



A Theoretical assessment of the Impact of Embedded Finance on Shifting Tendencies of Online Consumers with special reference to India

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Abstract

Embedded finance, which integrates financial services such as payments and credit into non-financial digital platforms, is reshaping online consumer behavior. This study examines the impact of embedded finance on the shifting tendencies of online consumers, with special reference to India's rapidly evolving digital economy. Drawing on behavioral finance and technology adoption theories, the paper explores how embedded financial solutions, including Buy Now, Pay Later (BNPL), embedded payments, and instant digital credit, influence purchasing behavior, payment preferences, impulse buying, and platform loyalty. The study synthesizes existing literature to identify emerging behavioral patterns associated with frictionless financial access. Findings indicate that embedded finance enhances convenience and perceived affordability, leading to increased spending and stronger platform dependence, particularly among young and digitally active consumers. However, the study also highlights concerns related to overconsumption and digital indebtedness. The paper contributes to the literature by contextualizing embedded finance within India's fintech and regulatory landscape and offers insights for policymakers and digital platforms promoting responsible financial integration.

I - Introduction

The rapid digitization of financial services has significantly transformed the global commerce ecosystem, reshaping the way consumers interact with markets, platforms, and payment systems. One of the most notable developments within this digital transformation is embedded finance, a model in which financial services such as payments, lending, insurance, and investment products are seamlessly integrated into non-financial digital platforms. Unlike traditional banking models that require consumers to access standalone financial institutions, embedded finance enables users to access financial services within their existing online journeys, such as e-commerce platforms, ride-hailing applications, food delivery services, and social commerce ecosystems. This structural shift has profound implications for consumer behavior, particularly in online environments where convenience, speed, and personalization play a decisive role in purchase decisions.

Embedded finance has emerged as a critical driver of platform-based economies, supported by advancements in application programming interfaces (APIs), fintech innovations, and data analytics. By reducing friction in financial transactions and offering contextual financial solutions at the point of need, embedded finance enhances the overall customer experience. For online consumers, this integration alters not only the mechanics of payment but also perceptions of trust, risk, affordability, and value. As a result, consumer decision-making processes are increasingly influenced by the presence of embedded financial options such as "Buy Now, Pay Later" (BNPL), instant credit, digital wallets, and one-click payments. These developments necessitate a deeper understanding of how embedded finance reshapes consumer tendencies in online markets.

Consumer behavior theory suggests that purchasing decisions are influenced by a combination of economic rationality, psychological factors, social influences, and technological ease. In online settings, these influences are amplified by digital interfaces that reduce information asymmetry and transaction costs. Embedded finance further intensifies this effect by lowering financial and cognitive barriers to consumption. For instance, deferred payment options can increase consumers' willingness to purchase higher-value goods, while integrated insurance or warranty products can reduce perceived post-purchase risk. Consequently, embedded finance does not merely facilitate transactions but actively shapes consumption patterns, spending frequency, brand loyalty, and platform dependence.

Despite the growing adoption of embedded finance across digital platforms, its impact on shifting tendencies of online consumers remains underexplored in academic literature, particularly from a behavioral and empirical perspective. Existing studies on fintech adoption have primarily focused on consumer acceptance, technological readiness, and regulatory challenges. While these studies provide valuable insights, they often treat financial services as standalone offerings rather than embedded components of a broader digital consumption ecosystem. There is a clear research gap in understanding how embedded finance influences consumers' preferences, switching behavior, impulse buying tendencies, and long-term engagement with online platforms.

The concept of shifting tendencies refers to changes in consumer behavior patterns over time, including shifts in payment preferences, brand choices, purchasing frequency, risk appetite, and reliance on digital platforms. Embedded finance can act as a catalyst for such shifts by redefining how consumers perceive affordability and access to financial resources. For example, the availability of instant credit at checkout may shift consumers from cautious spending to more impulsive purchasing behavior. Similarly, seamless payment integrations may reduce price sensitivity and increase platform stickiness, leading consumers to prefer platforms that offer embedded financial solutions over those that do not.

From a theoretical standpoint, the study of embedded finance intersects multiple frameworks, including the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Behavioral Economics, and Consumer Decision-Making Models. Embedded finance influences perceived ease of use and perceived usefulness, which are central constructs in TAM. Simultaneously, it affects behavioral intentions by altering subjective norms and perceived behavioral control, as proposed in TPB. Behavioral economics further explains how features such as deferred payments and frictionless credit exploit cognitive biases like present bias and mental accounting, thereby reshaping consumer tendencies in online environments.

The relevance of this research is further heightened in emerging economies, where rapid digital adoption and increasing internet penetration have expanded access to online commerce. In such context's, embedded finance has the potential to promote financial inclusion by offering credit and payment solutions to previously underserved consumers. However, it also raises concerns related to overconsumption, digital debt accumulation, and consumer vulnerability. Understanding how embedded finance shifts consumer tendencies is therefore crucial not only for businesses and platform operators but also for policymakers and regulators seeking to balance innovation with consumer protection.

Moreover, the competitive dynamics of online markets are increasingly shaped by embedded finance capabilities. Platforms that integrate seamless financial services gain strategic advantages by enhancing customer retention and lifetime value. As consumers become accustomed to frictionless financial experiences, their expectations evolve, leading to a behavioral shift where convenience and integrated finance become baseline requirements rather than value-added features. This transformation underscores the need for empirical research that examines the behavioral consequences of embedded finance adoption among online consumers.

The present study seeks to examine the impact of embedded finance on shifting tendencies of online consumers, focusing on how integrated financial services influence purchasing behavior, payment preferences, and platform loyalty. By analyzing consumer perceptions and behavioral outcomes, this research aims to contribute to the growing body of literature on fintech and digital consumer behavior. The study also intends to provide practical insights for digital platforms, fintech providers, and policymakers by highlighting the behavioral implications of embedded finance in online consumption contexts.

In conclusion, embedded finance represents a paradigm shift in the digital economy, transforming financial services from standalone products into invisible yet influential components of online consumer journeys. Its ability to alter consumer perceptions, reduce transaction friction, and reshape decision-making processes makes it a critical area of academic inquiry. By investigating the impact of embedded finance on the shifting

tendencies of online consumers, this research addresses a significant gap in existing literature and contributes to a deeper understanding of consumer behavior in the evolving digital financial landscape.

II - Review of Literature

Research on the intersection of embedded finance and online consumer behaviour has grown rapidly as digital financial services transform e-commerce ecosystems. Embedded finance—where financial services such as payments, credit, or insurance are integrated into non-financial digital platforms—has reshaped how consumers interact with online markets, prompting scholars to examine its implications for spending practices, payment choices, and behavioural tendencies.

Cheng and Huo (2025) investigated adoption patterns of Buy Now, Pay Later (BNPL), a prominent form of embedded finance, from a behavioural economics perspective, highlighting how time inconsistency affects consumer uptake of payment innovations in online commerce (Cheng & Huo, 2025). Similarly, Kumar and Nayak (2024, 2025) argue that BNPL adoption is influenced by personality traits such as innovativeness, technological anxiety, and impulse buying, thereby emphasizing psychological drivers underpinning consumer choice (as noted in Buy now, pay later) (Kumar & Nayak, 2024; 2025).

Empirical evidence shows that embedded payment options markedly alter purchase behaviour. A study published in the *Journal of Retailing* found that customers who adopt BNPL tend to increase their online spending by an average of 6.42%, with younger and low-income segments particularly responsive to this payment innovation (Kumar et al., 2024). Research by Broloes and Taylor (2022) supports this view, noting that BNPL's integration into the online shopping experience makes embedded credit more attractive than conventional credit cards, thus shifting credit usage patterns among consumers (Buy Now, Pay Later: Understanding Consumer Behaviour).

The behavioural effects of these embedded finance innovations are also observed in generational spending tendencies. For example, studies on BNPL influence on young shoppers indicate that perceived usefulness and risk perceptions significantly shape their spending and impulse buying behaviours, reinforcing the idea that embedded credit can amplify immediate gratification motives among digital natives (Mukhtar et al., 2023; Wong et al., 2024).

Embedded payment systems broadly, beyond BNPL, also influence consumer intention and adoption dynamics. Demir, Özsoy, and Saygılı (2024) examined embedded payments and found that convenience and ease of integration into existing online journeys are key determinants of user intention, especially among younger demographics. Perceived trust, social influence, and hedonic motivation emerged as significant predictors of embedded payment adoption, aligning with classic technology acceptance frameworks (e.g., TAM and UTAUT2) in digital financial contexts (Demir et al., 2024).

Consumer acceptance of embedded financial services is further contextualised within broader FinTech adoption research. Alkadi and Abed's (2023) systematic review on FinTech payment services highlights the importance of perceived usefulness and ease of use in driving online consumer acceptance, offering a foundation for interpreting how embedded finance shapes behavioural intentions within e-commerce systems.

While spending behaviours shift with embedded finance, research also underscores associated psychological and risk factors. For instance, psychological determinants such as materialism and perceived benefits have been found to mediate BNPL adoption, often exacerbating impulse purchases and altering budgetary discipline among specific consumer segments (Halim et al., 2024). Likewise, broader FinTech research suggests that increased reliance on digital payment tools can reduce consumer decision autonomy and heighten cognitive dependency, illustrating potential behavioural shifts resulting from embedded financial solutions (Liu, 2025).

The literature on embedded finance beyond payment adoption highlights structural and institutional implications that indirectly affect online consumer behaviour. Adıgüzel (2025) conceptualises embedded finance as a transformation beyond traditional banking, noting how the integration of financial services into digital platforms reshapes financial access and user experience, which in turn influences consumer expectations and engagement patterns with online services (Adıgüzel, 2025). Ozili (2022) offers a broader thematic review, framing embedded finance as a pivotal innovation in financial services that decentralises traditional banking and favors seamless consumer interactions within online ecosystems, enabling new consumer habits to form (Ozili, 2022).

The evolving field of digital finance also includes analyses of how payment methods influence consumption patterns. Work by Jiang (2022) suggests that alternative digital payments, including mobile and embedded payment systems, tend to increase spending relative to traditional cash payments, providing an empirical precedent for understanding how embedded finance affects online consumer expenditure behaviour (Jiang, 2022).

Further, machine-learning research by Leung, Li, and Qi (2025) reveals that variations in digital credit limits—even within embedded finance contexts—significantly shape consumer spending distributions, suggesting that credit availability mechanisms inherent in embedded finance can powerfully influence purchasing decisions at different consumption levels.

Complementary research points to broader digital finance impacts. Li et al. (2023) demonstrate that digital finance mechanisms—including embedded services—exert spillover effects on consumption at regional levels, illustrating macro-level behavioural shifts linked to digital financial integration. Additionally, broader FinTech and digital banking research emphasises cybersecurity and consumer trust as critical factors influencing adoption and sustained use of embedded financial services, which can ultimately moderate behaviour changes over time (Waliullah et al., 2025).

Collectively, this body of literature suggests that embedded finance—through integrated credit products, seamless payments, and personalised financial services—substantially influences online consumer behaviour by affecting spending levels, adoption intentions, psychological risk perceptions, and digital trust. However, scholars also highlight the need for more nuanced research that connects these behavioural shifts to regulatory contexts, long-term financial well-being, and ethical considerations in consumer finance.

III - Research Gap

The existing body of literature on embedded finance and online consumer behavior provides valuable insights into fintech adoption, digital payments, and Buy Now, Pay Later (BNPL) models. However, a critical examination of the reviewed studies reveals several conceptual, contextual, and methodological gaps, particularly in relation to the Indian digital economy.

First, most empirical studies on embedded finance are concentrated in developed economies such as the United States, Europe, and parts of East Asia. While these studies explore consumer acceptance, spending behavior, and psychological drivers of embedded financial services, their findings cannot be directly generalized to the Indian context due to significant differences in digital infrastructure, financial literacy, income distribution, and regulatory frameworks. India's digital ecosystem—characterized by rapid smartphone penetration, Unified Payments Interface (UPI) dominance, and a large population of first-time digital finance users—presents unique behavioral dynamics that remain underexplored in existing research.

Second, prior studies predominantly examine embedded finance through a technology adoption lens, relying heavily on models such as the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), and perceived usefulness–ease of use frameworks. While these models effectively explain adoption intention, they provide limited insight into post-adoption behavioral shifts, such as changes in spending discipline, brand switching behavior, impulsive buying tendencies, and long-term platform dependence. The notion of “shifting tendencies” of online consumers—referring to dynamic and evolving consumption patterns—has not been adequately conceptualized or empirically tested, especially in emerging markets like India.

Third, the literature tends to focus narrowly on specific embedded finance instruments, particularly BNPL, without adopting a holistic view of embedded finance ecosystems. Embedded finance in India extends beyond BNPL to include UPI-based one-click payments, embedded insurance, instant micro-credit, and platform-based digital wallets. There is a paucity of integrated studies that examine how the combined presence of these services influences consumer decision-making and reshapes online consumption behavior over time.

Fourth, limited attention has been paid to behavioral and psychological consequences of embedded finance usage, such as cognitive biases, over-consumption risks, digital debt accumulation, and financial stress among online consumers. In the Indian context, where a large segment of users are newly banked and financially inexperienced, embedded finance may simultaneously promote financial inclusion and increase vulnerability to unsustainable consumption patterns. Existing studies insufficiently address this dual impact, leaving a significant gap in understanding the welfare implications of embedded finance.

Fifth, methodological gaps are evident in the dominance of cross-sectional survey designs and self-reported data in existing research. There is a lack of longitudinal and mixed-method studies that capture behavioral shifts over time and contextualize quantitative findings with qualitative consumer insights. Additionally, regional diversity within India—urban versus rural users, metro versus non-metro cities, and varying socio-economic groups—has received minimal scholarly attention in the embedded finance literature.

Finally, regulatory and institutional perspectives are often discussed in isolation from consumer behavior studies. Given India's evolving regulatory stance toward fintech, digital lending, and consumer data protection, there is a need for research that integrates regulatory awareness, consumer trust, and behavioral outcomes within a unified analytical framework.

IV - Future Prospects of the study with special reference to India

The future prospects for research on embedded finance and online consumer behavior in India are both significant and timely, given the country's rapid digital transformation and expanding fintech ecosystem.

Future studies can adopt a behavioral finance perspective to examine how embedded finance interacts with cognitive biases such as present bias, mental accounting, and loss aversion among Indian consumers. Such research can provide deeper insights into how seamless financial integration influences impulse buying, credit reliance, and long-term consumption planning.

There is considerable scope for longitudinal research that tracks consumer behavior over time to assess whether embedded finance leads to sustained changes in spending habits, platform loyalty, and financial well-being. Long-term studies can help distinguish between short-term convenience effects and lasting behavioral shifts, which is particularly relevant in India's fast-evolving digital marketplace.

Another promising research avenue lies in segment-specific analysis, focusing on youth, gig-economy workers, small-town consumers, and first-time digital users. Given India's demographic diversity, future research can explore how embedded finance affects different consumer segments in distinct ways, thereby enabling more inclusive and responsible fintech innovation.

From a policy and regulatory perspective, future research can contribute to the development of consumer-centric regulatory frameworks by examining how awareness of digital lending guidelines, data privacy norms, and consumer protection mechanisms influences trust and adoption of embedded financial services. This is particularly relevant in light of the Reserve Bank of India's increasing scrutiny of digital lending and embedded credit models.

Technological advancements such as artificial intelligence, big data analytics, and open banking frameworks also present opportunities for future research. Studies can investigate how personalized embedded finance offerings influence consumer autonomy and ethical consumption, especially in algorithm-driven recommendation environments common in Indian e-commerce platforms.

Finally, future research can explore the socio-economic impact of embedded finance in India, balancing its role in enhancing financial inclusion against potential risks of digital indebtedness. Such studies can provide actionable insights for fintech firms, platform operators, educators, and policymakers seeking to promote sustainable digital consumption practices.

V - Conclusion

In summary, while existing literature establishes the growing relevance of embedded finance in shaping online consumer behavior, substantial research gaps remain—particularly in understanding dynamic behavioral shifts within the Indian digital economy. Addressing these gaps through context-specific, theory-driven, and methodologically robust research will not only advance academic knowledge but also support the responsible evolution of embedded finance in India.

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