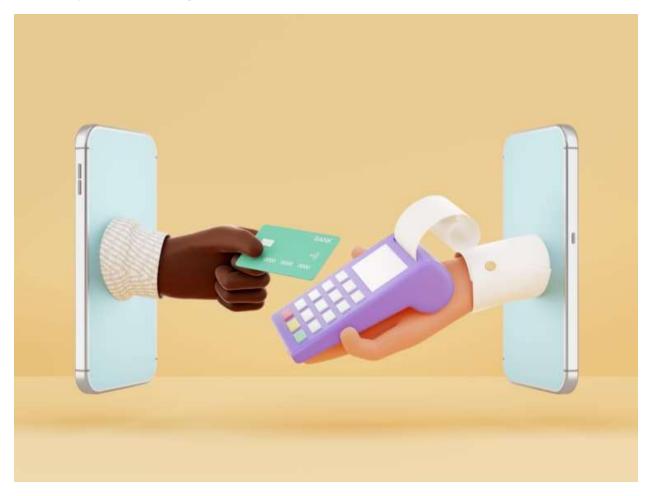**Is India Ready For A Contactless Payment Revolution?**

09 Feb'25 | By Srinivas Nidugondi

SUMMARY

Tap-to-pay refers to a form of payment using a credit, debit, or gift card on a point-of-sale system equipped with adequate technology

Contactless payments can significantly reduce the operational costs of handling cash and traditional card payments

The widespread adoption of contactless payments fosters greater financial inclusion

Have you ever been asked, 'does tap work on your card?' while standing at the supermarket checkout? In a world defined by convenient and secure financial transactions, the phrase 'tap to pay' has become a synonym to modern payment methods. Contactless-equipped cards use radio frequency identification (RFID) technology and near-field communication (NFC) to process transactions where possible.

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For retailers, embracing contactless payment methods means streamlining the checkout process, making it faster, more convenient, and hygienic. Contactless payments can significantly reduce the operational costs of handling cash and traditional card payments, translating to better efficiency and higher profit margins.

From an economic perspective, the widespread adoption of contactless payments fosters greater financial inclusion, and the increased speed and convenience of transactions stimulate consumer spending and economic growth.

Contactless payments have seen remarkable growth, with a six-fold increase in usage in India over the past three years. This rise in popularity, especially in recent years, is partly due to the unique challenges brought about by the global pandemic.

According to a Comviva survey called 'The Future of Payments: From 'Transactions' to 'Experiences' , contactless payments which utilise NFC and QR code technologies, are gaining momentum. It was observed that about 27% of respondents already offered such payment methods and a notable 36% planned to introduce them within the next year.

Challenges Of Contactless Payments

Limited Acceptance of Tap & Pay

While QR code-based solutions have seen significant adoption in the small and micro retail sectors, there remains some inertia for acceptance and uptake of "Tap & Pay" payment technology by smaller retail establishments.

Low Transaction Limit and Perceived Security Risks

The Reserve Bank of India (RBI) has imposed a capping limit of INR 5000 for each contactless transaction. While this limit aims to mitigate the risk of unauthorised transactions, it has sparked concerns among consumers who perceive contactless payments as less secure since they do not require a PIN. In reality, contactless payments are designed with robust security features, balancing convenience with security.

Technical Limitations

One significant challenge in the adoption of contactless Tap & Pay payments, particularly in the case of mobile payments, is the requirement for consumers to have an NFC-compliant smartphone. While not all consumers currently possess compatible devices, this is a technical barrier that can be overcome with time and technological advancements.

Limited International Availability

While contactless payment technology may be similar worldwide, certain mobile wallets used for these payments may not be universally accepted abroad. Travelers relying on their mobile devices for transactions may encounter limitations or inconveniences when using their preferred mobile payment method in foreign countries.

Are Contactless Cards Safe And Secure?

[Contactless cards](#) are typically resistant to standard skimming techniques. They utilise encryption and verification to protect card data and prevent credit card skimming. The technology ensures that sensitive payment information remains secure, enhancing consumer trust in the payment system.

The safety of contactless cards is further supported by strict regulations and guidelines enforced on payment card issuers and retailers. These measures are designed to combat risks associated with money laundering and terrorism, making every transaction safer.

Beyond security, contactless cards offer the flexibility of various payment devices, including smartphones and smartwatches, allowing you to choose the method that suits you best. Plus, loyalty benefits and rewards programs often come with contactless card usage, adding value for consumers and encouraging the adoption of this secure and user-friendly payment method.

Is Biometrics The Next Frontier In Secure, Contactless Payments?

The future of secure payments in India is poised for exciting advancements driven by the convergence of technology, security, and convenience. As digital payments continue to surge, with projections reaching a staggering $10 Tn by 2026 (according to a 2022 report by BCG and PhonePe), the need for robust security measures becomes paramount.

A promising development in the industry is the incorporation of biometric authentication into payment systems. Face recognition technology is gaining widespread acceptance, and it has the potential to usher in a new era of truly touchless payments.

At the end of 2023, there were about 16.89 Lakh micro-ATMs in India. During the pandemic, cash withdrawal through micro-ATMs surged to approximately INR 1.2 Lakh Cr in FY20, increasing to approximately INR 3.33 Lakh Cr in 2023 as per RBI data.

The Indian government's Aadhaar Enabled Payment Service (AEPS) has already harnessed biometrics, using micro-ATMs to facilitate secure, cardless money disbursal in remote areas.

This low-cost platform connects micro-ATMs to banks across India, allowing instant deposits and withdrawals regardless of the associated bank. By closely monitoring the growth and adoption of AEPS and the deployment of micro-ATMs nationwide, we can gain valuable insights into the future course of biometric payment technologies.

Fintech corporations are fervently seeking innovative solutions for seamless payments while ensuring the highest levels of security. Numerous Proof-Of-Concept (POC) projects are underway to investigate the potential of biometrics and facial recognition in bolstering payment security.

In the Indian context, however, technology readiness at merchant points will be a crucial factor in adopting these advanced payment methods. The future of contactless payments in India is bright. By embracing innovation, prioritizing security, and focusing on customer experience, we can create a truly seamless and secure digital payment ecosystem for all.