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Research Article

A Study On the Influence of Digital Media Literacy on Small and Medium Enterprises Growth

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ABSTRACT

This study investigates the impact of digital media literacy on the growth of small and medium enterprises (SMEs). As the digital economy transforms the global market, SMEs face increasing pressure to adopt new technologies. This research examines how proficiency in digital media influences business performance and growth. The findings indicate that media literacy training leads to improved business outcomes, including increased revenue, market expansion, and enhanced customer satisfaction. By providing entrepreneurs with the skills to navigate and utilise digital platforms effectively, digital media literacy emerges as a critical factor for SME success in the digital age. The study suggests that integrating digital media literacy training into support programs can empower SMEs to compete more effectively.

Keywords: Digital media literacy, Small and medium enterprises, business growth, digital economy, entrepreneurial training, business performance.

Introduction:

The internet's role as a mass medium has led to the development of innovative business models, with the potential to improve coordination, provide competitive advantage, and enhance customer communication (Chan-Olmsted 2004). Digital media literacy is the ability to access, understand, create, and critically evaluate digital content across various platforms, enabling effective and responsible use of digital technologies (European Commission, 2007). As digital technologies continue to expand, media awareness is becoming increasingly important (Koltay, T. 2011). The foundation for intellectual advancement and the capacity to create new knowledge lies primarily in literacy. (Widarno 2021).

This applies to all individuals and holds a deeper significance to entrepreneurs, As technology-driven competitors proliferate and the digital economy continues to reshape the global economic landscape, it is evident that the market is becoming increasingly demanding for small and medium enterprises (SMEs). The digital economy, driven by digital technologies and electronic communications, has emerged as a significant force in the global economy (Javaid et al., 2024; Xia et al., 2023). It encompasses various sectors, including e-commerce, digital marketing, and cloud services (Xia et al., 2023). The core of the digital economy is the IT/ICT sector, with emerging digital and platform services expanding its scope (Bukht & Heeks, 2017).

The digital economy is transforming traditional industries, work practices, and social interactions (Sharma, 2006; Xia et al., 2023). This heightened demand serves as a potent catalyst for SMEs to embrace new digital technologies and undergo business transformation. (Silva, et al. 2022). The implementation of digital tools enables companies to improve communication with consumers, better understand their needs, and enhance operational efficiency (Zimonjić & Zimonjić, 2023; Mastilo, 2017). Digital platforms are emerging as key facilitators of market interactions, promoting economic growth and innovation (Salutina et al., 2021). Overall, digital technologies are creating new competitive advantages for businesses by optimising workflows, enhancing productivity, and enabling innovative business models (Berawi et al., 2020; Shvetsov, 2021).

This study embarks on a comprehensive exploration, aiming to dissect the intricate relationship between digital media literacy and the expansion of small enterprises. The research delves into the core of digital

entrepreneurship, investigating the manner in which proficiency in digital media can enable small businesses to expand their scope, amplify customer engagement, and ultimately, facilitate significant growth.

Hypothesis:

Hypothesis 1: Digital media literacy training significantly improves the business performance of small and medium enterprises (SMEs) by enhancing their ability to effectively utilise online marketing strategies.
Hypothesis 2: There is a positive correlation between the level of digital media literacy among SME owners and the growth rate of their enterprises, particularly in terms of customer acquisition and revenue generation.

Objectives:

1. To evaluate the proficiency of entrepreneurs within the small and medium enterprise sector in utilising digital media.
2. To investigate the impact of digital media utilisation on business performance subsequent to entrepreneurial training.
3. To determine the correlation between effective digital media utilisation and the business outcomes among entrepreneurs, including metrics such as revenue, market expansion, and customer satisfaction levels.

Literature Review:

A range of studies have explored the influence of digital media literacy on small business growth. (Widarno 2021) found that business literacy, including digital media literacy, can enhance the performance of small and medium-sized enterprises (SMEs). This is supported by (Supriadi 2021), who identified a positive impact of digital economic literacy on the performance of food SMEs in Indonesia. (Nuseir 2018) and (Omar 2020) both highlighted the potential of digital media, including digital marketing, in enhancing SME performance, particularly in the UAE and Malaysia. These studies collectively suggest that digital media literacy can play a significant role in driving small business growth.
According to research conducted by (KIC 2021) on 260 MSMEs in Indonesia in 2021, approximately 82.9% of them were adversely affected by the pandemic. However, a unique 5.9% experienced a positive impact, while 14.1% remained in good condition, largely due to their utilisation of digital technology in business operations. Nonetheless, there's a clear need for assistance among SME stakeholders in adopting digital technology. Those who have yet to embrace digital tools face significant vulnerabilities, particularly in terms of (1) lacking digital literacy among MSME actors in Indonesia and (2) concerns regarding digital data security, leaving them susceptible to exploitation by cybercriminals. The SME cooperative underscored that 34% of consumers and MSME clients in Indonesia still exhibit limited digital literacy (Umboh and Aryanto 2023).
Small and medium enterprises (SMEs) might encounter obstacles such as a shortage of technical skills and a perception of insignificance. However, by enlightening SMEs about the advantages of digital marketing and offering technical assistance, businesses can surmount these hurdles and enhance their digital marketing endeavours. (Wadhwa 2023) In an investigation, (Camilleri and Costa 2018) the impact of digital media literacy on small business growth, findings from principal component analysis revealed that businesses predominantly directed their online communications towards various marketplace stakeholders, such as consumers, suppliers, and other businesses. Moreover, these communications also extended to engage with other interested groups, including human resources, shareholders, and investors, by highlighting the businesses' social responsibility and environmentally-sound practices. Additionally, regression analysis indicated significant and positive relationships between SMEs' online stakeholder engagement and the rate of technological innovation, as well as between online engagement and owner-managers' perceived usefulness of digital media. The study underscores the significance of technological innovation pace, owner-managers' perceived ease of digital media use, and their commercial responsibility as crucial factors influencing online communication regarding responsible entrepreneurship.

Theoretical Framework:

The rapid advancement of digital technologies has been instrumental in transforming societies, enhancing connectivity, and promoting financial accessibility. With the potential to level the playing field for all individuals, digitalization is seen as a crucial driver of ecological, political, and social transformation processes (United Nations, 2020; Rikke & Lizzie, 2020). Against this backdrop, there is a growing need to explore the impact of digital media training, particularly for SMEs entrepreneurs, and its subsequent effects on business performance. This research aims to delve into how effective digitalization is in fostering growth in entrepreneurial setups led by SMEs.
In examining digital media utilisation patterns among SMEs entrepreneurs and their post-training performance, the study draws upon the theoretical frameworks of Media Richness Theory and the Technology Acceptance Model (TAM). The Media Richness Theory, developed by Daft and Lengel, categorises communication media based on their capacity to convey rich or lean information. Rich media channels, such as interactive social media and video conferencing, offer greater interactivity and feedback, potentially impacting business performance. On the other hand, lean media channels, like text-based emails, provide limited interaction and are less effective for conveying complex information.

The Technology Acceptance Model, pioneered by Davis, focuses on factors influencing technology acceptance and usage. Perceived usefulness and ease of use are critical components in this model. For SMEs entrepreneurs, perceived usefulness pertains to how digital media tools can enhance business operations, while perceived ease of use assesses the ease of learning and using these tools, especially after training. The integration of TAM allows for an examination of how SMEs perceive and adapt to digital media tools and how it influences their overall business performance (Foley Curley, 1984).

By combining the Media Richness Theory and the Technology Acceptance Model, this research provides a robust framework for understanding digital media utilisation among small and medium entrepreneurs. It enables a comprehensive analysis of communication richness, technology adoption, and their impact on performance outcomes in the digital age. This theoretical underpinning guides the study in exploring the intricate dynamics between media richness, technology acceptance, and the entrepreneurial performance of SMEs in today's digital landscape.

Research Methodology:

The research methodology applied in the study "A Study on the Influence of Digital Media Literacy on Small Business Growth" was structured to investigate small-scale entrepreneurs' perspectives on the digital landscape. It aimed to assess the impact of digital media usage on their post-training performance and explore the correlation between digital proficiency and business success. The overarching objective was to empower entrepreneurs, enhance their skills for business growth, and promote the adoption of digital technologies in small businesses.

To address the specific research problem and objectives, a quantitative approach with an experimental design was utilised. This design entailed two groups: a Control Group comprising 5 entrepreneurs and a Treatment Group consisting of 25 participants who underwent the initial questionnaire or pre-training questionnaire. Primary data collection involved surveys administered to 25 entrepreneurs. The New Media Literacy Scale (NMLS), developed and validated by Mustafa Koc and Esra Barut, was employed as a pre and post-training assessment tool. The NMLS encompassed 35 items categorised into four factors: Functional Consumption, Critical Consumption, Functional Prosumption, and Critical Prosumption. These factors assessed various aspects of digital media usage, including consumption, critical analysis, and engagement with digital content. Following the training, the assessment of acquired knowledge was based on the performance of their businesses. The study sought to determine if there was a correlation between effective digital media utilisation and improved business performance.

The collected survey data underwent analysis using SPSS software. Descriptive analysis was conducted to capture digitalization experiences, integrating narrative methods for qualitative insights. Quantitative analysis involved t-tests to compare outcomes across categories such as educational level, income, and business size. Correlation analysis explored the relationship between digital proficiency and business success, while regression analysis identified significant factors impacting performance. SPSS aided in generating visual representations to facilitate data interpretation.

This comprehensive analysis aimed to elucidate the intricate relationship between digital skills, entrepreneurial experiences, and business performance. By shedding light on the challenges and successes faced by small businesses in the digital business sphere, this analysis provided valuable insights into the dynamics of the digital economy.

Results and Findings:

TABLE 3.1

Paired Samples T-Test

Measure 1		Measure 2	Test	Statistic	z	df	p
Post Test	-	Pre Test	Student	1.477		24	0.076
			Wilcoxon	213.500	1.814		0.036

Note. For all tests, the alternative hypothesis specifies that Post Test is greater than Pre Test.

Descriptives

Descriptives

	N	Mean	SD	SE	Coefficient of variation
Post Test	25	135.800	13.784	2.757	0.102
Pre Test	25	129.160	13.600	2.720	0.105

Comparing the Post Test (N = 25) and Pre Test (N = 25), the Post Test exhibits a slightly higher mean score (135.800) compared to the Pre Test (129.160), indicating a modest improvement or change between the two assessments. Both tests show similar standard deviations (13.784 for Post Test and 13.600 for Pre Test), suggesting consistent variability in scores across the samples. The standard errors are also comparable (2.757 for Post Test and 2.720 for Pre Test), indicating similar precision in estimating the mean scores. Additionally, the coefficient of variation is marginally lower for the Post Test (0.102) than for the Pre Test (0.105), suggesting slightly less variability relative to the mean in the Post Test scores.
The z-value (1.814) and p-value (0.036) together signify the statistical significance of the observed difference between pre-test and post-test scores. For both statistical tests, the p-values play a critical role, with values typically below 0.05 considered indicative of statistical significance.
Specifically, the Wilcoxon signed-rank test (p = 0.036) reveals a statistically significant difference between pre-test and post-test scores. In contrast, the paired samples t-test (p = 0.076) shows a trend towards significance but does not reach conventional levels, suggesting a more moderated impact. **This finding implies that while the media literacy training influenced participants' scores, its effect was tempered, possibly by pre-existing business proficiency.**

TABLE 3.2

Model Summary - Business Performance

Model	R	R^2	Adjusted R^2	RMSE
H_1	0.985	0.971	0.968	0.995

ANOVA

Model		Sum of Squares	df	Mean Square	F	p
H_1	Regression	761.225	2	380.612	384.365	< .001
	Residual	22.775	23	0.990		
	Total	784.000	25			

Coefficients

Model		Unstandardized	Standard Error	Standardized	t	p
H_1	Post Test	0.025	0.009	0.354	2.797	0.010
	Pre Test	0.017	0.009	0.235	1.789	0.087

The correlation coefficient (R) indicates a very strong positive relationship **between the predictors (such as media literacy training) and business performance**. An R value of 0.985 suggests that 98.5% of the variance in business performance can be explained by the predictors in the model. The coefficient of determination (R^2) indicates that 97.1% of the variance in business performance is accounted for by the predictors included in the model. **This indicates a highly effective model in explaining variations in business performance.**
A modified version of R^2 is adjusted R^2 that adjusts for the number of predictors in the model. **With an adjusted R^2 of 0.968, it suggests that the predictors included in the model are indeed contributing significantly to explaining business performance.**
This measures the average magnitude of the residuals (the differences between predicted and observed values) in the model. **A lower RMSE of 0.995 indicates that the model has a good fit to the data, with smaller errors between predicted and observed values.**

SUMMARY

In summary, the comparison between Post Test (N = 25) and Pre Test (N = 25) scores reveals a modest improvement in scores following media literacy training, as indicated by the slightly higher mean score in the Post Test and consistent variability across both tests. The statistical analyses, including the Wilcoxon signed-rank test (p = 0.036) and paired samples t-test (p = 0.076), underscore the significance of this improvement, albeit with varying levels of statistical strength. This suggests that while media literacy training positively influenced participant scores, its impact was moderated, possibly influenced by existing business proficiency. Additionally, the predictive model (H_1) for business performance demonstrates strong explanatory power (R =

0.985, R^2 = 0.971), effectively capturing variations in performance. The adjusted R^2 of 0.968 further validates the model's effectiveness, considering the predictors involved. With a low RMSE (0.995), the model reliably predicts business performance outcomes influenced by factors like media literacy training.
Together, these findings highlight both the immediate impact of media literacy training on test scores and the robustness of the predictive model in understanding and predicting business performance outcomes.

- **Lowest Possible Score on NMLS**: 35
- **Highest Possible Score on NMLS**: 175

Table 2
Descriptive statistics and correlation coefficients for NMLS factors.

Factor	Min-Max	Mean	SD
Functional consumption (FC)	7–35	25.85	4.93
Critical consumption (CC)	16–55	43.11	6.51
Functional prosumption (FP)	7–35	26.72	5.73
Critical prosumption (CP)	10–50	32.22	8.97

*$p < 0.01$.

TABLE 3.4

BUSINESS PERFORMANCE MEAN ANALYSIS					
Factors	Self Rated Improvement	Functional Consumption	Critical Consumption	Functional Prosumption	Critical Prosumption
PRE	3.00	3.70	3.78	3.89	3.45
POST	3.76	3.96	3.89	4.01	3.72

Based on the provided data, the business performance factors—self-rated improvement, functional consumption, critical consumption, functional prosumption, and critical prosumption—all show increases from pre- to post-training assessments. Specifically, self-rated improvement increased from 3.00 to 3.76, functional consumption from 3.70 to 3.96, critical consumption from 3.78 to 3.89, functional prosumption from 3.89 to 4.01, and critical prosumption from 3.45 to 3.72. These increases suggest a positive impact of the media literacy training on various aspects of business performance, reflecting enhanced skills in consumption and prosumption behaviors. Additionally, the reported increase in monthly revenue by 55% on average, with responses ranging from 105 to 149, underscores the tangible benefits observed post-training, indicating substantial improvement in business outcomes. This aligns with previous discussions highlighting the significant influence of media literacy training on enhancing business performance metrics.

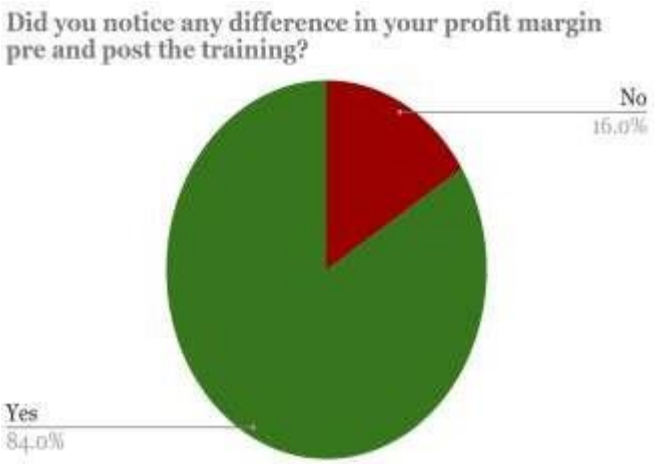

Fig 3.1

The majority (84%) reported an improvement in profit margins post-training. This suggests that the skills and knowledge gained from media literacy training have contributed positively to financial performance, potentially through more effective marketing strategies, cost management, or increased customer engagement.

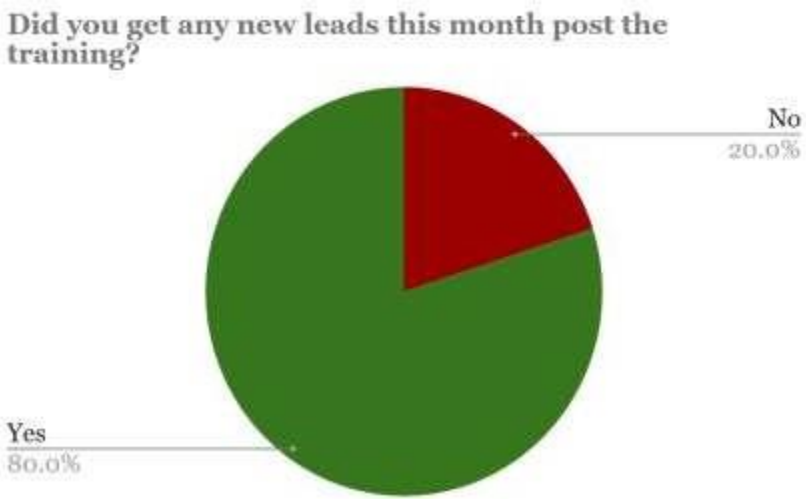

Fig 3.2

A significant majority (80%) reported acquiring new leads following the training. This indicates that the training likely enhanced participants' ability to attract and engage with potential customers or clients, possibly through improved media communication and outreach strategies.

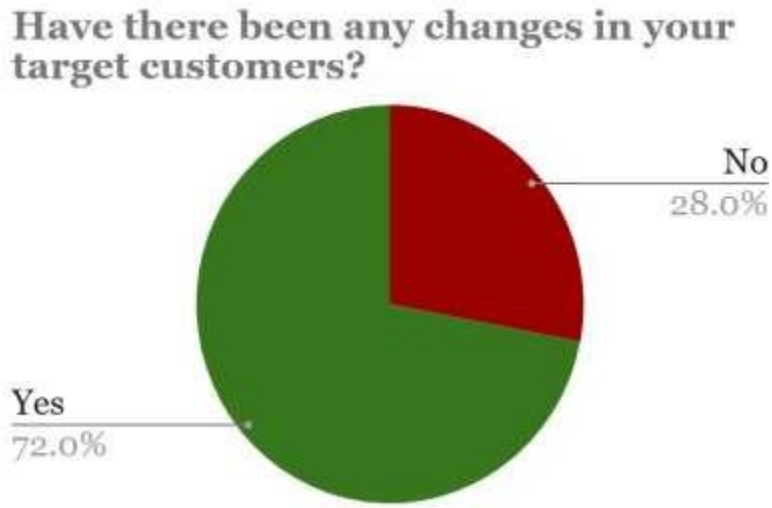

Fig 3.3

A substantial proportion (72%) reported changes in their target customer base after the training. This suggests that the training influenced participants' understanding or adaptation of their market demographics, possibly leading to more targeted marketing efforts and better alignment with customer needs and preferences via media tools.

Conclusions:

The paper aimed to investigate the influence of digital media literacy on the growth of small and medium enterprises (SMEs). The findings underscore the pivotal role that proficiency in digital media plays in enhancing business performance among SMEs.

The comparison of Pre Test and Post Test scores reveals a modest yet statistically significant improvement following media literacy training. The Wilcoxon signed-rank test ($p = 0.036$) and paired samples t-test ($p = 0.076$) affirm that media literacy training has a positive impact on participants' scores, though the magnitude of this impact may be moderated by existing business proficiency.

Furthermore, the predictive model (H1) for business performance showcases strong explanatory power ($R = 0.985$, $R^2 = 0.971$), with an adjusted R^2 of 0.968, signifying its robustness in capturing the variations in

performance due to media literacy training. The low RMSE (0.995) further validates the model's reliability in predicting business performance outcomes influenced by digital media literacy.

These findings emphasize the immediate benefits of media literacy training on entrepreneurs' capabilities and its subsequent positive impact on business performance. The results suggest that enhancing digital media literacy can be a strategic tool for SMEs, aiding in revenue growth, market expansion, and improved customer satisfaction.

In conclusion, digital media literacy emerges as a crucial factor for SME growth in the digital economy. Policymakers, educators, and business support organizations should consider integrating digital media literacy training into their support frameworks to empower SMEs to navigate the digital landscape more effectively. This study contributes valuable insights for stakeholders aiming to foster a digitally proficient entrepreneurial ecosystem that can drive sustainable growth and competitive advantage for SMEs.

References:

1. Bukht, R., & Heeks, R. (2017). Defining, conceptualising and measuring the digital economy. International Organisations Research Journal. https://doi.org/10.2139/ssrn.3431732
2. Berawi, M. A., Suwartha, N., Asvial, M., Harwahyu, R., Suryanegara, M., Setiawan, E. A., Surjandari, I., Zagloel, T. Y., & Maknun, I. J. (2020). Digital innovation: Creating competitive advantages. International Journal of Technology. https://doi.org/10.14716/ijtech.v11i6.4581
3. Camilleri, M. A., & Costa, R. A. (2018). The small businesses' responsible entrepreneurship and their stakeholder engagement through digital media. ERN: Technology.
4. Chan-Olmsted, S. M. (2004). Introduction: Traditional media and the internet: The search for viable business models. International Journal on Media Management, 6(2-3), 1-6.
5. European Commission. (2007). A European approach to media literacy in the digital environment. Available (consulted July 2009) at: http://ec.europa.eu/avpolicy/media_literacy/docs/com/en.pdf
6. Javaid, M., Haleem, A., Singh, R. P., & Sinha, A. K. (2024). Digital economy to improve the culture of Industry 4.0: A study on features, implementation, and challenges. Green Technologies and Sustainability. https://doi.org/10.1016/j.grets.2024.100083
7. Katadata Insight Center. (2021). Retrieved from https://kic.katadata.co.id/
8. Koltay, T. (2011). The media and the literacies: Media literacy, information literacy, digital literacy. Media, Culture & Society, 33(2), 211-221.
9. Nuseir, M. T. (2018). Digital media impact on SMEs performance in the UAE. Academy of Entrepreneurship Journal, 24(1), 1-10.
10. Salutina, T. Y., Platunina, G. P., & Vasileva, I. A. (2021). Transformation of business technologies into digital platforms and evaluation of the effectiveness of their application. 2021 International Conference on Quality Management, Transport and Information Security, Information Technologies (IT&QM&IS), 888-892. https://doi.org/10.1109/ITQMIS53292.2021.9642870
11. Sharma, S. K. (2006). E-commerce in a digital economy. https://doi.org/10.4018/978-1-59140-799-7.CH050
12. Shvetsov, A. (2021). Improving business efficiency: The contribution of the latest digital technologies. Management and Business Administration. https://doi.org/10.33983/2075-1826-2021-4-69-81
13. Silva, R. P., Mamede, H. S., & Santos, A. (2022). The role of digital marketing in increasing SMEs' competitiveness. ICSBT.
14. Supriadi, Y. N., Desmintari, D., Resti, A. A., & Siregar, Z. M. (2021). The impact of digital economy literacy strategy model on firm performance of small medium enterprises.
15. Umboh, I. A., & Aryanto, V. D. (2023). Digital marketing development model through digital literacy mediation to improve SMEs performance. Media Ekonomi dan Manajemen.
16. Wadhwa, S. (2023). Role of digital marketing in business: An empirical study for small and medium businesses. Psychology and Education.
17. Widarno, B. (2021). The effect of business literation on SMEs performance with mediation of risk management and entrepreneurial self-efficacy.
18. Xia, L., Baghaie, S., & Mohammad Sajadi, S. (2023). The digital economy: Challenges and opportunities in the new era of technology and electronic communications. Ain Shams Engineering Journal. https://doi.org/10.1016/j.asej.2023.102411
19. Zimonjić, B., & Zimonjić, M. (2023). The role of digital transformation in modern business. Megatrend Revija. https://doi.org/10.5937/megrev2302037z