Anusandhanvallari
Vol 2024, No.1
January 2024
ISSN 2229-3388

Impact of Embedded Finance on Consumer Financial Behaviour in Platform Economies: An Empirical Study

Anshu Shukla

Assistant Professor Disha Institute of Management and Technology, Raipur, C.G.

Abstract: Platforms are also used in the emerging era of financial tech, which has grown at a fast pace and spurred the development of embedded finance in platform economy. Embedded finance is a business model in which financial services like Buy Now Pay Later, digital wallets, digital payments and embedded lending are deployed into any non-financial digital offer, and impact consumers' financial behaviour. In this study, we look at how embedded finance affects consumer financial behaviour and its relation to financial decision-making, spending patterns and transaction convenience. This study involves primary data collection using structured questionnaire with the respondents of 150 based on empirical and descriptive data. Data analysis was made through percentage and regression analysis. The results indicate that embedded finance improves the transaction experience, boosts engagement with consumers and positively impacts spending behaviours and purchase decisions. The study findings suggest that embedded finance is a key driver of today's consumer financial behaviors as part of a digital platform ecosystem.

Keywords: Embedded Finance, Consumer Financial Behaviour, Platform Economies, Digital Payments, BNPL, Financial Technology, Consumer Spending Behaviour.

Introduction

Financial service interactions with consumers have changed over the last few years quite a bit due to all of the digital platforms. Embedded finance involves embedding finance (from payment to insurance, lending to investments) in non-financial digital applications like e-commerce apps, ride share apps, food delivery apps, and social media platforms (Rishika & Ranganathan, 2021). Platform economies steer users away from traditional banking systems and instead offer easy financial services at the consumer journey. This integration has introduced a profound shift in consumer financial behavior, making transactions smoother and more convenient, and promoting real-time financial decision-making.

Embedded finance has gone hand-in-hand with financial technology, open finance brands, APIs and artificial intelligence-based consumer insights. Payment gateways, BNPL services, digital wallets, micro-credit and insurance products are becoming essential features of the digital ecosystems such as Amazon, Uber, Paytm, Shopify etc. – they often find their way right into the platform. These transformations have helped shape consumer behavior in the way they spend, save and borrow, as well as their loyalty to online platforms (Tang & Yuan, 2020). For consumers, the embedded finance can facilitate financial transactions, fulfilling the transactions without leaving the platforms that they often use, and reducing user usage time and dependence.

Embedded finance is also seen as fostering an easier experience for consumers that can impact the impulse buying process, as well as boost consumer spending frequency (Chishti and Barberis, 2019). When the payment model is embedded in digital platforms, consumers are ready to make hasty decisions, as are instant credit options. Plus, embedded finance helps to make financial products more accessible to populations that typically do not have the opportunities to use traditional banking services (Van Belleghem, 2020). This is especially noticeable in developing countries where smartphone usage and digital payments have grown at a rapid pace.

Platform economies are digital economies that are closely interconnected and involve customers, companies and service providers interacting via an online platform and technology. For these economies, embedded finance is a

strategic lever for boosting customer engagement, retention, and monetization. For businesses, the benefits include improved customer understanding, customer customization, and a boost in sales and transactions; for consumers, the advantages are quicker and more comfortable financial services with more customization. (Trifković & Dholakia, 2021) There are also worries about over consumption, financial susceptibility, privacy concerns for data, and digital indebtedness due to the ease of using embedded credit systems, but (Yue et al., 2022).

The rising adoption of platform economics is changing the financial behaviour of consumers, with concepts drawn from behavioural finance, such as 'take the easy route' and 'promises of earlier enjoyment', influencing their decisions. The context in which financial services are available can affect the financing behavior, the perception of risk and financial behaviour. Research has shown that embedded payment tools diminish the psychological □pain of paying,□ and allow more buying through the platform, which leads to higher overall spending levels (Simester & Sullivan, 2021). Additionally, digital financial landscapes produce significant consumer insights that are turned up to use in personalizing financial products and making an impact on consumer selections.

While the importance of embedded finance has risen in recent years, there was a lack of empirical work to explore consumer financial behaviour in platform economies in emerging markets in particular. Current bodies of literature are mostly conceptual, technological and strategic; a focus on firms. Given this, the purpose of this study is to empirically investigate the impact of embedded finance on financial behavior of consumers in platform economy, where the ability of the platforms is expanded by incorporating financial services.In light of this, the present study has set out to empirically explore the perceived embedded finance effects on consumers' financial behavior from the platforms with regard to consumers' perceptions, spending, borrowing and all-round digital financial engagement in platform economy. The results of this research can help in the understanding of fintech-induced behavioural changes and offer policy implications, digital platform operators, and financial institutions on how responsible and customer-focused financial innovation ought to be.

Literature Review

Embedded finance has become a major focus of academic research, as financial services move rapidly into the digital world and platform business models emerge. Another explanation by Chishti and Barberis (2019) stems that embedded finance can be described as a paradigm shift in which financial services are woven into the customer journey without financial services themselves being a core part of the business activities. Part of their study highlighted the transformative role embedded finance has to play in developing new revenue streams and also improving the customer experience and engagement.

Adding to this, Tang and Yuan (2020) analysed the effects of digital financial embedding on financial market development in China and saw that financial inclusion and incremental financial market development had advanced significantly with digital finance entrenchment as a result of its effect on consumer financing in digital transactions. The result was that consumers were more optimistic about embedded payment systems because they were more convenient and readily available and could save money on transaction fees.

Van Belleghem (2020) spoke about the future of banking in the digital world and talked about the shift in relationship between consumers and the bank towards embedded Finance, which takes finance transactions out of the bank and into the digital world. Study emphasized that the platforms contribute to building customer loyalty and enhancing consumer reliance on mobile apps.

Rishika and Ranganathan (2021) have offered a general introduction to embedded finance and found that the embedded payment and lending, insurance, and finance are key segments of the embedded finance ecosystem. Their study indicated that consumers make faster and smoother transition to the digital age by seamlessly

combining financial services. Embedded finance, too, is reshaping the financial services industry as a whole, by leveraging technology and API-based services, is noted as such by O'Reilly and Spencer (2021).

The embedded finance described above offers strategic opportunities for banks and fintech companies, which Simester and Sullivan (2021) explored. They found that frictionless payments and instant consumer credit has a strong impact on consumer buying habits and impulse buying. Their research also came up with the conclusion that digital financial convenience decreases consumers' thinking effort for purchases.

Trifković and Dholakia (2021) discussed the opportunities and challenges stemming from embedded finance in financial services. But the authors concluded, embedded finance creates opportunities for increased customer engagement and platform stickiness while also having consequences for data privacy, cybersecurity, and consumer undervariance of financial systems.

Yue et al. (2022) dwelt on the growing phenomenon of digital finance and how it affects the behaviours of the users. Based on their observations, the authors found that digital financial inclusion facilitated access to credit and consumption but also raised the danger of overextending their finances and experiencing financial pressures on consumers. The study also pointed to the double aspect of digital finance which was not only an inclusion instrument but also a debt trap.

Recent research has also highlighted the behavioural aspect of embedded finance in digitally-enabled societies. Goon et al. (2023) noted that embedded finance streamlines financial interactions and fosters a more customized financial environment that boosts consumer involvement within platform ecosystems. The authors further observed the relationship between integrated credit facilities and embedded payment systems and purchasing frequency and platform-loyalty.

In the realm of digital platforms and alternative lenders, Lee (2024) analyzed the role of machine learning and digital finance integration, finding that it can contribute to better financial access while posing regulatory and ethical issues. The study highlighted the need for a balance between innovation and measures taken to protect consumer interests.

Thukral et al (2024) described the effect of digital discussion platforms on financial behavior, highlighting that the online digital ecosystem has a profound impact on consumer financial perceptions, financial investment choices, and their financial spending choices. Their research indicated that both platform interaction as well as in-platform financial instruments play a role in the transformation of financial behavior among users.

Overall, the academic and published literature suggests that embedded finance is becoming a very effective influence on the behavioural change of product users when it comes to platform economies. Current research has broadly shown that embedded finance has positive effects on convenience, financial inclusion, platform engagement, and high risk of impulsive spending, digital indebtedness, and privacy issues. Despite this, empirical evidence on the direct impact of embedded finance on financial behaviour of the customers in various sections and platforms of digital ecosystems is still in its nascent stage. This study aims to solve this problem by delivering empirical data concerning how embedded finance impacts the behaviours of today's platform economies.

Objectives

1. To explore how embedded finance influences consumers' financial behavior.
2. To investigate the impact of embedded payments and lending on consumer spending.
3. To explore how embedded finance relates to consumer decisions on digital platforms.

Hypothesis:

H_1: Embedded finance plays an important role in consumers' financial behavior in platform economy.

Methodology

The research in the present paper is empirical and descriptive in nature with core emphasis on the effects of the embedded finance phenomenon on consumer financial behaviour in platform economies is analyzed. Primary data was gathered via a structured questionnaire with customers on digital products that embed financial services, e.g. digital payments, BNPL, embedded lending and digital wallets. For the selection of respondents, a convenience sampling method was used and the sample size considered to be 150 consumers. To gather consumer perceptions around spending behavior, financial decision-making, convenience, and engagement with platforms, questionnaire was designed. Secondary data on fintech and consumer behaviour were gathered from research journals and books, reports, and published articles. Fintech, embedded finance, and consumer behaviour secondary data were gathered from research journals and books, reports, and published articles.

Results and Discussion

The study examined the reactions of 150 embedded financial services consumers amongst platform economies. The analysis highlighted the perceptions of consumers on convenience, spends, adoption of digital payments, borrowing attitude and financial decisions.

Table 1 Consumer Perception towards Embedded Finance

Statements	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Embedded finance improves transaction convenience	42.0	38.7	10.0	6.0	3.3
Embedded payments increase online spending	36.7	34.0	14.7	9.3	5.3
BNPL services encourage impulsive purchases	31.3	35.3	16.7	10.0	6.7
Embedded finance saves transaction time	40.0	37.3	11.3	7.4	4.0
Integrated financial services improve platform engagement	38.7	34.6	13.4	8.0	5.3

From the table, it should be noted that respondents are positively oriented towards the embedded finance services related to platform economy. Most respondents reacted with a strong agreement (80.7%) or agreement that embedded finance makes transactions easier. Likewise, 77.3% said embedded finance reduces transaction time and 73.3% said that embedded financial services enhance digital platform engagement. 70.7% respondents agreed that embedded payment allows for an increase in online spending, while 66.6% said the BNPL service has an impact on impulsive purchases. The results show that embedded finance has a significant impact on consumer behavior, leading consumers to engage more with digital platforms, increase spending frequency, and improve convenience.

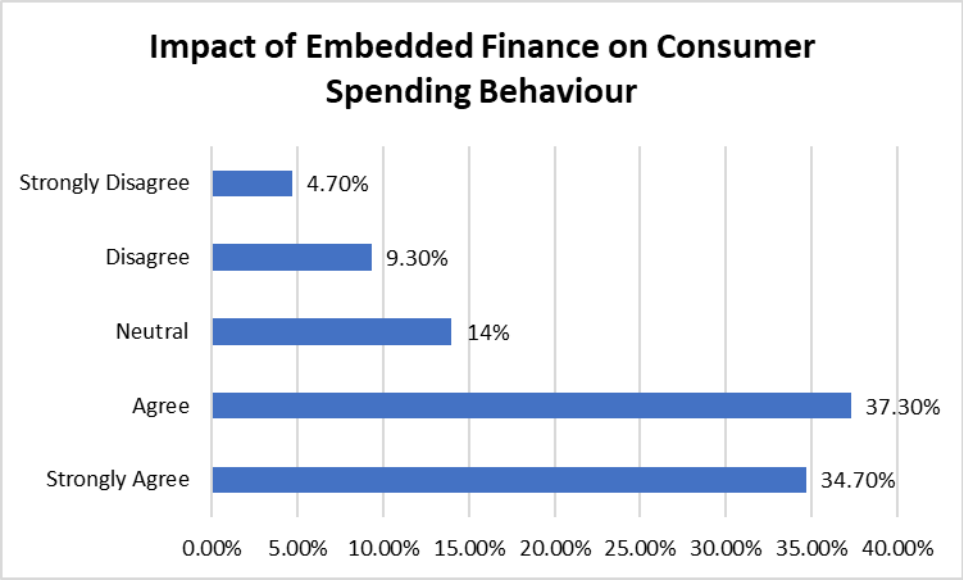

Fig. 1 Embedded Finance and Consumer Spending

The respondents strongly agreed or agreed that embedded finance affects our spending behaviours, accounting for 72.0% of respondents. 14.0% responded "neither agree nor disagree" and 14.0% disagreed with the statement. The findings indicate that the payment system and the instant credit facilities and frictionless transactions positively influenced consumers' spending frequency inside the digital platforms.

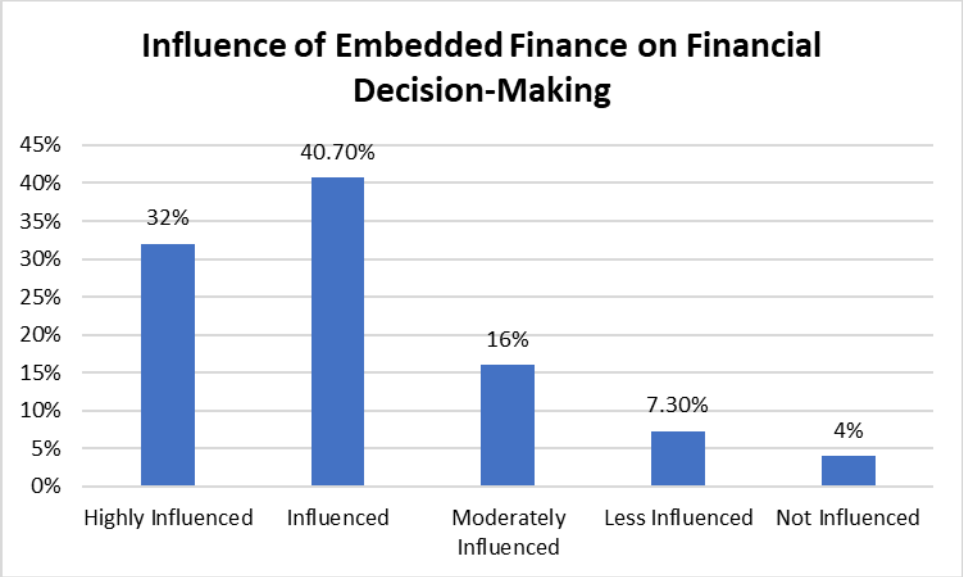

Fig. 2 Influence of Embedded Finance

As per the fig., embedded finance plays a significant role in influencing the financial decision of 72.7% of the people. Digital payment integration, customization of offers and embedded financial services influence consumers' purchasing decisions and their financial choices. Less than a tenth (11.3%) said that they felt influenced at lesser levels. This shows that the embedded finance has a significant impact on consumer financial behaviour in platform economy.

Hypothesis Testing

Student's theory testing was done in order to find out if there is a significant effect of embedded finance on the financial behaviour of consumers in platform economies. A regression analysis was used to analyse the relationship between adoption of embedded finance and consumer financial behaviour. The significance level for the study was set at 5% levels.

Table 2 Impact of Embedded Finance and Consumer Financial Behaviour

Variables	Beta Coefficient	t-value	p-value
Embedded Finance	0.691	9.126	0.000
Statistical Measures	**Value**		
R	0.691		
R^2	0.477		
Adjusted R^2	0.471		

The above table 2 show that embedded finance has a positive effect on the financial behavior of consumers. The higher the value of beta coefficient, the stronger the positive relationship between embedded finance and consumer financial behaviour is. The calculated value of p (0.000) is significant since it is less than the significance level (0.05), supporting the statistical significance of the relationship. Embedded finance services account for 47.7% of the variation in consumer financial behaviour, measured by the R^2 value of the model.

Thus, the H_0 is rejected and the H_1 will be accepted. The findings have shown how embedded finance has a significant impact on consumer financial behavior in platform economies, affecting spending habits, ease of transactions, and financial decisions.

Discussion:

Based on the study results, it can be concluded that embedded finance significantly impacts consumer financial action in platform economy. The analysis reveals that embedded financial services offer a lot of convenience, ease of time and access for consumers. Many reported a positive effect on their overall □digital transaction experience' when there is an integrated payment system/embedded financial tool. That's what embedded finance does□it is making financial activities easy, and making digital platforms easier to engage in for consumers. The outcomes align with previous research that highlighted the advantages of embedded finance, including better user experience and enhanced platform reliance, by offering convenient financial services.

The study also confirms that embedded finance has a significant impact on consumers' purchasing behavior. Most of the respondents believed embedded payments and Buy Now Pay Later (BNPL) services lead to a higher level of spending and impulsive purchases. The instant availability of payment and credit options lessens the barrier of purchasing and tend to affect consumers' purchasing decisions. The results are in line with behaviour finance theories proposing that less friction in digital payment systems leads to greater spending tendencies and less need to consider the psychological consequence of a payment.

The findings also show embedded finance is a key part of the consumer financial decision-making process. Better tailored financial services, integrated payment systems, and digital credit measures affect the decision to make a purchase and patterns of platform usage. There□s been a growing trend for consumers to turn to digital platforms for financial products and services, not just for financial transactions. This is a reflection of the

increasing of integration of financial service and the whole-day digital life and illustrates the changes of traditional financial use in platform economy.

The regression analysis further validates the statistically significant, positive relationship found between embedded finance and consumer financial behavior. The results reveal embedded finance's significant role in shaping consumer financial habits in digital economic ecosystems, accounting for a substantial share of the variance. The acceptance of the alternative hypothesis indicates that embedded finance has a significant effect on consumer financial behaviour, affecting their spending habits, financial engagement and transaction convenience.

Internalized fintech implies certain concerns, though, when it includes. Embedded financial services make the services more accessible and convenient, but can increase dependence on digital credit systems and frictionless payment procedures and lead to overconsumption and impulse spending. The results underscore the importance of integrating financial products in a responsible way, educating users, and establishing regulations that promote ethical and sustainable adoption of embedded finance solutions in the digital era.

Conclusion

The research finds that embedded finance statistically and substantially positively affects consumers' financial actions in platform economies. The results show how financial services can be embedded within the environment of the product and the service, through the use of financial products like embedded payments, digital wallets, Buy Now Pay Later (BNPL) etc., which creates better convenience in transactions, maximises consumer engagement, and affects consumer behaviour. Financial services that are easily accessible, fast and user-friendly, and lie in the background of digital platforms are a much preferred choice by consumers. The research also reinforces the influence of embedded finance on consumer financial choice and spend, and how it will shape the digital financial landscape over the coming years and decades. In addition, the regression analysis clearly proves that embedded finance is now vital for platform business, and that there is a strong statistical relationship between embedded finance and consumer financial behaviour.

Recommendations

The complexity and variety of embedded financial services are growing, and it is crucial for both the financial industry and digital platform providers to offer secure, transparent, and consumer-centric embedded financial services in order to create conditions for sustainable adoption among consumers and trust in services. To reduce risks of impromptu spending and excessive digital indebtedness, there is a need to develop suitable rules and regulations relating to data privacy, practices in digital lending and consumer protection through government bodies. Efforts should also be directed towards financial literacy programs, promoting consumer awareness of financial products embedded in services and how they are being used. In addition, platform companies need to develop improved cybersecurity protocols, build more ethical and responsible data management policies, and develop tailor-made financial products that incorporate sustainability as a key factor, whilst offering convenience and fostering responsible financial practices. There is potential for further study on cross-platform variations as well as differences in demographic adoption of embedded finance, and the long-term impact of such changes on individuals' behaviours.

References

[1] Chishti, S., & Barberis, J. (2019). The embedded finance revolution: How potential embedded finance players are innovating and creating new business models. *Journal of Financial Transformation, 50*(1), 29– 39.

[2] Goon, P., Laskar, H. R., & Barman, A. (2023). Embedded finance: The integration of financial services into non-financial platforms. *Futuristic Trends in Management, 3*(4), 107– 130.
[3] Lee, L. (2024). Enhancing financial inclusion and regulatory challenges: A critical analysis of digital banks and alternative lenders through digital platforms, machine learning, and large language models integration. *Journal of Digital Financial Studies, 12*(2), 88– 105.
[4] O□Reilly, L., & Spencer, J. W. (2021). Embedded finance: How innovators are redefining the financial services landscape. *Deloitte Review, 29*(1), 60– 73.
[5] Rishika, R., & Ranganathan, A. (2021). Embedded finance: An overview and future directions. *Journal of Banking and Financial Technology, 5*(1), 18– 25.
[6] Simester, D., & Sullivan, M. (2021). The rise of embedded finance: A strategic opportunity for banks. *Journal of Financial Perspectives, 9*(1), 107– 115.
[7] Tang, S., & Yuan, Y. (2020). Embedded finance and financial market development: Evidence from China. *Journal of Financial Services Research, 58*(1– 2), 49– 77.
[8] Thukral, S., Sangwan, S., Chatterjee, A., Dey, L., Agrawal, A., Chandra, P. K., & Mukherjee, A. (2024). Understanding how social discussion platforms like Reddit are influencing financial behavior. *International Journal of Financial Technology, 11*(2), 145– 162.
[9] Trifković, N., & Dholakia, N. (2021). Exploring embedded finance: Opportunities and challenges for the financial services industry. *Journal of Financial Services Marketing, 26*(2), 95–106.
[10] Van Belleghem, S. (2020). The future of banking: Embedded finance. *Journal of Digital Banking, 4*(4), 301– 310.
[11] Yue, P., Korkmaz, A. G., Yin, Z., & Zhou, H. (2022). The rise of digital finance: Financial inclusion or debt trap. *Finance Research Letters, 47*(3), 102– 118.
[12] Zetzsche, D. A., Buckley, R. P., Arner, D. W., & Barberis, J. (2020). Decentralized finance and embedded financial services. *Journal of Financial Regulation, 6*(2), 172– 203.