

How has digital banking integration with e-commerce platforms influenced frequency and volume of online purchases?

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Abstract

Digital technology has evolved so quickly that today we are seamlessly integrating digital banks into ecommerce sites to create new ways for consumers to buy things using the Internet. Digital banking allows consumers to make online purchases more efficiently and easily than ever before. With more people using their phones and mobile banking applications to conduct everyday transactions, there are now multiple channels through which e-commerce and digital banking interact:

This research investigates a major source of concern for businesses that rely heavily on ecommerce and use digital banks as financial gateways. The primary research question that this study will examine is how the integration of digital banking impacts how often consumers make purchases online.

This analysis uses qualitative and quantitative research methods, focusing on secondary data such as academic articles, trade publications, market reports, and research conducted by others to evaluate the influence of digital payments on consumer behavior.

Results indicated that consumers are able to use digital banking integrations to complete transactions at a faster rate and with increased levels of accessibility. The conclusion of this study identifies the key factors affecting both the number of transactions and total dollar amount consumers²⁰⁸ make when conducting e-commerce purchases. Ultimately, banks, ecommerce platforms, and government should work together to create a secure, efficient, inclusive digital financial system that meets the needs of all consumers and increases the number and value of transactions.

1. Introduction

The emergence of advanced digital technology has radically altered both banking and ecommerce, moving banks away from simply offering an online site to full-scale digital banking (mobile banking, instantly paying online). E-commerce has evolved from a limited supply of products on websites to complete e-business solutions via a comprehensive digital marketplace, offering users a smooth User Experience while providing all necessary details about their purchases. As these digitized experiences have converged with each other, transactions have become faster, more secure, easier and have fundamentally changed the way consumers engage both with their banks and when purchasing online.

The COVID-19 pandemic has fueled this digital growth trend worldwide as restrictions on physical movement and less frequent in-person interactions have led consumers to opt for digital banking over traditional brick and mortar banks; likewise, consumers have shifted to online shopping instead of visiting local retailers. As more ecommerce tools have been

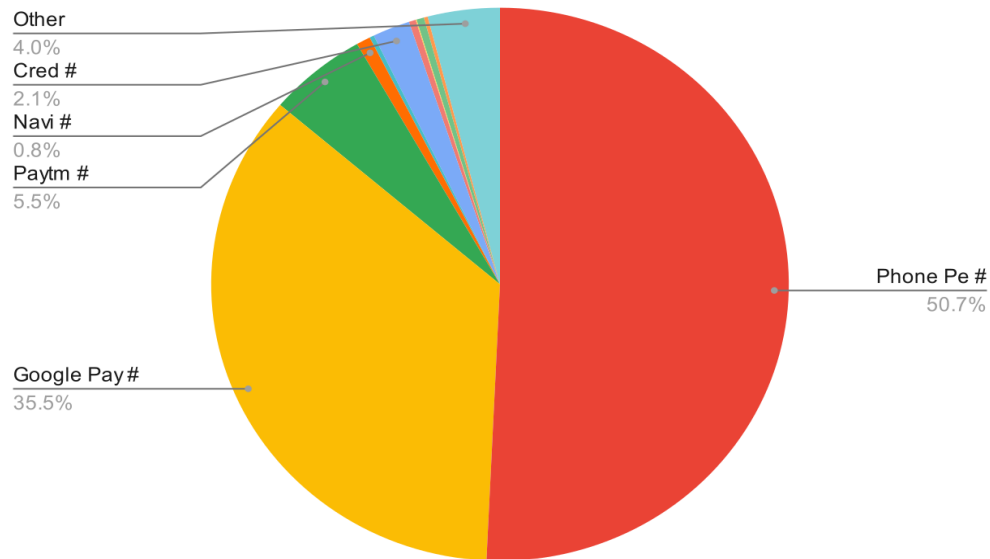
developed over time (payment gateways, digital wallets, UPI, buy now/ pay later services (BNPL's), embedded finance), all of these innovations have reduced friction in the transaction and provided greater convenience leading to a significant change in consumer behaviour towards more frequent purchasing and higher spending due to ease of payment, availability to access the internet and overall speed in payment.

The need for research arises because it is unclear whether these changes in shopping behaviours are sustainable or merely a temporary change due to COVID-19, an outside influence that impacted their ability to make these purchases. Additionally, there are still concerns regarding security (both consumer and merchant) and trust (both consumer and merchant) in conducting these new digital transactions.

This research address the following three main questions:

- How does the integration of digital banking tools affect how often consumers make purchases?
- The overall impact on the number of transactions created.
- What are some of the factors including trust, convenience, and speed that drive this relationship?

Market Share of Payment Apps In India



Source: [Wikipedia](#)

2. Conceptual Framework

In the era of constantly evolving technology, financial institutions are increasingly considering new ways to enhance how they provide services to their customers. Digital Banking is an evolving trend; it allows a customer to use digital channels, such as (a) Mobile Applications, (b) Internet Banking, and (c) Electronic Payment Platforms, allowing customers access to their finances 24 hours a day, 7 days a week, 365 days per year.

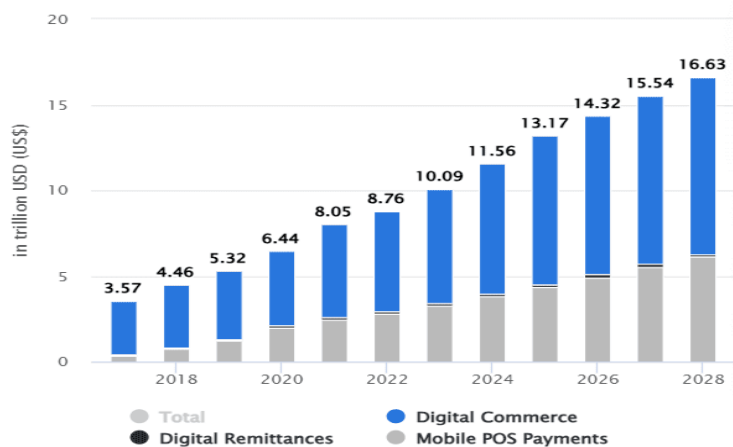
E-commerce Platforms allow consumers to buy and sell products and services via the internet through a variety of ways; customers generally use e-commerce platforms for convenience, access, and selections.

Integration provides for a seamless connection between Digital Banking and E-Commerce Platforms through the use of (a) API-based Payments, (b) Digital Wallets, and (c) Embedded Finance, enabling merchants and consumers to easily and quickly transact as part of the purchase process from the point of selection to receipt/shipping.

The primary concepts associated with this study are Purchase Frequency and Transaction Value. Purchase Frequency (or Purchase Patterns) measures a consumer's frequency of making online purchases during a specific period of time; this also gives an indication of how often a consumer engages with an online retail platform. Transaction Value gives a measure of the total dollar amount and/or total number of transactions made by a consumer; this gives a measure of the overall level of consumer spending. These two concepts are fundamental to identifying how Digital Financing Tools impact the level and dollar volume of online consumer purchases.

Digital banking → convenience & trust → increased transactions

Online Transaction Value Statistics By Segment



Source: Statista

3. Review of Literature

Researchers have extensively examined the adoption of digital banking with a focus on several key areas including trust, ease of use, and security. In a study conducted by (Lee et al., 2025), one of the critical findings of the current Technology Acceptance Model (TAM) is that perceived ease-of-use combined with accessibility have a strong influence on the adoption of digital banking services following the COVID-19 pandemic. Additionally, researchers have found that trust and security in perceived security are essential determinants for potential users to adopt digital banking services. According to one of the findings from (Malhotra & Baag, 2023), if a user is assured that their personal information and transactions will be kept secure, then that user is more likely to adopt digital banking services in relation to emerging financial technologies. Recent studies of fintech have also determined that ease-of-use will lead to an increase in user trust, which will ultimately lead to an increased rate of user acceptance of digital banking services as a means of completing financial transactions (Nangin et al., 2020).

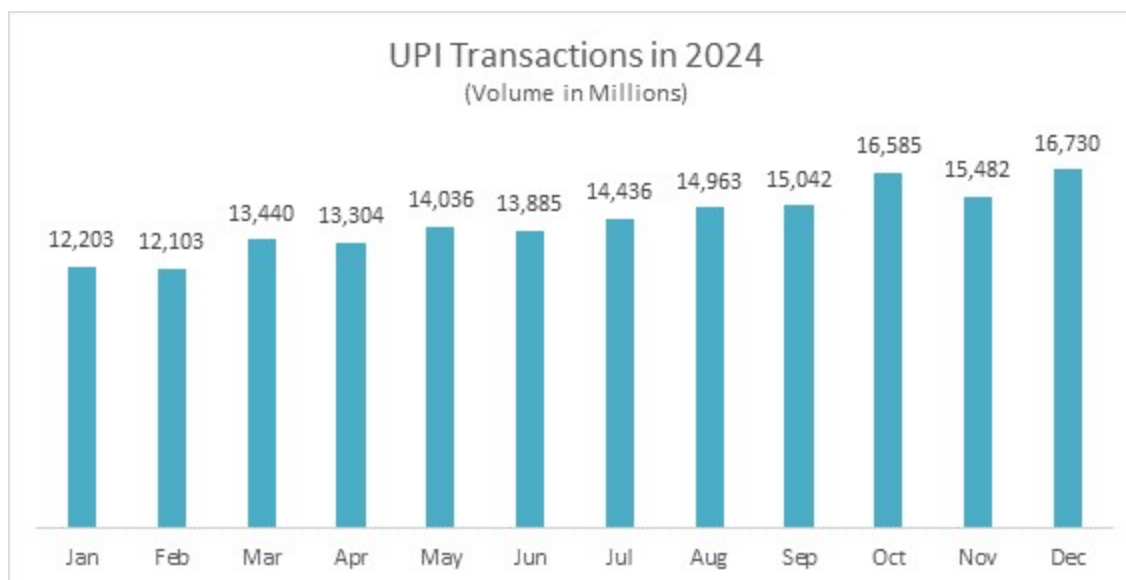
One of the primary factors that has led to an increase in digital payment transactions has been convenience, time efficiency and 24/7 access (Al-Omouh et al., 2020; Treiblmaier et al., 2006). Furthermore, these factors have led to the removal of time and geographical constraints for conducting online shopping and have helped accelerate consumer usage of e-commerce and the integration of digital payments into the overall digital shopping and purchasing functions of e-commerce platforms.

The COVID-19 Pandemic has increased the acceleration of digital transformation in banking and e-commerce industries. Research shows that restrictions on physical movement due to COVID-19 and reduced access to traditional banking institutions led to increased adoption of

digital banking (Malhotra & Baag, 2023). In addition, studies of digital payments during the pandemic found that, due to safety concerns and the need to make contactless purchases, more consumers used digital payment methods during this time (Aggarwal et al., 2025). During this period, consumers began relying heavily on digital platforms to conduct both banking and commerce.

Digital financial services offer users convenience, speed, and expanded access to financial resources—users can transact anytime and from anywhere (Patnaik et al., 2023). These innovations also lower transaction costs, increase efficiency, and provide more people with access to financial services, especially in developing countries. However, there are still significant challenges to be addressed, such as cybersecurity threats, data privacy issues, and a lack of personal interaction in a digital environment. Security risks, such as phishing and data breaches, can erode the trust of consumers and negatively affect the adoption of these technologies; hence requiring strong regulatory frameworks and technical safeguards (Waliullah et al., 2025).

Studies investigating the adoption of digital banking and the growth of e-commerce have been done extensively but do not take into account how they work together to influence consumer purchasing behaviour such as purchase frequency and total spending. Most studies look at either technology adoption factors or digital payments in isolation from one another without assessing how a single product combines both digital banking and e-commerce. There is very little research on how the seamless combination of digital banking and e-commerce virtually enhances consumer decision-making and spending behaviour. The purpose of this research is to fill this gap by examining the relationship between digital banking and e-commerce on consumer online purchase behaviour.



Source: [PIB](#)

4. Digital Banking and E-commerce Integration

The integration of digital banking with e-commerce has had a major influence on the online transaction ecosystem by creating transactions that can happen seamlessly, quickly, and safely. This integration can be enabled by many different digital tools and technologies used in conjunction to make payment processing easier for users and provide them with an improved overall experience.

A significant part of this integration into eCommerce - The role of payment gateways (intermediary between buyer and eCommerce site and the buyer's bank) - plays a very important part in processing the transaction; passing the information securely from the eCommerce to their bank; verifying the payment; and making sure that the money is transferred without any issues. In addition, mobile banking applications allow users to authentically and efficiently complete

transactions using their bank account, providing an easier way for buyers to have access and control of their payments. Similarly, digital wallets allow users to create ease in completing their purchases through the secure storage of payment information to complete the purchase with 'one click' rather than having to provide the same information multiple times. In addition, apps such as UPI (Unified Payments Interface) and other types of real-time payment methods enable instant transfer of money, thereby providing faster and more trustworthy ways for users to complete their transactions.

Furthermore, there is also embedded finance, where the financial services are incorporated directly through the e-commerce site. Therefore, users can be provided with payment (via credit, e.g., Buy Now Pay Later), access to credit, and insurance through the eCommerce site rather than having to leave the site and go to their online banking applications to complete the transaction. This will minimize the number of steps involved to complete a transaction; thereby minimizing the frictions of the transaction and enhancing the overall user experience.

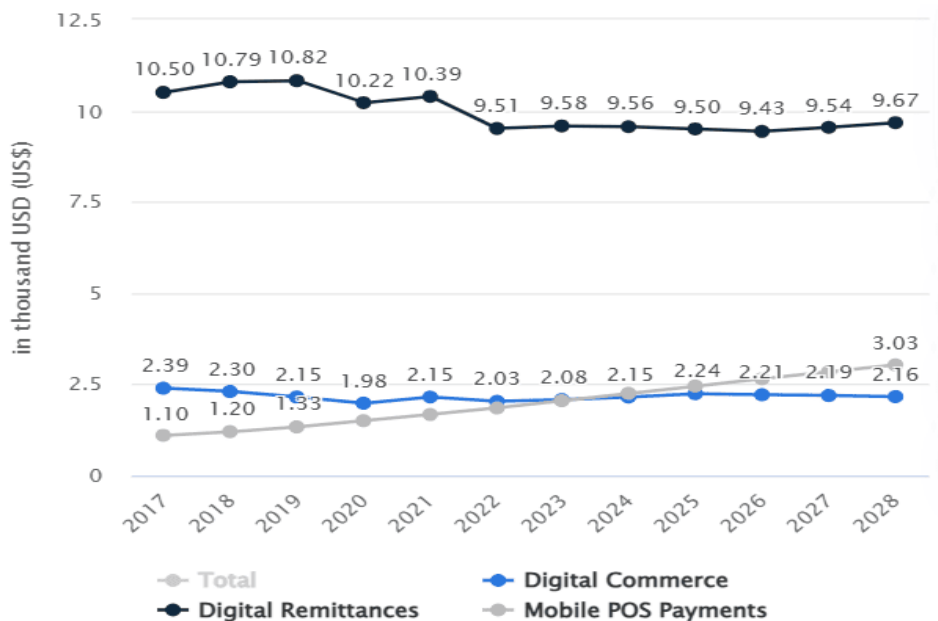
Transaction friction impacts Consumer Behavior. A smoother checkout will decrease cart abandonment with multiple easy-to-use payment options - Quick payment allows for increased efficiency, which has both increased reorder frequency and purchasing numbers. Additionally, as the technology evolves to use more intuitive or simplified user interfaces and integrated financial services, the convenience of using web-based banking will increase customer satisfaction and in turn will drive increased numbers of purchases and transactions through e-commerce.

Digital commerce users are expected to rise from



Source: [Airwallex](#)

Average Online Transaction Value Per User



Source: Statista

5. Channels Influencing Consumer Behaviour

Digital Banking Integration provides the framework for how eCommerce has evolved as a channel between digital banking and consumer purchase behavior. It is essential to consider the various channels that consumers use to interact with eCommerce platforms and how those interactions affect purchasing decisions. Convenience and accessibility through 24/7 digital banking allows consumers to purchase items and services anytime and anywhere without limit to geographical location or time, increasing the rate of repeated online purchases and overall engagement with e-commerce.

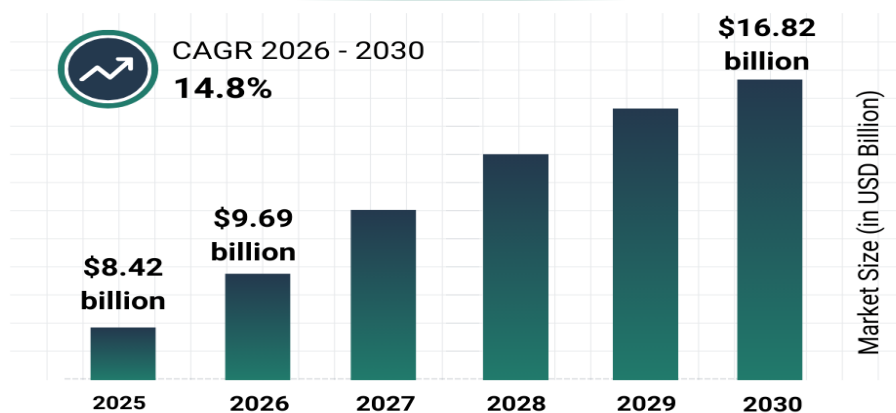
Speed and efficiency (quickness of transactions) are of paramount importance when using instant payment methods (real-time transfers or one-click checkouts). Enabling faster transaction processing speeds decreases the wait time to complete a purchase and creates a better overall shopping experience, encouraging more rapid purchase completion.

Consumer behaviour is basically influenced by confidence and security. User confidence is created by using advanced authentication, encryption and secure payment gateways. Users are more likely to engage in high value transactions and increase their overall consumption of a digital platform when they perceive their digital transactions to be safe and secure.

Consumer data creates a consciousness of purchase behaviour through personalisation and data analytics in e-commerce and digital banking spaces which provide users with tailored, targeted recommendations and discounts and customised financial services. In addition, this personalisation creates a positive experience for consumers and encourages continued purchase cycles, along with an increase in transaction volumes.

Digital Banking Platform Market Report 2026

The Business
Research Company



Source: [BusinessResearch](#)

6. Impact on Purchase Frequency

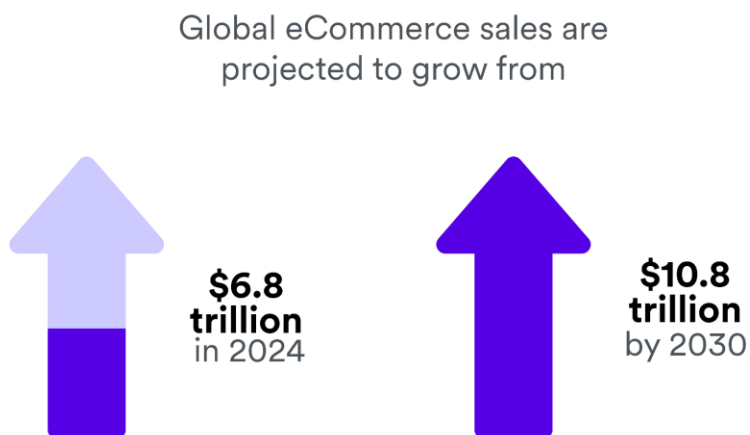
E-commerce platforms have integrated payment systems into their sites, enhancing the speed of the payment process and enabling consumers to perform transactions more easily than ever before. In addition, there is less effort required to complete the purchase of products. Therefore, as payments have become more streamlined, consumers have a greater tendency to make their purchasing decisions more quickly than they did in the past. As a result, over time, the total number of purchases a consumer makes will increase.

As a result of this type of ecommerce/ banking integration, we have also seen an increase in the prevalence of micro-transactions and impulse buys. Digital payment options have made it so easy for consumers to purchase frequently at low value that the use of instant payment

systems has greatly decreased the mental effort required to make a decision to purchase, thus encouraging consumers to engage in spontaneous purchasing behaviour.

Mobile banking has provided another level of convenience to consumers, enabling customers to perform transactions at any time and from any location using their smartphones. Mobile banking helps consumers access their finances while on-the-go and encourages increased use of digital payments. In addition, one-click payment options eliminate the need for consumers to enter their financial information for each and every transaction. By speedily finishing the checkout process with these two transaction methods, customers are encouraged to return to the merchant's ecommerce website for future purchases.

Overall, we have observed a shift in consumer behaviour from purchasing planned purchases to making spontaneous purchases. Convenience and speed significantly influence a consumer's purchasing behaviour, resulting in increased frequencies of purchases in the online marketplace.



Source: [Airwallex](#)

7. Impact on Transaction Volume

An increased number of transactions have occurred as a result of integrating digital banking solutions with e-commerce platforms, as well as the increased average amount purchased per transaction per individual involved in these transactions. Payment systems that are efficient and seamless will minimize any obstacles to completing a purchase, therefore encouraging consumers to not only purchase more frequently, but also to spend more money per transaction. Because it is convenient and easy for consumers to complete their payments, they develop confidence in using e-commerce, as well as wanting to complete purchases that are worth more per transaction.

Credit options, including Buy Now Pay Later (BNPL), digital credit options, and other forms of credit, have played a significant role for consumers looking to complete more purchases than they normally would due to immediate financial constraints. Credit options increase a consumer's purchasing capabilities and the total amount of money they may spend. Furthermore, methods of completing payments, such as one-click payment options, integrated gateways for payments, and similar methods allow individuals to complete their purchases with very little hassle or effort, thereby reducing the length of time they are required to spend and the level of effort it requires for them to complete the purchase.

Transactions occurring across borders and on a global scale allow consumers to shop in other countries and provide another means to increase the volume of transactions. Digital financial inclusion adds an additional benefit to increasing transaction volume as it involves integrating previously unbanked or underbanked individuals into the formal financial system, thus increasing the total number of individuals who may make purchases online. This leads to an

increased number of transactions occurring when a large number of individuals have access to digitally-based payment systems.

8. Emerging Market Perspective

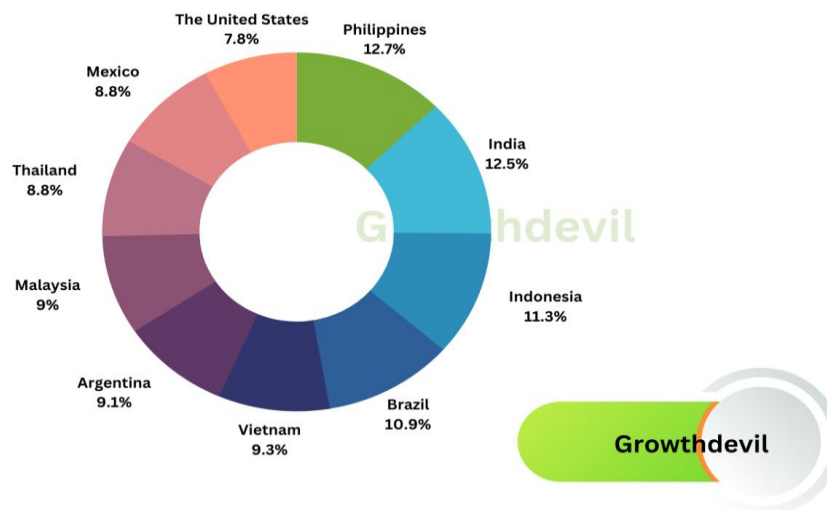
Emerging markets have recently increased their online and mobile usage, helping many people to use e-commerce and digital banks. Mobile phone prices are falling, so many more people can now use the internet and shop online. Many new technologies offer new ways to use digital banking. These include mobile wallets and instant payments, which are created to create a better way for payment systems to work together.

Despite these advancements, several challenges persist. One significant barrier to the growth of digitized financial services is the limited level of digital literacy in rural and less-educated populations, which makes it difficult for these people to use all the benefits that digital finance has to offer. In addition, concerns about the safety of their money and information through fraud, hacking, and a general mistrust of digital platforms are significant hindrances for consumers to use digital financial services.

The emerging markets provide many growth opportunities as well. Digital bank integration enhances financial inclusion by giving previously unbanked populations access to formal financial service products through digital banking technology. Additionally, as more people know about digital banking, small businesses and consumers can access and participate in the digital economy. Emerging markets will play a major part in future growth of digital

transactions and ecommerce as their infrastructure improves and their awareness continues to grow.

E-Commerce Growth And Sales By Country



Source: [GrowthDevil](#)

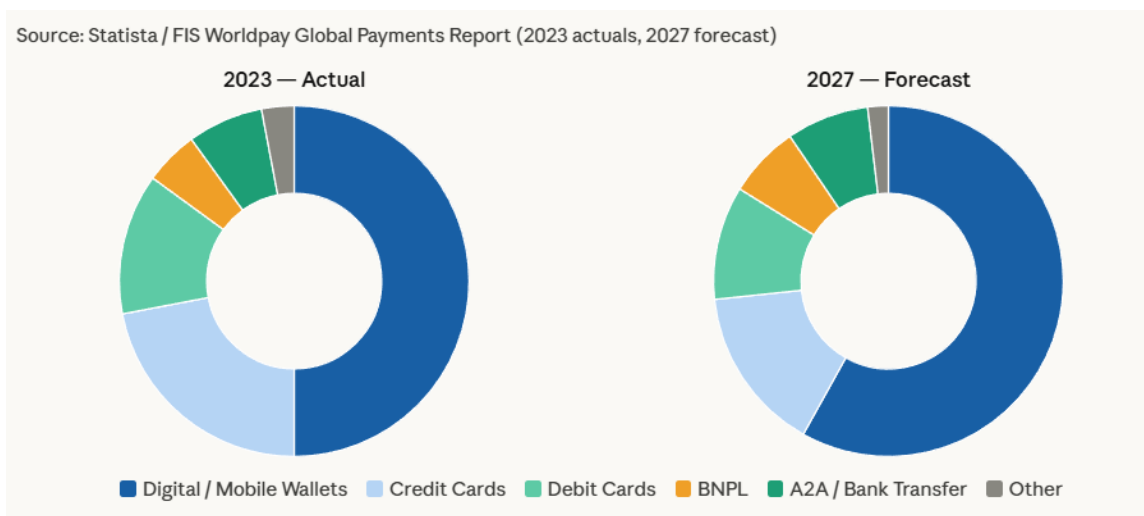
9. Analysis

Research has found that digital banking has a positive effect on e-commerce platforms in terms of frequency of purchases and volume of transactions. Many studies show that consumers are more likely to make online purchases when they have increased convenience of payment and are able to complete those transactions in less time, which increases the consumers' overall spend.

When comparing developed with emerging markets there are several key differences. In developed markets digital banking has a greater impact on consumers due to the quality of digital infrastructure and the overall level of digital literacy, leading to consumers accepting digital banking more readily and achieving higher transaction intensity than in emerging markets.

Emerging markets are more rapidly adopting digital banking due to the growth in internet access and mobile phone penetration but have more barriers in place to adopting digital banking due to poor infrastructure, regulatory challenges and varying levels of consumer awareness.

In summary, the factors that are influencing digital banking integration with e-commerce include: the quality of the infrastructure, the regulatory framework and the level of trust that consumers have in the digital banking system. In developed markets where there is a high level of digital infrastructure it is most likely that consumers will have a high level of confidence in regards to completing safe and secure transactions. The overall findings support the notion that although digital banking increases e-commerce activity across the globe, the increase will be greater in developed markets due to the maturity of the financial and technological infrastructure and ecosystems.



10. Policy and Practical Implications

The growing integration of digital banking and e-commerce platforms has important effects on various stakeholders. For banks, this means they must constantly improve their digital infrastructure to provide services that are reliable, fast, and able to grow.

Improving security and building trust with consumers through improved authentication systems, enhanced encryption and more transparent communications are also crucial to the continued adoption and use of their services.

For the e-commerce platforms, they should focus on providing seamless and user-friendly payment systems for consumers that minimise transaction friction. One-click payment options, multiple options for making payments, and smoother checkout experiences are all things that will create a more positive customer experience, resulting in a higher rate of completed transactions than without those features in place.

From the regulatory perspective, authorities should improve the data protection and cybersecurity frameworks to protect users against fraud or data breaches. A clear regulatory framework will not only protect consumers, but it also helps build trust in digital ecosystems and helps increase the adoption of digital financial services.

Consumers can benefit from these developments since they will have better access to financial services and greater financial inclusion - especially in emerging markets. Banks, Platforms and Regulators need to work together to develop a secure, efficient and inclusive digital transaction environment that supports ongoing growth in e-commerce activities.

11. Conclusion

Digital Banking Integration with E-Commerce Platform has a major Impact on consumer behaviour for purchasing. Digital banking integration (DBI), when combined with e-commerce platforms, has a major impact on consumer behaviour regarding purchases online. The findings of the research show that DBI will help increase the number of transactions made online and the total dollar amount of those transactions. Consumers attribute increased purchase frequency and dollar amounts while shopping through e-commerce to improved convenience when making payments, faster transaction processing, and increased accessibility.

Generally speaking, with the introduction of digital tools such as mobile banking, digital wallets (e.g., Apple Wallet, PayPal), and real-time payment systems, transactions have become much more convenient. As a result, consumers make more frequent purchases and with higher dollar amounts than they did prior to digital banking becoming a common method of payment.

The evidence presented here indicates that DBI has many advantages, but it is critical for consumers to have confidence in DBIs to use them. Thus, it is vital for digital banks to establish secure, trustworthy digital environments because providing secure digital banking is necessary for the long-term sustained growth of these businesses.

Looking forward, there will be more opportunities for research in this area. As new technologies are being introduced to the banking and e-commerce ecosystem (such as artificial intelligence (AI), Central Bank Digital Currencies (CBDC), and advanced financial technology (fintech) solutions), these technologies will further change the way digital financial transactions occur and how consumers behave during the shopping process. Conducting research on how these technologies will impact the future of digital banks and e-commerce integrations will

provide additional insights into how the changing financial ecosystem will occur, especially in emerging markets.

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