

The Influence of Human Resource Development and the Use of Digital Technology on the Work Productivity of MSMEs (Study of MSMEs in Masamba District)

Ismayani^{1*}, Indra Kusdianto², Ahmad Suardi³

¹ Universitas Muhammadiyah Palopo

² Universitas Muhammadiyah Palopo

³ Universitas Muhammadiyah Palopo

Corresponding Author Email: ismayani@student.umpalopo.ac.id

Abstract

This research aims to determine the influence of human resource development and the use of digital technology on the work productivity of MSMEs. The method used is multiple linear regression analysis. The data used are primary data and secondary data obtained directly from the results of distributing questionnaires and observations in the field. The results of this research's multiple regression analysis prove that human resource development has a significant influence on work productivity. However, if seen from the calculated t value $>$ t table ($3.254 > 2.008$), the use of digital technology does not have a significant effect on work productivity, because seen from the t table value $>$ t calculated ($2.008 > 0.751$). Simultaneously the development of human resources and the use of digital technology, both individually and collectively, have a role in influencing work productivity.

Keywords: HR expertise; use of technology; productivity

1. Introduction

MSMEs have become a very important sector in the Indonesian economy because they have a major role in economic growth, creating jobs and improving people's welfare. Human resources (HR) are a very important factor and cannot be separated from organizations, be they institutions or companies [3]. Human resource management (HR) plays an important role in achieving institutional goals if it has human resources who have good skills [5]. In an organization, human resources have an important role in increasing the effectiveness and efficiency of the organization [15]. There are many things that support human resources to have good quality and performance, one of which is the commitment of the employees concerned to the company where they are located [19]. In the context of MSMEs, developing human resources includes training (recruitment, performance evaluation). Effective human resource management in the era of digital technology requires integration between HR expertise and the use of technology to help increase productivity and innovation.

The use of digital technology allows MSMEs to expand their marketing reach by using online platforms such as e-commerce (Shopee, TikTok Shop and Tokopedia), social media (Facebook, Instagram, WhatsApp Business and TikTok), and digital advertising (images on website pages) , This makes it possible to reach more customers. The rapid development of technology today has become one of the causes of changes in everyone's lives [7]. Technology that previously supported meeting production needs now helps technology information in data management. This can affect work productivity (Matandra, 2018). The use of technology can increase work productivity by making it easier to access information and optimizing the efficiency of daily tasks. Digitalization includes increased use of digital technologies as well as integration and cross-fertilization in a company's products and inbound and outbound operations.

This can cause fundamental changes, especially in the way companies create and capture value [12]. Digital technology in various fields certainly really helps companies to achieve their goals. Along with development, the industrial revolution and government revolution became the basis for important changes in technology adoption [4].

Work productivity refers to how efficiently and effectively a person completes their tasks. This can be measured by comparing the output produced and the input issued. According to (Sutrisno, 2017), work productivity is a mental attitude. Work productivity means an increase in performance which usually includes: increasing the quality of workers, increasing the quantity (number) of workers, increasing the efficiency of existing resources in the organization, and increasing work effectiveness [20]. A mental attitude that always strives to improve the existing belief that today's work can be done better than yesterday and tomorrow must be better than today. Productivity is a comparison of the results that have been achieved (output) with the overall resources (input) used per unit of time, the definition of this work includes measurement methods, although theoretically someone can do this but it is difficult to apply in practice, especially because of this Commonly used input resources consist of many types and in different proportions [13]. Work productivity (Triton 2018) defines work productivity as a comparison of the results achieved by all means of power used or a comparison of production volume with the resources used [10].

Based on the results of observations in the district. North Luwu, that researchers found that human resource development and use of digital technology for micro, small and medium enterprises had not gone well. There are still business actors who are unable to provide innovative and creative ideas or things for the progress of the businesses they manage. Therefore, supporting and providing knowledge and information to small, micro and medium business actors in Masamba sub-district is part of the demands in the overall effort to increase human resource development for each individual.

Based on the results of research Naufal Mohammad, Wahono Budi, 2022 [8] entitled the influence of human resource development, work supervision and job training on the work productivity of Gojek drivers in Malang City, partially (t) in this study explains that the HR development variable has a significant effect on the productivity variable. Work. Based on research Malikhah et al., 2023 [5] with the title analysis of HR competency and the use of information technology on the work productivity of business actors in Pematang Serai village, Langkat Regency, the use of information technology has a positive and significant influence on work productivity, based on this, it means that it is higher the use of information technology can increase work productivity. Based on the test results, the magnitude of the adjusted R square is explained by the independent variables competence and use of information technology amounting to 22%, while the remaining 78% is the variable not researched. Based on the results of research Sri & Margareta, 2020 [18] with the research title the influence of entrepreneurship training, the ability to utilize technology and education on the productivity of women MSME entrepreneurs in Palembang. The ability to utilize technology has an influence on productivity shows the great need for business development which really requires facilitation from technology.

Based on several theoretical descriptions, a research conceptual framework was created through the hypothesis H1 It is suspected that there is an influence of X1 on Y, H2 It is

suspected that there is an influence of X1 on Y, H3 it is suspected that there is a joint influence between the variables.

This research aims to understand and analyze the extent to which human resource development and the use of digital technology can influence the work productivity of MSMEs in Masamba sub-district. The results of this research can provide insights and recommendations that can be used by MSME owners to maximize their potential and adapt to human resource development and digital technology developments, so as to increase their efficiency and productivity.

2. Methodology

According to Silaen (2018), research methods are planning all the processes needed to plan and carry out research. To ensure that research runs according to guidelines and does not deviate, research methods are one strategy that can be implemented [14]. The method in this research is to use a quantitative approach where the problem formulation asks about the relationship between two or more variables. Borg and Gall (1989) in (Priadana & Sunarsi, 2021) [11] stated that quantitative research consists of exploratory research and causal research. The quantitative approach aims to test theories, establish facts, show relationships between variables, provide statistical descriptions, and predict results. Based on the problem formulation and research objectives explained in the introduction, this type of research is grouped into quantitative research.

Population, Place and time

Population is a generalized area consisting of objects and subjects having certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiono, 2004) in Pentury, 2022 [9]. The population used in this research was 100 MSMEs in Masamba district in the culinary business, fashion business and beauty business. This research was conducted in the Masamba sub-district, North Luwu district. The research will be carried out during November 2023.

Sampel

The sample is a portion of the population taken using sampling techniques (Husain and Purnomo, 2001). In this research, the technique used is probability sampling, namely a sampling technique that provides equal opportunities for each member (Sugiyono, 2018) Sample used in this research were 53 business actors.

Data types and sources

According to Edi Riadi (2016:48) in [16] Data sources are anything that can provide information about the data in research, divided into two, namely primary data and secondary data. Secondary data, researchers collect directly through observation, interviews, discussions and socialization techniques that are targeted at the list of questions used by researchers. Basic data was obtained through a questionnaire (form) for research. Primary data, obtained from websites on the Internet and several journal references similar to the author's research.

Research Instrument

The research instrument was based on the results of the questionnaire using a Likert scale. Sugiyono (2007:87) in the research instrument has provided alternative answers for each

question item and respondents can choose one of the appropriate answers, each item has a value of 1 to 5 adjusted to the alternative answers chosen for each statement.

3. Result and Discussion

3.1. Result

Validity test

Ghozali (2009) in Irwansyah, 2022 [2] the validity test is used to test whether or not a questionnaire or questionnaire is valid. If the statement in the questionnaire can explain something to be measured, then it is said to be valid. A statement or question is said to be valid if the r-count value $>$ r-table. From the validity test table "R count $>$ R table" shows that all statement items for each variable are declared valid.

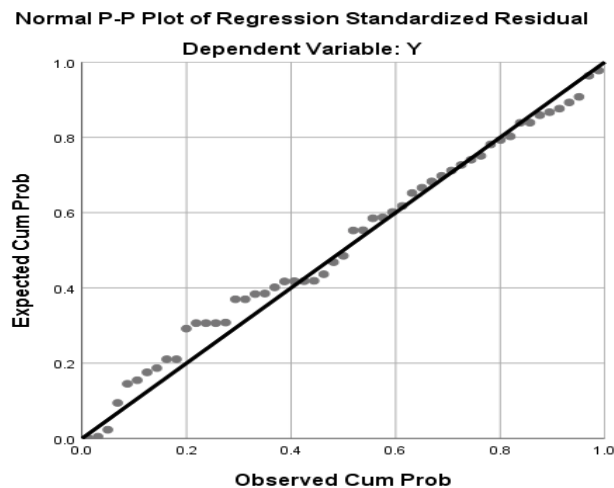
Test reliability

Variable	Alpha	Information
X1	0,616	Reliable
X2	0,706	Reliable
Y	0,662	Reliable

Source: SPSS 25

From the Reliability test table, it shows that Cronbach's Alpha is $>$ 0.60, so all statement items for each variable are declared reliable.

Test the normality of the p-pots graph method



From the graph above, it can be said that the data is normally distributed when the details follow a diagonal line (normal P-plot).

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		53
Normal Parameters ^{a,b}	Mean	.000000
	Std. Deviation	1.91944663

Most Extreme Differences	Absolute	.099
	Positive	.050
	Negative	-.099
Test Statistic		.099
Asymp. Sig. (2-tailed)		.200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

The basis for decision making, if the significant value (sign) is > 0.05 then it can be interpreted as normal distributed research data. Based on the Kolmogrov Smirnov normality test, a significant value of 0.20 is greater than 0.05, so it can be concluded that the data is normally distributed.

Multicollinearity test

Model	Coefficients ^a				Collinearity Statistics		
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
	B	Std. Error	Beta				
(Constant)	1054.6	2860	.687	.001			
X_1	.415	.127	.489	.254	.002	.602	.661
X_2	.083	.111	.113	.751	.456	.602	.661

a. Dependent Variable: Y

Dasar Basic decision making in multicollinearity tests is if the VIF value < 10 , it means there is no multicollinearity. If the VIF value is > 10 then there is multicollinearity. Based on the table it is known that.

Variable	Tolerance	VIF	Criteria
X1	0,602	1,661	Not occur multicollinearity
X2	0,602	1,661	Not occur multicollinearity

Source: SPSS 25

The conclusion from the results of the table above is that there is no multicollinearity in the independent variables in this research model.

Heteroscedacity test

To determine heteroscedasticity, you can use the Glejser test. The basis for decision making for the Glejser test is that if the significance value is > 0.05 then there is no heteroscedasticity in the data, conversely if the significance value is < 0.05 then there is heteroscedasticity in the data.

Glejser test Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.557	1.812		.307	.760
X_1	.097	.081	.214	1.197	.237
X2	-.081	.070	-.208	-1.161	.251

a. Dependent Variable: ABSRESIDUAL

The table results show that heteroscedasticity does not occur in the regression equation model.

Multiple linear regression

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	10.546	2.860		3.687	.001		
X_1	.415	.127	.489	3.254	.002	.602	1.661
X2	.083	.111	.113	.751	.456	.602	1.661

a. Dependent Variable: Y

Variable	T Count	T Table	Criteria
X1	3,254	2,008	Influential
X2	0,751	2,008	No effect

Source: SPSS 25

Based on the comparison table of T count and T table above, it shows that t count > than t table (influence). Based on the results of the regression equation $Y = 10.526 + 0.273$ The coefficient of determination test (r^2) shows that the adjusted R square value is 0.294, which means that the influence of the independent variables is: 0.294.

3.2. Discussion

In this research, the results of hypothesis testing show that human resource 10 development has a significant influence on work productivity. This can be seen from the calculated t value > t table ($3.254 > 2.008$), so that the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. On the other hand, the use of digital technology does not show a significant influence on work productivity, because the table value > t calculated ($2.008 > 0.751$), so H_a is rejected and H_0 is accepted. However, if viewed simultaneously, human resource development and the use of digital technology, both individually and together, have a role in influencing work productivity.

Investments in human resource development, such as training and skills development, can significantly increase work productivity. However, even though digital technology has become an important part of various aspects, the results of this research show that the use of digital technology does not have a significant effect on work productivity. This shows that although technology can help in some aspects of work, it is not enough to increase work productivity. Even though the use of digital technology does not have a significant influence on work productivity, when combined with human resource development, both can play a role in increasing work productivity. This shows that integrity between human resource development and digital technology can be an effective strategy for increasing work productivity.

The results of research conducted by Mohammad Nasih Naufal [8] through calculations obtained for the HR development variable which was tested partially (t) explain that HR development has a significant effect on the work productivity variable. In line with research conducted by Muhammad Ramdhan, the ability to partially utilize technology has a positive and significant effect on the productivity of MSMEs in the Situ Panjalu Ciamis area.

4. Conclusion

Based on the results of the data analysis that has been carried out, several findings were obtained to provide a clearer and more comprehensive picture of how human resource development and the use of digital technology interact and contribute to the work productivity of MSMEs.

Human resource development has a positive and significant influence on the work productivity of MSMEs in Masamba sub-district. Meanwhile, the use of digital technology does not show a significant influence on the work productivity of MSMEs in Masamba sub-district. However, if viewed simultaneously, both human resource development and the use of digital technology have a role in influencing work productivity, both individually and collectively.

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6. Reference

- [1]. Armiani, A., Basuki, B., & Suwarno, N. (2021). Teknologi Digital Memediasi Dampak Strategi Bisnis Terhadap Kinerja Umkm Di Nusa Tenggara Barat. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, 5(3), 300–320. <https://doi.org/10.24034/J25485024.Y2021.V5.I3.4892>
- [2]. Irwansyah, F. (2022). Pengaruh Disiplin Kerja, Reward Dan Punishment Terhadap Kinerja Karyawan Pada Pt. Rajawali Citramass Mojokerto (Vol. 12, Issue 2). <http://jurnalfe.ustjogja.ac.id>
- [3]. KUSDARIANTO, I., & Samsinar, S. (2023). Pengaruh Pemanfaatan Teknologi Digital dan Gaya Kepemimpinan Terhadap Kinerja Aparatur Desa, Kecamatan Malangke. *SEIKO: Journal of ...*, 5(2), 62–67. <https://doi.org/10.37531/sejaman.v6i1.3765>
- [4]. KUSDARIANTO indra, S. A. (2017). Pengaruh Human Resources Dalam Pada Stie Muhammadiyah Palopo. *Jurnal Riset Edisi Xxiii*, 3(012), 15–28. https://scholar.google.com/citations?view_op=view_citation&hl=en&user=C6dl9aea-aaaj&Cstart=20&pagesize=80&Citation_For_View=C6dl9aeaaaaj:Qiv2me_5wuyc
- [5]. Malikhah, I., Nst, A. P., & Kaban, G. P. (2023). Analisis Kompetensi Sdm Dan Pemanfaatan Teknologi Informasi Terhadap Produktivitas Kerja Pelaku Usaha Di Desa Pematang Serai Kabupaten Langkat. *Maneggio: Jurnal Ilmiah Magister Manajemen*, 6(1), 34–43. <https://doi.org/10.30596/maneggio.v6i1.14586>
- [6]. Mochammad, A. (2021). Hubungan Antara Modal Psikologis dengan Produktivitas Kerja pada Pengusaha UMKM Kerajinan Kulit dan Koper di Kecamatan Tanggulangin Sidoarjo. *Character: Jurnal Penelitian Psikologi*, 8(1), 70–83. <https://ejournal.unesa.ac.id/index.php/character/article/view/38495>
- [7]. Monica, F., & Japarianto, E. (2022). Analisa Pengaruh Perceived Ease of Use Dan Melalui Perceived Enjoyment Terhadap Behavior Intention Pada Digital Payment. *Jurnal Manajemen Pemasaran*, 16(1), 9–15. <https://doi.org/10.9744/pemasaran.16.1.9-15>
- [8]. Naufal Mohammad, wahono budi, athia ita. (2022). Pengaruh Pengembangan Sdm, Pengawasan Kerja Dan Pelatihan Kerja Terhadap Produktivitas Kerja Driver Gojek Kota Malang. *Riset Manajemen Prodi Manajemen*, 11(Agustus). <https://jim.unisma.ac.id/index.php/jrm/article/view/17563/13277>
- [9]. Pentury, G. M. (2022). Pengaruh Disiplin Kerja, Kepuasan Kerja, Dan Pengalaman Kerja Terhadap Prestasi Kerja Karyawan Pada Pt. Pertamina (Persero) Terminal Bbm Kabupaten Kepulauan Aru. *Manis: Jurnal Manajemen Dan Bisnis*, 6(1), 33–46. <https://doi.org/10.30598/manis.6.1.33-46>

- [10]. Prawoto, A., & Hasyim, W. (2022). Pengaruh Motivasi Kerja, Disiplin Kerja Dan Lingkungan Kerja Terhadap Produktifitas Kerja Pada Pt Manufakturing Cikarang. *Ikraith-Ekonomika*, 5(3), 276–286. <https://doi.org/10.37817/ikraith-ekonomika.v5i3.2485>
- [11]. Priadana, S., & Sunarsi, D. (2021). *Metode Penelitian Kuantitatif* (Della (ed.)). Pascal Books. <https://lemlit.unpas.ac.id/wp-content/uploads/2022/02/Metode-Penelitian-Kuantitatif.pdf>
- [12]. Radiansyah, E. (2022). Peran Digitalisasi Terhadap Kewirausahaan Digital: Tinjauan Literatur Dan Arah Penelitian Masa Depan. 9(2), 828–837. <https://doi.org/10.35794/Jmbi.V9i2.41351>
- [13]. Salju, & Muhammad, L. (2019). Pengaruh Motivasi Dan Pengalaman Kerja Terhadap Produktivitas Kerja Karyawan Pt. Comindo Mitra Sulawesi Cabang Palopo. *Jurnal Manajemen STIE Muhammadiyah Palopo*, 4(2), 1–7. <https://doi.org/10.35906/jm001.v4i2.280>
- [14]. Salmaa. (2023). *Desain Penelitian: Pengertian, Jenis, dan Contoh*. Deepublish. <https://penerbitdeepublish.com/desain-penelitian/>
- [15]. Sam, H., Suardi, A., & Adil, A. (2023). Analisis Dampak Komunikasi, Lingkungan Kerja, Dan Motivasi Kerja Terhadap Kinerja Pegawai. *Jesya*, 6(2), 1327–1336. <https://doi.org/10.36778/jesya.v6i2.1061>
- [16]. Sari, M. S., & Zefri, M. (2019). Pengaruh Akuntabilitas, Pengetahuan, dan Pengalaman Pegawai Negeri Sipil Beserta Kelompok Masyarakat (Pokmas) Terhadap Kualitas Pengelola Dana Kelurahan Di Lingkungan Kecamatan Langkapura. *Jurnal Ekonomi*, 21(3), 311.
- [17]. Satrio, W. abiyu, & Kusmiyanti. (2020). Pengaruh Pengembangan Sumber Daya Manusia Terhadap Kinerja Pegawai. *EProceedings ...*, 7(2), 4066–4073. <https://openlibrarypublications.telkomuniversity.ac.id/index.php/management/article/view/13521>
- [18]. Sri, D., & Margareta, C. (2020). Pengaruh Pelatihan Kewirausahaan, Kemampuan Memanfaatkan Teknologi Dan Pendidikan Terhadap Produktifitas Wanita Pengusaha UMKM Di Palembang. *Ecoducation : Economic and Education Journal*, 2(2), 142–158.
- [19]. Suhardi, A., Ismilasari, I., & Jasman, J. (2021). Analisis Pengaruh Loyalitas dan Komitmen Organisasi terhadap Kinerja Karyawan. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 4(2), 1117–1124. <https://doi.org/10.36778/jesya.v4i2.421>
- [20]. Wirtadipura, D. (2022). Pengaruh Perencanaan dan Koordinasi Terhadap Produktivitas Kerja Pegawai Pada Dinas Pekerjaan Umum dan Penataan Ruang Kabupaten Serang. 2, 323–332.