludes with assessing digital marketing's success to inform the following more optimum development feedback cycle.

## 2 Research Methodology

This innovation aimed to expand the market for goods made in the cottage industry. There are a few distinct phases to this development process. First, a comprehensive plan can be formulated to create a digital or online marketing information system. This will help businesses target the most profitable segments of their targeted audience and a better understanding of the buying habits of those individuals by utilizing the Porter Value Chain [4], the TOGAF Framework, and other existing tools. Digital marketing information systems should also be integrated with Village Information System [5].

A little market research is carried out to get feedback from customers on the product's benefits and drawbacks. This analysis looks at the necessity and its relation to the feasibility of developing a centralized online hub for the house construction sector and any other important digital marketing information system features. Connectivity-related infrastructure in the hamlet, as well as non-functional demands, will be evaluated.

Designing marketing content and resources, as well as user experiences, to pique the attention of prospective customers is an integral part of creating a digital marketing information system. The design should also provide a supporting database that may be utilized to inform future choices.

The next step is to put the plan drawn up in the previous step into action by deploying a digital marketing information system on the most suitable platform, as determined by the analysis performed in the previous step. In addition, training is provided for users in the home sector so that the implementations may be put to their best potential use.

The last phase is examination and measurement in the framework of continuous development to ensure the quality of the digital marketing information system, as shown by the constantly rising number of sales in the home business. Figure 1 depicts the methodology of this research.

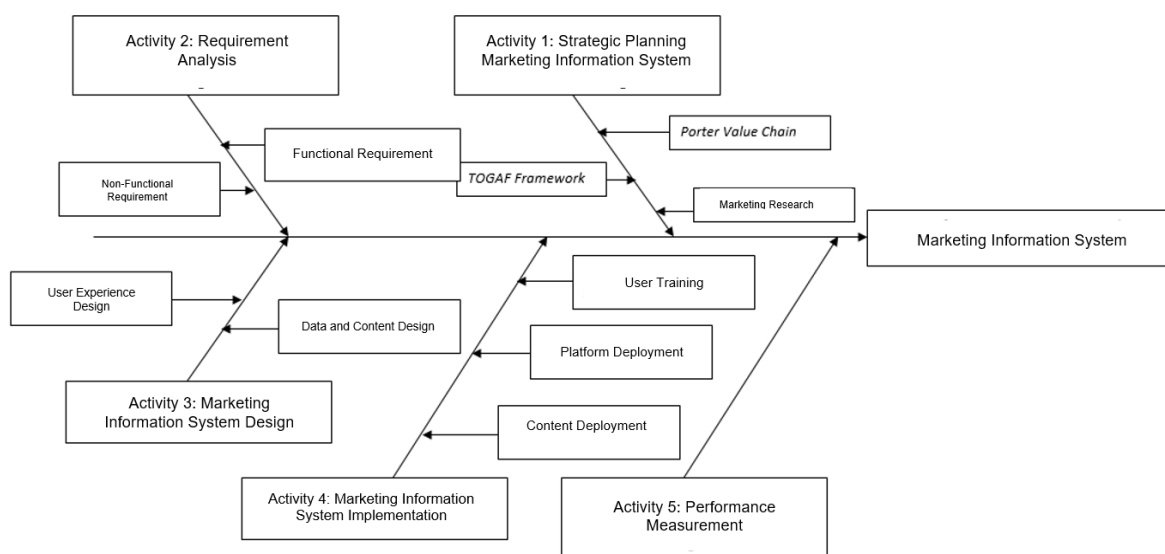


Figure 1. The methodology of the research

The detailed methodology for each activity is explained as follows:

## 2.1 Activity 1: Strategic Planning of Village Digital Marketing Information Systems

- Porter Value Chain

Porter Value Chain conducted by literature studies are carried out by collecting information from books, articles, and scientific journals that discuss the strategic planning of information systems/information technology related to the Village Information System. Data collection related to the strategic planning of information systems is carried out for several techniques, including direct observation, interviewing stakeholders related to village government organizations, and business processes related to strategic planning of information systems. In addition, business processes are analyzed with analytical tools: Porter's Value Chain, Business Process, and Marketing Analysis.

- Enterprise Architecture modeling uses the stages in the TOGAF ADM methodology, as explained below [6]:
  - a. Preliminary phase: the scope of the EA to be developed will be determined, with the stages of understanding the business environment and high-level management leadership commitment.
  - b. Architecture Vision: this stage determines the need to carry out the architectural design vision, which includes organizational profile, vision and mission, organizational goals, and organizational goals, and current architectural conditions.
  - c. Business Architecture: this stage determines the main and supporting activities of the organization that are described through the value chain. The business architecture will be modeled with the Business Process Management Notation.
  - d. Information System Architecture, this stage determines the information architecture, data architecture, and application architecture.

## 2.2 Activity 2: Requirement Analysis

An analysis was performed to determine the information system's requirements. Document analysis and interviews with stakeholders in the information system were used to conduct the analysis. The analysis results were documented in the Software Requirements Specification (SRS) document, which included functional and non-functional requirements.

## 2.3 Activity 3: Information System Design

The design process develops a blueprint to be modified in computer artifacts of digital marketing. The types of design executed are user experience, data, and content. The Software Design Description (SDD) document records the design outcomes.

## 2.4 Activity 4: Information System Implementation

The implementation is the process of transforming design findings into software. System Testing is also conducted before deploying the system. The implementation of digital marketing concept also developed using social media and e-commerce platforms that are already familiar to young people.

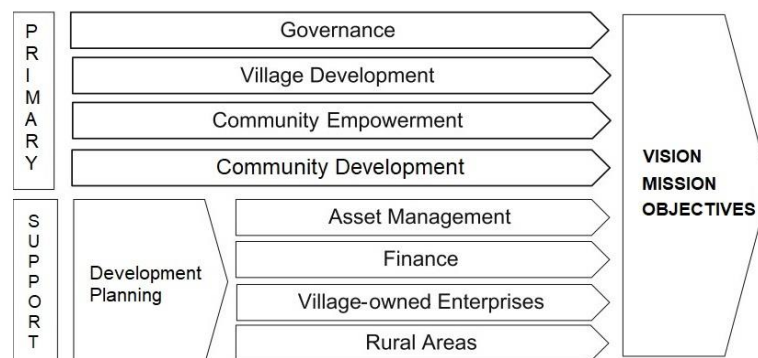
## 2.5 Activity 5: Performance Measurement

This activity is conducted to assess the digital marketing implementation outcome and impact. In addition, some indicators are used to measure the impact of digital marketing platforms.

## 3 Results and Discussion

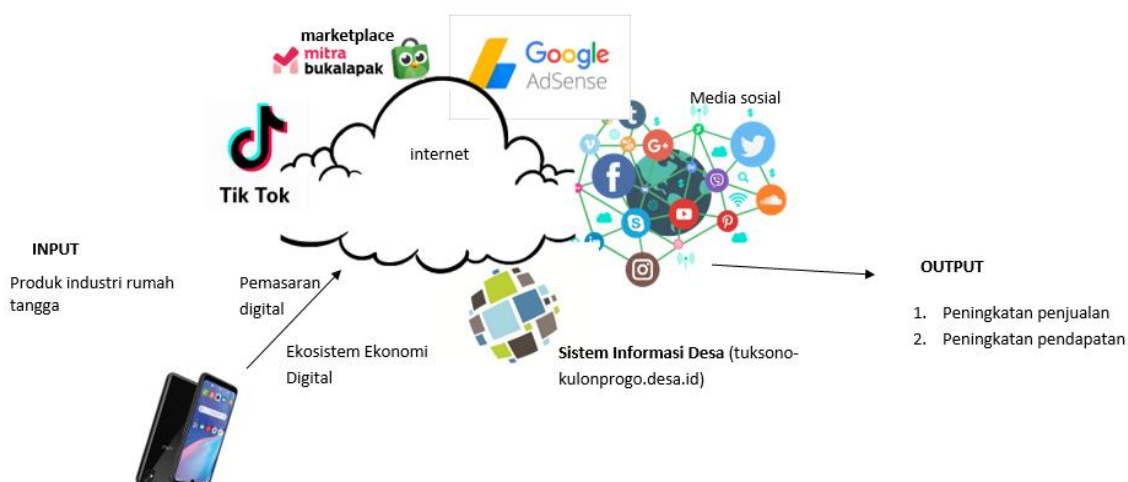
In Activity 1, this proposal develops the Strategic Planning of Village Digital Marketing Information Systems. This strategic planning is related to the Porter Value Chain of Tuksono Village. The government of Tuksono Village must ensure that the primary activity to achieve its goals and objectives is conducted

efficiently. Figure 2 shows the value chain of the Tuksono Village. The village government is primarily responsible for governance, village development, community empowerment, and community development. This Village and Community development and empowerment must include SMSEs development related to the marketing information systems for SMSEs products.



**Figure 2.** Village Value Chain

The SMSEs marketing information system requirement was analyzed with a literature study and interviews with SMSEs stakeholders. The analysis concluded that developing marketing information systems is related to digital marketing. This development is generally carried out by creating new marketing channels currently used conventionally. The new marketing channel is expected to be able to access potential consumers across generations, not restricted by time and space. The science and technology description of this development can be illustrated in the figure.3



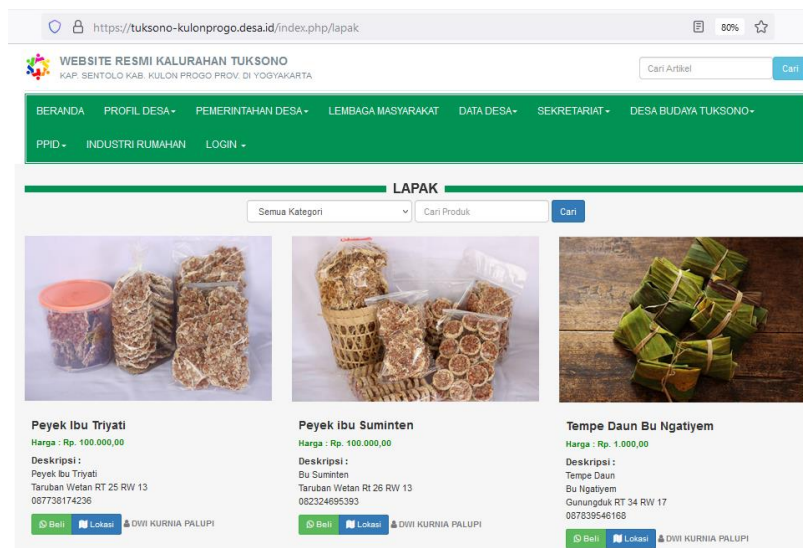
**Figure 3.** Input Output Transformation of Digital Marketing Development

The products of the Tuksono village household industry will be uploaded to the current available various digital economic platforms, which include (a) using the Tuksono village information system which is currently being used, (b) social media platforms that are widely used by the community such as Tik Tok, Facebook, Instagram, Twitter, etc., (c) existing public marketplace platforms such as Tokopedia, Bukalapak, Shopee, etc., (d) using specific techniques on search engines to improve the ease of searching on the internet.

The design of the marketing information system has to capture potential customers from across the generation. The user experience (UX), interface (UI), and interaction design must be as simple and attractive as possible.

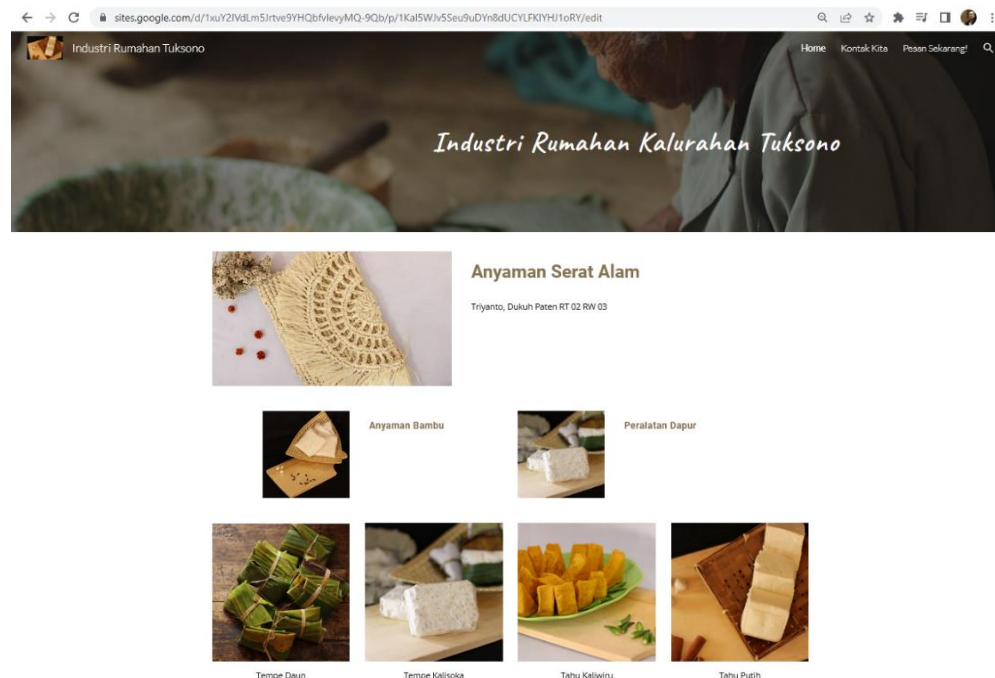
The implementation of the digital marketing support for MSME in Tuksono Village is:

- Embed Digital Marketing in Tuksono Village Information System is displayed in Figure 4, showing the screenshot of the information system.



**Figure 4:** Menu Industri Rumahan from the Tuksono Village Information System

- Creating a digital marketing website using Google Sites with search engine optimization (SEO). Figure 5 shows the screenshot of Tuksono's Home Industry site.



**Figure 5:** Google sites for Industri Rumahan Tuksono

- Using the most influential social media platforms like Tiktok and Instagram. Some best practices for marketing in Tiktok are: (i) Focusing on content quality, (ii) Using the most used Filter, Effect, and Soundx, and (iii) Using Tiktok Stitch features.
- Public Marketplace: Shopee, or Tokopedia. Figure 6 shows the example of a Shopee account for selling souvenirs of Tuksono's Home Industries and Tiktok Marketing content.

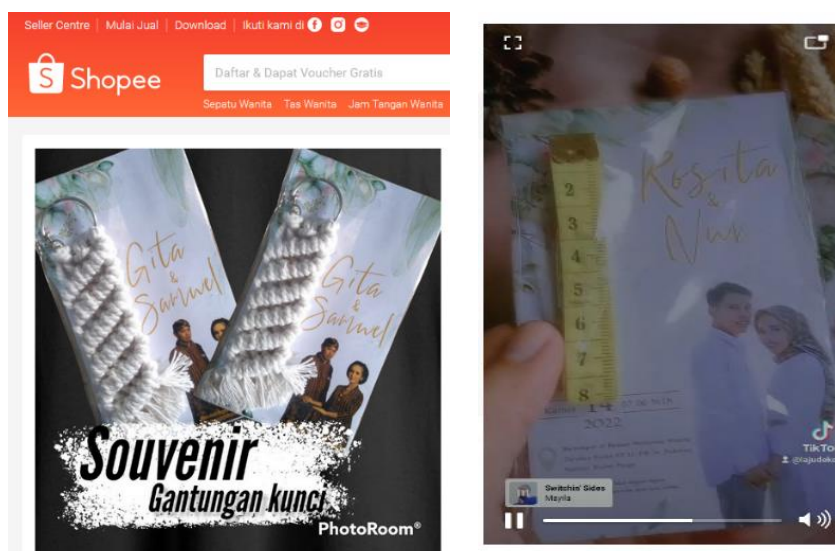


Figure 6: (a) Tiktok video content for digital marketing, (b) Selling souvenirs using Shopee Marketplace

### 3.1 Impact Measurement

The development of a Digital Marketing Information System is expected to have a positive impact on strengthening SMSEs in Tuksono Village. The development impact is measured qualitatively and quantitatively based on the indicators in the following Table 1:

Table 1: Performance Indicators Measurement.

Indicator	Baseline	Actual	Description
Increased Knowledge of Marketing	N/A	Increased Knowledge	Four times marketing workshop for MSMEs
Increased Skills	N/A	Increased Skill in creating websites and digital content.	Four times marketing workshop for MSMEs
Successfully doing inter-district marketing	5 transactions per month	14 transactions per month on average	Increasing inter-district marketing
Increased Profits	125K per day	150K per day	Increasing profit

## 4 Conclusions

Digital Marketing Information System strategic plan in Tuksono Village, Sentolo, Kulonprogo have developed using Porter Value Chain and TOGAF. The implementation has also been applied to some platforms, including Village Information System, Social Media platforms, public marketplace, and sites with search engine optimization (SEO). Digital Marketing is one way to increase SMSEs’ marketing channel to customers, which could also increase the SMSEs’ sales. It could also be seen that digital marketing implementation positively impacts Tuksono SMSEs, as shown by the performance indicators measurement in Tuksono Village. To keep the program’s sustainability, digital marketing implementation must be integrated with Village Strategic Planning and its value chain.

## 5 Declarations

### 5.1 Funding Source

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## 5.2 Publisher's Note

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