IMPLICATIONS OF NEW TECHNOLOGIES ON SAVING BEHAVIOR IN THE DIGITAL ECONOMY

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ABSTRACT: *Digital transformation changed the way individuals manage money and make financial decisions. The appearance and then the evolution of financial technologies (fintech), artificial intelligence, and mobile banking applications introduced new tools that automate, personalize, and influence saving behaviour in the digital economy. These innovations affect how people perceive trust, control, and financial security. The present paper explores how demographic and behavioral characteristics change the adoption of digital saving tools. The main purpose of the study is to identify patterns in digital saving adoption. As methodology, the research employs a qualitative method using data collected through semi-structured interviews with digital banking users and focuses on their perceptions of convenience, security, and emotional engagement in digital platforms that influence their savings habits. The results show that digital technologies facilitate accessibility and encourage saving discipline, but in spite of this, concerns about data protection and emotional detachment persist.*

The results indicate that digital financial technologies may influence saving behaviour through increased convenience and transparency. At the same time, concerns related to trust and data protection continue to shape adoption decisions.

Keywords: *Digital economy, Digital banking, Financial technology, Saving behaviour*

JEL Classification: *O33, E21, G21*

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1. INTRODUCTION

Digital transformation changed how people manage their finances nowadays and take decisions about money management. New technologies as fintech, artificial intelligence and mobile banking started to be used as tools that help automate, personalize and define how people save and invest in both advanced and emerging economies (Gomber et al., 2017; Claessens et al., 2018). Digital technologies continue to spread globally especially in low-income populations and improve access to financial services and consequently provide easier savings solutions.

In Romania, the rapid digital transformation reshaped the country's financial landscape as the financial technology (FinTech) sector expanded quickly and made financial services more accessible. Due to this, people were encouraged to switch from traditional to digital transactions. Digital transactions such as payments, investments or money transfers can now be carried out far more quickly and conveniently. Moreover, the increasing integration of sustainability criteria and sustainable indices in capital markets reflects structural changes that also influence individual investment and saving decisions (Panait et al., 2025).

It's financial literacy that can also change people's saving behavior. Individuals who have a clearer understanding of financial principles are generally more inclined to save consistently and develop healthier long-term financial habits. Data from the Global Findex (2025) shows that nearly half of adults worldwide (48%) saved money during the previous year. However, saving behavior varies depending on a country's level of economic development. In high-income economies, a much larger share of adults (around 71%) made short-term savings, while in emerging and developing economies, the proportion was lower, at about 43% (Demirgüç-Kunt et al., 2020). In the Romanian context, education and financial literacy support financial inclusion and improve saving outcomes (Drăghici & Oprea, 2025).

Although the use of digital banking services increased considerably, the adoption remains uneven, influenced by demographic, economic, and technological factors.

Based on these, most of the past studies focused mainly on analyzing the digital banking from an economic perspective or on general consumer perceptions and emotions.

Therefore, the paper analyzes the relationship between FinTech adoption and savings behaviour for people aged 35 to 45 and how they perceive digitalization in banking and which factors or past experiences could influence their saving habits. The study provides practical recommendations for banking institutions and offers useful insights for improving communication strategies and the user experience.

To achieve these objectives, the study addresses the following research questions: 1. How do new digital technologies influence the saving behaviour? 2. How do trust and security concerns affect people's decision to use digital tools for saving?

The paper is structured into five sections. The first section provides a background discussion. The second section offers a review of the relevant literature, followed by a description of the data and research method in the third section. The fourth section focuses on the results and discussion, while the fifth and final section presents the conclusions, the study's limitations, and directions for future research.

2. LITERATURE REVIEW

The new FinTech solutions have the ability to make the shift from traditional finance services to the digital, innovative ones and to ease the access of previously unserved areas, especially from the developing countries (Ololade, 2024; Margareta et al., 2025). Recent bibliometric evidence also confirms the rapid expansion of research on banking digitalization and its implications for financial inclusion in emerging economies and demonstrates that there is a structural shift toward technology-driven financial intermediation (Oprea & Nicula, 2026).

In their papers, Oprea (2023) and Adelaja et al. (2024) show that innovations like mobile money, artificial intelligence, and blockchain-based solutions make financial services more flexible, accessible, and better adapted to people's daily needs. These digital tools help households manage shocks, save more regularly, and make quicker financial decisions as observed in countries such as Romania (Anghel & Strachinaru, 2016). People started to experience the benefits of these tools, from lower financial fees and penalties to easier access. The benefits influence the decision-making, which becomes more informed and focused on saving solutions (Carlin et al., 2023). Lack of digital competencies and of financial literacy can be considered an obstacle in using FinTech solutions (Broekhoff et al., 2024; Singh et al., 2024).

Different studies show that people who are financially literate tend to make smarter savings and investment decisions (Thakor, 2020; Oprea et al., 2025). Researchers also caution about the fact the relationship between FinTech and improved saving habits is not universal (Mader, 2018).

Papers focused on behavioral mechanisms which underline FinTech adoption show a better understanding of the heterogeneity of these effects. Maria & Sugiyanto's (2023) research shows that trust and security perceptions repeatedly emerge as high-impact determinants of behavioral intention. Empirical models that integrate UTAUT2 with trust-based constructs confirm that institutional and technology trust can compensate perceived risk mostly in mobile banking and e-wallet contexts where data sharing and authentication are important to users (Amnas et al., 2023; Kilani et al., 2023).

Newer evidence also indicates that adoption intentions rise when functional value (speed, convenience, personalization) dominates financial and privacy risks, but this balance varies by user profiles and prior digital experience (Wei et al., 2025).

Evidence from Romania also emphasizes that perceived data security and trust in advanced technologies (including features enabled by AI) are associated with intention to adopt digital wallets and mobile banking and reinforce the role of guarantees and transparent governance for stable saving routines (Bodorin, 2025).

Trust is a mediator between perception of utility and intention of FinTech services use, thus, it is considered a determinant factor in FinTech adoption (Kabakuş & Küçükoğlu, 2022; Gefen et al., 2003). In this context, Oyewole et al. (2024) highlighted the importance of consumer protection laws, digital ID systems, and privacy safeguards to help build trust in FinTech platforms (Oyewole et al., 2024).

The loyalty toward a financial institution is given by trust. The clients who consider digital services safe intend to develop a relationship based on trust with a financial institution.

(Sa'diyah & Soegoto, 2021; Alrawad et al., 2023). Recent studies also underline that perception of security and data protection are correlated with the trust level of clients and influence the adoption and use decision of digital services (Kantika et al., 2022; Acosta-Prado et al., 2024). Even the best digital platforms can be abandoned by users if there is a security doubt (Gui et al., 2024).

3. METHODOLOGY

The study applies qualitative research based on semi-structured interviews that explore how Romanian consumers' savings habits are influenced by trust and security. This method offers the option to adjust the questions based on participants’ responses and allows new themes to emerge naturally during the discussion.

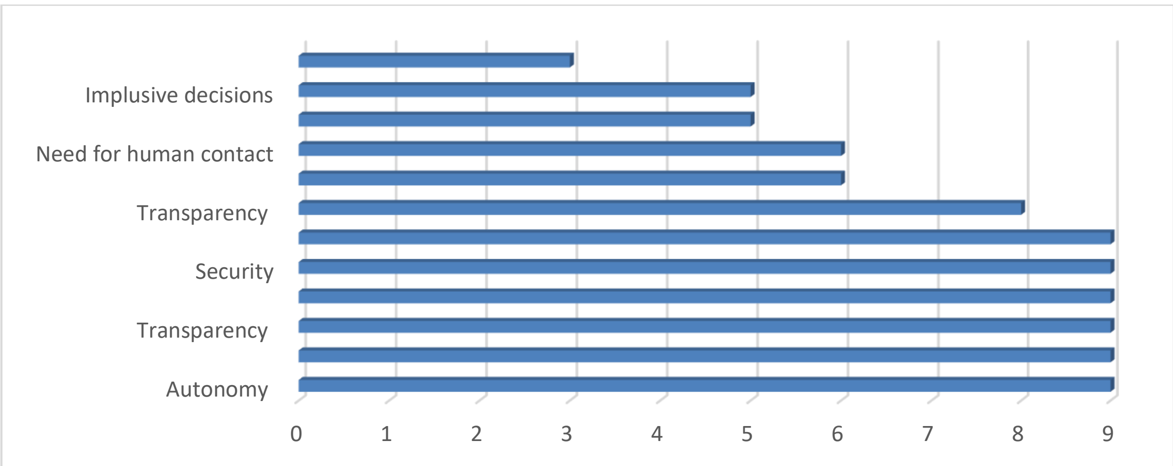
The data obtained from participants’ interview responses are qualitative, and the unit of analysis is the individual user of digital banking services. The purposive sampling contained nine participants, men and women aged 35–45, living in Bucharest. The justification to select this particular group was motivated by the fact that these consumers' experience with both traditional and digital banking services, which allowed them to provide informed comparisons. The interviews were conducted in April 2025. Interviews were audio-recorded with participants’ consent, fully transcribed, and analyzed to identify themes related to digital behavior, perceived security, and emotional responses. The results were summarized and exported into an Excel file to support cross-case comparison.

The methodology was limited by the small number of participants, which does not allow the results to be generalized. However, the data are rich and suitable for the exploratory purpose of the study.

4. RESULTS AND DISCUSSIONS

The qualitative study was conducted with nine participants, aged 35–45, which allowed the research to focus on a segment that has interacted with both traditional banking channels and modern digital platforms. Participants came from different professional backgrounds and brought diverse viewpoints on trust, autonomy and adaptability in the context of savings and investing. Analysis of the semi-structured interviews revealed three main themes related to how consumers perceive trust and security in digital banking services when making a savings decision. Each theme contains multiple subthemes, supported by detailed and context-specific concepts. To visually highlight the main themes identified during the interviews, Figure 1 illustrates their distribution based on how frequently they appeared in participants' responses.

Figure 1. Frequency of themes identified in the interview analysis (N = 9)



Source: author's representation based on data obtained from the analysis.

The results of the analysis are summarized below:

Digital banking behavior is linked to more consistent saving habits.

- ✓ Autonomy (9/9). The possibility to check in real-time balance and have direct control over accounts makes saving more intentional: people know where they stand and can move small amounts into savings when they see a surplus. This supports regular, self-directed saving and tighter budgeting.
- ✓ Speed / Efficiency (9/9). When saving is instant, respondents are more likely to act on saving intentions (e.g., round-ups, same-day transfers on payday).
- ✓ Transparency (8/9). Easy access to balances and transaction history raises awareness of spending leaks, which participants described as helping them stay on track with saving targets.

Positive emotional perceptions, such as trust and comfort, support saving behavior, while frustration and anxiety tend to inhibit it.

- ✓ Comfort (9/9). When the experience feels easy and familiar, people are willing to save more often (e.g., set & forget automations, recurring transfers).
- ✓ Perceived security (9/9). The new protective methods, like two-step verification and biometrics, are a precondition for depositing money into digital savings accounts. People that have a sense of security are more inclined to adopt a saving tool. On the contrary, if the safety measures are not in place, the decision to save can be delayed or people will avoid to move funds.
- ✓ Anxiety (3/9). People who have a fear of errors or fraud seem to avoid exposing themselves to the new saving features (e.g., automated rules). As a consequence, the saving frequency is reduced among a minority of users.

Trust dynamics indicate that the combined support, digital and human, improves user confidence.

- ✓ Influence on habits (9/9). All the respondents confirmed that they are inclined to adopt a savings tool when they have available both human and digital support.
- ✓ Need for human contact (6/9) and preference for hybrid (6/9). Many respondents want human support for complex or high-stakes actions (e.g., large transfers, disputes), but are comfortable using apps for routine saving.

Table 1. Quick synthesis - direction of association with saving

Theme	Direction vs. saving behavior	Why it matters
Autonomy, Transparency	**Positive**	Control and visibility support budgeting and planned transfers
Speed/Efficiency	**Positive (with caveat)**	Frictionless saving may also enable impulsive spending
Perceived Security, Comfort	**Strong positive**	Preconditions for adopting/keeping automated saving tools
Frustration, Anxiety	**Negative**	Interrupt routines; reduce willingness to try saving features
Need for human contact / Hybrid	**Positive**	Reassurance → sustained digital saving for routine goals
Impulsive decisions	**Negative (subset)**	Can erode saved amounts without guardrails

Source: author's representation based on data obtained from the analysis.

The qualitative results show that digital banking behaviour shapes saving habits. Autonomy, speed and transparency are the elements mentioned in almost all the responses. This indicates that users feel more in control of their finances when they use digital services. Majority of participants responded that digital tools (instant transfers, real-time balance visibility) helped them save more frequently and in an organized manner.

Emotional perceptions also influence how individuals use digital saving features. Feelings of comfort, familiarity, and perceived security (biometrics, two-factor authentication) were mentioned by all respondents, showing that positive emotions build confidence and support stable saving behaviour. In contrast, frustration caused by technical problems and anxiety related to errors or fraud can disrupt saving routines and discourage the use of digital tools.

In terms of trust dynamics influence, many participants preferred a hybrid approach: digital tools for routine tasks and human assistance for complex or sensitive issues. This combination provides a sense of trust and encourages continued use of digital platforms for regular saving. At the same time, the speed of digital transactions can make people take impulsive decisions on spending, which may conflict with saving goals.

All three dimensions: digital behaviour, emotional perceptions, and trust dynamics, indicate a clear connection to saving behaviour. The results show that comfort, transparency, and control can support frequent and organized saving, while frustration, anxiety, and impulsivity may diminish saving discipline for some users. These findings align with the literature showing that FinTech removes barriers and supports saving through access, automation, and convenience. Adoption of these solutions depends on digital financial literacy and trust, shaped by security measures, regulations, and cultural context.

This qualitative study had some limitations because it relied on a small sample of adults and data collected over a short period of time, which can limit the generalization of the findings and may incur selection and response bias. The study can be used as a reference framework for future research on causal links between digital technologies, perceived security and saving behavior based on larger, multi-region or cross-country samples and mixed methods (standardized surveys, experiments).

5. CONCLUSIONS

The purpose of this study was to examine how digital technologies, particularly FinTech applications, artificial intelligence tools, and mobile banking platforms, can change saving behaviour among adults with age 35-45. The paper analyzed how individuals perceive trust, security, and emotional engagement when interacting with digital financial services, and to identify behavioural patterns that influence their decision to adopt digital saving tools. We have selected a qualitative methodology approach in order to explore two core objectives: understand the influence of technological innovation on short-term saving habits and analyze how much the adoption decision to use a saving tool is guided by trust and sense of security. The findings indicate that the adoption of digital technologies changed the user's perception to practice a more organized money management due to services' speed, accessibility, and transparency (real-time information, online transfers).

This shows that digital tools can stimulate short-term saving routines. At the same time, protective and security features such as biometrics and two-factor authentication increase confidence in digital platforms. Nevertheless, the study also highlights the fact that the technical issues, uncertainty, or fear of fraud can discourage saving behaviour.

The research provides an integrated view that connects FinTech adoption, emotional responses and saving habits. The focus is on a demographic group (adults aged 35–45) that is rarely examined in qualitative FinTech studies. With this approach, the paper provides new insights into how this segment experiences the transition from traditional to digital banking. There was introduced in the study a thematic coding to map the user perceptions and generate a detailed categorization of behavioural, emotional and trust-related factors that influence saving decisions. These contributions strengthen the understanding of how digital finance affects every day financial behaviour at the individual level.

The study has several limitations. The small sample of nine participants limits the generalization of the results. Because the data rely on self-reported experiences, responses may be influenced by personal preferences or other contextual factors. At the same time, the sample is geographically limited to Bucharest and may not capture long-term behavioral dynamics from a wider region. Future research should focus on expanding to larger, more diverse samples across different regions or countries to test the consistency of these findings and investigate demographic or cultural variations. The results of this study can serve as a basis for banks and policymakers to develop targeted personalized digital tools in order to encourage users to have consistent saving practices.

In conclusion, the study highlights that digital transformation changes financial behavior and makes saving more efficient, intentional, and accessible. As financial technologies continue to develop, it’s important to build transparent, user-centered, and trustworthy digital ecosystems that will support individuals in managing their finances and developing sustainable saving habits in the digital economy.

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