



A Critical Review of Personal Finance Tracker Technologies Among Gen Z

Diana Nurindrasari^{1}, Amelia Indah Kusdewanti², Ima Kristanti³, Aisyah Vanadia Rubianto⁴

^{1,2,3,4}Politeknik Negeri Malang, Jl. Soekarno Hatta No. 9, Malang, Jawa Timur, 65141, Indonesia

^{1*}diananurindrasari94@gmail.com, ²ameliaiindah@polinema.ac.id, ³imakristanti21@polinema.ac.id,

⁴aisyahvr@polinema.ac.id

*Corresponding author

doi.org/10.33795/jraam.v8i1.008

Article Information

Submission date	19-10-2024
Revised date	07-10-2025
Accepted date	11-10-2025

Keywords:

Financial Tracker;
Money Management;
Personal Finance.

Abstract: *A Critical Review of Personal Finance Tracker Technologies among Gen Z*

Purpose: *The objective of this study is to critically review personal financial tracker technologies among Gen Z.*

Method: *A multi-method approach, including synchronous and asynchronous with accounting students at the State Polytechnic of Malang.*

Result: *mental accounting and financial education play a significant role in shaping the intention and practice of using the application.*

Novelty: *This article critically explores how technology could create financial literacy, practice, and susceptibility for Gen Z.*

Contribution: *This study adds to behavioural finance and digital sociology by examining Gen Z's financial knowledge and technology.*

Kata kunci:

Financial Tracker;
Manajemen Uang;
Keuangan Personal.

Abstrak: *Tinjauan Kritis Teknologi Pelacak Keuangan Pribadi di Kalangan Gen Z*

Tujuan: *Tujuan penelitian ini untuk reviu kritis personal financial tracker technologies pada Gen Z.*

Metode: *pendekatan multi method yaitu synchronous and asynchronous pada mahasiswa Akuntansi di Politeknik Negeri Malang.*

Hasil: *Mental accounting dan edukasi finansial berperan besar dalam membentuk niat dan praktik penggunaan aplikasi.*

Kebaruan: *Artikel ini secara kritis mengeksplorasi bagaimana teknologi dapat menciptakan literasi keuangan, praktik, dan kerentanan terhadap generasi Z.*

Kontribusi: *penelitian ini memperluas kajian dalam bidang keuangan perilaku dan sosiologi digital dengan memberikan perspektif tentang relasi antara teknologi dan kesadaran finansial pada Gen Z.*



1. Introduction

Digital transformation has brought a significant shift in the way individuals manage their personal finances [1-2]. Formerly, financial tracking was done manually, but over the years, with the integration of technology, it has become a

trend to use financial tracking apps to record financial transactions [3]. This kind of shift not only influences how individuals track their personal financial management, but also form a certain trend about how they make their financial decisions [4]. Z generations, commonly known as Gen Z, was a generation

born between 1997 to 2012, and they are the most susceptible to this shift [5]. As digital natives, gen Z is used to integrating technology in their daily lives, including money management. These applications not only simplify their record taking but also affect their habit in saving, analyzing, and making decisions in financial activities [6,7]. This Phenomena concerning “talk about money” is not only limited to face-to-face interactions in class or among families, but it expands through smartphone and digital communication [8]. Thus, The convenience and availability of these financial tracker technologies raise a notable question about how far technology can influence financial behaviour, preferences, digital dependency, and decisions making for Gen Z. This question becomes relevant considering the increasingly uncertain global economic conditions, so that early financial literacy awareness has now become an urgent necessity [9]. One example of this urgency is the rise of “horrrifying” loan cases where its users could not manage their debt because of their flashy lifestyles as well as their limited knowledge about financial management[10-12].

Previous findings show that technology in financial management can increase financial literacy and form a good habit in financial management [13-15]. That aspect is also supported with the rise of technology and availability in cashless payment which allows its users to have a database about their financial activities. Another findings also explains how the shift of trend in financial management are caused by the development of technology in finance that is easily accessible, particularly among productive groups and young people [16]. In comparison, there are several researches that highlight previous findings conversely, especially in terms of the arising risk such as over-reliance on digital guides, lack of critical thinking in financial decision-making, and threats to data privacy [17]. The duality between the

advantages and the risks creates a gap in research which is important to explore. Although there are a lot of studies that have discussed the adoption of financial technology, there are a few that have done so critically, in particular about how technology can fundamentally construct the financial comprehension, practice and susceptibility in Gen Z.

This article aims to fill in the gap with providing a critical review of personal finance tracking technology, highlighting its influence on the habits, preferences, and literacy of Gen Z users. This research not only emphasizes how Gen Z utilizes technology in financial tracker, but also how these apps could shape their perception of financial management. In order to confirm the argument, this research is using the Feenberg theoretical approach [18].

The basis of critical views from Feenberg explain that technology is not neutral, but it has certain values and interests. Technology does not appear “as it is”, but it is the result of social construction. This allows for democratic rationalization, that there is space and effort to involve users in the design process so that technology will be more in line with real necessity. However, this does not rule out the possibility that technology could include the interest of the technocrats or market. Consequently, this critical view is relevant with the technology of financial tracker that is on the rise and could be used as a tool to design the behaviour of its users. The researchers would like to emphasize the Gen Z with accounting background in one of the biggest state polytechnic in Indonesia, because they have unique characteristics in their comprehension about financial literacy. This condition made them the ideal subject to study how technology interacts with their background and how this app is consistent with their formal education.

2. Method

The research method used was a critical approach by combining synchronous-

asynchronous methods to gain a comprehensive understanding of personal financial tracker technologies as well as preferences, habits, and literacy among Gen Z. Asynchronous approach is carried out by literature review from indexed research in Scopus and Sinta to maintain the validity of findings. The researchers also mapped relevant articles to find pattern and value from the application of personal financial tracker technologies. The Synchronous approach is implemented through several stages, which is survey, experiment, and interviews. The survey is conducted to 10 students from Accounting, 11 students from Finance, 4 students from Accounting Management, and 5 students Applied Master of Accounting Information Systems Program Study. Polinema is chosen as the research object due to its status as one of the biggest Polytechnic in Indonesia with its accounting department actively applying related learning about financial management. The survey instrument was developed based on the results of the researcher's initial exploration of students' habits in tracking personal finances and their level of involvement with technology.

Based on the survey result, the researcher developed an application prototype about Personal Financial Tracker, that later was validated by subject matter experts, one an expert in personal financial planning and one expert at User Interface/User Experience to ensure the features feasibility, ease of use, as well as its relevance to user needs.

Subsequently, 12 students, who are divided into 4 groups consisting of 3 people, use the application for one week as limited users. Thereafter, researchers interviewed the students by using Zoom to explore the user's experience. Table 1 shows the information of the subjects for this research.

Data Analysis is conducted by using 2 approaches. In the synchronous stage, the analysis of survey, experiment, and interview data was conducted using the Miles and Huberman technique, which includes the

Table 1. Informants Information

No	Informant Initial	Age	Student Background
1	Mutia	20 y.o	D-III AKT
2	Valen	20 y.o	D-III AKT
3	Rahmania	20 y.o	D-III AKT
4	Shabrina	20 y.o	D-IV AKM
5	Irinne	20 y.o	D-IV AKM
6	Adel	20 y.o	D-IV AKM
7	Amadea	21 y.o	D-IV KEU
8	Aulia	21 y.o	D-IV KEU
9	Mayangsi	20 y.o	D-IV KEU
10	Merry	21 y.o	Magister - MTSIA
11	Grace	22 y.o	Magister - MTSIA
12	Diva	22 y.o	Magister - MTSIA

process of data reduction, presentation, grouping according to themes, and drawing conclusions. In the asynchronous stage, researchers used a critical study of literature to evaluate the findings of previous studies which were then positioned within the framework of critical theory of technology from Feenberg's critical thinking [18]. The findings from the synchronous and asynchronous stages were confirmed and analyzed with Feenberg's thinking to find patterns and values regarding personal financial tracker technology in Gen Z.

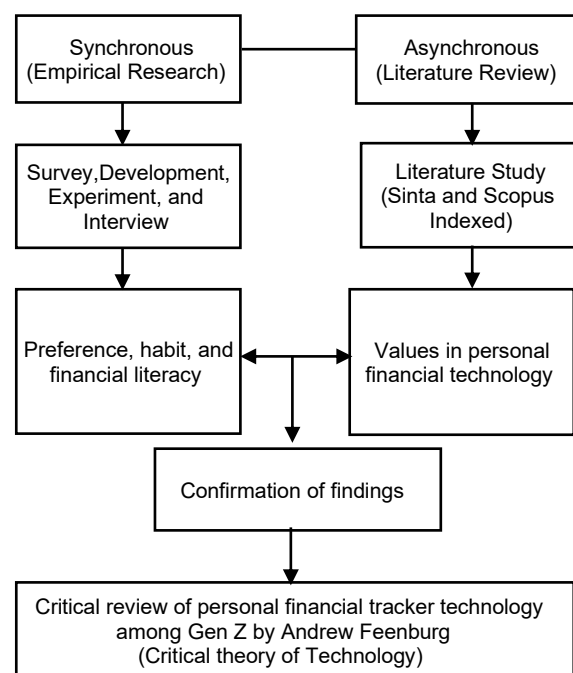


Fig. 1. Research Framework

3. Results and Discussion

Preferences, Habit, and Financial Literacy: Survey and Experiment. A survey was conducted randomly to 30 respondents who were active accounting students in State Polytechnic of Malang about their habit in recording their financial activity. Afterward, they would be asked to use the application that the researchers had developed. The objective of the survey was to comprehend the preferences, habits and financial literacy of the respondents and adjust it to the financial personal tracker. The result showed that 73,3% of respondents had already recorded their financial activity periodically, while 26,7% of the rest did not have that kind of habit yet. Based on those who recorded their financial activity, 45,5% use smartphones and record it manually, 31,8% use physical notebooks, 18,2% use financial applications, and the rest use spreadsheets. As for those who had not this kind of habit, their major reason (69,6%) was because they often forget or think of it as irrelevant. This circumstance might have occurred due to the lack of comprehension regarding financial literacy [9]. In addition, it could also arise as a result of the lack of awareness about the importance of financial management since their early age [19].

Additionally, the majority of the respondents (93,35%) get their income from pocket money. As for other income, 26,7% get their additional income from part time jobs, 20% from investment and 3,3% from scholarships. It should be noted that the majority of the respondents were active students and did not have stable jobs yet, thus it was most likely that their financial resources were limited to pocket money from their parents. Although some students could get additional income from other sources, their number is small. This condition emphasizes that students at 19 - 22 years old are not at their productive age because they have not generated stable income yet [19]. It also determines the ideal time for them to start recording their financial activities on a regular

basis so that they can make better financial decisions, particularly after they graduate from college.

In terms of expenditure, the majority of students' expenses centered around food (90%), transport (80%), phone credit (66,7%) followed by saving/investment (60%). A small amount of these expenditures went to entertainment and boarding houses. Interestingly, 40% of expenses were allocated to charity and infaq. This aspect is usually overlooked by students because they still do not have stable income. It shows that almost half of the respondents have the awareness that necessities are not only related to material things, but also fulfilling social needs is important and needs to be budgeted in personal finances [20].

Afterward, all respondents who filled in the survey (100%) were willing to try the application of a personal financial tracker that has been developed by the researchers. Considering that Gen Z prefers simplicity and practicality, the design of the application is made by integrating several applications. Google Workspace was used as the homepage to input data, while Spreadsheet was utilized for the database, finally for visualizing the result, the application was using Looker Studio. Those applications were chosen due to its simplicity, low cost and no advertisement when the user was using it. Later, the researchers asked 12 informants to conduct the experiment for 1 week to see their preferences, habits and their financial literacy.

The results of a one-week experiment with 12 informants actually showed that most informants were inconsistent in using the application and only recorded it a few times initially. Despite the application's accessibility, which is free and features straightforward visualisations, enabling users to independently access and control the database and visualisations, the responses were insufficient. These findings demonstrate that habit is the primary challenge, not simply the availability of technology. Awareness and habit are more dominant influences on each

individual's behavior than the availability of technology. User habits form a strong foundation in building habits to utilize technology in personal financial management. Although technology is a primary support, it remains the dominant factor in user habits[21].

The results also emphasize how financial behavior is not just a matter of technical recording, but also social habits that influence technology usage. Based on the survey, although 73.3% of respondents have recorded their finances, the majority still use manual methods (45.5% on mobile phones, 31.8% on notebooks, 18.2% on spreadsheets) compared to financial applications (only 18.2%). This indicates resistance to technology that is too complex or considered impractical. This phenomenon is a form of resistance that arises when the technology design is not in line with daily practice [18]. A 1-week experiment on 12 informants also confirmed this: even though the application developed was simple, free, and based on Google Forms/Spreadsheets, the majority still did not consistently record due to laziness, forgetfulness, and lack of habit. In other words, technology fails to function if it is not integrated with the user's social rhythm.

Furthermore, the results of the application testing with informants served as the basis for in-depth interviews to uncover Gen Z users' preferences for personal financial tracker applications. In general, they considered the developed application easy to use, but still experienced confusion regarding data privacy because input results were mixed with other users' data. The majority of informants stated that the application helped them understand financial patterns and improve personal financial planning, but the biggest obstacle was a lack of consistency due to laziness and forgetting to record, even though they actually had enough time. Interestingly, informants explained that they were aware that personal financial management can be started or implemented without having to wait for a large income. Understanding spending habits is crucial in

financial management, so that future evaluation and management can be improved. This is especially true if personal financial management utilizes an application to facilitate recording and tracking of expenses. The opinions of these informants serve as an evaluation for researchers to improve the ease and accessibility of personal financial tracker applications. The ease and accessibility of an application will facilitate users in managing their finances better.

A potential solution proposed is an automatic reminder feature and daily notifications to encourage users to be more disciplined. This is an interesting finding: a person's awareness of recording is based on automatic reminders or daily notifications, so a person's financial recording patterns depend on the technology. Previous research confirms that a person's habits and preferences for maintaining consistent personal financial records are based on user-friendly technology and reminder modes [22]. The findings suggest that habits are built from user self-awareness, not solely on technology. However, this self-awareness needs to be maintained with the reminder feature of the personal finance management app. Therefore, personal finance management technology is truly linked and sustainable to a user's habits.

Moreover, survey and experiment results with informants indicate a gap between awareness and practice in personal financial management among Gen Z. Despite high interest in using applications and relatively good financial literacy, discipline in record keeping remains low. Yet, financial literacy and discipline are interconnected, thus forming the primary foundation of financial management. In managing personal finances, financial skills and knowledge are key to building self-awareness in making decisions and taking action [23].

In addition, the informants explained that their financial knowledge is fairly good, supported by their background as accounting and finance students. Several informants from the finance study program received material on personal financial management through a

personal financial planning course. The material covered investment instruments, financial behavior, building a personal financial portfolio, budgeting, and calculating individual income tax. Moreover, to support better personal financial management, they also attended several seminars and social media platforms. Thus, financial management became familiar to them. Consequently, the informants gained knowledge about financial planning and management from a wide variety of social media platforms and workshops they had attended.

Interestingly, most of the informants also gained knowledge regarding the urgency of "frugal living" financial management from the viral film in Indonesia, "Home Sweet Loan." The film tells the journey of a career woman who is able to use her money wisely so she can save to buy her own home. The film, with its theme related to wise financial management, was able to provide insight, especially for informants as the Gen Z generation, so they can start managing their personal finances wiser and better. In fact, with sufficient knowledge and information regarding good personal financial management in terms of record keeping, the applications used, and the various sources of income they can obtain, personal financial management can be more optimal. Therefore, the success of implementing a personal financial tracker in this generation is determined not only by technology, but also by financial literacy strategies and the integration of features that suit their preferences.

As they become accustomed to managing their personal finances, they will be increasingly motivated to seek further information on the subject. When they eventually become interested in investing their savings in other assets that can generate returns, in other words, investments, they are expected to be able to create their own financial portfolios. The goal is for them to not only be able to record and budget their finances, but also to generate profits from

their investments. This result is in line with previous studies which explain that a person's financial literacy can encourage that person to manage their finances more wisely, so that the money they manage can become secure savings for the future [20].

Another aspect worth discussing is the aspect of the application, which is the privacy data, user interface and customization as the factors that can increase the users' engagement. Based on the results of interviews with informants, it is clear that customizable applications are the right choice and are needed by users. Considering that each user's needs are different, applications that are easily customizable will be preferred. Furthermore, this adds value to the application in attracting users' interest. Some findings regarding user experience that are highlighted in personal financial tracker applications are: first, technology developers should pay more attention to the user interface, accessibility, and data privacy. Second, the application's attractive design and color tones match the interests of users, especially those of Generation Z and millennials. Third, it can be used offline or online, so users can update financial records and get data visualizations in real time without requiring a stable internet connection.

In terms of financial preferences, research also shows that students prefer simple, secure, and customizable apps over popular apps like Mint or Quicken, which offer comprehensive features but are complex and perceived as intrusive on privacy. In fact, Gen Z students in interviews emphasized the importance of an attractive user interface, data privacy, and offline access. This preference confirms Feenberg's concept of democratic rationalization, which states that technology should be designed with users, not imposed based on developer assumptions. Meanwhile, financial literacy appears to be the differentiating factor between passive record-keeping and active management. Students who have received financial planning material in class or attended seminars or on social

media are able to view apps as a means of reflecting on consumption patterns, not simply recording numbers. Conversely, those with low literacy levels stop at simple record-keeping. The finding that 40% of respondents even allocated funds to charity/infaq indicates that apps must also accommodate social and religious values in financial management.

By combining these three aspects, it's clear that a personal financial tracker shouldn't be viewed simply as a "technical tool," but rather as an arena for social negotiation where habits, preferences, and financial literacy interact. Based on Feenberg's perspective, the app's design should foster user participation to truly become a technology that supports the development of critical financial awareness, not simply a transaction-recording tool.

A Study of Personal Financial Technology Literacy, Behavior, and Preferences. Personal financial recording technology in the form of applications is essentially intended to help individuals manage income, expenses, debt, and investments more efficiently [13,14]. Studies on personal financial technology, such as smartphone applications and AI-based tools, significantly improve users' ability to manage their finances [4]. Personal financial technology has also been shown to improve decision-making and increase financial literacy [13].

However, its effectiveness is greatly influenced by the financial literacy and behavioral patterns of its users. Without adequate financial literacy, users tend to simply record transactions without being able to develop a consistent financial management strategy. Financial behavior studies confirm that mental accounting factors, financial management education, and financial cognition directly influence the intention and actual practice of using financial applications [16]. This indicates that user preferences for application features are highly dependent on the extent to which the application is able to adapt to their cognitive and social needs, not only on the technical recording function. In

other words, financial literacy is not just a prerequisite, but a key driver for personal financial trackers to truly become a learning tool and form healthy financial habits.

However, other empirical findings refute that user preferences often contradict the assumptions of app developers. They found that while popular apps like Mint or Quicken offer comprehensive features, many users decided to discontinue it due to security concerns, impracticality, and incompatibility with daily practices [17]. The emerging behavioral pattern is a tendency for users to choose apps that are simpler, safer, and more suited to their routines, even if the features offered are limited. Meanwhile, in the context of digital payments, reduced physical interaction with money actually causes some users to lose awareness of their spending, so apps need to be designed with transaction metadata visualization that encourages reflection on consumption patterns. Thus, user preferences, financial literacy levels, and daily habits must be central to the design of personal financial trackers. In this way, technology not only serves as a recording tool but also collaborates to develop a more critical financial awareness.

Personal Financial Technology on Critical Theory of Technology. Personal financial technology cannot be viewed as a purely neutral technical instrument. Within the framework of the Critical Theory of Technology [24], technology is an arena where user behavior can be shaped and negotiated. The findings of this study indicate that although respondents have a high interest in financial recording, daily habits such as forgetfulness, laziness, and a sense of unnecessaryness are the main factors in the failure of a technological system. This shows that technology interacts with usage habits, which can trigger behavioral changes (for example, with automatic reminders). However, it can also fail if it does not align with the user's social rhythm. Feenberg calls this condition a form of Co-construction of Technology and Society, namely that the financial behavior of Gen Z students is not

only influenced by application features, but also shapes how the application must be designed to be relevant and appropriate to their rhythm and social context.

The financial preference and financial literacy aspects demonstrate the dynamics between social values and technological design. Students' preference for secure, simple, and easily customizable applications demonstrates that technological design should not be solely top-down from developers, but requires user participation to meet their daily needs. Financial literacy is also a determining factor that can move the function of technology beyond simply being a recording tool, but also a tool for wiser management for its users. Without literacy, users will only record transactions. However, with literacy, users will have the ability to evaluate and decide on financial management policies based on the data presented in their financial management applications. Previous study emphasizes that low financial literacy makes individuals tend to be inconsistent in recording and planning [25]. Meanwhile, others found that students' savings behavior is influenced by financial literacy and social norms [26]. The results of surveys and experiments on respondents, which showed that 40% of respondents allocated funds for charity/infaq, are evidence that the socio-religious dimension is also important in student financial management—something often overlooked in Western application design. This was formed because respondents lived and grew up in an environment with a strong tradition of social activities such as charity. This will indirectly shape their financial literacy. In other words, successful app design must integrate social values, cultural preferences, and financial literacy levels to truly facilitate changes in financial behavior.

Feenberg believes that this is part of democratic rationalization, a process where technology is not only for efficient activities but can also be a critical educational tool that fosters awareness. However, this occurs if

users are literate and able to manage information well and comprehensively. User preferences for simple, secure, and customizable applications are also consistent with previous research. They emphasized that the effectiveness of personal financial management applications is greatly influenced by the extent to which the technology fits the user's lifestyle [13-14]. A study even showed that mental accounting and financial education play a significant role in shaping the intention and practice of using the application [16]. Automatic reminders and data visualization have the potential to help respondents improve the consistency of recording, reinforcing the findings that emphasized the importance of nudging in application design [17]. This is where Feenberg's principle of democratic rationalization is relevant: technology should be designed with users so that it is not just a recording tool, but a partner in developing financial awareness.

In conclusion, personal financial technology not only has the potential to be a medium of transformation, which is not just a recording tool, but also as a learning partner that can foster literacy, direct preferences, and shape healthier financial behavior. Interestingly, the findings from the experiment showed that some respondents who were accounting students and generation Z still preferred to do manual recording, such as on mobile phones, books, and spreadsheets compared to using popular applications. This is in line with the findings that explain the low adoption of financial applications such as Mint and Quicken, even though the features provided were complete [27-28]. The obstacles that emerged were not only about security and privacy, but also incompatibility with the financial habits of the users. This is similar to Resistance from Feenberg, where technology is less assimilated because its design does not pay attention to the social context of its users. Thus, financial behavior is more determined by several factors, such as habits, environment and social awareness of

the users, rather than simply by the availability of technical features in the technology.

4. Conclusion

Financial behavior is determined more by user habits and awareness than simply the availability of technical features in the technology. Mental accounting and financial education play a significant role in shaping the intention and practice of using an application. Furthermore, personal financial technology is not simply a neutral technology, but rather a social space where interactions between financial behavior, preferences, and literacy occur. This is evident from field findings through surveys, observations, and interviews with respondents, which indicate that the implementation of personal financial technology can fail if it is not aligned with strong social rhythms, preferences, and literacy.

Furthermore, user habits and awareness are key factors in consistent application use. Based on Feenberg's Critical Framework of Technology, financial applications should be treated as socially shaped technologies that are co-constructed with users, taking into account their values, habits, and cultural context. This is so that they can function as a tool for better financial management.

Lastly, one of this study's shortcomings is in its sample, which only includes respondents from one institution. Due to this, the results might not accurately reflect the opinions of people from different institutions. Therefore, in order to provide a more thorough grasp of the subject, future study should involve a wider range of respondents.

References

- [1] Khando K, Islam MS, Gao S. The Emerging Technologies of Digital Payments and Associated Challenges: A Systematic Literature Review. *Future Internet* 2023;15. <https://doi.org/10.3390/fi15010021>.
- [2] Saputra R. Pengaruh Financial Technology Terhadap Perilaku Keuangan Melalui Niat Berperilaku Sebagai Variabel Mediasi Pada Usaha Kecil Menengah Di Kabupaten Tebo. *Jurnal Manajemen Terapan Dan Keuangan (Mankeu)* 2022;11.
- [3] Elsalonika A, Ida I. Perilaku Keuangan Generasi Z: Peran Penerapan Financial Technology, Literasi Keuangan, dan Efikasi Diri. *Jurnal Manajemen Bisnis Dan Kewirausahaan* 2025;2:65–379.
- [4] Firliant, Jasman J, Asriany. The Influence Of Financial Technology (Fintech), Financial Attitudes And Financial Knowledge On The Financial Behavior of The Millennial Generation. *Management Studies and Entrepreneurship Journal* 2023;4:1882–91.
- [5] Susanto KP, Mandagie WC, Endri E, Wiwaha A. Financial literacy, technological progress, financial attitudes and investment decisions of Gen Z Indonesian investors. *Investment Management and Financial Innovations* 2025;22:25–34. [https://doi.org/10.21511/imfi.22\(1\).2025.03](https://doi.org/10.21511/imfi.22(1).2025.03).
- [6] Caseba FL, Dewayanto T. Penerapan Artificial Intelligence, Big Data, dan Blockchain dalam Fintech Payment Terhadap Risiko Penipuan Komputer (Computer Fraud Risk): A Systematic Literature Review 2024:1–15.
- [7] Erye, Deu I. Integrasi Teknologi Digital dan AI dalam Memperkuat Akuntabilitas pada Operasi Manajemen Rantai Pasokan: Analisis Literatur Sistematis. *TEKNIMEDIA* 2024;5:200–11.
- [8] Harto B, Sulistianingsih, Sofyan, Nurhakim TF. Dampak Media Sosial Terhadap Pengambilan Keputusan Finansial Melalui Pendekatan Kualitatif dalam Industri Keuangan.

- Komversal: Jurnal Komunikasi Universal 2024;1:91–107.
- [9] Restike KP, Prasasti D, Fitriani DI, Ciptani MK. Pengaruh Literasi Keuangan, Perilaku Pembelian Impulsif, dan Gaya Hidup Terhadap Penggunaan Shopee Pay Later Gen Z. *Jurnal Akuntansi Bisnis* 2024;22.
- [10] Tri Purwani TP, Harto Listijo HL, Rahmat Budi Santoso RBS. Generational Differences in Repeat Borrowing Attitudes: A Study of Millennials and Generation Z in Peer-to-Peer Lending. *Global Business Finance Review* 2025;30:44–56. <https://doi.org/10.17549/gbfr.2025.30.2.44>.
- [11] Santoso W, Trinugroho I, Risfandy T. What Determines Loan Rate and Default Status in Financial Technology Online Direct Lending? Evidence from Indonesia. *Emerging Markets Finance and Trade* 2020;56:351–69. <https://doi.org/10.1080/1540496X.2019.1605595>.
- [12] Hardin C, Rottinghaus AR. Introducing a cultural approach to technology in financial markets. *J Cult Econ* 2015;8:547–63. <https://doi.org/10.1080/17530350.2014.993683>.
- [13] Nur Annafiah, M. Miftach Fakhri, La Ode Lisbar, Amelia Syamsuddin, Nur Yahya Akhmad, Aprilianti Nirmala S. Development of Doe'ku Application: A Digital Solution to Manage Personal Finance Effectively. *Journal of Embedded Systems, Security and Intelligent Systems* 2024;192–204. <https://doi.org/10.59562/jessi.v5i3.5039>.
- [14] Fitriani Y. Analisa Pemanfaatan Aplikasi Keuangan Online Sebagai Media Untuk Mengelola Atau Memanajemen Keuangan. *Journal of Information System, Applied, Management, Accounting and Research* 2021;5:454. <https://doi.org/10.52362/jisamar.v5i2.432>.
- [15] Dewi L. Comparison Of Android-Based Personal Financial Management Applications With Variative Financial Conditions. *JAS (Jurnal Akuntansi Syariah)* 2023;7:102–14. <https://doi.org/10.46367/jas.v7i1.1098>.
- [16] Yeo KHK, Lim WM, Yii K-J. Financial planning behaviour: a systematic literature review and new theory development. *Journal of Financial Services Marketing* 2024;29:979–1001. <https://doi.org/10.1057/s41264-023-00249-1>.
- [17] Shi W, Ali M, Leong C-M. Dynamics of personal financial management: a bibliometric and systematic review on financial literacy, financial capability and financial behavior. *International Journal of Bank Marketing* 2025;43:125–65. <https://doi.org/10.1108/IJBM-06-2023-0359>.
- [18] Lewis M, Perry M. Follow the Money. *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*, New York, NY, USA: ACM; 2019, p. 1–14. <https://doi.org/10.1145/3290605.3300620>.
- [19] Feenberg A. Critical Theory of Technology: An Overview. *Tailoring Biotechnologies* 2005;1:47–64.
- [20] Gallardo-Vázquez D, Miralles-Quirós JL, Miralles-Quirós MM. Financial education and responsible consumption in undergraduate management students. *The International Journal of Management Education* 2024;22:101071. <https://doi.org/10.1016/j.ijme.2024.101071>.
- [21] Di Domenico SI, Ryan RM, Bradshaw EL, Duineveld JJ. Motivations for personal financial management: A Self-Determination Theory perspective. *Front Psychol* 2022;13.

- <https://doi.org/10.3389/fpsyg.2022.977818>.
- [22] Venkatesh V, Davis FD, Zhu Y. Competing roles of intention and habit in predicting behavior: A comprehensive literature review, synthesis, and longitudinal field study. *Int J Inf Manage* 2023;71:102644. <https://doi.org/10.1016/j.ijinfomgt.2023.102644>.
- [23] Ab Hamid SN, Kalaiarasi D, Abdul Rahman A, Mohd Amin SI. Understanding personal loan repayment intentions: The role of financial literacy, attitudes, norms, and self-efficacy. *Social Sciences & Humanities Open* 2025;12:101990. <https://doi.org/10.1016/j.ssaho.2025.101990>.
- [24] Chowdhry N, Dholakia UM. Know thyself financially: How financial self-awareness can benefit consumers and financial advisors. *Financial Planning Review* 2020;3. <https://doi.org/10.1002/cfp2.1069>.
- [25] Feenberg A. *Critical Theory of Technology* 2009:146–53.
- [26] Lusardi A, Mitchell OS. The Economic Importance of Financial Literacy: Theory and Evidence. *J Econ Lit* 2014;52:5–44. <https://doi.org/10.1257/jel.52.1.5>.
- [27] Mahdzan NS, Tabiani S. The Impact of Financial Literacy on Individual Savings. An Exploratory Study in the Malaysian Context. *Transformations in Business and Economics* 2013;12:41–55.
- [28] Kaye J, Vertesi J, Ferreira J, Brown B, Perry M. #CHImoney. CHI '14 Extended Abstracts on Human Factors in Computing Systems, New York, NY, USA: ACM; 2014, p. 111–4. <https://doi.org/10.1145/2559206.2559221>.
- [29] Snow S, Vyas D, Brereton M. Sharing, Saving, and Living Well on Less: Supporting Social Connectedness to Mitigate Financial Hardship. *Int J Hum Comput Interact* 2017;33:345–56. <https://doi.org/10.1080/10447318.2016.1243846>.

This page is intentionally left blank.