EXPLORING THE ROLE OF DIGITAL AND FINANCIAL LITERACY IN THE ADOPTION OF FINTECH SERVICES IN NEPALESE SOCIETY

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ABSTRACT

The purpose of this study is to examine the role played by digital literacy and financial literacy in the adoption of FinTech services. It explores the key *factors behind the adoption process, which include the ease of use, the perceived usefulness, and the perceived benefits of the service. It aims to contribute to the body of* knowledge *by offering insights into the impact of literacy skills on the adoption of FinTech services by individuals. The researchers adopted a survey-based approach to collect the views of 136 participants and then analyzed the results statistically to determine the impact of digital and financial literacy on the adoption of FinTech services. According to the findings, both types of literacy are important factors in the adoption process, which should be addressed through literacy programs to enhance the adoption rates. The study is important because it offers policymakers and other stakeholders insights and strategies to enhance the level of digital financial literacy among the population.*

Keywords: Digital Literacy, Financial Technology, FinTech Adoption, Digital Finance, Financial Literacy

Introduction

The rapid development and growth of financial technology, or FinTech, have had a significant impact on the way in which financial services are made available and accessed by individuals, enabling them to conduct various types of financial transactions, investments, and lending through the use of digital technologies. Although the availability and accessibility of financial technologies have been made possible, the extent to which it is adopted by individuals largely depends on their individual financial and technological preparedness. According to the literature, the basic requirement to enhance the confidence and willingness of individuals to adopt the use of financial technologies is to be financially literate (Singh et al., 2025; Tmava et al., 2025). Empirical evidence shows that the higher the level of

knowledge and behavior of individuals regarding finance, the higher the probability to take advantage of the use of financial technologies to conduct mobile payments, digital banking, and investments (Khatri et al., 2025; Alkhwaldi, 2024).

Recent literature has shown that digital literacy and financial technology adoption have become essential tools in bridging the link between financial literacy and financial technology adoption. Recent research has shown that digital literacy and financial technology adoption have significantly improved the reduction of perceived technology and cybersecurity risks, thereby enhancing the positive intention and adoption of financial technology services by individuals (Anwarul et al., 2024; Khan et al., 2025).

On the other hand, financial digital literacy has been shown to be a significant tool in bridging the link between financial technology adoption intentions and the actual adoption of financial technology services by individuals across various demographic groups (Loke et al., 2025; Dinh et al., 2025). Moreover, educational exposure and financial self-efficacy have remained significant tools in promoting the preparedness and willingness of individuals to adopt financial technology services, as highlighted in the research conducted by Mulyono (2023). This has shown that the integration of financial literacy, digital literacy, and financial technology adoption remains a significant requirement in promoting the adoption of financial technology services by individuals.

In order to examine the role of digital literacy and financial literacy in shaping the adoption of financial technologies and to assess how various adoption factors contribute to users' acceptance and effective utilization of digital financial services, the study undertakes the following objectives:

1. To examine the influence of digital literacy and financial literacy on the adoption of FinTech services in Nepalese society.
2. To analyze how factors of FinTech adoption such as ease of use, perceived usefulness, and relative advantage contribute to enhancing users' acceptance and effective use of digital financial technologies.

Literature Review

Singh et al. (2025) explored the impact of financial literacy on the adoption of Fintech, the researchers considered the OECD model of financial literacy consisting of financial knowledge, attitude, and behavior. The research showed that financial literacy has a significant impact on the adoption of Fintech. The research showed that financial literacy enhances the confidence of the people towards the adoption of financial technologies. The research also showed that financial literacy has an impact on the adoption of Fintech through digital literacy and cybersecurity awareness. The research showed that digital literacy and cybersecurity awareness act as sequential mediators to strengthen the adoption of Fintech.

The study by Dinh et al. (2025) sought to examine the impact of digital financial literacy on Fintech adoption behavior among secondary and tertiary students in Hanoi, Vietnam, using a combination of UTAUT2 and Theory of Planned Behavior models. The study revealed that digital financial literacy significantly affects students' Fintech adoption behavior, including factors such as performance expectancy, perceived convenience, financial attitude, and personal motivation, as well as students' perception of risk and security, which all impact Fintech adoption behavior. The study revealed that students who exhibit high levels of digital financial literacy tend to accept and use Fintech services, and therefore, financial literacy in Fintech adoption behavior remains a crucial area in developing countries.

Khan et al. (2025) examined the significance of digital financial literacy in the adoption of Peer-to-Peer lending platforms in India, based on the interrelationship between financial literacy, digital literacy, and digital financial literacy. The results of the study found that while financial literacy and digital literacy are important in building digital financial literacy, they are not directly linked to the users' intention of adopting the Peer-to-Peer lending platforms. Rather, digital financial literacy was found to be the major factor directly influencing the users' intention of adopting the Peer-to-Peer lending platforms, suggesting the significance of the combination of financial and technological capabilities in influencing the users' behavior, as opposed to the isolated effects of financial and digital literacy. This study found that users who are more financially and digitally literate are more inclined towards adopting innovative lending platforms, suggesting the significance of building digital financial literacy in the overall development of FinTech and its inclusivity.

Khatri et al. (2025) evaluated the influence of digital financial literacy in developing countries by employing the technology acceptance model. The results revealed that Fintech innovations like mobile payments via portals, digital wallets, and peer-to-peer lending have a significant positive influence on financial inclusion both directly and indirectly via digital financial literacy. The results confirmed that digital financial literacy plays a crucial mediatory role as a key enabling factor in increasing the capability to understand and utilize Fintech innovations for the purpose of expanding financial inclusion. The results also highlighted the importance of increasing digital financial literacy to maximize the use of Fintech innovations.

Tmava et al. (2025) studied the relationship between financial knowledge and FinTech adoption in Kosovo, with a distinction between perceived and objectively measured financial literacy. The study found that individuals' perceived financial literacy has a high positive correlation with mobile banking, mobile payments, and digital lending services. This indicates that financial confidence plays a vital role in

FinTech adoption. On the other hand, there is a significant relationship between objectively measured financial literacy and mobile banking adoption. The study also found demographic characteristics to be key factors in FinTech adoption, highlighting the need to increase financial confidence among FinTech users in order to achieve higher FinTech adoption rates.

Maharjan and Mahato (2025) explored the impact of digital literacy on the adoption of e-governance in Nepal, the researchers considered the issue of the digital divide between the rural and urban populations. The research showed that while the citizens were confident about the adoption of electronic communication tools, the adoption of e-governance was still very low. The research highlighted the issue of limited access to digital devices and the socio-economic divide between the rural and urban populations of Nepal. The research also showed that the reliability of the internet was an important aspect to consider while measuring the satisfaction of the citizens towards the e-governance system adopted in the country. The research showed that while significant steps have been taken to incorporate e-governance in Nepal, the absence of digital literacy has become an impediment to the effective delivery of the system in the country.

Loke et al. (2025) explored the contribution of financial knowledge and digital financial literacy in bridging the digital divide in digital financial services adoption in Malaysia. The study found that financial knowledge played a significant role in influencing both user intention and usage of digital financial services, while digital financial literacy had a differential effect on digital financial services adoption. The study found that awareness and understanding of digital financial services facilitated both user intention and usage, but knowledge in digital financial risk management played a critical role in facilitating usage. The study also found that digital skills played a key role in facilitating user adoption intention rather than usage. This study indicates that improving financial literacy in certain dimensions is critical in facilitating digital financial services adoption.

Anwarul et al. (2024) studied the influence of financial literacy, digital literacy, and financial self-efficacy in Fintech adoption behavior, especially for consumers in Bangladesh. From this study, it was revealed that financial literacy, digital literacy, and financial self-efficacy positively and significantly influence Fintech adoption behavior. Financial self-efficacy was found to be the dominant factor for Fintech adoption behavior. Furthermore, there was a significant relationship found between digital literacy and Fintech adoption behavior. This indicates that those who have high digital literacy tend to adopt Fintech, making financial literacy in Fintech adoption behavior a key area to promote Fintech adoption and inclusion in developing countries.

Alkhwaldi (2024) explored the determinants of FinTech adoption and its effects on quality of life in Jordan by extending the UTAUT and TTF constructs with financial literacy. The study showed that FinTech adoption is affected by performance expectancy, effort expectancy, facilitating conditions, social influence, and task-technology fit, while financial literacy enhances FinTech adoption and quality of life directly. The study also found that FinTech adoption mediates the relationship between financial literacy and quality of life, suggesting that people with financial literacy skills are better positioned to leverage FinTech adoption to improve their quality of life through better financial management. The study provides evidence on the need to improve financial literacy skills in conjunction with digital skills to enhance FinTech adoption and support socio-economic well-being in a digital economy.

In the research conducted by Mulyono (2023) to investigate the influence of digital literacy on the use of Fintech services among university students, with a focus on the mediating role of financial literacy in the digital revolution caused by the COVID-19 pandemic, the findings showed the positive and significant influence of digital literacy on the use of Fintech services through financial literacy. This is an affirmation of the capability of digital literacy to improve the financial literacy of university students and, in turn, the use of Fintech services. Moreover, the research verified the mediating role of education level in the relationship between digital literacy and the use of Fintech services. This is an affirmation of the capability of education level to improve the receptiveness of university students to the use of Fintech services.

Results and Discussion

Table 1

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
DL	136	5.00	25.00	18.2721	4.32129
FL	136	7.00	25.00	16.1029	3.54501
AEU	136	6.00	25.00	17.5221	3.60446
APU	136	5.00	25.00	18.1618	4.34140
ARA	136	7.00	25.00	17.5294	3.54848

From the descriptive statistics, the responses of the 136 participants on the digital literacy, financial literacy, and FinTech adoption dimensions are indicated. The results indicate that the highest average score was recorded in the digital literacy dimension, DL, with a mean of 18.27 and a standard deviation of 4.32, suggesting that the participants have relatively good digital skills compared to their financial knowledge, since the average score was relatively lower in the financial literacy dimension, FL, with a mean of 16.10 and a standard deviation of 3.55. Among the

FinTech dimensions, the highest average was recorded in the perceived usefulness dimension, APU, with a mean of 18.16 and a standard deviation of 4.34, suggesting that the participants have a very positive perception of the benefits of using FinTech compared to the other factors, namely, the ease of use dimension, AEU, with a mean of 17.52 and a standard deviation of 3.60, and the relative advantage dimension, RA, with a mean of 17.53 and a standard deviation of 3.55, suggesting that the participants have a relatively positive perception of the convenience and benefits of using digital finance technologies.

The relatively low standard deviation for all the dimensions suggests that the responses are relatively consistent, and the minimum and maximum scores suggest that the responses are variable enough, indicating that the participants have relatively good literacy skills and attitudes towards FinTech.

Table 2

Correlations

	DL	**FL**	**AEU**	**APU**	**ARA**
DL	1				
FL	.527**	1			
AEU	.583**	.609**	1		
APU	.730**	.543**	.675**	1	
ARA	.571**	.590**	.554**	.590**	1

**. Correlation is significant at the 0.01 level (2-tailed).

As indicated by the analysis above, there is a significant correlation between all the study variables at the 0.01 level ($p < .001$). In other words, digital literacy, financial literacy, and the FinTech adoption variables of ease of use, perceived usefulness, and relative advantage are highly interrelated concepts. Specifically, digital literacy is moderately to highly correlated with financial literacy (.527), ease of use (.583), perceived usefulness (.730), and relative advantage (.571). The above findings indicate that people with high digital literacy skills will perceive FinTech services as being more useful, easier to use, and having relative advantage. In addition, financial literacy is also highly correlated with ease of use (.609), perceived usefulness (.543), and relative advantage (.590), implying that people with high financial literacy will perceive FinTech services as being more useful and having relative advantage. Among the FinTech adoption variables, ease of use and perceived usefulness are highly correlated (.675), implying that people will perceive FinTech services as being more useful if they perceive them as being relatively easier to use.

Table 3

Regression analysis with AEU

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.155	1.171		4.402	<.001
	DL	.303	.062	.364	4.876	<.001
	FL	.424	.076	.417	5.589	<.001

a. Dependent Variable: AEU

The regression model clearly indicates how various dimensions of FinTech adoption influence Ease of Use (AEU), which is our response variable. From this model, it is very clear that Digital Literacy (DL) has a very strong positive effect on ease of use in a statistically sound manner ($\beta = 0.303$, $t = 4.876$, $p < 0.001$). This means, in layman's terms, that people who are more digitally literate have a tendency to find FinTech services easy to use. Similarly, Financial Literacy (FL) also has a positive effect on ease of use in a very clear and statistically significant manner ($\beta = 0.424$, $t = 5.589$, $p < 0.001$), indicating that people who are financially literate have a tendency to find FinTech services easy to use.

Table 4

Regression analysis with APU

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.559	1.268		2.017	.046
	DL	.618	.067	.615	9.175	<.001
	FL	.267	.082	.218	3.257	.001

a. Dependent Variable: APU

The analysis by regression focuses on the relationship between digital literacy (DL) and financial literacy (FL) and their influence on Perceived Usefulness (APU), which is the primary focus. From the results, there is a positive and significant association between DL and APU ($\beta = 0.615$, $t = 9.175$, $p < 0.001$), indicating that the higher the level of digital literacy, the higher the perceived usefulness of FinTech services. There is also a positive and significant association between FL and APU ($\beta = 0.218$, $t = 3.257$, $p = 0.001$), indicating that the higher the level of financial literacy, the higher the perceived usefulness of FinTech services.

Table 5

Regression analysis with ARA

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.677	1.179		4.817	<.001
	DL	.296	.063	.360	4.727	<.001
	FL	.400	.076	.400	5.243	<.001

a. Dependent Variable: ARA

The regression analysis also focuses on the influence of Digital Literacy (DL) and Financial Literacy (FL) on the perceived usefulness of FinTech services, where ARA is used to determine the perceived usefulness. The results indicate that both DL and FL have a positive and significant influence on ARA ($p < 0.001$). For instance, the results indicate that DL has an unstandardized coefficient of 0.296 and a standardized Beta coefficient of 0.360. This implies that for every one-unit increase in digital literacy, there is a corresponding increase in the perceived usefulness by 0.296 units. On the other hand, FL results indicate that for every one-unit increase in financial literacy, there is a corresponding increase in the perceived usefulness by 0.400 units. This implies that both DL and FL have a significant influence on the perceived usefulness of FinTech services. However, FL results indicate a higher influence than DL since the standardized Beta coefficient for FL (0.400) is higher than that of DL (0.360).

Findings

The study indicates that the people in the study are digitally literate and financially literate, and they have a positive perception towards FinTech services, as indicated by the higher average scores in digital literacy, financial literacy, and especially perceived usefulness and relative advantage. The correlations indicate that digital and financial literacy are positively correlated with the use of FinTech services, and the more digitally and financially literate the people, the more likely they are to use FinTech services. The results of the regression analysis indicate that the more useful and advantageous the people in the study perceive FinTech services to be, the more digitally literate they are, and the easier the people in the study find FinTech services to use and the more advantageous they are, the more financially literate they are, indicating that FinTech services can increase digital and financial literacy.

The results of the survey indicate that more than half of the people in the study use digital financial services on a daily basis, and the most popular digital financial services include E-sewa, mobile banking, Khalti, and Connect IPS. The long-lasting appeal of FinTech services may be the convenience and the time saved, resulting in

high behavioral acceptance of the service. Therefore, FinTech not only increases digital literacy, but it also increases the adoption of digital financial services, especially due to the positive perception of the people in the study towards the service.

The results of the study indicate that digital literacy and financial literacy are the most important factors in the adoption of FinTech services, and the study extends the existing body of knowledge on the topic, especially since the study follows the works of Singh et al. (2025) and Dinh et al. (2025), which also indicated the significance of literacy in the adoption of FinTech services, especially digital financial literacy, unlike the present study that provides a wider perspective on the topic, especially in the context of Nepalese society, where digital financial services are still in their development stage.

Conclusion

The study demonstrates the significance of digital literacy and financial literacy in the development and use of FinTech services. When people are literate in these areas, they feel more confident in their use of digital financial services. The study also demonstrates the significance of the ease of use and the perceived benefits of FinTech services in their adoption, with a clear advantage in terms of relative advantage. The study demonstrates that these factors are interrelated, and that increasing digital and financial literacy can have a substantial impact on the adoption of FinTech services, especially for the underserved. The study provides valuable insights into the role of literacy in the perception of FinTech services and their adoption, especially in the underserved communities that are currently not well represented in digital financial ecosystems.

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