

Analysis of Economic Digitalization of IKM Pande Besi as Supporting Strategies for Developing Product Marketing Intensity

Bella Arum Kristanti^{1*}, Tuwis Hariyani², Rini Ratna Nafita Sari³

^{1,2,3} University of Kahuripan Kediri, Jl. Pb. Sudirman No.25, Plongko, Pare, Pare Sub-district, Kediri Regency, East Java, 64212, Indonesia

bellaarum@kahuripan.ac.id¹, tuwishariyani@kahuripan.ac.id², riniratna@kahuripan.ac.id³

*corresponding author

Article Information		Abstract
Submission date	06 December 2023	<p>Research aim: The aim of the research is to determine the influence of modern technology consisting of the use of smartphones and digital marketing on increasing marketing of iron pande products.</p> <p>Design/Method/Approach: The type of research in this research is Quantitative Method.</p> <p>This data collection was carried out using research instruments in the form of interviews and questionnaires as the main data sources, and secondary data sources were also used to complete the research. The analysis used in this research uses Binnary Logistic Regression Analysis.</p> <p>Research Finding: Gadget ownership, digital marketing and price factors influence the marketing intensity of Pande Besi SMEs. The digital economy is a new challenge that is being faced by business actors, including SMEs. Therefore, SMEs must be able and ready to run their businesses using the digital economy concept.</p> <p>Keywords: Digital Economy, Marketing, Small and Medium Industry</p>
Revised date	05 February 2024	
Accepted date	31 March 2024	

1. Introduction

Competition between Small and Medium Industries (IKM) with increasingly tight factory production in terms of the digital economy has become real. In this case, the form of the digital economy, for example, is the use of social media, e-mail, use of websites, online product management applications/media, and online transactions. In the Digital Economy Era, information is no longer just a medium for transactions and communication, but has become the main source of profit in the economy.

The Digital Economy encourages changes in individual and organizational mindsets in making economic decisions, especially as a result of developments in the internet and mobile phone technology. The digital economy is able to provide access to the procurement and supply of goods and services that support business operations in the industrial and trade sectors. Technological developments make a significant contribution to industrialization which creates economic growth [1].

The increasingly tight competition in Small and Medium Industries (IKM) in terms of the Digital Economy has become real with the increasing development of technology, therefore Small and Medium Industries (IKM) must really pay attention to this phenomenon and know and master digital marketing related to it. Digital Economy. Technology and digital strategies provide direction for progress [2]. This is very important because as we know, Small and Medium Industries (IKM) are one of the important and main sectors that contribute to Indonesia's economic growth.

However, the capabilities of many Small and Medium Industries (IKM) in the digital realm are still limited. However, in the current global competition, Small and Medium Industries (IKM) that are growing and developing well are IKM that have implemented and joined the digital ecosystem, so it is important to immediately transform Small and Medium Industries (IKM) from offline to online. This transformation must be carried out immediately considering the change in consumer behavior towards online.

Pande Besi craftsmen are a form of local product related to tradition and work that uses technical elements in the process. Kiping Village is a village located in Tulungagung Regency, East Java. The majority of the people depend on blacksmiths for their livelihood. Where in almost every house you can find various types of products from the blacksmith sector which produces tools such as knives, sickles or machetes, with various sizes and functions. The industrial center for blacksmith craftsmen in this area has existed for a long time and until now has been passed down for several generations.

Currently, the agricultural equipment industry is growing rapidly. Currently this area is facing obstacles regarding regeneration. Iron pande craftsmen in Kiping Village, Tulungagung Regency are also faced with manufactured products and imported goods. Iron pande craftsmen face various problems apart from those related to factory production and imported goods, namely marketing problems.

Therefore, through this article, the author tries to carry out an analysis of marketing development strategies for Small and Medium Micro Industries (IKM) by utilizing the digital economy, so that this article can be used as a source of information especially for SMEs in running their businesses.

1.1. Statement of Problem

Based on the background presented, there are problems that occur, namely IKM Pande Besi which is faced with high factory product output and many imported products coming in and there is still minimal marketing of IKM Pande Besi products.

1.2. Research Objectives

The aim of the research is to determine the influence of modern technology consisting of the use of smartphones and digital marketing on increasing marketing of iron pande products. Analysis is also used to determine strategies for solving problems faced by the iron pande industry center.

2. Method

The type of research in this research is Quantitative Method. The research began with the process of analyzing the problems faced by the traditional local industry, namely the iron pande industry center. This data collection was carried out using research instruments in the form of interviews and questionnaires as the main data sources, and secondary data sources were also used to complete the research. Field research was carried out in Tulungagung Regency in Gondang District with a focus on Kiping Village. Based on the industrial cluster, the Kiping Village area is the oldest ironsmith industrial center in Tulungagung Regency. Where many of the people of Kiping Village are craftsmen and blacksmith entrepreneurs. The population in this study were all craftsmen and blacksmith entrepreneurs in Kiping Village, Gondang District, Tulungagung Regency.

Meanwhile, the sample used in the research was 70 interview and questionnaire respondents. In this study, samples were taken using simple random sampling techniques. In this research, the research variables are divided into two groups, namely the dependent variable or dependent variable (Y) and the independent variable or independent variable (X). Where Y is the marketing results variable (sales), then variable X1 is the gadget ownership variable (smartphone and laptop or PC), X2 is the digital marketing variable, and X3 is the price.

The analysis used in this research uses Binnary Logistic Regression Analysis to determine the influence of gadget ownership, digital marketing and price on the marketing of iron pande products in Kiping Village, Gondang District, Tulungagung Regency.

3. Results and Discussion

Based on the results of the research and sampling carried out, there were 54 small and medium iron pande industries that had a high level of marketing and 16 small and medium iron pande industries that had a low level of marketing. When testing the hypothesis with the Hosmer and Lemeshow Test, results were obtained with a Sig value of 0.072, where this value is greater than alpha 5%, this means the model is good. Furthermore, in the test results there was a decrease in the -2 Log Likelihood value in BLOCK 0 of 52.331 and BLOCK 1 of 19.760. These results indicate that the hypothesized model fits the data.

In the Cox & Snell and Nagelkerke R Square tests, the results showed that together, the independent variables in the research were able to explain 86.2% of marketing results while the remaining 13.8% was explained by other variables outside the research model.

Next is the Significance Test of the parameters or Wald test. This test was carried out to determine the relationship between the variables studied in the research. In this study, a logistic regression test was carried out on factors that had a strong influence on the marketing of iron pande products in Kiping Village, Gondang District, Tulungagung Regency, East Java Province, Indonesia. It is known from the estimation results that gadget ownership (X1), digital marketing (X2), price (X3) influence the marketing of iron pande products.

Table 1. Binary Logistic Regression Test Results

Y	B	S.E.	Wald	Sig.	Exp (B)
X1	.277	.662	.175	.045	.720
X2	2.568	2.241	1.620	.021	.062
X3	1.927	1.610	1.756	.056	.130
Constant	2.430	5.981	.178	.692	10.286

Source: Author, data processed in 2023.

Based on the results above, the following logistic regression model is obtained.

$$\text{Marketing (Yi)} = \text{Ln} \left(\frac{P_i}{1-P_i} \right) = 2,430 + 0,277 X_1 + 2,568 X_2 + 1,927 X_3$$

From the results of data analysis, it is known that the significance value of the gadget ownership factor is 0.045, which is smaller than the confidence level of 5% (0.05), which means that the gadget ownership factor influences the productivity of the blacksmith, with a positive coefficient value. This shows that blacksmith craftsmen or the blacksmith industry who have gadgets such as laptops or PCs and smartphones and use them with high intensity tend to have a high level of marketing or can be said to be increasing.

Meanwhile, blacksmith craftsmen or blacksmith industries who do not have gadgets such as laptops or PCs and smartphones tend to have stagnant or constant marketing levels. There is a point in the results of this analysis that the use of technology or gadgets such as laptops or PCs and smartphones can provide quite high effectiveness and efficiency, which means that ownership of this technology provides opportunities for access to the internet which encourages people to introduce their products and leads to marketing. on line.

The digital marketing factor in this research focuses on marketing or online marketing strategies or can be said to be digital marketing, where this factor has a significance value of 0.031, which means it has a significant effect on blacksmith marketing, with a positive coefficient. These findings conclude that when blacksmith craftsmen or the blacksmith industry do online marketing, marketing will be high or increase. The online marketing that is intensively carried out by the blacksmith industry is able to increase productivity, this is indicated because digital marketing has an impact on high demand. Digital marketing is indeed possible to increase marketing intensity which has an impact on productivity [3].

Another finding is that blacksmiths who market online, whether through Shopee or Tokopedia, also continue to fulfill needs or orders offline, whether orders from wholesalers or offline shops that need blacksmith products. By implementing an offline marketing strategy and being encouraged by online marketing, the productivity of the blacksmith will be higher. It is indeed possible for digital marketing to increase marketing intensity [4].

Meanwhile, Pande Besi SMEs that do not use digital marketing tend to have low marketing intensity, this is because marketing is only limited to offline marketing or to middlemen. Digitalization is defined as digital technology that changes business models and provides sources of income, for this reason SMEs must be ensured to get wider marketing access [5]. One tool for the sustainability of a business is to utilize digital media so that it can be accessed by many people. Many businesses involve digitalization for business continuity [6].

The price factor influences the marketing intensity of iron pande products, which is indicated by a significance value of 0.56. At online marketing prices, whether marketed via ecommerce or social media, iron pande products are cheaper than the prices of manufactured goods or even imported products.

Apart from that, the quality of IKM iron pande products is better than manufactured goods, as can be seen from the raw material which comes from steel and the sharpness of iron pande products is sharper than manufactured goods. Price creativity accompanied by accompanying forms of quality means that marketing can be improved because of the advantages possessed by IKM Pande Besi products. This is what causes blacksmith craftsmen or the blacksmith industry to gain high profits and their production continues to increase.

4. Conclusion

Gadget ownership, digital marketing and price factors influence the marketing intensity of Pande Besi SMEs. The digital economy is a new challenge that is being faced by business actors, including SMEs. Therefore, SMEs must be able and ready to run their businesses using the digital economy concept. SMEs must pay attention to supporting factors including individual abilities in using digital technology and communication tools such as smartphones (HP), tablets, laptops and desktop PCs to access, manage, integrate, analyze, evaluate information, build new knowledge, create and communicate with people. others to participate effectively in society.

Apart from that, the strategy for implementing the digital economy is also key to the continued development of SMEs in the digital economy. The strategies in question include increasing market share overseas, adding production units and improving product quality, improving the online marketing process.

References

- [1] Radicic D, Petcovic S. Impact of digitalization on technological innovations in small and medium-sized enterprises (SMEs). *Technological Forecasting & Social Change*. 2023; 191,122474.
- [2] Eller R, Alford P, Kallmunzer A, Peters M. Antecedents, consequences, and challenges of small and medium-sized enterprise digitalization. *J. Bus. Res.* 2020;112:119–127.
- [3] Lam S, Li H, Yu ATW. A Demand-Side Approach for Linking the Past to Future Urban-Rural Development. *Urban Planning Journal* 2021;6.
- [4] Klarin T. The Concept of Sustainable Development: From its Beginning to the Contemporary Issues. *Zagreb International Review of Economics & Business*. 2018;21:67-94.
- [5] Purnomo F. Program Ladit (Lapak Digital) : Optimalisasi Media Digital sebagai Wadah dalam Pengembangan Umkm di Madura. *Jurnal Studi Manajemen Dan Bisnis* 2019;6:89–95.
- [6] Sofyan RA, Suharti L. Pengaruh Motivasi Intrinsik dan Pengetahuan TIK terhadap Kesiapan Digitalisasi UMKM dengan Faktor Demografi sebagai Variabel Pemoderasi (Studi pada UMKM Kuliner di Salatiga). *Jurnal Administrasi Bisnis* 2021;10:107–120.