


# The Influence of Digital Marketing on the Income of Micro and Medium Enterprises in Ambon City

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Article Info	ABSTRACT
<p><b>Keywords:</b> Digital Marketing, Information Technology, Income</p>	<p>Digital Marketing and the use of information technology are needed today, considering that MSMEs in Ambon City at that time sold and ordered goods directly with very expensive boarding houses with slow and complicated access so that MSMEs in Ambon City felt challenged to switch from direct sales to online sales. This study aims to determine the influence of Digital Marketing and the use of Information Technology on the Income of Micro, Small and Medium Enterprises (MSMEs) in Ambon City. The instruments used in this study are questionnaire sheets, interviews and documentation as primary data, and other data obtained from references or secondary data. Data analysis techniques using multiple linear regression statistics. Based on the data analysis technique, it was later found that Digital marketing and the use of Information Technology had a positive and significant effect on the income of MSMEs in Ambon City. Based on the data analysis technique, it was later found that Digital marketing and the use of Information Technology had a positive and significant effect on the income of MSMEs in Ambon City.</p>
<p>This is an open access article under the <a href="https://creativecommons.org/licenses/by-nc/4.0/">CC BY-NC</a> license</p> 	<p>Corresponding Author: Amirudin Pattimura University Jl. Ir. M. Putuhena, Poka, Kec. Tlk. Ambon, Kota Ambon, <a href="mailto:Malukuudindalas@gmail.com">Malukuudindalas@gmail.com</a></p>

## INTRODUCTION

Digital Marketing is an effort to advance the economy that requires media involvement so that it reaches buyers in a safe and comfortable atmosphere. Currently, digital marketing has had a positive impact and has turned into a mandatory action carried out by all financial managers. Digital Marketing also brings mental, humanistic, anthropological and innovative elements that will become a new media with boundaries, intelligence, sight and sound. Digital Marketing is being expanded in helping administration efforts and customer commitment, as indicated by salesforce, around 68% of companies have incorporated multi-purpose marketing (Sihombing, N.S, 2022). The digital marketing revolution has changed the perspective of marketing organizations in dealing with buyers. Along with technological developments, digital marketing has experienced an evolution. The development of the Internet and digital technology has changed the way Micro, Small and Medium Enterprises are viewed (MSMEs).

An important factor that can influence the success and sustainability of MSMEs is the quality of human resources. Human resources are one of the factors that influence Indonesia's development. The quality of human resources is influenced by several aspects,

including socio-cultural, health and education. At the international level, there are many measurement processes for Indonesia. Ukkas (in Shobaruddin, 2020).

In the current era of digitalization, MSMEs are required to make adjustments to the increasingly complex dynamics of economic life which require knowledge of information technology. Traditional media understands consumers better because it is done face to face directly, while social media further develops communication channels between companies/organizations and consumers (Putri, 2022). Economic digitalization is increasingly important to increase productivity and efficiency in marketing and supplying goods. Intermediary traders feel helped by the existence of information technology in various formats, because economic or trade transactions can be done via social media, either in Facebook format or WhatsApp format.

Several MSMEs in Ambon City have used economic digitalization in this form, namely by ordering merchandise originating from outside Ambon, whether in the form of vegetables, cosmetics or clothing. Traders no longer need to come to suppliers such as Jakarta, Masohi, Namlea or other places that are sources of supply for their merchandise. This reduces transportation and accommodation costs so that total costs can be reduced and in turn has an impact on increasing income. As one respondent stated.

*“Katong Seng needs to come to Jakarta, we just need to communicate via WA with the seller in Tanah Abang and this Katong Pung is already a regular customer. Because the information about the goods is already in the form of pictures, including the price. So you just have to choose and order according to your needs, so it's easier”.*

. This research aims to determine the influence of Digital Marketing and the use of Information Technology on the Income of Micro, Small and Medium Enterprises (MSMEs) in Ambon City.

## METHODS

### Types of research

This type of research uses a quantitative approach.

### Time and Place of Research

The research was carried out from October to December 2023, taking place at MSME objects in Ambon City.

### Population and Research Samples

The population of this research is a number of MSMEs who have used digital marketing in their trade transactions. The population of MSMEs in Ambon City is 2,864. The sample was determined by purposive sampling, namely deliberately selected based on MSME actors according to the type of business consisting of vegetable, cosmetic and clothing traders. Thus, 25 MSME actors who used Digital Marketing were selected as respondents.

## Procedure

This research was designed as shown in Figure 1 below:

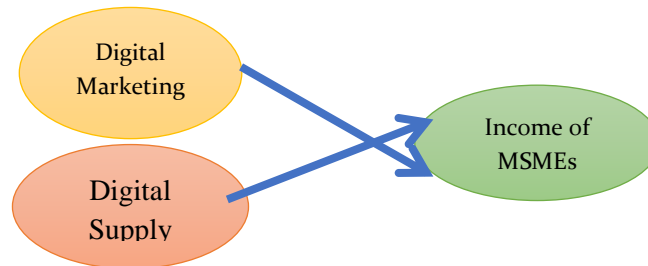


Figure 1. Research Design

This research was designed by conducting interviews and questionnaires to see data related to digital marketing and digital supply and income of MSMEs.

## Data, Instruments and Data Collection Techniques

Data was obtained through observation, interviews and questionnaires. For the questionnaire instrument, questions were prepared to obtain digital marketing data and digital supply data. Then income data can be done through interviews and questionnaires, guided by the Likers scale.

## Data analysis technique

Quantitative data analysis techniques can use the formula:

$$Y = a + b_1X_1 + b_2X_2 + e$$

Where:

Y = MSME Revenue

X<sub>1</sub> = Digital marketing

X<sub>2</sub> = Digital supply of goods

a = constant

b<sub>1</sub>, b<sub>2</sub> = regression coefficient

e = standard error

Based on the formula above, the researcher then describes it through data reduction, data display and conclusion drawing (Milles Hubernan in Sugiyono, 2018)

## RESULTS AND DISCUSSION

### Research Overview

Ambon City is the capital of Maluku Province with an area of 359.45 km<sup>2</sup> consisting of 5 (five) sub-districts, each sub-district of Nusaniwe, Sirimau, South Litmur, Teluk Ambon, Baguala and Teluk Ambon. The largest sub-district is Teluk Ambon Sub-district with around 26% of the total area, then Nusaniwe Sub-district with an area of 25% and the smallest is

Teluk Ambon Baguala Sub-district with an area of 11%. Therefore, Ambon City has become the center of government, education and trade.

This population growth then affects the number of the workforce. Likewise with the unemployment rate. Population growth that is not accompanied by the provision of proportional employment opportunities will increase the unemployment rate. The workforce in Ambon City is 236,005 people and the non-workforce is 142,989 people. The number of people working is 208,474 people, so the employment opportunity level is 88.33%, meaning that out of 100 residents there are around 88 – 89 people who work. As a result, the open unemployment rate in Ambon City is 11.67% (Ambon City in Figures 2023).

The population density is 969 people/km<sup>2</sup>. The most populous sub-district is Sirimau Sub-district, namely 1,688 people/km<sup>2</sup>, while South Leitimur Sub-district is the sub-district with the smallest density level, as seen in figure 2 below.

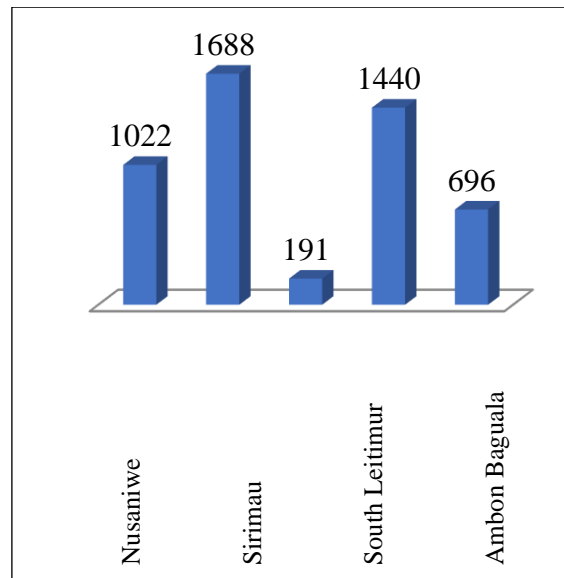


Figure 2. Population Density Level by District in 2022

### Several Social and Economic Indicators.

Several socio-economic indicators are reflected in several social and economic variables, such as health infrastructure, economic infrastructure and other economic variables. Health infrastructure in Ambon City is quite adequate compared to other regions or districts in Maluku Province as seen in table 1 below.

**Table 1.** Number of Health Infrastructure in Ambon City 2020 – 2022

Infrastructure	2020	2021	2022
Hospital	10	10	10
Polyclinic	16	17	17
Public health center	20	22	22

Auxiliary Health Center	29	36	36
Integrated Healthcare Center	-	314	314
Pharmacies	20	23	22
Total	95	422	421

Source: Ambon City in Figures 2023.

Table 1 shows that over the last three years there has been no significant change in the amount of health infrastructure. Community health centers increased in 2021 and 2022 to 22, as well as supporting community health centers increased in 2021 from 29 to 36. Meanwhile, pharmacies in 2022 decreased to 22 from 2021 of 23.

Another indicator is the poverty rate which shows that the poverty rate in Ambon City fluctuates. In 2020 it was 4.51%, rising in 2021 to 5.02% and falling again to 4.68 in 2022. This can illustrate that the dynamics of poverty in Ambon City are not only determined by the effectiveness of poverty alleviation policies but also because of the existence of demographic dynamics and determining the poverty line. This can be seen in Table 2 below.

**Table 2.** Poverty Conditions in Ambon City 2020 – 2022

Poverty Indicators	2020	2021	2022
Poverty Line (Rp)	596.042	621.482	661.016
Population (thousands of people)	22,15	23,67	22,58
Poverty level (%)	4,51	5,02	4,68

**Source: Ambon City in Figures, 2023**

Table 2 explains that in 2021 there was an increase in poverty to 5.02, this was due to an increase in the population to 23.67 thousand people compared to 2020 which only amounted to 22.15 thousand people, while on the other hand there was an increase in the poverty line to Rp. 621,482 compared to 2020 which was IDR. 596,042. In 2022 there will be a decrease in the poverty level, due to a decrease in the population to 22.58 thousand people.

To support the economy and trade, trade and banking infrastructure is needed. As of 2022 in Ambon City, the number of trading infrastructure consisting of markets, shops, stall and inn is 424, a decrease compared to 2021, namely 506, even smaller than 2020, which was 488. This can be seen in Figure 2 below this:

Figure 2 Number of Trade Infrastructure in Ambon City 2020 – 2022

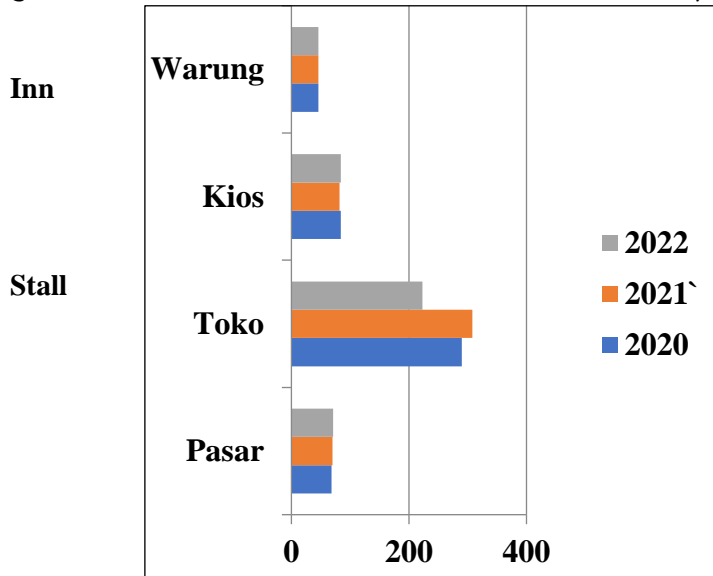


Figure 3. Number of Trade Infrastructure in Ambon City 2020 – 2022

Source: Ambon City in Figures, 2023

Figure 2 shows that the amount of trade infrastructure in the city fluctuates and tends to decrease. Tang still has 46 stalls, while shops have decreased drastically from 308 units in 2021 to 223 units or 27.60%. The number of stores will return to 84 units in 2022.

The availability of trade infrastructure, especially shops, can be an indication that the economic dynamics in Ambon City are experiencing fluctuations. This is still the impact of the 2020 Covid-19 pandemic. Apart from trade infrastructure, banking infrastructure also makes an important contribution to the economy of Ambon City, namely helping business people and the general public to carry out financial transactions, both for household and business purposes.

### Development of MSMEs in Ambon City

MSMEs play an important role in the local, regional and national economy. MSMEs not only contribute to the formation of GRDP or GRDP but also contribute to the absorption of labor. MSMEs experienced a decline in numbers during the Covid-19 pandemic in 2020. Many have been forced to reduce turnover, not operate temporarily, but many new business units have emerged with new products.

This is one of the advantages of MSMEs, namely that they can adapt to new situations by creating new products, even though their development is not as rapid as with large-scale business units. Market adaptation takes a long time. The economic dynamics during the Covid-19 pandemic caused a shift in the economic transaction paradigm, which was previously considered a face-to-face transaction system, then was considered a conventional economic transaction system. A new paradigm has emerged, namely an online economic transaction system using internet facilities or known as digital economy, e-commerce. This system has developed rapidly to date, considering that at that time people's social interaction

was very limited due to government regulations, so the digital economy is more popular today. People's habit of shopping online means MSMEs have to adapt to the digital economic system.

### Results of Income Variable Description

The description of the research data is intended to explain the distribution of values from respondents' answers. This description will show the smallest value, the average value and the largest value, as well as the standard deviation. This can be seen in table 3 below: Table 3 shows that for Y1 or the highest value is 5, namely the statement about information technology and digital marketing increasing cost efficiency, information technology and digital marketing increasing time efficiency and information technology and digital marketing increasing income in general responden respondents strongly agreed, while a small portion said they agreed.

### Results Description of Digital Marketing Variables

The digital marketing variable has several statement indicators, namely 1. Social media is used to market products, 2. Online sales can speed up the transaction process, 3. Online sales can reach a wide market, and 4. Digital marketing can communicate with buyers. The research results are shown in table 4 below.

	N	Minimum	Maximum	Mean	Std. Deviation
x11	25	4	5	4,60	,500
x12	25	3	5	4,48	,586
x13	25	4	5	4,40	,500
x14	25	3	5	4,32	,557
Valid N (listwise)	25				

Source: Appendix 2

The statement that social media is used to market products and online sales can reach a wide market, some respondents said they strongly agreed and others agreed. Statement: Online sales can speed up the transaction process and digital marketing can communicate with buyers, some respondents said they strongly agree and some said they disagree.

### Results Description of Digital Variables Supply of Goods

Information technology consists of four statement indicators, namely: 1. Information technology makes it easier to find suppliers, 2. Information technology makes it easier to order goods, 3. Information technology expands business areas and 4. Information technology increases income. The results can be seen in table 5 below.

Table 5. Statistical Description of Digital Variables Supply of Goods



	N	Minimum	Maximum	Mean	Std. Deviation
x21	25	4	5	4,64	,490
x22	25	3	5	4,28	,614
x23	25	3	5	4,24	,523
x24	25	3	5	4,24	,523
Valid N (listwise)	25				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
y1	25	4	5	4,76	,436
y2	25	4	5	4,68	,476
y3	25	3	5	4,28	,678
y4	25	3	5	4,20	,707
y5	25	4	5	4,56	,507
Valid N (listwise)	25				

Source: Appendix 2

The table shows the first statement, namely that information technology makes it easier to find suppliers. Most respondents agree or strongly agree. Meanwhile, in the next statement, respondents generally strongly agreed and the rest disagreed.

### Regression Analysis

Based on Regression Analysis to see the influence of Digital Marketing and Digital Supply of goods on the income level of MSMEs in Ambon City, statistical equipment was used, namely multiple linear regression. With the help of SPSS, the results show that the regression equation is as follows

$$Y = 12,596 + 0,277X_1 + 0,285X_2$$

$$Se = 1,287 \quad 0,143 \quad 0,108$$

$$t = 9,786 \quad 1,933 \quad 2,635$$

$$Sig = 0,000 \quad 0,066 \quad 0,015$$

$$F = 41,476, Sig = 0,000$$

$$Durbin Watson = 1,313$$

Looking at the results of the calculations above, an understanding can be given for each variable regression coefficient value that influences the income level of MSME actors in Ambon City as follows.

1. Nilai The intercept value  $\alpha = 12,596$  means that if there is no change in the use of digital marketing and digital supply of goods, the minimum income level will be 12,596 units.
2. The marginal value of using digital marketing  $\beta_1 = 0.143$ , meaning that if there is a change in digital marketing, the level of income will increase by 0.143 units assuming that there is no change in the digital supply of goods.
3. The marginal value of digital supply of goods  $\beta_2 = 0.285$ , meaning that if there is a change in the use of digital supply of goods by 1 unit, then the level of income will increase by 0.285 units assuming that there is no change in digital marketing.

The calculation results show an R value of 0.889 and R<sup>2</sup> of 0.79 or 79 percent. It can be concluded that the use of digital marketing and digital supply of goods has the ability to explain the influence of variations in changes in these two variables on variations in changes in income. This means that revenue is determined by the use of digital marketing and digital supply of goods by 79 percent, while the remaining 21 percent is determined by other variables outside the analysis model.



From all the testing techniques used, it can be concluded that the regression model includes BLUE (Best Linear Unbiased Estimator) so it is good to use for estimating or forecasting.

This research is in line with the theoretical concept which states that the development of information technology makes people tend to search for information about products and sellers through various social media, so that sellers can take advantage of this technology to promote and sell their goods. Digital marketing can expand market reach, reduce marketing costs and improve good relations with consumers. There is two-way communication between sellers and consumers so that a mutually beneficial relationship is built between the two.

The main problem faced by MSMEs is marketing. Conventional methods require high costs, for example opening new branches, participating in exhibitions, making and distributing brochures and so on. The development of the internet has become an efficient means of opening new marketing channels for MSMEs products. Apart from the relatively cheap costs, by using the internet the dissemination of information will be faster and have a wider reach.

Digital marketing not only increases online sales turnover but also increases offline sales, because consumers already know the attributes of the products sold by business actors. Especially if business actors always provide the latest information regarding their product showcases. Innovation and product information sharing updates are very necessary.

Several previous studies elsewhere, such as Febriyantoro and Arisandi (2018), found that digital marketing is beneficial for MSMEs in saving costs, increasing customer loyalty and creating orders systematically. Putri (2022) found that the development of the use of digital marketing is very significant for business people or entrepreneurs in utilizing social media as a means of digital marketing. It was found that MSMEs carry out marketing using online media, or in other words, digital marketing has a positive impact on increasing their income.

Similar results were also found by Gumilang (2019) who said that digital marketing builds intensive communication with customers and suppliers, increasing efficiency and effectiveness resulting in an increase in sales volume. Sagita and Wijaya (2022) found that the obstacles often faced were unstable internet connections and delays in order delivery.

## CONCLUSION

From the description presented in the previous section, the following conclusions can be drawn: Digital marketing has a positive and significant effect on increasing MSME income in Ambon City. Digital supply of goods has a positive and significant effect on increasing MSME income in Ambon City.

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