

The Impact of Mobile Banking on Personal Finance Management: A Study of Vocational Students at Universitas Sebelas Maret

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Abstract

This study examines the factors influencing mobile banking adoption for personal financial management among vocational students at Universitas Sebelas Maret, focusing on perceived usefulness, ease of use, and social influence using the frameworks of TAM (Davis, 1989) and UTAUT (Venkatesh, 2003). As mobile banking becomes increasingly essential for digital financial services, understanding how young users adopt and utilize mobile banking is important. This study surveyed 142 vocational students at Universitas Sebelas Maret to assess their adoption of mobile banking for personal financial management. It examined their perceptions of mobile banking's usefulness, ease of use, and social influence. Data were collected through structured questionnaires, and analyzed using regression techniques in Stata 19. The research also considered demographic factors such as gender, semester, and study program cluster to ensure the robustness of the findings. The results show that perceived usefulness and social influence significantly impact students' financial planning behaviors, while perceived ease of use did not show a significant effect. These findings suggest that improving digital financial literacy and increasing awareness of mobile banking's benefits are key to enhancing students' personal financial management practices. Additionally, the banking industry needs to continue providing mobile banking services that are genuinely useful, so they can be adopted by students for better financial planning.

Keywords: Mobile Banking, Perceived Ease of Use, Perceived Usefulness, Social Influence, Personal Financial Management

Abstrak

Penelitian ini meneliti faktor-faktor yang mempengaruhi adopsi mobile banking untuk manajemen keuangan pribadi di kalangan mahasiswa vokasi Universitas Sebelas Maret, dengan fokus pada persepsi manfaat, kemudahan penggunaan, dan pengaruh sosial menggunakan kerangka kerja TAM (Davis, 1989) dan UTAUT (Venkatesh, 2003). Seiring dengan semakin pentingnya mobile banking dalam layanan keuangan digital, pemahaman tentang bagaimana pengguna muda mengadopsi dan memanfaatkan mobile banking menjadi sangat penting. Penelitian ini mensurvei 142 mahasiswa vokasi Universitas Sebelas Maret untuk menilai adopsi mereka terhadap mobile banking untuk manajemen keuangan pribadi. Penelitian ini mengkaji persepsi mahasiswa terhadap manfaat mobile banking, kemudahan penggunaan, dan pengaruh sosial. Data dikumpulkan melalui kuesioner terstruktur dan dianalisis menggunakan teknik regresi di Stata 19. Penelitian ini juga mempertimbangkan faktor demografis seperti jenis kelamin, semester, dan rumpun program studi untuk memastikan kekuatan hasil penelitian. Hasil penelitian menunjukkan bahwa persepsi manfaat dan pengaruh sosial secara signifikan mempengaruhi perilaku perencanaan keuangan mahasiswa, sementara persepsi kemudahan penggunaan tidak menunjukkan pengaruh yang signifikan. Temuan ini menunjukkan bahwa meningkatkan literasi keuangan digital dan meningkatkan kesadaran akan manfaat mobile banking merupakan kunci untuk meningkatkan praktik manajemen keuangan pribadi mahasiswa. Selain itu, industri perbankan perlu terus menyediakan layanan mobile banking yang benar-benar bermanfaat, sehingga dapat diadopsi oleh mahasiswa untuk perencanaan keuangan yang lebih baik.

Kata kunci: Mobile Banking, Persepsi Kemudahan, Persepsi Manfaat, Pengaruh Sosial, Pengelolaan Keuangan Pribadi



INTRODUCTION

The rapid digital transformation in the financial sector has led to the widespread adoption of mobile banking, revolutionising how individuals manage their finances. Mobile banking enables users to access financial services such as money transfers, bill payments, and savings management directly from their mobile devices, making financial services more accessible, especially in developing countries. According to Gabor & Brooks (2017), mobile banking has significantly contributed to financial inclusion by providing millions of people with access to formal financial services in regions previously underserved by traditional banking. In Indonesia, digital banking services have continued to evolve alongside fintech developments. Mobile banking, available 24/7, provides a practical solution for non-cash transactions and has become increasingly popular among young people (Sutia et al., 2020).

Mobile banking in Indonesia has rapidly expanded due to increased smartphone use and internet access, particularly among Generation Z, who are highly familiar with digital technology. Despite this growth, many students still struggle with financial management due to limited financial knowledge, impulsive spending habits. The 2022 National Survey on Financial Literacy (SNLIK) reported that only 47.88% of Gen Z are financially literate, underscoring the need for stronger financial education. Mobile banking offers features such as balance checking, expense tracking, and digital budgeting, which can support better financial behavior. Goyal and Kumar (2021) highlight that digital financial literacy enhances personal finance planning and control when supported by mobile technology. In addition, Liu et al., (2017) found that mobile channel usage is linked to more responsible financial behaviours, such as frequent balance monitoring.

The growing use of mobile banking among students shows how important it is to understand the key factors that shape their decision to adopt this technology. One of the most widely used models to explain technology adoption is the Technology Acceptance Model (TAM), developed by Davis (1989). This model highlights that perceived usefulness and perceived ease of use are the main reasons people decide to adopt new technology. In the context of Islamic banking, Suhartanto et al. (2020) confirmed that both factors strongly influence users' attitudes and intentions, and that religiosity can strengthen these effects. Other researchers have also emphasized the importance of trust and risk. Martins et al., (2014) pointed out that even when users are worried about risks, their expectations of good performance can still drive them to adopt mobile banking.

To better capture the complexity of user behaviour, Venkatesh et al. (2003) introduced the Unified Theory of Acceptance and Use of Technology (UTAUT). This framework includes additional factors such as performance expectancy, effort expectancy, social influence, and facilitating conditions. Liu et al. (2019) showed that these elements, especially performance expectancy and social influence, play a major role in shaping students' willingness to use mobile apps. Expanding on this, Alalwan et al., (2017) adapted the UTAUT2 model by adding trust, enjoyment, and the perception of price fairness. All of these factors were shown to meaningfully influence the decision to adopt mobile banking. Taken together, these findings suggest that students are more likely to use mobile banking when they find it useful, easy to use, trustworthy, and supported by their social environment.

Financial planning behaviour, particularly among students, is strongly influenced by both individual capabilities and contextual factors. Key determinants include financial literacy, budgeting skills, self-control, and the use of digital financial tools (Agarwal & Ann Elston, 2001). Gender differences also shape financial habits, with male and female students demonstrating distinct saving and spending behaviours (De et al., 2010). Moreover, family plays a crucial role. Damayanti et al. (2025) found that parental

education, financial literacy and financial management experience significantly influence students' financial planning, highlighting the importance of social learning. As students increasingly rely on digital platforms for banking and budgeting, their financial planning is also shaped by perceptions of usefulness, ease of use, and social encouragement factors emphasised by the UTAUT framework (Venkatesh et al., 2003; Baptista & Oliveira, 2015; Liu et al., 2019). Thus, these findings suggest that effective financial planning among students is a result of financial knowledge, digital adoption, and supportive environments.

This study investigates the impact of mobile banking on personal finance planning among vocational students at Universitas Sebelas Maret. Vocational students were chosen for this study due to their practical education, which exposes them to real-life financial decisions. We surveyed 142 vocational students to understand their use of mobile banking and its influence on their personal finance management behaviours. The focus of the survey was on students' perceived ease of use, perceived usefulness, and social influence of mobile banking, specifically in relation to financial planning. The findings aim to understand the relationship between these factors and how they affect students' ability to manage their finances and improve financial planning practices. Additionally, the study will explore how mobile banking contributes to financial inclusion.

The remainder of this paper is structured as follows: Section 2 describes the research methodology used in this study. Section 4 presents the empirical findings and discussion, and Section 5 concludes the study and offers recommendations.

RESEARCH METHODOLOGY

This study investigates the factors influencing mobile banking adoption for personal financial management among vocational students at Universitas Sebelas Maret. The research design is quantitative, with a sample of 142 students selected using Slovin's formula for sample size determination. Given the population of 6,600 students, Slovin's formula was applied to ensure a representative sample. Data collection was carried out using a structured questionnaire to assess students' perceptions of mobile banking and their financial management behaviours. The study employed the TAM (Davis, 1989) and UTAUT (Venkatesh et al., 2003) frameworks, focusing on perceived ease of use, perceived usefulness, and social influence. Additionally, Yeo et al. (2024) concept of personal financial planning was used to assess the impact of mobile banking on students' financial behaviours. Control variables, such as sex, semester, and major (social sciences vs. science and technology), were included to account for variations in financial management behaviours. Data analysis was performed using three techniques: descriptive analysis, correlation matrix analysis, and regression analysis. As Neuman (2014) explains, these methods are essential for summarising data and exploring the relationships between variables, helping to uncover patterns and guide conclusions. The following regression equation was proposed:

$$PFP = \alpha + \beta_1 \cdot PEOU + \beta_2 \cdot PU + \beta_3 \cdot SI + \beta_4 \cdot \text{sex} + \beta_5 \cdot \text{semester} + \beta_6 \cdot \text{major} + \varepsilon$$

RESULT AND DISCUSSION

The results section presents the findings from the survey conducted among vocational students at Universitas Sebelas Maret. It begins with a summary of the descriptive statistics to provide an overview of key variables, including students' perceptions of mobile banking and their financial management behaviours, along with control variables such as gender, age, semester, and study program cluster. The following analysis will explore the relationships between these variables and their impact on students' financial behaviours.

Table 1. Descriptive Statistic

Variable	Obs	Mean	Std. Dev.	Min	Max
PU	142	4.446	0.574	1.6	5
PEOU	142	3.981	0.676	1	5
SI	142	3.493	0.796	1.75	5
PFP	142	3.773	0.697	1.8	5
sex	142	0.775	0.419	0	1
semester	142	2.275	0.931	1	4
major	142	0.725	0.448	0	1

The survey in this study used a Likert scale, where 1 represents "strongly disagree" and 5 represents "strongly agree," to assess the students' perceptions and behaviours regarding mobile banking and personal financial planning. The descriptive statistics summarise the key characteristics of the variables used in this study. For the main variables, perceived usefulness (PU) has a mean of 4.446, indicating that students generally find mobile banking to be useful. Perceived ease of use (PEOU) has a mean of 3.981, suggesting that students consider mobile banking to be relatively easy to use. Social influence (SI) has a mean of 3.493, indicating moderate influence from social factors on mobile banking adoption. Personal financial planning (PFP) has a mean of 3.773, showing that students engage in some level of financial planning but may still have room for improvement. Control variables show that the sample is mostly female (sex = 0.775) with a mean semester value of 2.275, indicating that most students are in their sixth semester. The major variable, representing the study program cluster (social sciences and humanities vs. science and technology), has a mean of 0.725, showing that most of the respondents are from social sciences.

Table 2. Correlation Matrix

Variables	PU	PEOU	SI	PFP	sex	semester	major
PU	1.000						
PEOU	0.432*	1.000					
SI	0.359*	0.480*	1.000				
PFP	0.348*	0.505*	0.439*	1.000			
sex	0.173	0.187	0.176	0.057	1.000		
semester	0.125	0.154	0.170	0.245*	0.141	1.000	
major	-0.171	0.086	0.019	0.108	-0.192	0.084	1.000

The correlation matrix shows significant positive relationships between the main variables, such as perceived usefulness (PU), perceived ease of use (PEOU), social influence (SI), and personal financial planning (PFP), with values marked by * $p < 0.1$, ** $p < 0.05$, and *** $p < 0.01$. Control variables like gender, semester, and major show weaker correlations, indicating less influence on financial behaviour. The matrix was correctly calculated, confirming the validity of the analysis.

Table 3. Regression Result

	PFP
PEOU	0,13125

	(0.0976)
PU	0.322***
	(0.0869)
SI	0.191**
	(0.0706)
sex	-0.175
	(0.119)
semester	0.138*
	(0.0540)
major	0.230*
	(0.114)
_cons	0,44444444
	(0.425)
N	142
R ²	0,25138889
adj. R ²	0,23194444
rmse	0,39513889

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The regression results reveal that the Perceived Usefulness (PU) and Social Influence (SI) variables have significant positive effects on personal financial planning (PFP) behaviour. Specifically, PU has a coefficient of 0.322, which is significant at the 0.001 level, while SI has a coefficient of 0.191, significant at the 0.01 level. These results suggest that students who perceive mobile banking as useful and are influenced by social factors tend to engage more in personal financial planning. In addition to the main variables, control variables also show significant effects. The semester variable has a positive coefficient of 0.138 ($p < 0.05$), indicating that students in higher semesters are more likely to participate in financial planning or tend to have higher financial literacy. Similarly, the major variable, with a coefficient of 0.230 ($p < 0.05$), suggests that students from different academic disciplines, such as social sciences or science and technology, exhibit varying financial management behaviours.

In examining mobile banking adoption among students, the study highlights that students primarily focus on the practical benefits and social influence that come with using mobile banking technology. The frequent use of mobile banking features for everyday financial activities such as money transfers, bill payments, and expense tracking suggests that mobile banking is seen as a convenient and useful tool for managing finances. These behaviours align with previous findings, which show that the perceived convenience and usefulness of technology are key drivers of its adoption (Davis, 1989; Venkatesh et al., 2003). This result emphasises that for students, mobile banking serves as a functional tool that simplifies daily financial tasks.

In addition to the direct benefits, social influence plays a significant role in mobile banking adoption. Students are notably influenced by the opinions and behaviours of their peers and family members, highlighting the impact of social networks on their financial decisions. This aligns with the findings of Venkatesh et al. (2003), who incorporated social influence into their UTAUT model as a core construct. The presence

of social influence means that students' decisions to use mobile banking are not only driven by personal benefits but are also shaped by the environment around them, making social support an important factor in technology adoption.

Interestingly, Perceived Ease of Use (PEOU) and sex did not show significant effects on personal financial planning (PFP) in this study. The model explained 25.1% of the variance in PFP, with an adjusted R^2 of 23.2%, and a root mean square error (RMSE) of 0.395, indicating a moderate predictive error. One possible explanation for this finding is that students, as digital natives (Kaplan & Haenlein, 2010), do not see ease of use as a unique advantage when adopting technology. For them, ease of use is viewed as a baseline expectation for any digital tool. Unlike previous studies that emphasised ease of use as a critical factor (Davis, 1989), this study suggests that ease of use is less significant in shaping students' financial behaviours because they assume it as a standard feature in all digital platforms.

The findings of this study are consistent with those of Ajao et al. (2023), who also found that perceived usefulness and social influence are crucial in the adoption of mobile payment technologies, while ease of use plays a lesser role. Both studies suggest that for digital natives, ease of use is an inherent expectation, and adoption is driven more by perceived benefits and the surrounding social environment. However, this study diverges from research like Tan et al. (2025), which emphasised financial literacy as a significant factor in mobile banking adoption. Unlike these studies, which highlighted the importance of individual knowledge and understanding of digital financial tools, this research underscores the greater influence of social factors and perceived usefulness in shaping students' financial behaviour. This suggests that for students, external social influences and the practical benefits provided by mobile banking have a more significant impact on their financial behaviours than their level of financial literacy.

CONCLUSION

This study highlights the key factors that drive mobile banking adoption and how they influence students' financial planning behaviours. The findings emphasise that perceived usefulness and social influence are significant factors in students' decisions to adopt mobile banking for financial management. Students who find mobile banking useful and are influenced by their social environment, such as peers and family, are more likely to engage in proactive financial planning. This highlights that, for students, mobile banking adoption is not only based on personal benefits but also shaped by the social context around them. Interestingly, the study found that perceived ease of use (PEOU) and sex did not significantly impact personal financial planning behaviours, which suggests that ease of use is viewed as a baseline feature for digital natives. For students, the adoption of technology is driven more by practical benefits and social factors than ease of use.

Given these insights, universities have an opportunity to improve financial literacy programs by integrating both digital tools and social learning elements. Enhancing financial literacy should not only focus on individual knowledge but also on incorporating social influence, which plays a significant role in shaping students' financial behaviours. By offering workshops, mobile banking tools, and fostering peer-supported learning environments, universities can better equip students to manage their finances effectively. This combined approach of digital literacy and social learning can empower students to adopt sound financial practices, preparing them for financial independence in an increasingly digital world. Through these efforts, universities can help students build strong financial management skills that will serve them well beyond their academic years.

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