

## RESEARCH ARTICLE

## ANALYSIS OF THE UTILIZATION OF DIGITAL TECHNOLOGY FOR MSMEs IN THE CITY OF PONTIANAK – INDONESIA

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## ABSTRACT

The purpose of this research is to find out whether social media, e-marketplace and e-commerce have a significant influence on digital technology in Pontianak City. The development of digital technology in information and communication has a relationship with society, information and communication technology as a tool that can be used to study social phenomena that cover broad fields such as trade applications, community services and so on. This research is located in Pontianak City with 105 respondents of MSME actors. Data analysis using SPSS 24 software. The results of this study found that social media has a significant role in digital technology, meanwhile e-marketplace and e-commerce do not have a significant effect.

## KEYWORDS

Digital Technology, Information Technology, Communication Technology, Pontianak City MSMEs

## 1. INTRODUCTION

The emergence of computer hardware technology which is also accompanied by software equipment that has various abilities can help each individual's work, ranging from office applications, management, personal, entertainment and other fields of human work (Esposito and Romagnoli, 2021). All human work has been assisted with this equipment, it is getting easier, faster, more thorough and efficient (Diandra and Syahputra, 2021). In the current era of globalization, the development of Digital Technology in life has many positive impacts, one of which, in exchanging information more easily and quickly, making work easier as well as work done by one person to be more effective and efficient (Arizona et al., 2019). (Demartini et al., 2019). Digital technology has also changed many things in life, there have been significant changes that have changed people's mentality, attitudes, and perspectives in all fields (Danuri, 2019).

The digital lifestyle has also now become part of everyday life, followed by the increasing demand for digital technology products (Yulia et al., 2020). Almost every human activity is used up to use digital devices both in work, shopping, education, communication between people and entertainment (Danuri, 2019; OECD, 2021). In the business world, before there was digital technology we had to go to markets or shops that provide the desired goods, people had to travel the distance and spend time, but after digital communication devices such as computers / Smartphones connected to the network internet, people can easily choose the goods they want, make buying and selling transactions online, and make payments via mobile banking/E-wallet (Strauss, 2009; Arizona, 2020; Hendarsyah, 2019; Tazkiyyaturrohman, 2018).

The development of digital technology also greatly affects economic growth in Indonesia, the development of the amount of businesspeople in this case acting as producers, contributing to encouraging product

offerings in online trade (Ariani et al., 2017; Hilda, 2020). The influence of digital technology on the economic growth of selling goods and services online and conventionally has similar implications for the increase in GDP (Gross Domestic Product) which is a commonly used indicator to determine economic growth from year to year (Kotler, and Keller, 2009; Strauss, 2009). Business actors, especially MSMEs, are expected to be able to adapt and be technology literate so that they can be implemented in carrying out their business marketing (Juniwati and Afifah, 2021; Rassool and Dissanayake, 2019).

Digital marketing includes social media, e-commerce, display advertising, search engine marketing, and many other forms of digital media (Hilda, 2020; Arizona and Yulia, 2019). By using digital technology devices, business actors can market online to stay connected and provide services to consumers without distance and time limits (Yulia and Arizona, 2020; Ulas, 2019). This research is important to do, to provide clear directions and goals for MSME actors in Pontianak City, in order to optimize the use of digital media, through facilities such as social media, e-market place and e-commerce. And of the three facilities, which one has a significant effect on increasing sales.

## 2. RESEARCH METHODOLOGY

This study is a quantitative descriptive statistical method on 105 SMEs in Pontianak City (Sugiyono, 2013). The location of this research is in Pontianak City. It will be held from July 2021 to October 2021. In this study, the selected sample was 105 MSME actors in Pontianak City who were selected randomly using random sampling. The data to be analyzed in this study relates to the relationship between the research variables. Data analysis was carried out quantitatively with continued hypothesis testing which included hypothesis determination, statistical testing, namely by linear regression analysis and multiple correlations.

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### 3. DISCUSSION

Respondents in this study amounted to 105 people with random sampling on MSMEs in the city of Pontianak. Respondent data filling using google form. The type of business occupied by the respondents in this study were 48.6% or 51 respondents, 12.4% or 13 respondents were in the business of fashion, 3.8% or 4 respondents were in the business of beauty, as many as 7.6 % or 8 respondents are in the service sector, 5.7% or 6 respondents are engaged in handicrafts and 21.9 % or 23 respondents are engaged in other businesses. The most widely used digital devices by respondents in this study were as many as 82.9% or 87 respondents were mobile phones, because according to respondents' information, mobile phones are easy to use and can be carried everywhere so that it is very helpful and makes it easier to carry out business activities. Other digital devices used by respondents in this study were tablets / I pads as much as 3.8% or 4 respondents, using laptops as much as 6.7% or 7 respondents, using PC computers as much as 1.9% or 2 respondents and said other devices are 4.8% or 5 respondents. The results of the validity and reliability test stated that all variables showed valid and reliable results.

**Table 1: Determination Coefficient**

| Model Summary   |                   |          |                   |                            |
|---|-------------------|----------|-------------------|----------------------------|
| Model   | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1   | .822 <sup>a</sup> | .675     | .665              | 2.592                      |
| a. Predictors: (Constant), E-commerce (X3), E-marketplace (X2), Social Media (X1) |                   |          |                   |                            |

Source: processed data results, 2021

Based on the SPSS model summary output table above, it is known that the coefficient of determination or R square is 0.675. The R square value of 0.675 comes from the square of the correlation coefficient R, which is  $0.822 \times 0.822 = 0.675$ . The magnitude of the coefficient of determination (R square) is 0.675 or equal to 67.5%. This figure means that the social media variable (X1); e-marketplace (X2) and e-commerce (X3) simultaneously have an effect on digital technology (Y), which is 67.5%. This means that these three variables have a considerable influence on the use of digital technology. And further research needs to be done to use other independent variables such as SEO (Search Engine Optimization) and other variables not examined in this study.

**Tabel 2: F Test**

| ANOVA <sup>a</sup>  |                |          |             |         |        |                   |
|---|----------------|----------|-------------|---------|--------|-------------------|
| Model   | Sum of Squares | df       | Mean Square | F       | Sig.   |                   |
| 1   | Regression     | 1409.239 | 3           | 469.746 | 69.934 | .000 <sup>b</sup> |
|   | Residual       | 678.418  | 101         | 6.717   |        |                   |
|   | Total          | 2087.657 | 104         |         |        |                   |
| a. Dependent Variable: Digital Technology (Y)                                     |                |          |             |         |        |                   |
| b. Predictors: (Constant), E-commerce (X3), E-marketplace (X2), Social Media (X1) |                |          |             |         |        |                   |

Source: processed data results, 2021

Based on the SPSS output table, it is known that the value of sig. is  $0.000 < 0.05$ , then according to the basis of decision making in the F test it can be concluded that the hypothesis is accepted or in other words social media (X1) ; e-marketplace (X2) and e-commerce (X3) simultaneously affect digital technology (Y). And it is known that the calculated F is 69.934. Because the value of  $F_{count} 68.934 > F_{table} 3.08$ , then as the basis for decision making in the F test, it can be concluded that the hypothesis is accepted or in other words social media (X1) ; e-marketplace (X2) and e-commerce (X3) simultaneously affect digital technology (Y).

**Tabel 3: t-Test**

| Coefficients <sup>a</sup>                     |                             |            |                           |       |       |      |
|---|-----------------------------|------------|---------------------------|-------|-------|------|
| Model   | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.  |      |
|   | B                           | Std. Error | Beta                      |       |       |      |
| 1   | (Constant)                  | 14.492     | 2.206                     |       | 6.570 | .000 |
|   | Social Media (X1)           | .585       | .073                      | .734  | 8.005 | .000 |
|   | E-marketplace (X2)          | .103       | .063                      | .144  | 1.639 | .104 |
|   | E-commerce (X3)             | -.015      | .059                      | -.024 | -.251 | .802 |
| a. Dependent Variable: Digital Technology (Y) |                             |            |                           |       |       |      |

Source: processed data results, 2021

### 3.1 Social Media (X1)

Based on the SPSS output, it is known that the value of sig. is  $0.000 < 0.05$ , then according to the basis of decision making in the t test, it can be concluded that social media (X1) partially affects digital technology (Y). And it is known that t count is 8.005. Because the t arithmetic value is  $8.005 > t_{table} 1.983$ , then as the basis for decision making in the t test, it can be concluded that the hypothesis is accepted or in other words social media (X1) partially affects digital technology (Y).

### 3.2 E-Marketplace (X2)

Based on the SPSS output, it is known that the value of sig. is  $0.104 > 0.05$ , then according to the basis of decision making in the t test, it can be concluded that e-marketplace (X1) partially has no effect on digital technology (Y). And it is known that t count is 1.639. Because the t arithmetic value is  $1.639 < t_{table} 1.983$ , then as the basis for decision making in the t test, it can be concluded that the hypothesis is rejected or in other words e-marketplace (X2) partially has no effect on digital technology (Y).

### 3.3 E-Commerce (X3)

Based on the SPSS output, it is known that the value of sig. is  $0.802 > 0.05$ , then according to the basis of decision making in the t test, it can be concluded that e-commerce (X1) partially has no effect on digital technology (Y). And it is known that t count is -0.251. Because the t arithmetic value is  $-0.251 < t_{table} 1.983$ , then as the basis for decision making in the t test, it can be concluded that the hypothesis is rejected or in other words e-commerce (X3) partially has no effect on digital technology (Y).

## 4. UTILIZATION OF DIGITAL TECHNOLOGY IN MSMEs IN PONTIANAK

The development of digital technology is increasing, especially when Indonesia is hit by the COVID-19 pandemic. Many activities inevitably move to digital, including the MSME sector (Juniwati and Afifah, 2021). According to the Chairperson of the Indonesian MSME Association since the Covid-19 outbreak, it is estimated that the turnover of MSMEs in the non-culinary sector has decreased by 30%-35% (Jelita, 2021). The reason is that sellers only rely on direct sales between sellers and buyers physically (Muditomo and Wahyudi, 2021; Rassool and Dissanayake, 2019). With an appeal from the government launched on March 15, 2020 to carry out social distancing, this has a serious impact on the absorption of MSME products. One of them is the changing behavior of businesspeople or business actors in running their business (Juniwati and Afifah, 2021; Ulas, 2019). The efforts that the government can do are to move MSMEs to run their businesses through an online system (e-marketing) where this will not violate government rules regarding social distancing rules (Ulas, 2019; Demartini et al., 2019).

Through the role of technology, business activities and the distribution of goods can still be carried out (Diandra and Syahputra, 2021). By utilizing digital technology, MSME actors can carry out online sales strategies to increase market size in the existing segmentation (Ulas, 2019; Esposito and Romagnoli, 2021; Danuri, 2019; Chaffey, 2006). So, the online marketing process through electronic technology both marketing and as a form of promoting products and services that reach a wider market and build closer customer relationships so that they can provide satisfaction to consumers (Essakly et al., 2019; Yulia and Arizona, 2020; Strauss, 2009). There are several options for MSME actors to make online sales, including through: social media, e-marketplaces and e-commerce (Ulas, 2019; Demartini et al., 2019; Diandra and Syahputra, 2021; OECD, 2021).

The results of the study can be seen that the social media variable (X1) has a significant effect on the use of digital technology for MSME actors, this can be seen from the results of the t test. MSME actors use social media because they are considered easier to understand and respond quickly than using other variables, namely e-marketplace (X2) and e-commerce (X3). And the results of the study show that simultaneously all the variables in this study have a significant effect on the use of digital technology. Digital technology as an online marketing tool is the most efficient and effective tool for business actors in reaching customers and sales targets (Hilda, 2020; Danuri, 2019). Digital/online marketing has a positive impact on business actors, because with a minimum budget or even free they can advertise products on online platforms (Hilda, 2020; Yulia and Arizona, 2020).

## 5. CONCLUSION

The purpose of this research is to find out whether social media, e-market

place and e-commerce have a significant influence on digital technology in Pontianak City. The magnitude of the coefficient of determination (R square) is 0.675 or equal to 67.5%. This figure means that the social media variable (X1), e-marketplace (X2) and e-commerce (X3) simultaneously have an effect on digital technology (Y), which is 67.5%. This means that these three variables have a considerable influence on the use of digital technology. The results of this study found that social media has a significant role in digital technology, meanwhile e-marketplace and e-commerce do not have a significant effect. Further research can add more respondents so that with the aim of knowing the sales process carried out by MSME actors in Pontianak City and can add different indicators in this study so that significant results can be found for e-marketplace and e-commerce variables.

## REFERENCES

- Ariani, Ratna, S., 2017. Strategi Serangan Internet Marketing. CV. Andi Offset.
- Arizona, N.D., Yulia, C., 2019. Analisis Perbandingan Efektivitas Penggunaan Media Komunikasi Berbasis Messenger. *Eodemica*, 3 (1), Pp. 54–65. <https://doi.org/https://doi.org/10.31294/jeco.v3i1.4446>
- Chaffey, D., 2006. Additional student support at [www.pearsoned.co.uk/chaffey](http://www.pearsoned.co.uk/chaffey). In Practice.
- Danuri, M., 2019. Development and Transformation of Digital Technology. *Infokam*, XV (II), Pp. 116–123.
- Demartini, M., Evans, S., Tonelli, F., 2019. Digitalization technologies for industrial sustainability. *Procedia Manufacturing*, 33, Pp. 264–271. <https://doi.org/10.1016/j.promfg.2019.04.032>
- Diandra, D., Syahputra, E., 2021. Dalam Meningkatkan Kinerja Pemasaran Perusahaan Di Era Inovasi Digital: Pendekatan Technology Acceptance Model (Tam). *Prosiding SNasPPM*, 6 (1), Pp. 115–119. <https://pmat.unirow.ac.id/prosiding/index.php/SNasPPM/article/view/513>
- Esposito, G., Romagnoli, G., 2021. A Reference Model for SMEs understanding of Industry 4.0. *IFAC-PapersOnLine*, 54 (1), Pp. 510–515. <https://doi.org/10.1016/j.ifacol.2021.08.166>
- Essakly, A., Wichmann, M., Spengler, T.S., 2019. A reference framework for the holistic evaluation of Industry 4.0 solutions for small- And medium-sized enterprises. *IFAC-PapersOnLine*, 52 (13), Pp. 427–432. <https://doi.org/10.1016/j.ifacol.2019.11.093>
- Hendarsyah, D., 2019. E-commerce di era industri 4.0 dan society 5.0. *IQTISHADUNA: Jurnal Ilmiah Ekonomi Kita*, 8 (2), Pp. 171–184.
- Hilda, Afifah, N., 2020. Digital Marketing Strategi Terbaik Hadapi New Normal. Strategi Pemulihan Bisnis UMKM Masa Adaptasi Kebiasaan Baru, Pp. 55–64. <http://pascasarjanafe.untan.ac.id/wp-content/uploads/2021/01/8.pdf>
- Jelita, I.N., 2021. Gara-gara Pandemi Covid-19, Diperkirakan 30 Juta UMKM Bangkrut. <https://mediaindonesia.com/ekonomi/433606/gara-gara-pandemi-covid-19-diperkirakan-30-juta-umkm-bangkrut>
- Juniwati, Afifah, N.S., 2021. Keberlangsungan Umkm Di Kota Pontianak Di Tengah Dampak Covid-19. *Pasca Sarjana Untan*, 1, Pp. 65–76. <http://pascasarjanafe.untan.ac.id/wp-content/uploads/2021/01/9.pdf>
- Kotler, P., and Keller, K., 2009. *Marketing Management* (13th ed.). Upper Saddle River.
- Muditomo, A., Wahyudi, I., 2021. Conceptual Model for Sme Digital Transformation During the Covid-19 Pandemic Time in Indonesia: R-Digital Transformation Model. *BASKARA: Journal of Business and Entrepreneurship*, 3 (1), Pp. 13. <https://doi.org/10.24853/baskara.3.1.13-24>
- OECD. 2021. The Digital Transformation of SMEs. OECD Publishing, Pp. 1–4. [https://www.oecd-ilibrary.org/industry-and-services/the-digital-transformation-of-smes\\_bdb9256a-en](https://www.oecd-ilibrary.org/industry-and-services/the-digital-transformation-of-smes_bdb9256a-en)
- Rassool, M.R., Dissanayake, D.M.R., 2019. Digital Transformation for Small & Medium Enterprises (SMES): With Special Focus on Sri Lanka Context as an Emerging Economy. *International Journal of Business and Management Review*, 7 (4), Pp. 59–76. <https://www.researchgate.net/publication/335028085>
- Strauss, J.R. F., 2009. *E- Marketing* (I. Prentice-Hall (ed.); 5th ed.). Upper Saddle.
- Sugiyono., 2013. *Metode Penelitian Pendidikan Pendekatan Kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Tazkiyyaturrohmah, R., 2018. Eksistensi Uang Elektronik Sebagai Alat Transaksi Keuangan Modern. *Muslim Heritage*, 3 (1), Pp. 21–39.
- Ulas, D., 2019. Digital Transformation Process and SMEs. *Procedia Computer Science*, 158, Pp. 662–671. <https://doi.org/10.1016/j.procs.2019.09.101>
- Yulia, N.D., Arizona, M.N., 2020. Sistem informasi penjualan produk pontimarket. *Jurnal Khatulistiwa Informatika*, VIII (1), Pp. 53–59. <https://doi.org/https://doi.org/10.31294/jki.v8i1.8300.g4162>
- Yulia, Nanda, Wong, 2020. Analisis Pengaruh Ekuitas Merek Pada Keputusan Pembelian Smartphone iPhone XS Max Di Indonesia. *Jurnal Riset Ekonomi Dan Manajemen*, 7, Pp. 10–22. <https://doi.org/http://dx.doi.org/10.29406/jpr.v7i1.1821>

