
Sustainable Performance Improvement Model for MSME Human Resources Through Implementation Management Knowledge and Competence Entrepreneurship in Mediation Ability Digital literacy

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DOI: <https://doi.org/10.56457/jimk.v13i1.794>

Received: June 9, 2024

Accepted: June 23, 2024

Published: June 30, 2025

ABSTRACT

Micro business small and medium own great contribution to growth economy especially in developing countries such as Indonesia for example. Empowering MSMEs can become breakthrough in anticipate recession economy Where the number of MSMEs is increasing rise and have great contribution to gross domestic product (GDP), in 2023 MSMEs will reach 66 million units, an increase of 1.52% from year previously Where contribution its contribution to GDP reached 61% equivalent with Rp 9,580 trillion, then MSMEs can also absorb around 117 million power Work or 97% of power Indonesian work. However based on an international survey more 80 % of MSMEs in Asia closed in 2018 third they stand with various reason like lack of digitalization, competition company big , less market wide until with problem legality that is not complete . Then in support improvement quality of UMKM ministry Cooperatives and SMEs focus on performance business with one of the program that is digital transformation of MSMEs. Research This apply approach quantitative and use technique taking non-probability convenience sample (262 respondents). Partial Least Square Structural Equation Modelling (PLS-SEM) using SmartPLS4 was used. For analysis track and testing hypothesis. The explanatory power of the model is measured with R- squared and categorized as moderate. R2 value for Digital literacy significant ($p < 0.001$) of 0.475 (moderate). This means that 47.5 % of the variation that occurs in the variable independent. The remainder, 52.5 %, is explained by other variables that are not explained in the model. The Q2 Statistic Value for performance sustainable is $0.248 > 0$. This means that the entire model of variable independent own validity or relevance adequate predictive in predict variation latent variables.

Keywords: management knowledge, skills entrepreneurship, digital literacy, performance sustainable

INTRODUCTION

Economy estimated will experience recession or slowdown globally. According to authority service finance (OJK) recession is condition Where economy a country is in progress in condition worsening which can seen from product domestic gross domestic product (GDP) is negative, increasing unemployment, and growth real

economy is also valuable negative two quarters in a way in succession. So from That if a country is experiencing decline activity economy Keep going continuously for two periods then the country it is said experience recession. Indonesia is a country that has amount resident big Where own potential source Power human (HR) and resources Power natural resources

(natural resources) are also large, so from That appropriate development strategy is needed so that reach welfare, Kansil in Rinaldi (2023). In supporting this strategy government emphasizes on empowering MSMEs by the goal is to remain experience growth economy as well as anticipate recession, where MSMEs are one of the most important pillars in Indonesian economy (M Junaidi, 2023).

Then based on report from Human Development Report, the previous HDI value occupy 110th place in terms of results value 0.718 decreased become ranked 116th with value of 0.705, based on the indexed countries. This is because of there is shock economy after the covid-19 pandemic (UNDP, 2022). Based on these data show that source Power human quality in Indonesia his Still in category Enough low.

Empowerment of MSMEs can become breakthrough in anticipate recession economy Where the number of MSMEs is increasing rise and have great contribution to gross domestic product (GDP), in 2023 MSMEs will reach 66 million units, an increase of 1.52% from year previously Where contribution its contribution to GDP reached 61% equivalent with Rp 9,580 trillion, then MSMEs can also absorb around 117 million power Work or 97% of power Indonesian work (M Junaidi, 2023).

Then in support improvement quality of UMKM ministry Cooperatives and SMEs focus on performance business with one of the program that is digital transformation of MSMEs, where ministry Cooperatives and SMEs target 30 million business micro, small and medium enterprises go digital by 2024 (Kontan.co.id 27 May 2024). However

condition moment This of the 66 million MSMEs recorded only 27 million MSMEs have start transforming to digitalization business like use of digital platforms such as e-commerce (dpr.go.id December 7, 2023). This is one of the constraint the biggest for SMEs to reach a wider market wide so that reach optimal performance.

Based on brief info from the Indonesian House of Representatives in the field of economy, finance, industry and development the performance of MSMEs is less than optimal because of a number of the first thing limited skills and abilities where are UMKM actors matter This concerning the aspect operational business like management finance, procurement goods, and management an effort of course important For known by MSME actors (Suhayati, 2023). Second, difficulties in business capital Where according to Bank Indonesia notes that 69% of MSMEs still depend on own capital or family as well as Not yet own access banking (cnbcindonesia.com). The three MSMEs have limitations in standardization products, based on data from the National Standardization Agency (BSN), MSME actors who have product with Indonesian National Standard (SNI) is lacking from 10% compared to the number of MSMEs is 66 million. This is due to a number of factors, starting from awareness MSME actors who need improved until constraint cost for fulfil SNI standards (bisnis.com, October 20, 2022). With the number of MSMEs continues to grow increase but phenomenon in the field competent human resource performance as well as quality good effort, see sufficient contribution of MSMEs high in the economy as well as problems faced in the field so researcher

look at that need existence study more carry on .

Good performance related with perpetrator business in management its efforts, the performance of MSMEs is overall results work achieved and compared with results work, goal, target or specified criteria moreover formerly as well as has agreed together on a entity business with criteria assets and turnover that have been determined (Dinar Wahyudiati, 2017). In an effort improvement performance Apart from capital, you also need to develop source Power human beings who have there is (Sudiarta, Kirya, & Cipta, 2014). See problems and obstacles that have been exposed previously development that can done namely including management knowledge, competence entrepreneurship and ability innovation so that can support improvement performance sustainable.

Management knowledge that is ability For Work with understand and motivate others well in individual and group (Stephen P. Robbins & Timothy A. Judge 2015). Management knowledge is a strategy that is directed to owner organization about knowledge in management A organization so that expected can increase performance of MSMEs that have competence and empowerment competition. However, some study show that knowledge management is still very low among MSMEs, even though own positive and significant influence (Humaira & Sagoro, 2018).

Other related factors with performance of MSMEs, namely

competence entrepreneurship where is ability perpetrator business For carry out or do something work or based on task on skills and knowledge as well as supported by attitude work required by the job (Ishak Hasan in Rahmi, 2019). According to Armstrong (1994), performance somebody based on competencies that include understanding knowledge the knowledge, skills, expertise and behavior required for do work with Good in the context of this MSME directed at competence entrepreneurship. After see researches previously related with performance, management knowledge and skills entrepreneurship, encouraging researcher enter Digital literacy as mediator variable.

Based on difference results research that becomes inequality, thing This can become a research gap in research. Then see variables previously No influential significant in a way direct so researcher try enter variable ability innovation as variable mediation Where related ability innovation, research (Sari Yunita, et al, 2022; Sari Diana, et al, 2023; Taleb S, et al, 2023) states that ability innovation influential positive and significant to performance.

METHOD

Research Design

Study this apply approach quantitative. We aim For evaluate influence dimensions management knowledge, skills entrepreneurship to performance sustainable UMKM through digital literacy. The research model is shown in Figure 1.

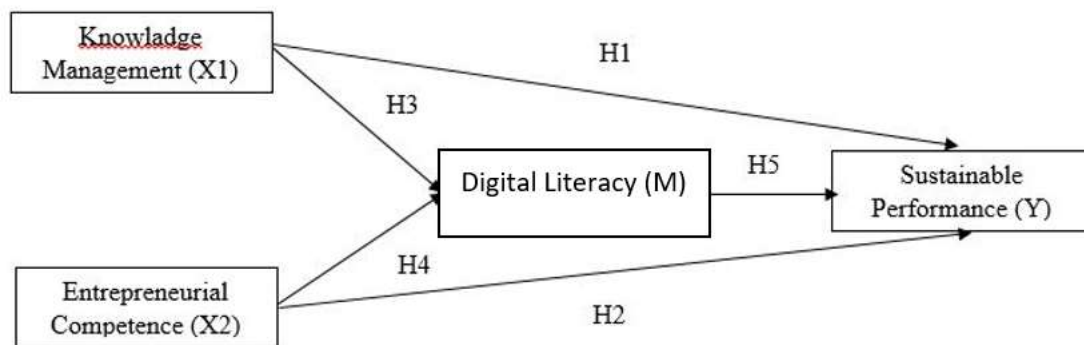


Figure 1. Proposed Research Model
Source: Developed by the author, 2025

Data Collection and Research Instruments

Study this use online questionnaire (Googleform for data collection. Retrieval technique sample practical non- probability used as method taking sample for reach easy research units accessed (Kumaret, 2018; Rahi, 2017). Questionnaire spread out through whatsapp and Instagram to MSME actors who previously has follow the Entreddev program Kemenkopukm RI 2024. Total number of respondents in study This is 262. Size sample follow heuristic: size minimum sample of PLS-SEM must be ten times more big from indicators (Hair, 2011). Total indicators applied in study This is 17, so there are 262 respondents has fulfil heuristics.

Each questionnaire item evaluated on a five- point Likert scale, where 1 indicates "very much not agree" and 5 "strongly agree." The Likert scale is proper interval scale For measure opinions and attitudes (Kumaret, 2018)

Measurement

Each questionnaire item evaluated on a five- point Likert scale, where 1 indicates "very much not"agree" and 5 "strongly agree". The Likert scale is the right scale for measure opinions and attitudes (Kumaret, 2018). This study covers 25 indicators referred

to in the study previously. Four items for measurement dimensions management knowledge (consists of from X1.1, X1.2, X1.6 and X1.7) sourced from G. Nyuga and C. Tanova (2024), then three items for measurement dimensions competence entrepreneurship consists of from (X2.3, X2.4, and X2.6) sourced from Roblesa, L., and MZ Rodriguez (2015), further 5 items for measurement dimensions digital literacy (consists of from M.1, M.2, M.3, M.4 and M.5) sourced from Prayoga, A., & Muryanti, E. (2021) and 5 items for measurement performance sustainable (consists of from Y.1, Y.2, Y.3, Y.4 and Y.5) sourced from Meutiaa, and T. Ismail (2012).

Analysis Method

Partial Least Square- Structural Equation Modeling (PLS-SEM) using SmartPLS4 is used For analysis track and testing hypothesis . Research This in a way special investigate influence every dimensions formation AR features on every dimensions loyalty. Therefore That is, we use PLS-SEM because PLS-Semi is recommended. for models with Lots model relations, constructions, or indicators (Hair et al., 2019). Evaluation the includes the outer model (measurement) and the inner model (structural model). Evaluation of the outer model covers validity convergent, validity discriminant, and

reliability. Validity convergent will analyzed through loading indicators and values extraction average variance (AVE). According to rule hum for measurement model selective said , loading indicator must more tall of 0.7 and AVE must be above 0.5 for conclude that latent variables explain more from half variance indicators (Haieretal., 2011). Validity discriminant analyzed based on Fornell-Larcker criteria: root AVE squared more tall from correlation highest from construct others (Haieretal., 2011). Reliability measured with reliability composite (CR) which must be more tall from 0.7 to show study This can produce consistent results when

repeated (Haieretal., 2011). Structural model will rated through R 2 value, Q2 value, and significance statistics as well as relevance coefficient track.

RESULT and DICUSSION

Profile Respondent

Respondents in the study This consists of of 60.7% women 39.3 % men. As attached in table 3 locations most namely Bekasi district. Bogor district and Bandung district. From the side ages also vary start from <20 years up to >40 years, consisting of from three sector coverage, namely agriculture, technology and HBW. With the long running business and turnover obtained diverse as attached in the table.

Table 1. Respondent Data

Indicator	Criteria	(%)
Gender	Man	39.9
	Woman	60.7
Age	<20 years	0.8
	20-25 years	11.8
	26-30 years	13.7
	31-35 years	20.2
	36-40	13
Long walk	1-3 years	47.3
	4-6 years	34.4
	7-9 years	8.8
	>10 years	9.5
Business sector	Agriculture	46.91
	Technology	12.6
	Health, beauty and wellness	40.5
Turnover	<100 million	56.92
	100-300 million	9.4
	300 – 2 billion	11.8
	>2 billion	1.9

ExternalModelEvaluation / MeasurementEvaluation

PLS-SEM evaluation in general done in two steps separate which includes evaluation outerloading (measurement) and assessment of structural models (Haieretal ., 2011). The main objective from evaluation of

measurement models is For to obtain valid and reliable constructs. Validity obtained through measurement validity convergent (outer Loading and AVE) shown in Table 3 and validity discriminant (Forner-Larcker) shown in Table 4. According to rules in mother finger for measurement model

reflective, outerloading must be > 0.7 and AVE must be > 0.5 (Hair et al., 2011). Indicator outerloading off all > 0.7 and AVE value show all has fulfilled condition > 0.5 discriminant Validity shown in Table 4 which shows that The Fornell-Larcker criteria have been fulfilled: root square from AVE more significant or more tall than correlation highest from construction others (Hair et al., 2011). Therefore that, it is concluded that all indicators used in this

model is valid. Reliability test done with use mark reliability composite (CR). Research results show that all CR value is above > 0.7 . With thus reliability internal consistency has been fulfilled. External model confirm that indicator in study This is valid and reliable, so step evaluation furthermore namely the structural model can conducted. The research results also confirmed that instruments used can produce consistent results If repeated.

Table 2. Outer Loading of the Measurements: Outer Loading, AVE, Composite Reliability (CR)

Dimension and Indicator	Code	Outer Loading	AVE	CR
Digital Literacy			0.553	0.858
I understand method use application or device supporting software operational business	M.1	0.812		
I can manage transaction digitally (for example , via e-wallet, e-commerce, or application cashier)	M.2	0.865		
I use digital media (eg , email, apps) message instant , social media) in activity business daily	M.3	0.565		
using e-commerce platforms (such as Shopee, Tokopedia, or others) for market product	M.4	0.802		
the use of digital media helps you solve work more fast compared to method conventional	M.5	0.629		
Management knowledge			0.547	0.829
I got it knowledge through Work team	X1.1	0.718		
I got it knowledge from report consultation	X1.2	0.703		
We have system for keep information	X1.6	0.794		
Staff/ employees can access information by online	X1.7	0.743		
Skills entrepreneurship			0.676	0.862
I often involving team or colleague business in taking decision	X2.3	0.837		
We do survey or evaluation to need customer for innovation	X2.4	0.855		
I give award or confession to team on achievement they	X2.6	0.772		
Sustainable performance			0.502	0.832
How much often profit your business is experiencing improvement in 6 months final	Y.1	0.727		
How much how often do you evaluate your business strategy For increase profit	Y.2	0.792		

How much often you do promotion for increase sale	Y.3	0.699
Digital media enhances sale business	Y.4	0.577
How much often you use technology or digital tools for speed up the work process	Y.5	0.730

Table 3. Discriminant Validity (Fornell-Larcker)

	Digital Literacy (M)	Entrepreneurial competence (X2)	Knowledge Management (X1)	Sustainability Performance (Y)
Digital Literacy (M)	0.744			
Entrepreneurial competence (X2)	0.524	0.823		
Knowledge Management (X1)	0.667	0.556	0.740	
Sustainability Performance (Y)	0.671	0.655	0.696	0.709

Structural Model Evaluation

Structural model assessment is step furthermore in evaluate PLS-SEM results after to obtain results satisfactory assessment (Hair et al., 2019). Criteria evaluation standard consists of from R-square/R² (coefficient determination), Q², and significance statistics as well as relevance coefficient path (Hair et al., 2019). R² value for Digital literacy significant ($p < 0.001$) of 0.475 (moderate). This means that 47.5 % of the variation that occurs in the variable independent. The remainder, 52.5 %, is explained by other variables that are not explained in the model. The Q² Statistic Value for performance sustainable is

0.248 > 0. This means that the entire model of variable independent own validity or relevance adequate predictive in predict variation latent variables. Furthermore Relevance predictive (Q²) is symbolized with Stone-Geisser values obtained from blind-folding procedure (Hair et al., 2011). Can interpreted with use formula: Q² is 0 = small; 0.25 = medium; 0.5 = accuracy predictive large (Hair et al., 2019). The Q² value in study This is 0.258 for digital literacy and 0.306 for performance sustainable. Both results show accuracy moderate predictive.

Table 4. Testing Hypothesis

	Path Coefficient	T Statistics	P Value	Conclusion
Digital Literacy (M) -> Sustainability Performance (Y)	0.112	1,969	0.049	Accepted
Entrepreneurial competence (X2) -> Digital Literacy (M)	0.066	1,492	0.136	Accepted
Entrepreneurial competence (X2) -> Sustainability Performance (Y)	0.185	2,879	0.004	Accepted

Knowledge Management (X1) -> Digital Literacy (M)	0.391	3,637	0.000	Accepted
Knowledge Management (X1) -> Sustainability Performance (Y)	0.143	2,577	0.010	Accepted

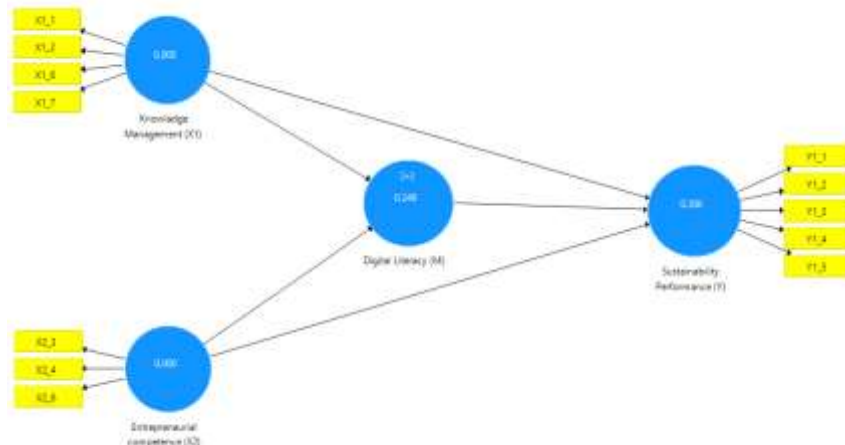


Figure 2. Research Model
Source: Developed by the author, 2025

Testing Hypothesis

Hypothesis testing done with evaluate significance coefficient track through t-statistics and p- values (Haieretal., 2011). The results shown in the Table. Significance statistics coefficient track tested with a bootstrapping process involving 5000 iterations. Hypothesis accepted when mark t statistic > 1.96 (Haieretal., 2011) and p- value is greater low from level significance (0.05). The results of eight hypothesis being tested show that the t-statistic > 1.96 and the p- value is greater low from 0.05. Therefore that is all hypothesis accepted. Regarding relevance, coefficient track found in range -1 to +1 with mark approaching -1 which indicates connection negative and value approaching +1 which indicates connection positive (Haieretal., 2022). Based on results, coefficients track in study This rated approaching +1, which indicates connection positive.

Discussion

Study This explore things that influence sustainability of UMKM. Good performance related with

perpetrator business in management its efforts, the performance of MSMEs is overall results work achieved and compared with results work, goal, target or specified criteria moreover formerly as well as has agreed together on a entity business with criteria assets and turnover that have been determined (Dinar Wahyudiati, 2017). In an effort improvement performance Apart from capital, you also need to develop source Power human beings who have there is (Sudiarta, Kirya, & Cipta, 2014). The dimensions studied in this study This among them management knowledge, skills entrepreneurship and digital literacy where based on hypothesis test results third dimensions the own influence positive to performance sustainable UMKM.

Through management knowledge and skills good and adequate entrepreneurship expected become support in operate business, in particular oriented towards sustainability in the future come. In addition, also through digital literacy is

expected will increase influence positive each dimensions to performance sustainable and proven in research This influential significant.

CONCLUSION

This study give a number of contribution important for theory and practice in context sustainability business namely in research This leads to MSMEs which in general will influence on the country's economy. Research This investigate these individual dimensions, which offer better understanding nuanced about How every element influence indicator main like management, capability and performance sustainable. In a practical, findings This offer outlook valuable for MSME actors who are trying increase retention and increase scale business, good from insight, management and turnover.

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