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The Influence of Human Resource Competencies and The Use Of Information Technology on the Performance of MSMEs (An Empirical Study of MSMEs in Depok City)

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ABSTRACT

This study aims to analyze the influence of Human Resource Competence and Information Technology Utilization on the performance of MSMEs in Depok City. This study employed a quantitative approach with a sample of 100 MSME owners selected using the purposive sampling technique. Data were collected via questionnaires and analyzed using IBM SPSS Statistics 29, incorporating tests for validity, reliability, classical assumptions, multiple linear regression, t-tests, F-tests, and the coefficient of determination. The results indicate that Human Resource Competence does not have a significant effect on MSME performance, whereas Information Technology Utilization has a positive and significant effect on MSME performance. Simultaneously, Human Resource Competence and Information Technology Utilization significantly influence MSME performance. The Adjusted R-Square value is 0.565, indicating that these two variables explain 56.5% of the variation in MSME performance.

Keywords: Human Resource Competence, Information Technology Utilization, MSME Performance.

1. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in supporting Indonesia's economic growth (Ramadani et al., 2025). According to data from the Kementerian Koordinator Bidang Perekonomian Republik Indonesia (2025), MSMEs number approximately 64 million business units—accounting for about 99% of the total number of business units nationwide—contribute more than 60% to the Gross Domestic Product (GDP), and employ approximately 97% of the workforce. Despite their significant contribution, MSMEs' share of total national exports remains at around 15.7% (Kementerian Koordinator Bidang Perekonomian Republik Indonesia, 2025).

Despite their substantial contribution to the national economy, the relatively limited contribution of MSMEs to national exports highlights the need to strengthen their capacity to compete in broader markets and improve business performance. Human resource competencies are among the factors that may support MSMEs in developing their capabilities and improving business outcomes (Natariasari & Diyanto, 2025). At the same time, the increasing use of digital technologies in business activities suggests that information technology utilization may also play an important role in supporting MSME performance (Pratamansyah, 2024).

The growth of the digital economy presents opportunities for MSMEs to improve their performance through human resource development and the use of information technology. Internet penetration in Indonesia has reached 81.72% (APJII, 2026). However, according to a 2024 report by the Institute for Development of Economics and Finance (INDEF), only about 22 million MSMEs—or approximately 33.6%—have joined the digital ecosystem. This phenomenon indicates that the adoption of information technology by MSMEs is still not optimal. This situation suggests that the utilization of information technology may be relevant to MSME performance, particularly in supporting business efficiency, market reach, and digital transformation (Pratamansyah, 2024).

The number of registered MSMEs increased from 5,609 in 2021 to 12,325 in 2025, indicating a substantial increase in the number of MSMEs in the city (Satu Data Indonesia, 2026). Despite this increase, participation in MSME capacity-building and digitalization programs remains relatively limited. In 2025, 500 participants were recorded in the New Entrepreneurship Program (WUB), while only 1,549 MSMEs—or about 12.6% of the total—participated in the MSME Go Online Facilitation Program (Satu Data Indonesia, 2026). These figures suggest that opportunities remain to strengthen MSME capacity development and expand the utilization of information technology among MSMEs in Depok City.

Previous research on the impact of human resource competencies and the use of information technology on MSME performance has yielded mixed results. Natariasari and Diyanto (2025), Rohmah and Rachman (2024), and Humaira et al., (2024) concluded that human resource competencies have a positive impact on MSME performance. Conversely, (Hardi et al., (2025) found that human resource competence does not have a significant effect on MSME performance. Differences in results were also found regarding the use of information technology. Indriyani and Wulandari (2025), and Irfadil et al., (2024) demonstrated that the use of information technology has a positive effect on MSME performance. Conversely, Putri et al., (2024) found a negative effect, while Arventyani and Ismunawan (2024) concluded that the use of information technology does not have a significant effect on MSME performance. These differing findings suggest that the relationship between human resource competencies, the use of information technology, and the performance of MSMEs requires further testing, These differing findings suggest that the relationship between human resource competence, information technology utilization, and MSME performance warrants further examination in different local contexts, including Depok City.

This study addresses this empirical gap by examining MSMEs in Depok City, which provides a distinct local context from those examined in previous studies. Depok City has experienced substantial growth in the number of MSMEs alongside continuing efforts to strengthen business owners' competencies and information technology utilization. Thus, this study is expected to provide more context-specific empirical evidence regarding the relationship between human resource competence, information technology utilization, and MSME performance.

Based on these empirical findings and the identified research gap, this study aims to examine the effect of human resource competence on MSME performance, the effect of information technology utilization on MSME performance, and the simultaneous effect of both variables on MSME performance in Depok City.

2. METHOD

This study employs a quantitative approach using a deductive method. The research data consist of primary data collected through an online questionnaire distributed via Google Forms. The research instrument was designed based on indicators for each variable and measured using a five-point Likert scale. The population of this study comprises MSMEs operating in Depok City. The sample was determined using purposive sampling with the following criteria: (1) MSME owners or managers operating in Depok City; (2) the business is actively operating at the time of data collection; (3) respondents are directly involved in managing or making decisions related to the business; (4) respondents are willing to participate in the study by completing the questionnaire; and (5) Using information technology in business operations, such as social media, marketplaces, digital apps, or other digital platforms. Based on these criteria, 100 respondents were obtained. Data analysis was performed using SPSS version 29 using multiple linear regression to examine the partial and simultaneous effects among variables. Prior to hypothesis testing, instrument quality tests were conducted, including validity and reliability tests, as well as classical assumption tests consisting of normality, multicollinearity, and heteroscedasticity tests. Hypothesis testing was performed using t-tests and F-tests, while the coefficient of determination was used to assess the proportion of variation in MSME performance explained by the independent variables.

3. RESULTS AND DISCUSSION

a. Descriptive Analysis

This study involved 100 MSME operators in Depok City who were selected as respondents. The characteristics of the respondents are presented in Table 1 as follows:

Table 1. Respondent Characteristics

Attributes	Category	Number	Percentage
Gender	Male	28	28 %
	Female	72	72 %
Age Range	18 – 24 Year	30	30%
	25 – 34 Year	34	34%
	35 – 44 Year	23	23%
	>45 Year	13	13%
Last Education	SMA/SMK	56	56%
	Diploma 2-3 (D2/D3)	7	7%
	Sarjana (S1)	34	34%
	Magister (S2)	3	3%
Type of Business	Kuliner (Food / Beverages)	71	71%
	Fashion	10	10%
	Services (Beauty Salon, Laundry, and Copy Shop)	13	13%
	Handicrafts	6	6%
Business Duration	Under 1 Year	11	11%
	1 – 3 Year	44	44%
	4 – 5 Year	18	18%
	More than 5 Years	27	27%
Annual Turnover	< Rp. 50.000.000	47	47%
	Rp. 50.000.000 – Rp. 500.000.000	44	44%
	> Rp. 500.000.000	9	9%

Source: Primary Data (2026)

According to Table 1, the majority of respondents were female (72%), aged 25–34 years (34%), and had completed high school or vocational high school (56%). Most respondents operated businesses in the culinary sector (71%), had been running their businesses for 1–3 years (44%), and had an annual turnover of less than Rp50,000,000 (47%). These characteristics indicate that the respondents were predominantly micro-entrepreneurs who were still in the business development stage. The dominance of culinary businesses in the sample indicates that the findings of this study should be interpreted in accordance with the characteristics of the respondents. Therefore, the findings may not fully represent all MSME sectors in Depok City, particularly those in the fashion, service, and handicraft sectors. This limitation should be considered when interpreting the findings.

b. Validity and Reliability Tests

The results of the validity test using the Corrected Item-Total Correlation indicate that all items across the three variables have correlation values above the table r value (0.3610). The correlation values for the Human Resource Competence variable ranged from 0.690 to 0.875, for Information Technology Utilization from 0.688 to 0.855, and for MSME Performance from 0.569 to 0.821. These findings indicate that all items met the validity criteria and are therefore suitable for use as a research instrument.

The results of the reliability test using Cronbach's Alpha yielded a value of 0.942 for the Human Resource Competence variable, 0.903 for the Information Technology Utilization variable, and 0.900 for the MSME Performance variable. All Cronbach's Alpha values exceeded the minimum threshold of 0.60; therefore, the research instrument was deemed reliable and demonstrated good internal consistency in measuring each research construct.

c. Classical Assumption Test

Normality Test

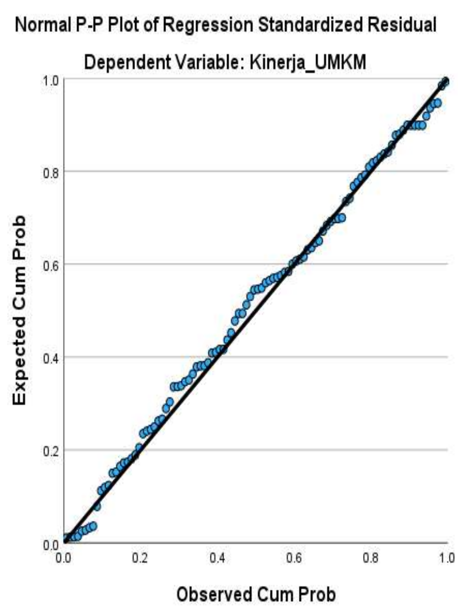

Figure 1. Regression Graph Results

Source: Analyzed using SPSS 29 (2026)

Based on the Normal P–P Plot of Regression Standardized Residuals, the residual points are distributed around and follow the direction of the diagonal line. The normality criterion is met when the residual points are distributed around the diagonal line without forming a systematic pattern.

Based on these results, the residuals are considered normally distributed, indicating that the regression model satisfies the normality assumption and can be used for further analysis.

Multicollinearity Test

Table 2. Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	**VIF**
1	**(Constant)**	**-**	**-**
	Human Resources Competencies (X1)	0.504	1.983
	Use of Information Technology (X2)	0.504	1.983
a. Dependent Variable: MSME Performance			

Source: Analyzed using SPSS 29 (2026)

Based on Table 2, the Tolerance values for Human Resource Competencies (X_1) and Information Technology Utilization (X_2) are both 0.504, which is greater than 0.10. Meanwhile, the VIF values for both independent variables are 1.983, which is less than 10. The decision criteria indicate that a regression model is considered free from multicollinearity when the Tolerance value is greater than 0.10 and the VIF value is less than 10. Therefore, the independent variables in this study do not exhibit multicollinearity.

Heteroscedasticity Test

Table 3. Heteroscedasticity Test

Model		Coefficients[a]				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.365	3.171		2.323	.022
	Human Resources Competencies (X1)	.003	.105	.004	.031	.975
	Use of Information Technology (X2)	-.096	.093	-.146	-1.033	.304
a. Dependent Variable: MSME Performance						

Source: Analyzed using SPSS 29 (2026)

Based on Table 3, the significance value for Human Resource Competencies (X_1) is 0.975, while the significance value for Information Technology Utilization (X_2) is 0.304. The decision criterion is that a regression model is considered free from heteroscedasticity when the significance value is greater than 0.05. Since both significance values exceed 0.05, the regression model does not exhibit heteroscedasticity and satisfies the assumption of homoscedasticity.

d. Multiple Linear Regression Analysis

Table 4. Multiple Linear Regression Analysis

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta
1	(Constant)	11.798	5.237	
	Human Resources Competencies (X1)	.081	.173	.044
	Use of Information Technology (X2)	1.190	.153	.726

Coefficients[a]

a. Dependent Variable: MSME Performance

Source: Analyzed using SPSS 29 (2026)

Based on the results of the multiple linear regression analysis, the following regression equation was obtained: $Y = 11,798 + 0,081X_1 + 1,190X_2$

The regression equation indicates that Human Resource Competencies and Information Technology Utilization have positive regression coefficients in relation to MSME Performance. The unstandardized regression coefficients (B) are 0.081 for Human Resource Competencies and 1.190 for Information Technology Utilization, indicating the expected change in MSME Performance for each one-unit increase in the respective independent variable, while holding the other variable constant. In terms of relative influence, the standardized Beta coefficients show that Information Technology Utilization has a higher coefficient (β = 0.726) than Human Resource Competencies (β = 0.044). This indicates that Information Technology Utilization has a stronger relative contribution to MSME Performance than Human Resource Competencies.

e. Hypothesis Testing

Partial Test (T-Test)

Table 5. Partial Test (T-Test)

Model		Coefficients[a] t	Coefficients[a] Sig.
1	(Constant)	2.253	.027

Human Resources Competencies (X1)	.467	.642
Use of Information Technology (X2)	7.786	<.001

a. Dependent Variable: MSME Performance

Source: Analyzed using SPSS 29 (2026)

H1: Human Resource Competencies have a significant effect on MSME Performance.

Based on the results of the partial test, the Human Resource Competencies variable (X_1) has a significance value of 0.642 (>0.05). Therefore, H_1 is rejected. These results indicate that Human Resource Competencies do not have a significant effect on MSME Performance.

These findings do not yet support the expectations of Human Capital Theory, which views knowledge, skills, experience, and capacity development as forms of human capital that can increase productivity and economic outcomes. Contextually, the competencies possessed by MSME operators may not necessarily be directly reflected in improved performance if they are not fully applied in business management. The characteristics of the respondents can provide context for these findings, as 44% of respondents have been operating their businesses for 1–3 years and 47% have annual revenue below Rp50,000,000. These characteristics indicate that the majority of respondents are in the business group with relatively limited stages of development and business scale. This situation may provide one possible contextual explanation for why the competencies possessed by the respondents were not statistically associated with higher MSME Performance in this study, although these characteristics were not examined as causal factors.

The results of this study are consistent with those of Ramadhan and Wandi (2023), who found that human resource competencies do not have a significant effect on MSME performance. However, these results differ from those of Rohmah and Rachman (2024), Anggraini et al., (2024), Natariasari and Diyanto (2025), who found a positive and significant effect of human resource competence on MSME performance. These differing results suggest that the relationship between human resource competencies and SME performance may be contextual and influenced by business characteristics and the business environment. Thus, the results of this study do not indicate that human resource competencies are unimportant, but rather that their impact on SME performance has not been proven to be significant for the characteristics of the sample studied.

H2: Information Technology Utilization has a significant effect on MSME Performance.

Based on the results of the partial test, the Information Technology Utilization variable (X_2) has a significance value of <0.001 (<0.05), so H_2 is accepted. These results indicate that Information

Technology Utilization has a positive and significant effect on MSME Performance.

These findings can be interpreted through the Technology Acceptance Model (TAM) developed by Davis (1989). TAM explains that perceived usefulness and perceived ease of use encourage technology acceptance and use. In this study, TAM provides a theoretical basis for understanding the adoption and use of technology in business activities, while the association between Information Technology Utilization and MSME Performance is examined empirically through regression analysis. When technology is accepted and utilized in business activities, its use may be associated with marketing, transactions, customer communication, and business management practices that are relevant to MSME Performance. Thus, TAM helps explain the process of technology acceptance and utilization, whereas the statistically significant relationship between Information Technology Utilization and MSME Performance represents an empirical finding of this study.

The results of this study are consistent with those of Indriyani and Wulandari (2025), and Irfadil et al., (2024), who found that the use of information technology has a positive and significant effect on MSME performance. These consistent results reinforce the empirical finding that the use of information technology is associated with MSME performance. This finding also indicates that the use of digital technology can be one aspect that MSME operators should consider in supporting their business activities and improving performance.

The findings have several practical implications for MSME development in Depok City. Since Information Technology Utilization was found to have a positive and significant association with MSME Performance, MSME development programs may place greater emphasis on practical digitalization, including the use of social media, marketplaces, digital payment systems, and other business applications. Technology-oriented training should focus not only on introducing digital tools but also on their practical application in marketing, customer communication, transactions, and business management. Although Human Resource Competencies were not statistically significant in the partial test, competency development remains relevant and may be integrated with technology utilization through continuous mentoring and business assistance. Such an integrated approach may help MSME operators apply their competencies more effectively in technology-based business activities. These implications are particularly relevant given the relatively limited participation of MSMEs in competency development and digital onboarding programs in Depok City.

Simultaneous Test (F -Test)

Table 6. Simultaneous Test (F -Test)

ANOVA[a]						
	Model	**Sum Of Squares**	**DF**	**Mean Square**	**F**	**Sig.**
1	Regression	2902.827	2	1451.413	65.383	<.001[b]
	Residual	2153.283	97	22.199		
	Total	5056.110	99			
a. Dependent Variable: Kinerja UMKM						
b. Predictors: (Constant), Human Resources Competencies, Use of Information Technology						

Source: Analyzed using SPSS 29 (2026)

H3: Human Resource Competencies and Information Technology Utilization simultaneously have a significant effect on MSME Performance.

Based on the results of the ANOVA test in the table above, the results of the simultaneous test show a calculated F-value of 65.383 with a significance level of <0.001, so H3 is accepted. These results indicate that Human Resource Competence and the Use of Information Technology together have a significant effect on MSME Performance.

f. Coefficient of Determination Test

Table 7. Coefficient of Determination Test

Model Summary[b]				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.758[a]	.574	.565	4.721
a. Predictors: (Constant), Human Resources Competencies, Use of Information Technology				
b. Dependent Variable: MSME Performance				

Source: Analyzed using SPSS 29 (2026)

Based on the results of the coefficient of determination test, the Adjusted R-Square value of 0.565 indicates that Human Resource Competencies and Information Technology Utilization jointly explain 56.5% of the variation in MSME Performance. The remaining 43.5% represents variation in MSME Performance that is not explained by the variables included in this regression model. This unexplained variation may be associated with other factors that were not examined in this study.

The contribution of this study is primarily empirical, practical, and policy-oriented. Empirically, this study provides context-specific evidence from MSMEs in Depok City by showing that

Information Technology Utilization is significantly associated with MSME Performance, whereas Human Resource Competencies are not statistically significant in the partial test. These findings contribute to the existing literature by demonstrating that the relationship between these factors and MSME performance may vary across local business contexts. Practically, the findings indicate that MSME development initiatives should pay greater attention to the practical utilization of information technology while continuing to strengthen human resource competencies through integrated assistance. From a policy perspective, the findings may provide a basis for local stakeholders in designing digitalization programs, technology-oriented training, and mentoring schemes that are aligned with the characteristics and needs of MSMEs in Depok City. Thus, the contribution of this study lies not only in testing the relationships among the variables but also in providing locally relevant evidence that can inform MSME development efforts.

4. CONCLUSION

This study aims to analyze the relationship between Human Resource Competencies, Information Technology Utilization, and MSME Performance in Depok City. The results show that Human Resource Competencies are not statistically significant in the partial test, whereas Information Technology Utilization has a positive and statistically significant association with MSME Performance. Simultaneously, the two independent variables are significantly associated with MSME Performance, with an Adjusted R-Square of 0.565. Based on the standardized Beta coefficients, Information Technology Utilization has a stronger relative contribution to the observed MSME Performance than Human Resource Competencies.

The findings provide empirical evidence specific to MSMEs in Depok City and suggest that practical digitalization may be an important consideration in MSME development initiatives. Local stakeholders may strengthen technology-oriented training, digital onboarding, and integrated mentoring that combines technology utilization with human resource development. Such initiatives should be adapted to the characteristics and needs of local MSMEs rather than assuming that competency development alone will directly translate into improved business performance.

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CONFLICT OF INTEREST

The authors have no conflicts of interest to report.

REFERENCES

Anggraini, R. D., Rasamashar, W., & Suci, R. G. (2024). Pengaruh Mental Accounting, Teknologi Informasi Dan Kualitas Sumber Daya Manusia Terhadap Kinerja UMKM Kecamatan Binawidya Pekanbaru. *Ilmiah Akuntansi*, *5*(1), 198–216.

APJII. (2026). *Survei APJII*. Asosiasi Penyelenggara Jasa Internet Indonesia. https://survei.apjii.or.id/

Arventyani, R., & Ismunawan. (2024). Pengaruh Modal , Laporan Keuangan , Pemanfaatan Informasi Terhadap Kinerja Umkm Di Beteng Trade Center (Btc) Solo. *Jurnal Rumpun Manajemen Dan Ekonomi*, *1*(3), 612–624.

Hardi, Rio Manullang, Marihot Munthe, Afriana, R. (2025). Pengaruh Kompetensi SDM Terhadap Kinerja UMKM Di Kota Pekanbaru. *Baseline:Jurnal Mahasiswa Magister Manajemen*, *2*(3), 430–438.

Humaira, J., Mulyana, A., & Muizu, W. O. Z. (2024). The Influence of Financial Capital and Human Resource Competency on the Performance of Culinary SMEs in East Jakarta with Digital Marketing as a Moderating Variable. *Al Qalam: Jurnal Ilmiah Keagamaan Dan Kemasyarakatan*, *18*(5), 3459. https://doi.org/10.35931/aq.v18i5.3931

Indriyani, Ika, V., & Wulandari, I. (2025). Pemanfaatan Teknologi Informasi, Kemampuan Menyusun Laporan Keuangan dan Perilaku Kewirausahaan Terhadap Kinerja UMKM Kulon Progo. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, Dan Akuntansi)*, *9*(3), 2821–2839.

Irfadil, M., Khotmi, H., & Setiawati, E. (2024). *Pengaruh Pemanfaatan Teknologi Informasi, Penggunaan Informasi Akuntansi dan Pelatihan Terhadap Kinerja UMKM Bidang Perdagangan di Lombok Barat*. *3*(2), 346–357.

Kementerian Koordinator Bidang Perekonomian Republik Indonesia. (2025). *Pemerintah dorong UMKM Naok Kelas, Tingkatkan Kontribusi Terhadap Ekspor Indonesia*. https://www.ekon.go.id/publikasi/detail/6152/pemerintah-dorong-umkm-naik-kelas-tingkatkan-kontribusi-terhadap-ekspor-indonesia

Natariasari, R., & Diyanto, V. (2025). The Effect of Human Resource Competencies , Financial Inclusion , E- Commerce Implementation , and Financial Knowledge on Performance of SMES. *Indonesian Journal of Economics, Social, and Humanities*, 149–169.

Pratamansyah, S. R. (2024). Transformasi Digital dan Pertumbuhan UMKM: Analisis Dampak Teknologi pada Kinerja Usaha Kecil dan Menengah di Indonesia. *Jurnal Akuntansi, Manajemen, Dan Perencanaan Kebijakan*, *2*(2), 17. https://doi.org/10.47134/jampk.v2i2.475

Putri, Anandita Anggraini, Syafira Purnama, H. (2024). Indikator Kinerja Umkm: Intellectual Capital Dan Financial Literacy. *Prosiding Snast*, (November), H87-100. https://doi.org/10.34151/prosidingsnast.v1i1.5050

Ramadani, S., Ramadhani, Amelia, D., Ikrom, M., & Harahap, Muda, L. (2025). Peran Strategis UMKM dalam Mendorong Pertumbuhan Ekonomi Berkelanjutan di Indonesia. *Jurnal Ekonomi, Bisnis Dan Manajemen*, *4*(1), 158–166. https://doi.org/10.58192/ebismen.v4i1.3183

Ramadhan, Guruh, T., & Wandi, D. (2023). Pengaruh Kompetensi SDM, Kompetensi Wirausaha Dan Keterikatan Kerja Terhadap Kinerja Pelaku Usaha UMKM Kerupuk Di Kota Serang. *Desanta Indonesian of Interdisiplinary Journal*, *4*(1), 1–12.

Rohmah, A. N., & Rachman, A. N. (2024). Pengaruh Pemanfaatan Teknologi, Literasi Keuangan, Tingkat Pendidikan, dan Kompetensi SDM Terhadap Kinerja UMKM di Kabupaten Sukoharjo. *As-Syirkah: Islamic Economic & Financial Journal*, *3*(4), 2163–2176. https://doi.org/10.56672/5sp19131

Satu Data Indonesia. (2026a). *Capaian pelaksanaan Program Fasilitasi UMKM Go Online pada beberapa kabupaten/kota di Indonesia*. Kementrian Komunikasi Dan Digital. https://data.go.id/dataset/dataset/data-capaian-terbaru-program-fasilitasi-umkm-go-online1

Satu Data Indonesia. (2026b). *UMKM di Tingkat Kabupaten Kota*. Kementerian PPN/Bappenas. https://data.go.id/dataset/dataset/umkm-di-tingkat-kabupaten-kota16