

# Evaluation of Digital Technology Adoption on Small and Medium-sized Enterprises (SMEs) Marketing in Indonesia

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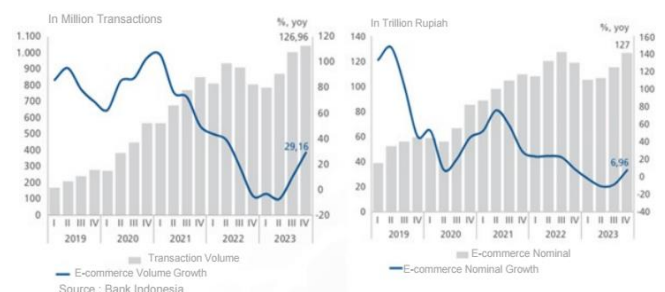
**Abstract**— Keeping with the Vision of Making Indonesia 4.0, the Ministry of Industry established the "Startup4Industry" program to promote the use of digital technology in Small and Medium-sized Enterprises (SMEs) activities. Like startups, which are pioneering enterprises that prioritize innovation and the use of technology, this method is regarded as a proper first step in implementing technical innovation, particularly digital technology, in SMEs. Delivery partners may utilize digital technology interventions to solve marketing, production, management, energy, and waste management problems in industrial facilities. Website and social media development are a few of the innovations provided by the nominees to support marketing. Websites and social media have been utilized not just to deliver product information, but also to strengthen their brands and boost their exposure. This study analyzes cross-sectional data from SME participants in the "Startup4Industry" program from 2021 to 2023 to investigate the influence of website and social media implementation, including Facebook, on SMEs performance as measured by revenue turnover and the macroeconomic setting. Using the Ordinary Least Squares (OLS) technique, it is possible to determine that SMEs that use websites have a significantly greater sales turnover of 38.4%. Meanwhile, adopting Facebook in SMEs increases sales turnover by 1.61%, but the results are not substantial.

**Keywords**—digital technology, SMEs, website, facebook, marketing, revenue turnover

## I. INTRODUCTION

The application of digital transformation in the national economy is a consequence of technological advancement. It has the potential to accelerate the processes of manufacturing, distribution, marketing, finance, and other economic

activities. Employment of digital technology in the economy also changes economic system into a digital form. According to Deloitte, digital industry is an emerging driver of economic growth driven by digital technologies, particularly internet access [1]. The convenience of online transactions contributed to the expansion of marketplace users and e-commerce platforms during the previous decade. Based on the Indonesian Economic Report 2023, the market value of e-commerce transactions has been growing in 2023 to Rp. 454 trillion, or increasing by approximately 6.96% compared to the previous year [2]. The trend of e-commerce transaction volume and value growth in Indonesia from 2019 to 2023 is as follows:



GRAPH 1. E-COMMERCE TRANSACTION VOLUME & VALUE

An increase in e-commerce transactions indicates that the Indonesian economy's structure will shift from manufacturing to services in the next decade. At the same time, representations of Indonesia's Gross Domestic Product (GDP) from 1980 to 2015 reveal that manufacturing investment has contributed substantially more to Indonesia's economic

growth than the services sector. To accomplish Indonesia's goal of achieving economic growth by 2030, the manufacturing sector must be strengthened to raise Indonesia's competitiveness in the export market.

Small and medium-sized enterprises (SMEs) constitute almost all of the manufacturing industry population in Indonesia. As reported by BPS, there be 4,229,479 SMEs in Indonesia by 2021, accounting for 99.74% of total industrial business units. In the meantime, the largest sectors represent only 11,805 firms, or 0.26% of all industrial business units in Indonesia. In proportion to the number of business units, the SME sector has the highest workforce absorption, comprising 72.20% of Indonesia's total industrial workforce. Despite the fact that SMEs account for the majority of business units and employment, their output value contribution to industries remains small.

The difference in output contribution between large industries and SMEs in emerging nations is inextricably linked to the use of digital technologies in company management and business unit management. According to OECD research, the smaller of industry has the lower the utilization of digital technology in its business divisions. This is inextricably linked to the need for a significant investment in digital technology, as well as the educational profile of SME entrepreneurs and the workforce involved, which currently remains unqualified. Whereas SMEs have a high potential for contributing to the national economy.

## II. LITERATURE REVIEW

### A. Digital Transformation on SMEs

Most previous research indicates that digital transformation may improve firm performance in practically every kind of company. According to Kahouli et al.'s (2023) research, MSMEs in the Hail Region use ICT to improve performance, customer satisfaction, service quality, and business continuity, but there is no significant impact on creativity [3]. Another study using Proportional Stratified Random Sampling and Path Analysis showed that business actors who play an active role in participating in training and properly using technology have a positive and significant impact on increasing productivity and sustainability of MSMEs in Denpasar City [4].

The primary barrier on deploying digital technology is infrastructure, specifically internet access and digital literacy, which are still uneven in Indonesia [5]. This hurdle frequently exists in impoverished countries. In addition to impediments to high-quality and inexpensive infrastructure, small businesses face a lack of digital skills, high costs, limited access to funding, and relatively high data costs [6]. Medennikov (2020) describes three stages of acceptance in the growth of digital technology in businesses. The first phase occurred prior the industrialization, when company performance was solely dependent on the capabilities of abilities of employees. Then it evolved in the 18th century, when the production sector transformed human assets into organizational resources, and in the final stage, digital technology adapted [7].

The increased use of ICT (Computer Information and Technology) and robotics in management tasks has led development of extremely flexible computerized properties. Medennikov's micro-level research suggests that digital technology implementation is better when business units can

build on existing organizational skills and human resources. Interestingly, this study develops a mathematical model and assesses the impact of digitalization implementation on performance using project cost calculations such as Total Cost Ownership (TCO), Return on Investment (ROI), and Economic Value Added (EVA) to measure cost efficiency, whereas Net Present Value (NPV) and Internal Rate Return (IRR) can be used for long-term projects [7].

In contrast with previous research, Holopainen et al. (2022) found that digitalization has a negative impact on business growth, as measured by the ratio of EBIT (Earnings Before Interest and Taxes) to revenue and ROA (Return on Assets) [8]. These disparate outcomes are feasible because medical corporations promote Human-centered methods, which fosters internal innovation. The use of the Internet can result in procedures that are overly sophisticated and distant, making them unnecessarily complex.

The discrepancies in the results of earlier studies on the impact of digital technology on business success are due to differing business criteria. As a result, the objective of this study is to assess the impact of digital technology implementation, particularly for SMEs with little funding, on business performance. The findings of this impact research are designed to help firm owners choose what tactics they may implement to improve their industrial performance.

### B. Startup For Industry Program

Making Indonesia 4.0, a long-term national effort, emphasizes one essential issue relating to human resources. The potential demographic bonus can be encouraged as part of a strategy to resuscitate the manufacturing sector, namely by enhancing workforce absorption and the productivity-to-labor cost ratio. Although Indonesia has the world's fourth-highest labour force, the vast majority of the potential workers are untrained. In addition, digital facilities and infrastructure are being developed to help accelerate the implementation of the Making Indonesia 4.0 agenda. This program is expected to provide easy access for SMEs This program is meant to make it easy for SMEs to use technological innovation in developing business performance.

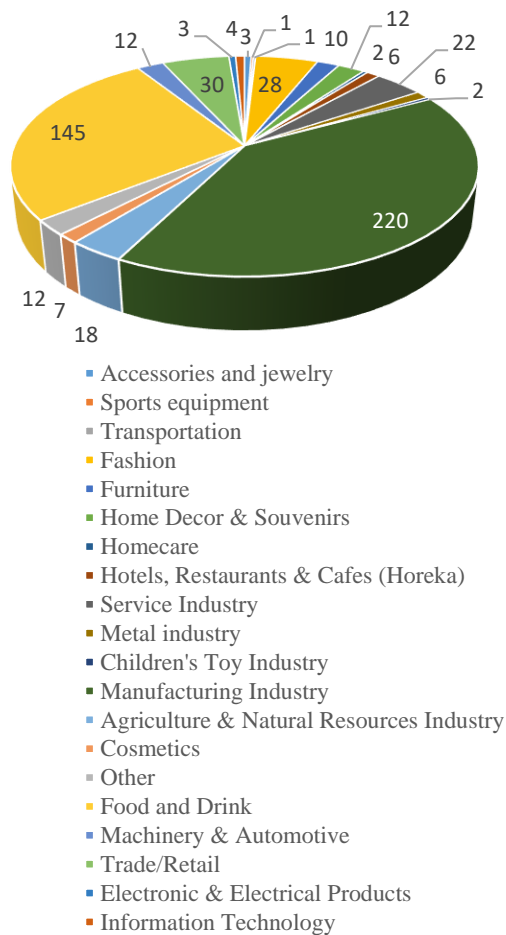
Aside from previous programs, since 2018, the Ministry of Industry has accelerated digital transformation in the manufacturing industry through the "Startup4Industry" program, which connects startups with industry. This program plays an important role in forming a technology solution ecosystem by serving as a liaison between industry and startups. Startup For industry can be used to handle marketing, production, management, energy, and waste management issues in industrial facilities. The use of digital technology is thought to be a key factor in increasing productivity and has the potential to aid operational activities, particularly in increasing company production results and improving business performance by expanding business networks and gathering customer feedback for long-term product and business sustainability. To enhance the use of digital technology in the business sector, the application and mastery of digital technology in production and marketing lines is essential.

By 2023, about 1,115 startups will have engaged in the administrative and video selection processes, as well as pitching matchmaking. Following an assortment of processes, twenty finalists were chosen to collaborate with twenty SMEs for three months to try to accomplish the primary performance

indicator targets established under the supervision and coaching of the “Startup4Industry” team. The Directorate General of IKMA of the Ministry of Industry distributed funds involving IDR 3 billion between 2018 and 2023 to finance fifty-eight implementation projects and award IDR 100 million in prizes to the 5 (five) best startups at the end of the implementation program.

Startup for Industry initiative fosters the empowerment of digital technology that can be applied in a variety of industries and meets the demands of the SMEs it supports. Digital technology can be implemented in the marketing, manufacturing, management, and corporate waste management sectors. Based on data from implementation project over the last three years, 544 SMEs expressed interest and registered their business units. From 2021 to 2023, 76 SMEs got the Startup for Industry implementation project in partnership with local startups. SMEs interested in this program come from a variety of industries and sizes, including micro, small, medium, and big firms.

The graph below depicts the sorts of enterprises that registered for the “Startup4Industry” program between 2021 and 2023.



GRAPH 2. THE COMPARISON OF BUSINESS TYPES REGISTERING FOR THE “STARTUP4INDUSTRY” PROGRAM 2021 TO 2023

Source : Processed Data

### III. RESEARCH METHODOLOGY

We employ a Multiple Linear Regression technique to assess the impact of digital technology on SMEs, particularly those that register and receive support for the Startup For

Industry program. The equations that result in our investigation consequently have the following forms:

$$\text{Log\_Sales} = \beta_0 + \beta_1 \text{DIG} + \beta_2 \text{Log\_Age} + \beta_3 \text{Log\_Emp} + \beta_4 \text{Log\_CAP} + \beta_5 \text{Log\_CAPDIG} + \varepsilon \quad (1)$$

Log\_Sales is the projected SMEs performance based on annual sales turnover, DIG is a dummy variable representing the use of digital platforms in SMEs (involved Web and Facebook), the age of SMEs was represented by Log\_Age and the number of employees was represented by Log\_Emp. Log\_CAP represents the Investment Value Capital. Then Log\_CAPDIG provides funding and business capital for SMEs to create digital technologies and  $\varepsilon$  represents the error term..

Following that to assess the macroeconomic (municipality level (i)) impact of digital technology use, a second stage regression was performed, with the dependent variable changed to Gross Regional Domestic Product in the manufacturing industry sector ( $\log_{\text{man\_gdrp}}$ ) and the accommodation and food service activities sector ( $\log_{\text{acc\_food\_gdrp}}$ ) and the dependent variable from the first equation entered into the second and third equation.

$$\log_{\text{man\_gdrp}} = \beta_0 + \beta_1 \text{DIG}_i + \beta_2 \text{Log\_Age}_i + \beta_3 \text{Log\_Emp}_i + \beta_4 \text{Log\_CAP}_i + \beta_5 \text{Log\_CAPDIG}_i + \beta_6 \text{Log\_Sales}_i + \varepsilon_i \quad (2)$$

And

$$\log_{\text{acc\_food\_gdrp}} = \beta_0 + \beta_1 \text{DIG}_i + \beta_2 \text{Log\_Age}_i + \beta_3 \text{Log\_Emp}_i + \beta_4 \text{Log\_CAP}_i + \beta_5 \text{Log\_CAPDIG}_i + \beta_6 \text{Log\_Sales}_i + \varepsilon_i \quad (3)$$

#### A. Descriptive Analysis

Descriptive statistical analysis can be used to display or describe data based on the lowest, maximum, median, and standard deviation of each variable in a study [9]. The research results based on the Y value or Dependent Variable include Revenue Value, GRDP Value of the Manufacturing Industry sector, and GRDP Value of the Accommodation and Food Service sector, which accounts for the majority of SME company activity. For the X value or Independent Variable, which includes marketing platforms and social media such as websites and Facebook. Meanwhile, the Control Variables include the age of SMEs, the number of employees, SMEs' capital/investment, and capital/investment in digital technology development.

#### B. Analysis of Classic Assumption Test

Before analyzing the influence of digital technology using multilinear regression, the first step is to test classical assumptions such as normality, multicollinearity, and heteroscedasticity tests. The autocorrelation test was not performed since the data utilized was cross-sectional. The classical assumption test is used to obtain regression equation estimation results that are BLUE (Best Linear Unbiased Estimator), or unbiased and consistent.

- Normality Test; The residual normality assumption test is used in Ordinary Least Squares (OLS) regression analysis to determine whether or not the residual values are normally distributed. The residual value represents the difference between the actual and predicted values of the dependent variable.
- Multicollinearity Test; The objective is to confirm that there is no substantial association between the independent variables. If there is a substantial correlation between the independent variables, the

regression equation under consideration has multicollinearity issues. The tolerance value (1/VIF) and VIF value indicate a multicollinearity concern. If  $(1/VIF) > 0.10$  and  $VIF < 10$ , there are no signs of multicollinearity or it passes the test.

- Heteroscedasticity test; Simple linear and multilinear regression with the OLS method require that the residual variance is constant or homoscedastic. The term "heteroscedasticity" refers to the uneven residual variance. The heteroscedasticity test can use a variety of methodologies, including the Breusch-Pagan test.

#### IV. RESULTS DISCUSSION

Impact measurement is conducted in two steps. In the initial stage of implementation, the usage of digital platforms is measured at the micro level, specifically on the performance of SMEs based on the average value of sales turnover each year. This continues with macro measurements at the Municipality level, whereby all variables are aggregated to determine the relative impact on the value of the GRDP sector, the majority of which are related to SME business activities, specifically GRDP in the Manufacturing Industry sector and the Accommodation and Food Service Activities Sector. The SME business sector that has registered for the Startup for industry program is fairly diverse, as seen in Graphic 2.

##### A. Result of Descriptive Analysis

The descriptive statistical analysis provides two types of results: Micro and Macro-level observations. This classification is carried out because, at the macro level, the amount of observation data is an aggregation of Micro-level data. The total number of observations from 2021 to 2023 is 511 at the micro level and 248 at the macro level.

1) *Log\_Sales*: Micro-Level log sales for 2021-2023 have an average value of 19.411, with a low of 13.997 and a high of 23.613. At the macro level, the sales level log variable is a control variable, with an average value of 19.401 based on 248 business unit samples.

2) *Log\_Man\_gdrp* and *Log\_Acc\_Food\_gdrp*: Another dependent variable at the macro level analysis unit is the manufacturing industry sector's log GDP. The average value from 2021 to 2023 is 15.616, with a minimum of 9.364 and a maximum of 19.535. In addition, there is a GRDP log for the accommodation and food service activities sector, with an average value of 13.920 based on cumulative observations. These business sectors were chosen because these sectors have the highest share of SMEs when compared to others..

3) *Digital*: At the micro and macro levels, the independent variable is the implementation of digital channels to market business items. This variable includes the use of websites including Facebook. This is a dummy variable. Where one reflects the use of the digital platform in question, and zero indicates that the business unit does not use that type of digital platform. At the micro and macro levels, these two variables have a maximum value of one and a minimum value of zero, respectively. Meanwhile, the average and standard deviation were varied. At the micro level, the average value for websites is 0.463, while Facebook's is 0.526. At the macro level, the average value for websites is 0.600, and Facebook's is 0.713. According to

observation data, digital platforms used include the Play Store and App Store, as well as Instagram, YouTube, and other e-commerce sites. However, after reviewing the initial data, the numbers were extremely low, and the data was not normally distributed. To prevent bias due to non-normally distributed data, these variables are not included in the equation mode.

4) *Log\_age*: The use of logs on this variable meets the traditional assumption of homoscedasticity. At the micro level, the average value for cumulative observations from 2021 to 2023 is 1.817, while at the macro level, it is 1.807. The maximum value at the macro and micro levels is the same, 4.410.

5) *Log\_Employee*: Another controlling element is the number of employees in the business unit. This variable also employs logarithms because the classic assumption of homoscedasticity is not satisfied. The average number of employees at the micro level from 2021 to 2023 is 1.783, while at the Macro Scale is 1.779. The maximum value at the micro and macro levels is 5.820.

6) *Log\_Capital*: In both the micro and macro levels, the minimal value is zero. The highest value at the macro and micro levels is the same: 23.025. Meanwhile, the average value at the micro level is 17.606, while at the macro scale is 17.623.

7) *Log\_Capital\_Digital*: The final control variable is the capital or investment variable used by the company to create digital technologies in production lines, management, and marketing. The minimum value is zero at both the micro and macro levels. Meanwhile, the greatest values at the micro and macro levels are 21,511 and 21,128 respectively. The average value at the micro and macro levels is 13.589 and 13.825, respectively.

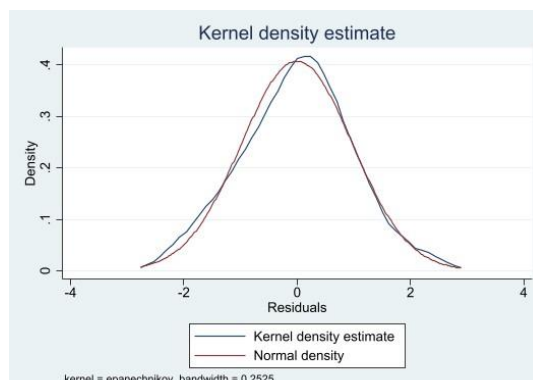
TABLE 1. RESIDUAL NORMALITY TEST

| Shapiro-Wilk W test for normal data |     |         |       |       |         |
|-------------------------------------|-----|---------|-------|-------|---------|
| Variable                            | Obs | W       | V     | z     | Prob>z  |
| resid                               | 501 | 0.99622 | 1.276 | 0.585 | 0.27926 |

| Skewness and kurtosis tests for normality |     |              |              |             |           |
|---|-----|--------------|--------------|-------------|-----------|
| Variable                                  | Obs | Pr(skewness) | Pr(kurtosis) | Adj chi2(2) | Prob>chi2 |
| resid                                     | 501 | 0.7243       | 0.5348       | 0.51        | 0.7736    |

Source : Processed Data



GRAPH 3. KERNELL DENSITY NORMALITY TEST

Source : Processed Data

## B. Result of Classic Assumption Test

a) *Residual Normality Test:* The Shapiro-Wilk and Skewness-Kurtosis tests show that the probabilities are 0.27926 and 0.7736, respectively, which are greater than 0.05. As a result, the data can be determined to have a normal distribution. The normality of data distribution can also be shown through the graphics as follows. The graphic below illustrates that the trend on the blue graph mirrors the red graph, indicating that the data is regularly distributed.

b) *Multicollinearity Test:* The multicollinearity test results demonstrate that all variables have VIF values < 10 and  $1/\text{VIF} > 0.1$ , suggesting no multicollinearity.

TABLE 2. MULTICOLLINEARITY TEST

| Variable     | VIF  | 1/VIF    |
|--------------|------|----------|
| log_cap_dum  | 1.36 | 0.737554 |
| log_employ   | 1.35 | 0.742209 |
| web          | 1.19 | 0.839547 |
| log_cap_di-m | 1.16 | 0.862811 |
| fb           | 1.07 | 0.937673 |
| log_age      | 1.04 | 0.957923 |
| Mean VIF     | 1.19 |          |

Source : Processed Data

c) *Heteroscedasticity Test:* The Breusch Pagan test findings show that the value is 0.1144, which is more than 0.05, indicating that there is no heteroscedasticity and that the residual variance is consistent.

TABLE 3. HETEROSCEDASTICITY TEST

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity  
 Ho: Constant variance  
 Variables: fitted values of log\_sales

|             |   |        |
|-------------|---|--------|
| chi2(1)     | = | 2.49   |
| Prob > chi2 | = | 0.1144 |

Source : Processed Data

## C. Evaluation of Digital Technology Implementation

Tables 1.4 and 1.5 show the findings of quantifying the influence of digital technology implementation on SME business performance and GRDP at the micro and macro levels, respectively. Table 1.4 displays the regression results based on variable variations and observation time from model equation (1). Columns 1 in Tables 1.4 and 1.5 show the basic regression results, excluding control variables. The web and Facebook variables indicate the digital platforms used by SMEs, as well as the independent variables in the regression equation for the dependent variable log of average sales in one year (from 2021 to 2023 cumulatively).

TABLE 4. IMPACT EVALUATION OF DIGITAL TECHNOLOGY IMPLEMENTATION ON SMEs BUSINESS PERFORMANCE

| VARIABLES  | 2021-2023                  |                            |
|------------|----------------------------|----------------------------|
|            | log_sales                  | log_sales                  |
|            | (1)                        | (2)                        |
| Web        | <b>1.213***</b><br>(0.142) | <b>0.384***</b><br>(0.104) |
| fb         | -0.0403<br>(0.142)         | 0.0161<br>(0.0985)         |
| log_age    |                            | 0.000609<br>(0.0642)       |
| log_employ |                            | <b>0.908***</b>            |

| VARIABLES    | 2021-2023                  |                               |
|--------------|----------------------------|-------------------------------|
|              |                            |                               |
|              |                            | (0.0552)                      |
| log_cap      |                            | <b>0.145***</b><br>(0.0195)   |
| log_capdig   |                            | <b>0.0253***</b><br>(0.00799) |
| Constant     | <b>18.87***</b><br>(0.112) | <b>14.70***</b><br>(0.314)    |
| Observations | 511                        | 511                           |
| R-squared    | 0.129                      | 0.592                         |

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05  
 Source : Processed Data

According to the calculation results, the online platform is a digital technology platform with the potential to dramatically grow revenues within a year. According to the cumulative data observations, SMEs that use websites have 38.4% greater average annual sales than those that do not (a significant result at the 1% level). Meanwhile, SMEs that use the Facebook platform show a corresponding trend, with a 1.61% increase, although the results are not substantial economically.

These results appear to be consistent study by Lodhi and Shoaib [10], who determined that the intensity of online buying via web-based platforms has increased over time. Aside from that, quality web-based digital marketing has a beneficial effect on customer relationship management, which is necessary for customers to develop trust in seller services, particularly during the first purchase transaction [11].

Other factors that have a substantial impact on SME sales levels in a year include the number of employees, company investment or capital, and corporate investment in digital technologies. Every 1% increase in the number of employees results in a 0.908% increase in sales levels over the year, which is a significant estimated result at 1%. Meanwhile, increases in Company Capital and Company Capital for Digital Technology might boost SME sales by 0.145% and 0.0253%, respectively, with expected outcomes at the 1% level.

The impact evaluation was improved at the macro level by altering the dependent variable to the GRDP Sector Value for the SME business sector, which includes GRDP in the Manufacturing Industry sector and GRDP in the Accommodation and Food Service Activities sector. Table 1.5 demonstrates that the usage of internet platforms in SMEs has a considerable impact on boosting GRDP in both the manufacturing industry sector and the accommodation and food and drink supply sectors. The GRDP value of the manufacturing industry sector in districts where SMEs use websites on average is 61.8% greater than that of SMEs that do not use websites (significant at the 5% level). The utilization of the Facebook platform has no substantial effect on the GDP value of either the manufacturing industry or the accommodation, food, and beverage services sector.

Similarly, the GDP value of the accommodation and food and beverage providing sector in districts where the average SMEs use websites is 52.5% greater than SMEs that do not use websites (significant at the 5% level). These findings apply to observation data spanning the years 2021 to 2023. Partial annual testing yields different results, with the GRDP value of the accommodation and food service activities sector in 2022 being 65% greater in regions where the average SMEs use websites. The utilization of the Facebook platform appears to be consistent with the results provided in Table 1.4.

Therefore, it is possible to conclude that using websites as a digital marketing platform has a substantial impact on SMEs' sales levels, the GRDP value of the manufacturing industry sector, and the GRDP of the accommodation and food service activities sector at the district and city levels. The number of observations from Urban Areas is 248 or fewer than the total number of National Districts because the observations only include SMEs from City Districts that have registered for the startup4industry program. However, the findings of evaluating this influence have constraints that must be considered, resulting in inconsistent results when calculating the regression equation models two and three. The elements that contribute to GRDP in Municipality are many, and SMEs are only one of them.

TABLE 5. IMPACT EVALUATION OF DIGITAL TECHNOLOGY IMPLEMENTATION ON SECTOR GRDP VALUES MANUFACTURING INDUSTRY AND ACCOMMODATION AND FOOD SERVICE ACTIVITIES SECTOR

| VARIABLES    | 2021-2023                  |                            |
|--------------|----------------------------|----------------------------|
|              | log_man<br>(7)             | log_acc_food<br>(8)        |
| Web          | <b>0.618**</b><br>(0.304)  | <b>0.525**</b><br>(0.257)  |
| Fb           | 0.274<br>(0.341)           | 0.357<br>(0.294)           |
| log_sales    | <b>0.258*</b><br>(0.132)   | <b>0.289***</b><br>(0.102) |
| log_age      | -0.0258<br>(0.162)         | 0.0752<br>(0.136)          |
| log_employ   | 0.0593<br>(0.197)          | 0.0812<br>(0.174)          |
| log_cap      | 0.00920<br>(0.0560)        | -0.0581<br>(0.0435)        |
| log_capdig   | -0.00130<br>(0.0273)       | 0.0104<br>(0.0246)         |
| Constant     | <b>9.840***</b><br>(2.097) | <b>8.341***</b><br>(1.737) |
| Observations | 248                        | 248                        |
| R-squared    | 0.099                      | 0.122                      |

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05  
Source : Processed Data

## V. CONCLUSION

According to the regression analysis above, SMEs that use a website have the potential to increase their average annual sales by 38.4% compared to SMEs that skip using a website. Furthermore, the utilization of the Facebook platform for SMEs shows an identical pattern, with a 1.61% growth, but the findings are not significant economically.

The number of employees, firm investment or capital, and capital digital technology are all significant factors that influence SME earnings. Every 1% increase in the number of employees results in a 0.908% increase in annual sales levels, which is a significant estimated result at 1%. Meanwhile, increases in Company Capital and Company Capital for Digital Technology could improve SME sales by 0.145% and 0.0253%, respectively, with 1% expected outcomes.

While the indicators are aggregated at the macro level, websites as a platform for digital advertising have a significant impact on SMEs' sales levels, as well as the GRDP value of the manufacturing industry sector and the GRDP of

Accommodation and Food Service Activities at the district and city levels (significant at the 5% level). In contrast, the use of the Facebook platform has no significant impact on the GDP value of either the manufacturing industry or the Accommodation and Food Service Activities.

Based on the results of this study, In the future, the Startup for Industry program might emphasize more on leveraging digital technologies in marketing initiatives. Creating a more appealing SME business website, for example, can serve as a stronger intervention program, along with other supporting training such as picture training and product package design, to encourage consumers to purchase the products created. Many studies have found that funding for advertising on digital platforms is rather high, although offline promotions are frequently impeded by networking issues. So, building a website in a bid to promote things to a bigger audience can generate new buyers.

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