

THE IMPACT OF DIGITAL PLATFORMS IN THE DEVELOPMENT OF FINANCIAL EDUCATION IN ROMANIAN HOUSEHOLDS

**Valentina Butmalai¹, Nicoleta Cristache^{2*}, Alina-Florentina Saracu³,
Sabin Murariu⁴, Marius Iosif⁵, Andrei Vizitiu⁶**
¹⁾²⁾³⁾⁴⁾⁵⁾⁶⁾ Dunarea de Jos University of Galati, Galati, Romania

Abstract

This article investigates the role of digital platforms on enhancing the financial literacy of households in Romania. The digitalization of the financial sector builds new opportunities for approach to financial services and knowledge, potentially contributory to improving financial literacy. This study uses an exploratory qualitative approach structured to provide an overview of the relationship between technology and financial literacy. The authors analyse the principal types of digital platforms utilized to grow financial literacy: financial applications, educational platforms, and platforms of banks and fintech companies. The advantages of digital platforms as an instrument for increasing financial literacy are identified: accessibility, interactivity, content personalization, and scalability. The strengths and weaknesses of using digital platforms are examined, including digital inequality and the lack of digital literacy among certain groups of the population. Based on the analysis, recommendations are suggested to enhance the effectiveness of using digital platforms to grow the financial literacy of Romanian households. The study proves that the systematic improvement of digital platforms can significantly develop the financial education of the population and facilitate a more active participation of households in the digital economy.

Keywords

financial education, financial literacy, digital platforms, digital financial literacy, financial behaviour, households, digitalization, financial technologies.

JEL Classification

D14, G53, O33, G21

Introduction

The development of digital technologies is significantly changing the financial landscape, creating new opportunities for improving the financial literacy of the

* Corresponding author, **Nicoleta Cristache** – cristache.nicoleta@yahoo.de

population. Given the rapid digitalization of the economy and the financial sector, research into the role of digital platforms in shaping and developing the financial literacy of Romanian households is particularly relevant. The importance of this topic is emphasized at the state level, as reflected in the National Strategy for Financial Education 2023-2030 (Ministry of Education, 2023), which considers digitalization one of the key tools for achieving these objectives.

Despite some progress in improving financial literacy among Romanians in recent years, many households still lack the knowledge and skills needed to make effective financial decisions. At the same time, the range of digital financial services is expanding, requiring users to develop new skills at the intersection of financial and digital literacy.

1. Review of the scientific literature

This approach builds on recent research by authors such as Alikperova (2021) and Gimranova (2021), who emphasize the need to adapt financial literacy to the era of digital transformation. The theoretical perspectives are complemented by studies examining the psychological aspect of financial decisions (Houcell, 2022) and the importance of international experience in optimizing training programs (Ivanova, 2022). 1) and Gimranova (2021), who emphasize the need to adapt financial literacy to the era of digital transformation. The theoretical perspectives are complemented by studies examining the psychological aspect of financial decisions (Houcell, 2022) and the importance of international experience in optimizing training programs (Ivanova, 2022). However, a literature review reveals a significant gap: most current studies, including large-scale reports such as the OECD (2023) or public opinion monitoring analyses (Kuzina & Ibragimova, 2018), primarily focus on measuring financial literacy or on its general legal and pedagogical aspects (Povetkina et al., 2020; Vinnikova et al., 2019). There is a lack of research examining the specific mechanism by which the design and architecture of digital platforms (interactivity, gamification, real-time feedback) directly influence knowledge retention and behavioural change among users.

The purpose of this study is to analyse the role and potential of digital platforms in improving the financial education of Romanian households, as well as to identify mechanisms that facilitate the efficient use of these tools in the modern digital economy.

2. Research methodology

The methodological basis of the study consists of a comprehensive approach. The first stage of the study focused on a literature review—the method chosen to theoretically underpin the concepts of financial literacy and digital platforms—using academic databases as the tools. The rationale for this approach lies in the need to determine the current state of knowledge and identify variables influencing learning in a virtual environment.

The second stage of the study involved an analysis of secondary statistical data to characterize the empirical context. By interpreting indicators provided by official institutions (such as the OECD and CEC Bank), a correlation was sought between the population's level of financial education and the degree of digital penetration in the financial sector. This method was chosen to ensure the objectivity of the study,

providing a quantitative database to confirm the previously formulated theoretical conclusions.

The final stage involved a comparative analysis of different types of digital platforms. This method allowed for an assessment of the differentiated impact of fintech applications, e-learning platforms, and social media on users. The use of this method was justified by the need to demonstrate how the platform's digital architecture can stimulate or, conversely, hinder financial knowledge retention.

For the purpose of this study, digital platforms are defined as technological solutions that facilitate multifaceted user interactions and the exchange of value in the digital environment. Financial literacy is viewed as a set of knowledge, skills, and attitudes necessary for making effective financial decisions and achieving individual financial well-being.

The concept of digital financial education deserves special attention. According to G. Gimranova, it represents “a set of knowledge, skills and attitudes necessary for the safe and effective use of digital financial products and services” (Gimranova, 2021). This concept reflects the transformation of the traditional concept of financial education in the context of digitalization and emphasizes the need to develop new skills among the population.

3. Results and discussion

An analysis of the current state of financial literacy among Romanian households shows positive trends, but the potential for growth remains significant. According to the OECD study (OECD, 2023), the financial literacy score of Romanian adults was 54, reflecting a low level of financial education. This represents a small progress at the national level compared to previous periods. It is particularly important to note that 57% of Romanians are active users of mobile banking services, and 63% prefer cashless payments (CEC Bank, 2025).

The current situation is characterized by a number of significant trends. First, the digitalization of everyday financial life is rapidly increasing: from simple payments and transfers to more complex financial transactions. Second, a generational shift is taking place among users of financial services, with representatives of Generations Y and Z, for whom the digital environment is natural, entering the market (Kuzina, 2019). Third, the trend of transition from offline channels for acquiring financial knowledge to online formats has accelerated. Digital platforms used for the development of financial education can be divided into several main categories (Povetkina et al., 2020):

- educational platforms specialized in financial education (government financial education portals, online educational courses);
- financial applications and services (budgeting applications, investment platforms);
- fintech platforms that integrate educational elements into their products;
- social media and content platforms that disseminate financial knowledge.

A distinctive feature of the Romanian market is the active development of banking ecosystems, which are gradually transforming into multifunctional digital platforms that offer not only financial services, but also educational content about financial literacy.

Digital platforms promote financial literacy through various mechanisms. The educational potential of these platforms is realized through interactive courses, videos, webinars and other formats that make the learning process more accessible and engaging. A significant advantage is the opportunity to practice financial skills through simulators, virtual investment portfolios and other tools that allow users to practice in a safe environment.

As N. Masyuk and co-authors note, digital financial literacy is becoming an integral part of modern knowledge management not only at the organizational level, but also at the household level (Masyuk et al., 2023). It implies the ability to critically evaluate financial information in a digital environment, to understand the principles of operation of digital financial instruments and to recognize the risks associated with their use. Several key mechanisms can be identified through which digital platforms influence household financial literacy.

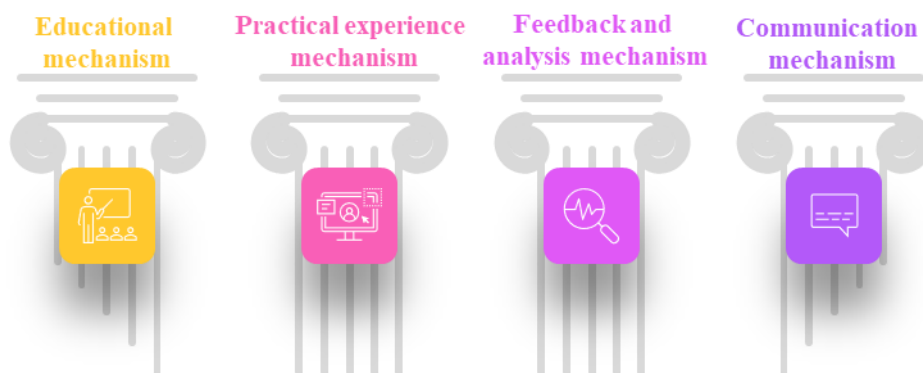


Figure no. 1. Key mechanisms of influence of digital platforms on household financial literacy

Source: developed by the authors

1. Educational mechanism. Digital platforms provide access to financial knowledge in a variety of formats, tailored to different learning styles and user experience levels.

2. Practical experience mechanism. Many digital platforms allow users not only to acquire theoretical knowledge, but also to apply it in practice in a simulated or real environment, with minimal risks.

3. Feedback and analysis mechanism. Digital platforms are able to collect and analyse data about users' financial behaviour, providing them with feedback and recommendations.

4. Communication mechanism. Many digital platforms create communities of users where they can share experiences, ask questions to experts, and receive support (Kuzina & Ibragimova, 2018). Personalization of financial products and services based on user behavioural data analysis also contributes to improving financial education. Digital platforms can provide personalized recommendations, educational content, and financial solutions tailored to users' individual needs, making the learning process more efficient (Silina & Stupin, 2016).

It is important to note that digital platforms possess not only technical capabilities, but also the ability to create new business models and value propositions, transforming interactions between market participants. This allows for the integration of educational components into a wide range of services, making financial education a natural part of the user experience.

The key advantages of digital platforms as a tool for improving financial education are accessibility, scalability and low cost of content distribution. These features are particularly important for ensuring financial inclusion, which, according to O. Solozobov, is a prerequisite for the full participation of households in economic life (Solozobov, 2024). The analysis allows us to systematize the key advantages of digital platforms in the context of the development of financial education.

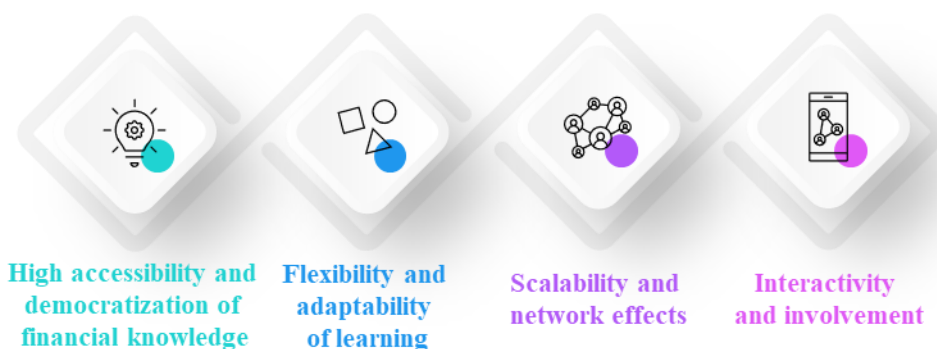


Figure no. 2. Key advantages of digital platforms in the development of financial education

Source: developed by the authors

1. High accessibility and democratization of financial knowledge. Digital platforms overcome geographical, temporal and financial barriers, making financial education accessible to a wide range of people.

2. Flexibility and adaptability of learning. The ability to acquire knowledge at a convenient time and pace, as well as the clarity and interactivity of digital content, facilitates more efficient absorption of information.

3. Scalability and network effects. Digital platforms can support an unlimited number of users without significantly increasing costs, allowing for maximum expansion of the coverage of financial education programs.

4. Interactivity and engagement. Modern digital platforms use a variety of interactive elements that make the learning process more engaging and increase user engagement (Ivanova, 2022).

However, the use of digital platforms to improve financial literacy faces several limitations. Digital inequality remains a pressing issue in Romania, especially in remote and rural areas, where access to high-speed internet and modern devices may be limited. Differences in digital literacy across age and social groups also create barriers to the use of digital platforms.

Issues related to information security and trust in digital platforms also require attention (Vinnikova et al., 2019). Users need to have confidence in the reliability and safety of the services they use, as well as in the authenticity of the information provided. In the face of the proliferation of disinformation and financial fraud, critical thinking and the ability to assess the reliability of sources become essential components of financial education.

Comparing traditional and digital approaches to developing financial education, digital platforms offer several advantages, such as scalability, flexibility, and personalization. However, traditional formats (face-to-face seminars, consultations, and printed materials) remain valuable, especially for population groups that lack sufficient digital skills or access to technology.

Hybrid approaches, which combine digital tools with elements of traditional education and face-to-face interaction, appear to be the most effective. These approaches capitalize on the advantages of digital platforms while overcoming their limitations (Housel, 2022).

When assessing the effectiveness of different types of digital platforms, it is important to consider not only quantitative indicators (number of users, volume of content provided), but also qualitative criteria, such as ease of use, content quality, user engagement and, most importantly, the impact on real financial behaviour.

Both public and private initiatives play an important role in the development of digital platforms for improving financial education. The state creates the necessary regulatory framework, develops and implements national financial education programs, provides funding and coordinates the efforts of the various participants. The private sector, in turn, develops innovative technological solutions, creates educational content and integrates financial education elements into its products and services.

A. Tsakaev and U. Rassukhanov note that financial education is an important element of the country's financial security system. In this context, the development of digital platforms for improving financial education is of strategic importance, contributing to strengthening financial stability at the macro level and improving financial well-being at the household level (Tsakaev & Rassukhanov, 2024).

Promising areas for developing digital platforms to improve financial education include:

- gamification and social interaction elements to increase user engagement;
- using artificial intelligence technologies to create personalized educational trajectories;
- developing specialized solutions for various target groups, taking into account their needs and level of digital literacy;
- creating financial education ecosystems that unite various platforms and services.

Thus, the results obtained from this analysis align with the directions identified in the recent literature. The agreement with previous studies is manifested on several main levels. First, the validation of digital platforms as tools for optimizing financial education confirms the theses supported by Gimranova (2021) and Masyuk et al. (2023). Second, the identification of the need for digital literacy as a precondition for financial success is in line with the conclusions of Alikperova (2021).

align with the directions identified in the recent literature. The agreement with previous studies is manifested on several main levels. First, the validation of digital platforms as tools for optimizing financial education confirms the theses supported by Gimranova (2021) and Masyuk et al. (2023). Second, the identification of the need for digital literacy as a precondition for financial success is in line with the conclusions of Alikperova (2021).

Furthermore, our results on the importance of financial culture in the context of economic security reiterate the perspectives offered by Tsakaev and Rassukhanov (2024), demonstrating that our approach is not an isolated one, but rather consolidates a current research trend that supports the integration of technology into the mechanisms of forming crisis-resistant financial behaviour.

Also, the analysis carried out on learning difficulties in the online environment confirms Housel's (2022) observations, according to which financial education is not just a transfer of technical data but is deeply influenced by user psychology and the way the digital interface interacts with cognitive biases.

Conclusions

This study demonstrates the significant potential of digital platforms as a tool for improving the financial literacy of Romanian households. Effective use of this potential requires a systematic approach that considers both the capabilities and limitations of digital technologies.

The analysis showed that digital platforms can have a significant impact on all components of financial education: knowledge, skills and attitudes. They provide broad access to high-quality educational resources, provide opportunities for the practical application of financial knowledge and create an environment conducive to the development of responsible financial behaviour.

To improve the effectiveness of digital platforms in developing financial education, the following recommendations can be made:

- developing public-private partnerships to create and promote high-quality educational content;
- implementing mechanisms for evaluating the quality and effectiveness of digital educational programs;
- implementing measures to overcome digital inequality and improve digital education;
- integrating financial education elements into various digital services used by households in everyday life.

Although this paper provides a solid conceptual framework for understanding the impact of digital platforms, it presents certain limitations inherent to a theoretical approach. The main constraint is the lack of a representative sample that would allow quantifying the impact of digital platforms on real financial behaviour. Further research in this area could focus on examining the impact of certain types of digital platforms on different aspects of financial education, assessing the long-term effects of using digital tools, and developing innovative approaches to financial education in the digital environment.

References

- [1] Alikperova N. "Financial literacy and financial education of the population", M: FNISC RAS, 2021. p. 117.
- [2] CEC Bank Survey 2025. Available: <https://www.finzoom.ro/articole/sfaturi/sondaj-cec-bank-pes~51bb81a906b54f2091a9374185f311f2/>
- [3] Gimranova G. "Digital financial education in the era of digital transformation of the economy", Economics and management: Scientific and practical journal. 2021. No. 1 (157). pp. 98-102.
- [4] Housel M. "The Psychology of Money. Timeless Lessons on Wealth, Greed, and Happiness", 2022. – 271 p.
- [5] Ivanova T. "Improving financial education: a review of international experience ", Bulletin of the State University. Series 3. 2022. No. 1. pp. 222-229.
- [6] Kuzina O. " Financial education of young people", Monitoring public opinion: economic and social issues. 2019. No. 4 (92). pp. 157-177.
- [7] Kuzina O., Ibragimova D. "Measurement issues and ways to improve the financial literacy of the population", Monitoring public opinion: economic and social issues. 2018. No. 4 (88). pp. 14-25.
- [8] Masyuk N., Gerasimova A., Bushueva M. "Digital financial education and digital financial skills in knowledge management", Creative Economy. 2023. Vol. 17, No. 5. pp. 1637-1654.
- [9] Ministry of Education of Romania. National Strategy for Financial Education 2023-2030. Available: https://www.edu.ro/sites/default/files/SNEF_proiect_2023.pdf
- [10] OECD. "INFE 2023 International Survey of Adult Financial Literacy ", Available: https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/12/oecd-infe-2023-international-survey-of-adult-financial-literacy_8ce94e2c/56003a32-en.pdf
- [11] Povetkina N., Povetkina N., Kudryashova E., "Financial education and sustainable development in the digital era (legal dimension): monograph", INFRA-M, 2020. p. 104.
- [12] Silina S., Stupin V. "Financial culture: necessity and training methods", Bulletin of the FPSB Academy. Psychological and pedagogical sciences. 2016. No. 2 (36). pp. 13-18.
- [13] Solozobov O. "Digital Finance for Improving Financial Inclusion for Households", Innovative Economy: Information, Analysis, Forecasts. 2024. No. 4. pp. 162–169.
- [14] Tsakaev A., Rassukhanov U. "Financial education and financial culture in the context of financial security", Economic Security. 2024. Vol. 7, No. 7. pp. 1817–1830.
- [15] Vinnikova I., Kuznetsova E., Mukhina E. "Problems of forming financial literacy", Problems of modern pedagogical education. 2019. No. 64-3. pp. 59-62.