

The Influence of Digital Literacy and Entrepreneurial Self-Efficacy on Entrepreneurial Intention of University Student in West Jakarta

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Abstract

This research seeks to examine how digital literacy and entrepreneurial self-efficacy affect the entrepreneurial intention of undergraduate students in West Jakarta. The study is motivated by the swift advancement of digital technology, which opens various business possibilities; however, these opportunities are not always accompanied by adequate digital skills or entrepreneurial confidence among students. A quantitative descriptive approach was applied, involving 150 undergraduate participants who have completed or are currently enrolled in entrepreneurship courses. Data were gathered through an online survey and processed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings indicate that digital literacy exerts a positive and significant impact on entrepreneurial intention. In addition, entrepreneurial self-efficacy emerges as the most influential factor affecting students' intention to engage in entrepreneurship. The study concludes that digital competencies and confidence in entrepreneurial abilities play crucial roles in determining students' readiness to start a new venture. These results suggest that educational institutions should reinforce digital-oriented entrepreneurship curricula to better prepare younger generations for today's evolving business environment.

Keywords: digital literacy, entrepreneurial self-efficacy, entrepreneurial intention, students.

INTRODUCTION

The development of digital technology over the past decade has become one of the most powerful driving forces behind fundamental transformations in almost every aspect of human life, including communication, employment, education, and economic activities. The shift toward the use of digital technology has not only changed patterns of social behavior and consumption but has also opened new opportunities in the field of entrepreneurship. International studies indicate that digitalization is now regarded as "the single most important force in entrepreneurship and innovation" (Berger et al., 2021), as it accelerates business processes, increases efficiency, and creates new business models that were previously unattainable. This global transformation has prompted many universities around the world to revise their curricula to ensure that students possess sufficient digital competence and are able to adapt to the increasingly complex demands of the digital economy.

Within this global context, digital literacy has emerged as one of the essential competencies required by the younger generation. Digital literacy is no longer limited to the ability to operate technological devices, but also encompasses the capacity to manage, evaluate, and utilize digital information effectively. According to Liang et al. (2025), digital

literacy plays a direct role in improving creativity, innovation capability, and decision-making skills that are closely related to entrepreneurial activities. Students with higher levels of digital literacy are better equipped to identify business opportunities and are more prepared to face the challenges of a technology-driven business environment.

The rapid advancement of digital technology is particularly evident in Indonesia. With internet penetration reaching 74.6% as of January 2025 (Hutagalung, Wibowo & Zahra, 2023), information technology has become an integral part of daily life. The rise of e-commerce, digital payment systems, and social media platforms has created significant opportunities for individuals, especially university students, to develop digital-based businesses. The Indonesian government has also reinforced this direction through various national digital competency development programs, including initiatives aimed at enhancing the workforce's digital skills to intermediate and advanced levels by 2024. Furthermore, the rapid growth of the Educational Technology (EdTech) sector highlights the vital role of educational institutions in shaping a generation capable of competing in the digital economy.

However, this progress continues to be overshadowed by a persistent digital divide. Research by Hidayat et al. (2025) found that approximately 70% of Indonesian adults still lack adequate digital literacy, suggesting that while access to technology has expanded, the ability to utilize it effectively remains limited. This divide is influenced not only by economic conditions but also by educational background and social environment, which affect an individual's exposure to digital tools from an early age. The gap is also evident among university students in West Jakarta, where despite living in an urban area with high technological access, many still exhibit varying levels of digital proficiency, particularly in using tools such as data analytics platforms, digital marketing software, and technology-based business management systems.

In the field of entrepreneurship, digital literacy acts as an important factor that encourages entrepreneurial intention, which refers to a person's willingness or determination to start a business. Entrepreneurial intention is considered the strongest indicator of actual entrepreneurial behavior (Bachmann et al., 2024). Students who have strong digital abilities usually feel more confident in creating innovative products, developing online marketing strategies, and managing business activities in digital environments. According to Hutagalung and Zahra (2023), digital literacy not only directly affects entrepreneurial intention but also increases entrepreneurial motivation and attitude through the mediating role of entrepreneurial self-efficacy (ESE). In the same way, Ip (2024) explains that digital education strengthens individuals' confidence when facing risks and uncertainties in entrepreneurship.

Entrepreneurial self-efficacy (ESE) represents an individual's confidence in their capability to design, launch, and manage a business effectively. ESE is closely linked to entrepreneurial intention, as people with higher self-assurance are more inclined to embrace risks and are better equipped to navigate uncertainty in business settings. Research by Emrizal & Primadona and Haque & Kour (2023) demonstrates that ESE plays a significant role in shaping students' entrepreneurial intention. This finding is reinforced by Mulyono et al. (2023), who reported that digital literacy and entrepreneurship education affect entrepreneurial intention through the mediating role of ESE. Similarly, Mustain et al. (2023) found that students possessing stronger digital competencies are more likely to exhibit higher confidence in launching technology-driven ventures. Furthermore, Manullang (2023) highlighted that ESE can amplify the effect of digital literacy on entrepreneurial intention, especially within the sphere of digital entrepreneurship.

Despite numerous previous studies investigating the links between digital literacy, ESE, and entrepreneurial intention, several gaps are still evident. First, much of the existing

research has concentrated on vocational learners or university students outside Jakarta, meaning it does not fully capture the characteristics of students in metropolitan regions like Jakarta, where access to technology is generally higher. Second, many studies have examined only the relationship between two variables or treated ESE merely as a mediating factor, without assessing the combined effects of both digital literacy and ESE simultaneously. Third, the digital literacy indicators applied in earlier studies were often broad and failed to specifically represent competencies essential for digital entrepreneurship, including skills in using digital marketing platforms, creative content tools, and technological solutions that support business activities. Additionally, studies focusing specifically on students in West Jakarta remain scarce, even though this area plays a distinctive role as both an educational center and a business hub within the capital city.

Addressing these research gaps, the present study aims to analyze the influence of digital literacy and entrepreneurial self-efficacy on entrepreneurial intention among university students in West Jakarta. This study seeks to provide both theoretical and practical contributions, particularly in guiding higher education institutions in developing more targeted programs for digital competency and entrepreneurship training. Given that university students represent a critical group in fostering innovation and driving the growth of the digital entrepreneurship ecosystem in Indonesia, understanding the factors that shape their entrepreneurial intentions is essential for supporting the nation's digital economic development.

METHOD

This study utilizes a descriptive quantitative method designed to illustrate and examine the relationships among Digital Literacy, Entrepreneurial Self-Efficacy, and Entrepreneurial Intention among university students in West Jakarta. The research population comprises all active undergraduate (S1) students attending universities in West Jakarta who have completed or are currently taking entrepreneurship-related courses. A total of 150 students were selected as the sample through purposive sampling to ensure they met the specified requirements: (1) active undergraduate enrollment, (2) age range of 18–22 years, and (3) completion or current participation in an entrepreneurship course. Data were collected using an online questionnaire distributed via Google Forms.

The measurement instrument was constructed based on established literature. The Digital Literacy variable was adapted from Bachman et al. (2024), incorporating four indicators: information and data literacy, communication and collaboration, safety and security, as well as problem-solving. The Entrepreneurial Self-Efficacy (ESE) variable follows the indicators introduced by Bachman et al. (2024), consisting of five dimensions: opportunity recognition, business start-up, strategy development, and resource management. Furthermore, the Entrepreneurial Intention variable applies the model from Bachman et al. (2025) and Ginting & Azizurohman (2025), which includes five indicators: goal intention, implementation intention, determination, commitment, and consideration. All constructs were assessed using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

Data analysis was performed using Structural Equation Modeling (SEM) with the SmartPLS application. As noted by Sekaran and Bougie (2016), SEM consists of two key components: (1) the outer model, which assesses validity (through convergent and discriminant validity) and reliability (using Cronbach's alpha and composite reliability); and (2) the inner model, which evaluates the structural links among latent variables. Once all constructs satisfy the required validity and reliability standards, the structural (inner) model is then examined to identify the strength and direction of the relationships between Digital

Literacy, Entrepreneurial Self-Efficacy, and Entrepreneurial Intention. These findings offer a thorough understanding of how students' digital capabilities and confidence shape their entrepreneurial motivations within the fast-changing digital economy. The PLS model is specified as follows:

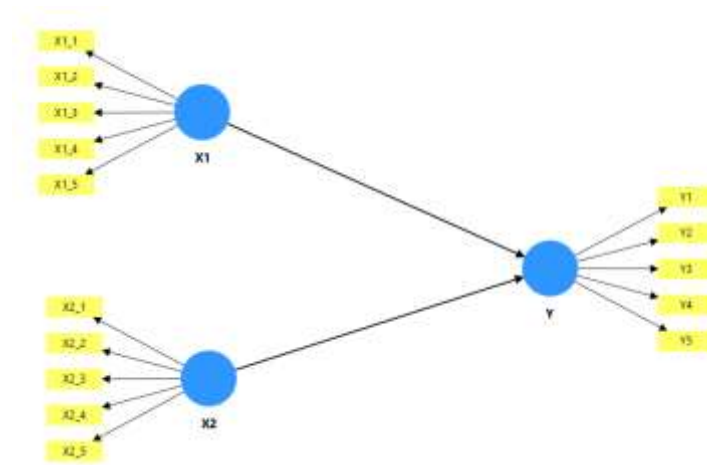


Figure 1. Research Model Specifications

RESULT AND DISCUSSION

Respondent Description

This study involved 150 active undergraduate (S1) students from several universities located in West Jakarta. The respondents were selected based on two main criteria: they were currently enrolled in or had previously taken an entrepreneurship course, and they were between 18 and 22 years old. Data were collected through a structured online questionnaire distributed via Google Form. Based on the descriptive analysis, most respondents (139 students or 92.7%) were aged between 18 and 22 years, while 10 respondents (6.7%) were above 22 years old, and only 1 respondent (0.7%) was under 18 years old. In terms of gender, the majority were female, totaling 96 respondents (64%), while male respondents numbered 54 (36%). Regarding university affiliation, most respondents came from Universitas Tarumanagara with 90 students (60%), followed by Universitas Bina Nusantara with 34 students (24.7%), and Universitas Trisakti with 26 students (17.3%). All respondents had either completed or were currently taking an entrepreneurship course, ensuring that their academic experiences were relevant to the study's focus on digital literacy, entrepreneurial self-efficacy, and entrepreneurial intention.

Outer Loading

Table 1. Convergent Validity Analysis

Variable	Average Variance Extracted (AVE)
Digital literacy	0.752
Entrepreneurial Self-efficacy	0.711
Entrepreneurial Intention	0.696

Source: SmartPLS Processing

In table 1 the convergent validity is seen from the AVE value, the result shows above 0.50 which means fulfilling.

Table 2. Internal Consistency Reliability Analysis

	Cronbach 's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)
Digital literacy	0.917	0.920	0.938
Entrepreneurial Self-efficacy	0.899	0.899	0.925
Entrepreneurial Intention	0.891	0.897	0.920

Source: SmartPLS Processing

In table 2, each item gets composite reliability and Cronbach's alpha > 0.60 is declared reliable to measure variable.

Inner Model

Table 3. Coefficient of Determination (R-square)

	R-square
Entrepreneurial intention	0.422

Source: SmartPLS Processing

The results in Table 3 indicate that the R-Square value for the endogenous variable Entrepreneurial Intention is 0.422. This means that the independent variables account for 42.2% of the variance in entrepreneurial intention, while the remaining 57.8% is explained by other factors.

Inner Model Testing

The examination of path coefficients is conducted to determine whether relationships exist among the variables included in this research. The outcomes of this analysis are presented in Figure 4, which displays the bootstrapping results.

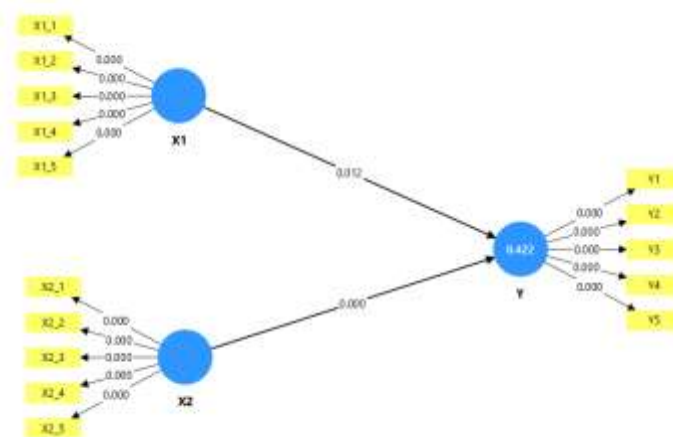


Figure 2. Bootstrapping Test Result

Table 4. Path Coefficient Result

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T statistic	P Values
DL > EI	0.234	0.233	0.094	2.505	0.012
ESE > EI	0.493	0.490	0.085	5.820	0.000

Source: SmartPLS Processing

Based on the path coefficient test result, so can explain that: The influence of digital literacy on entrepreneurial intention was demonstrated to be significant, shown by a p-value of 0.012. This result implies that students' capability to comprehend, assess, and apply digital technologies plays an important role in strengthening their intention to engage in entrepreneurship. In addition, entrepreneurial self-efficacy presented a highly significant impact ($p = 0.000$), indicating that having strong confidence in dealing with obstacles and managing business activities serves as a central determinant of students' entrepreneurial intentions. These results align with the findings of Hikmawati et al. (2025), who highlighted that self-efficacy represents the most critical psychological factor shaping entrepreneurial intention.

Discussion

The findings of this research indicate that digital literacy exerts a positive and significant effect on the entrepreneurial intention of university students in West Jakarta ($\beta = 0.234$; $p = 0.012$). Even though the effect size is classified as small ($f^2 = 0.068$), the result highlights the essential contribution of digital skills in motivating students to engage in entrepreneurial endeavors. This outcome aligns with the work of Hartini et al. (2022), who reported that digital literacy substantially boosts both entrepreneurial intention and entrepreneurial attitude. In the current digital landscape, the capacity to efficiently obtain information, assess digital content, and navigate online platforms equips students to recognize business opportunities more effectively. Digital capabilities also support innovation by enabling the use of digital marketing, data analysis, and e-commerce technologies, which function as critical drivers of contemporary entrepreneurship.

Moreover, the positive link between digital literacy and entrepreneurial intention is consistent with the framework outlined by Rangkutty et al. (2025), who highlight that digital literacy shapes individuals' technological engagement and strengthens their confidence in using digital tools to generate value. In the context of entrepreneurship, digital literacy acts as both a technical and cognitive skillset allowing students to convert digital information into actionable business insights. The presence of strong digital skills also reduces uncertainty in the early stages of business planning, as students can access market data, consumer trends, and competitor information with greater accuracy. This finding reinforces the view of Hidajat et al. (2024) that digital literacy enhances entrepreneurial creativity and innovation, which are vital components for building new ventures in a digital economy.

Entrepreneurial self-efficacy (ESE) stands out as the strongest predictor of entrepreneurial intention ($\beta = 0.493$; $p = 0.000$), showing a moderate effect size ($f^2 = 0.298$). This suggests that students' belief in their own entrepreneurial capabilities plays a central role in shaping their intention to launch a venture. These findings align with Hikmawati et al. (2025) and Samsuri and Lukiastuti (2024), who similarly emphasize self-efficacy as the most dominant psychological factor influencing entrepreneurial motivation. Students who trust their ability to identify opportunities, allocate resources, and navigate risks tend to demonstrate greater perseverance and a positive outlook toward business formation.

Consistent with Bandura's (1986) Social Cognitive Theory (SCT), this evidence shows that self-efficacy affects not only motivation but also the vigor and endurance of entrepreneurial behavior.

The notable impact of ESE further aligns with the Theory of Planned Behavior (TPB), which argues that an individual's behavioral intention is greatly shaped by perceived behavioral control, a concept closely related to self-efficacy. When students possess higher levels of self-efficacy, they generally view entrepreneurial obstacles as less challenging, leading to stronger intentions and a greater commitment to launching their own ventures. This relationship suggests that self-efficacy serves as an internal driver that transforms knowledge and skills into real entrepreneurial intentions. Furthermore, Hartini et al. (2022) emphasize that self-efficacy interacts with digital literacy, meaning that confidence in using digital tools can amplify the impact of digital competence on entrepreneurial outcomes.

Interestingly, while digital literacy contributes significantly to entrepreneurial intention, its influence is comparatively smaller than that of self-efficacy. This implies that although technical digital skills are essential in the modern business landscape, psychological readiness and confidence remain the dominant factors that determine whether a student will act on entrepreneurial opportunities. This finding mirrors the argument of Hidajat et al. (2024), who found that self-efficacy acts as a stronger predictor of entrepreneurial behavior than technical competencies alone. It highlights that without confidence and resilience, digital skills may not necessarily translate into entrepreneurial action.

The combined influence of digital literacy and entrepreneurial self-efficacy explains 42.2% of the variance ($R^2 = 0.422$) in entrepreneurial intention, suggesting that more than half of the factors influencing entrepreneurial intention may stem from other variables such as social support, entrepreneurial education, risk perception, and innovation orientation. This opens avenues for future research to explore how these factors interact with digital literacy and self-efficacy in shaping students' entrepreneurial aspirations.

Overall, the findings of this study underscore the need for universities to integrate digital competency development and entrepreneurial mindset training within their curricula. Strengthening students' technical abilities alongside psychological confidence will better prepare them to navigate the uncertainties of digital entrepreneurship. The combination of these competencies' digital literacy as a technological enabler and self-efficacy as a psychological motivator forms the foundation for fostering a new generation of entrepreneurs capable of leveraging technology for innovation, competitiveness, and sustainable growth.

CONCLUSION

This research highlights that both digital literacy and entrepreneurial self-efficacy serve as crucial determinants in shaping the entrepreneurial intentions of students in West Jakarta. In the midst of rapid technological progress, students who can access, interpret, and apply digital information effectively are generally more equipped to spot business prospects, leverage digital platforms for promotional activities, and formulate technology-driven business concepts. This is supported by the analysis, which shows that digital literacy exerts a positive and significant impact on entrepreneurial intention.

In addition, entrepreneurial self-efficacy appears to exert an even stronger effect compared to digital literacy. Students who possess confidence in their abilities to identify opportunities, manage risks, think innovatively, and participate in entrepreneurial endeavors exhibit a greater inclination to initiate a business. These results are consistent with the Theory of Planned Behavior (TPB) and Social Cognitive Theory (SCT), which both assert that an individual's confidence in their own capabilities acts as a central motivator of behavioral intention. In conclusion, the entrepreneurial intentions of students are shaped not only by

their mastery of technology but also by their self-confidence in performing the role of an entrepreneur.

REFERENCES

- Abdillah, M. H., Siregar, H., & Ramadhany, F. (2025). Korelasi kemampuan coding dengan minat berwirausaha teknologi di kalangan mahasiswa ilmu komputer. *Jurnal Pendidikan Sains dan Komputer*, 5(2), e2809476X. <https://doi.org/10.47709/jpsk.v5i02.6173>
- Antika, W. R., Anwar, A., Aswar, N. F., Musa, C. I., & Abadi, R. R. (2025). Peran keunggulan komparatif dalam memediasi pengaruh positioning terhadap keputusan pembelian produk smartphone merek Oppo di Kota Makassar. *RIGGS*, 4(3), 5017–5028.
- Bachmann, N., Rose, R., Maul, V., & Hölzle, K. (2024). What makes for future entrepreneurs? The role of digital competencies for entrepreneurial intention. *Journal of Business Research*, 174. <https://doi.org/10.1016/j.jbusres.2023.114481>
- Berger, A. N., et al. (2021). [Reference details incomplete – please provide full source information for proper APA citation.]
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Emrizal, E., & Primadona, I. (2023). The influence of entrepreneurial resilience and self-efficacy on entrepreneurial intention among students in Padang City. *Jurnal Manajemen dan Kewirausahaan*, 25(3), 112–125.
- Ervina Waty, A. F., Anggraini, A., Apriani, H., Ibrahim, A., Safra, H. A., Manafe, G., Juniarto, T. D., Nursanti, Y., & Hadiyat, Y. (2023). *Metodologi penelitian bisnis: Teori & panduan praktis dalam penelitian bisnis*. PT Sonpedia Publishing Indonesia.
- Ginting, Y.M., and Azizurrohmah, M. (2025). Linking Entrepreneurship Education to Entrepreneurial Intentions: A Social Cognitive and Resource-Based Perspective. *The Asian Journal of Technology Management (AJTM)*, 18(1),55-76. <https://doi.org/10.12695/ajtm.2025.18.1.4>
- Hartini, H., Wardhana, A., Normiyati, N., & Sulaiman, S. (2022). Peran self-efficacy dalam meningkatkan minat berwirausaha women entrepreneur yang dimediasi oleh pengetahuan kewirausahaan. *Jurnal Ekonomi Modernisasi*, 18(2), 132–148. <https://doi.org/10.21067/jem.v18i2.7036>
- Haq, M. R., & Kour, M. (2023). Exploring the Growth and Future Research Direction of Entrepreneurial Self-efficacy in Entrepreneurial Intention Research: a Bibliometric Analysis. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-023-01578-1>
- Hidayat, K., Tambun, S., Prasetyo, S., & Firmansyah, F. (2024). Pengaruh entrepreneurial self efficacy dan personal networks terhadap technopreneurship intention dengan literasi digital sebagai pemoderasi. *Jurnal Administrasi Publik*, 10(2), 170–191. <https://doi.org/10.52447/ijpa.v10i2.7939>
- Hikmawati, K. A., Wibisono, Y., Winarno, A., & Rahayu, W. P. (2025). Peran karakter dan pola pikir dalam membentuk niat berwirausaha: Tinjauan literatur sistematis. *At-Taklim: Jurnal Pendidikan Multidisiplin*, 2(5). <https://doi.org/10.71282/at-taklim.v2i5.268>
- Hutagalung, T. T., & Zahra, S. F. (2023). The mediating effect of self-efficacy on the influence of economic literacy and digital literacy on digital entrepreneurship intentions of Jakarta State University students. *International Journal of Current Economics & Business Ventures*, 3(2). <https://scholarsnetwork.org/journal/index.php/ijeb>
- Ip, C. Y. (2024). Effect of digital literacy on social entrepreneurial intentions and nascent behaviours among students and practitioners in mass communication. *Humanities and Social Sciences Communications*, 11(1). <https://doi.org/10.1057/s41599-023-02587-w>

- Liang, Y., Chen, R., Hong, H., Li, S., & Han, L. (2025). Shaping digital entrepreneurial intention in higher education: the role of entrepreneurship education, creativity, and digital literacy among Chinese university students. *Journal of Innovation and Knowledge*, 10(5). <https://doi.org/10.1016/j.jik.2025.100788>
- Manullang, D. R. (2022). PEran Self Efficacy dalam Memoderasi Pengaruh Digital Literacy Terhadap Entrepreneurial Intention. In *Jurnal Riset Pendidikan Ekonomi* (Issue 7). <http://ejournal.unikama.ac.idHal|118>
- Mustain, M., Murwani, F. D., & Mukhlis, I. M. (2023). The Effect of Digital Literacy on Entrepreneurial Intention through Entrepreneurial Attitude. *Formosa Journal of Applied Sciences*, 2(12), 3361–3370. <https://doi.org/10.55927/fjas.v2i12.7066>
- Rangkuty, P. R., Sinaga, A. P., Abdillah, M., Yoga, A. R., Sahriyan, I., Telaumbanua, R. N., & Tanjung, W. N. (2025). Peran literasi digital dalam mencegah kejahatan siber di kalangan generasi muda. *Jurnal Pengembangan Ilmu Manajemen*, 1(4). <https://ojs.ruangpublikasi.com/index.php/jpim/article/view/18>
- Samsuri, I. K., & Lukiastuti, F. (2024). Niat wirausaha sosial: Peran prioritas pengalaman, self-efikasi wirausaha sosial, dan keamanan finansial. *MAGISMA: Jurnal Ilmiah Ekonomi dan Bisnis*, 12(2). <https://doi.org/10.35829/magisma.v12i2.432>
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business A Skill Building Approach Seventh Edition*.
- Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.