

## Improving the Welfare of MSME Trader Families Through the Use of E-commerce

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### ABSTRACT

Even if e-commerce has a huge potential to improve the welfare of MSMEs, its execution is not always flawless. Some MSMEs can still have trouble using technology due to a lack of knowledge about digital platforms and a shortage of information technology-savvy personnel. This is the reason why e-commerce and its potential to enhance the well-being of MSME trade families are of interest to scholars.

The purpose of this study is to ascertain how E-commerce usage affects MSME traders' families' well-being. This study employs a quantitative descriptive methodology, utilizing questionnaire distribution and library data gathering approaches. This study use basic linear regression data analysis approaches to sample 46 MSME traders in the Tugu Utara Subdistrict area of North Jakarta.

The study's findings indicate that using e-commerce can help MSME traders in North Jakarta's Tugu Utara Subdistrict raise their family income to a somewhat satisfactory degree. It is intended that this study's findings will aid in future investigations.

## INTRODUCTION

MSMEs, or micro, small, and medium-sized enterprises, are vital to the Indonesian economy. They are the primary force behind inclusive economic development and poverty alleviation, and they considerably boost the GDP and create job opportunities. MSMEs, however, frequently confront a number of obstacles, including restricted access to markets, financing, and technology, which can impede their companies' expansion and long-term viability. Information and communication technology advancements in recent years have drastically altered the corporate landscape. The rise of electronic commerce, or e-commerce, is one of the most notable advancements. E-commerce has given MSMEs new ways to reach a wider audience, run their businesses more effectively, and deliver more value. MSMEs can get over a number of conventional barriers with e-commerce, including geographic.

All things considered, e-commerce has a number of advantages that can support MSMEs' expansion. MSMEs can raise their competitiveness, reach a wider market, improve operational efficiency, and overcome a number of conventional challenges by leveraging e-commerce. When e-commerce is implemented well, it may assist more inclusive and sustainable economic development and significantly boost the financial success of MSMEs.

Because of this, the author is interested in studying E-commerce usage characteristics and enhancing the welfare of MSME traders in the Tugu Utara Subdistrict area of North Jakarta by raising their family income. Based on a number of earlier research findings, a number of studies that used E-Commerce as the independent variable and increasing MSME family income as the dependent variable demonstrate that E-Commerce use has a significant impact, particularly on enhancing the welfare of MSME families.

(Putri, 2023) reports on the impact of e-commerce on the welfare of entrepreneurs in Indonesia. The International Conference on Official Statistics and Data Science: Proceedings The purpose of this research is to ascertain how the Covid-19 epidemic has affected the well-being of Indonesian entrepreneurs in relation to their use of e-commerce. Binomial logistic regression estimation results, based on August 2021 Sakernas data received from BPS, indicate that e-commerce plays a significant role in enhancing the well-being of enterprises in Indonesia during the Covid-19 epidemic. The income of Indonesian business owners can rise with the use of e-commerce.

(WANG et al., 2018) The production and processing of agricultural products, their transportation, storage, and distribution procedures, all naturally flow into an e-commerce system to form agricultural e-commerce. Growing agricultural e-commerce is good for farmer income and agricultural development. As an extensive, intense, and commercial agriculture management system, the "family farm" follows the e-commerce development trend and speeds up its advancement.

(Featherman & Hajli, 2016): This study looks at the risks associated with using e-services and how those risks affect how self-service technology is used and evaluated in the social commerce era. The results demonstrate that consumers' inclination to use e-services might be decreased by worries about usage dangers.

Under the project title Improving Family Welfare of MSME Traders Through utilization E-Commerce, researchers are interested in examining utilization factors E-commerce and family income of MSME traders based on the findings of prior study. The research is innovative, of course, because it is the first to examine usage characteristics related to e-commerce in this area. In addition, it employs quantitative methodologies and straightforward regression procedures. It is believed that this study's findings would aid in future investigations.

## **THEORETICAL FRAMEWORK**

The process of purchasing, selling, or exchanging products, services, and information using computer networks is known as e-commerce. It is a component of the larger e-business, which encompasses not only commercial activity but also partner business, customer assistance, and job openings. Customers can access and place orders using e-commerce from a variety of locations without needing to be physically there. (Kedah, 2023)

The primary feature of e-commerce, or electronic commerce, is conducting business online through purchases and sales. Compared to e-business, which encompasses all potential applications of the global internet network, this is a more limited notion. There are numerous subtypes of e-business, such as e-commerce, which is impossible without internet marketing components. (GRIGORYAN, 2023)

A subset of e-business pertaining to the exchange of products and services is e-commerce. Transactions between businesses and consumers, or business to business (B2B, B2C, and C2C), are commonly referred to as e-commerce. E-commerce has transformed buying by giving customers, wherever they may be, simple access to extensive product catalogs (Moriset, 2020)

The ability of a person to provide for their fundamental necessities, such as clothing, food, shelter, education, and health, is known as family welfare. In this context, the ability to provide for one's physical and mental requirements as well as maintain harmonious and balanced relationships with other family members is used to evaluate the welfare of the family. (Redjeki, 2018)

One of the welfare state's primary redistributive pillars is the family. In addition to providing extra advantages, the family has financial responsibilities to support its members before they may apply for public assistance This is known as the family redistribution concept. (FRERICKS et al., 2023)

A family that can adequately provide for each member's physical and mental needs as well as maintain harmonious and balanced relationships with one another is considered prosperous. The welfare of households with female heads of household is also examined in this study (Pertamayanti & Dewi, 2023)

## **METHODS**

The purpose of this quantitative descriptive study is to gain insight into how product innovation enhances the well-being of MSME traders' families in North Jakarta's Tugu Utara subdistrict. According to (Arikunto, 2010), the quantitative approach is based on the use of numbers in all stages of the

process—from data collection to interpretation to outcome presentation. The participants in this study were MSME vendors in North Jakarta's Lagoa subdistrict.

In order to ensure that the research findings could be justified, purpose sampling was used to choose the 46 MSME dealers who made up the samples from the Tugu Utara sub-district in North Jakarta. A sample, in Lijan Sinambela's opinion, is a subset of the population's size and makeup. (Lijan Sinambela, 2021)

**Hypothesis** In this research, the formula for hypothesis testing can be explained as follows:

- |                                |  |
|--------------------------------|--|
| H <sub>1</sub> : $\rho = 0$    | There is influence <b>usage E-commerce</b> significantly towards improving the welfare of MSME families    |
| H <sub>0</sub> : $\rho \neq 0$ | There is no influence <b>usage E-commerce</b> significantly towards improving the welfare of MSME families |

To better visualize the findings, a research design was developed for this study, with the use of E-commerce in this instance serving as variable X and raising the welfare of MSME traders' families as variable Y. E-commerce usage is one of the independent variables (X), while enhanced family welfare (Y) is the dependent variable.

Simple linear regression, a statistical technique to forecast the value of the dependent variable based on one independent variable, is employed in this study. Regression coefficients are typically estimated using the least squares method, and the relationship between the independent and dependent variables is represented as a linear equation in this case. (Kumari & Yadav, 2018)

A statistical method called simple linear regression is used to determine a linear relationship between two variables in which one variable is utilized as a predictor of the other. A common representation of the simple linear regression equation is  $Y = \beta_0 + \beta_1 X + e$ , in which Y and X are the dependent and independent variables,  $\beta_0$  and  $\beta_1$  are the regression coefficients, and e is the error term (Smith, 2015)

## RESULTS

A validity test was conducted on the variable instrument usage in this study, which is E-commerce (X). It was determined that the eight specified instrument items were valid, and that the eight declared valid variables in the variable increasing family welfare (Y) exist.  $r_{table} = 0.266$  is the result of a two-sided test with a significance threshold of  $\alpha = 0.05$ .  $R_{count} > R_{table}$  is the test criterion for deeming an item legitimate.

The computation results indicate that every item that has been deemed valid is dependable at a significance level of  $\alpha = 0.05$ , yielding a  $r_{table}$  value of 0.60. Regarding usage variables, the family welfare variable (Y) has a  $r_{count}$  of 0,904 bigger  $r_{table} = 0,60$  for dependable, and the e-commerce variable (X) has a  $r_{count}$  of 0.879 bigger  $r_{table} = 0,60$  for reliable.

Table 2's coefficients provide an explanation of the simple linear regression analysis's results, including the size of the t-count value, the significance level, and the regression formula. To make the results more understandable, the following coefficients were obtained using SPSS:

**Table 2**  
**Simple Linear Regression Analysis Table**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20.873	3.176		6.573	.000
	x	.387	.096	.518	4.019	.000

a. Dependent Variable: y

Source: Data processed from SPSS

The computation results are displayed in the table above, providing an explanation of the regression equation ( $Y' = 20.873 + 0.387x$ ), which can be used to predict variables through the use of variables in e-commerce. Using the following as a foundation for decision-making, it is evident that using "thank you"

- a) There is an influence of variable X on variable Y if value t-count > value t-table.
- b) There is no effect of variable X on variable Y if value t-count < value t-table.

The formula  $t \text{ table} = t (\alpha/2; n-k-1)$  can be used to find t-calculation tables with a significance level of 5%. From there, the t-table value,  $t (0,025; 46-1-1) = t (0,025; 44) = 2.013$  face t-count  $4.019 > t\text{-table } 2,013$ , with values as large as 0,00000 and  $0,00000 < 0.05$ , can be taken. The conclusion is that there is a variable that influences how much E-commerce is used to increase family wellbeing.

Based on the findings presented in Table 3's coefficient of termination calculation, it can be inferred that the variable of E-commerce usage contributes 26,9% to the variable of increasing family welfare, with the remaining 73,1% being influenced by unstudied factors. Next, the variables' current positive influence on E-commerce usage has a r value of 0.518, which falls within the coefficient interval of correlation between 0.40 and 0.599.

**Table 3**  
**Coefficient of Determination**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518 <sup>a</sup>	.269	.252	3.390

a. Predictors: (Constant), x

Source: Data processed from SPSS

## DISCUSSION

The usage variable E-Commerce (X) has an impact on the variable boosting family welfare (Y) for MSME traders in the Tugu Utara sub-district, according to the test results. The t-value of t-count 4,019 > t-table 2,013 with value themselves of 0.000 and value themselves 0,0010 < 0,05 clearly shows this. Thus, in the Tugu Utara subdistrict of North Jakarta, the families of MSME traders benefit greatly from the partial use of e-commerce.

According to a number of earlier studies, using e-commerce can have an impact on welfare. Jo, Y. J., Matsumura, M., & Weinstein conducted one such study. This study looks at how price behavior and consumer welfare are affected by e-commerce in Japan. It was discovered that the introduction of e-commerce businesses cut the relative inflation rate for commodities sold heavily online and enhanced price convergence between cities, both of which eventually improved consumer welfare. (Jo et al., 2019)

Additional research by (Rahmatika et al., 2020) offers an overview of the significance of adopting e-commerce for financial profits and can be stated as follows: E-commerce implementation in Pabuaran - Cibinong Village, PKK Group. The purpose of this training program is to teach Pabuaran-Cibinong housewives who are members of PKK how to use the Shopee marketplace. This is anticipated to boost revenue and save expenses, giving families financial advantages without interfering with daily responsibilities.

## CONCLUSIONS AND RECOMMENDATIONS

Generally speaking, there is an influence between the usage variables E-Commerce towards the welfare improvement variable because the t-value is equal to t-count 4.019 > t-table 2,013, according to test results and analysis of the relationship between variables X and Y regarding use E-Commerce towards improving the welfare of families of MSME traders in the Tugu Utara sub-district, North Jakarta.

Then, the usage variable E-Commerce has a positive influence at the moment, with a r value of 0,518 (found in the coefficient interval correlation 0.40–0.599), and it can contribute as much as 26,9% to raising the welfare of MSME traders' families. Other, unstudied factors account for 73,1% of the remaining amount. Moreover, we are able to ascertain the predictive regression equation, which is  $Y' = 20.873 + 0.387x$ .

## FURTHER STUDY

The researcher acknowledges that despite numerous time, financial, and opportunity constraints, this study is far from ideal and that more research is necessary. Nevertheless, the study's findings can undoubtedly help other researchers, particularly those studying related variables.

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