



Enabling the Digital Shift: Tokenisation in India's Economic Landscape

Executive summary

The digital payments landscape is undergoing a seismic shift, driven by technological advancements that range from mobile wallets and wearables to biometrics. As consumers adapt to these emerging payment methods, the onus is on banks, fintechs, and merchants to innovate and meet these evolving needs. However, this digital transformation also opens up new avenues for fraud, requiring robust security measures. This report explores how tokenisation is playing a critical role in shaping a secure and efficient digital economy in India, especially as the country aims for a \$1 trillion digital economy by 2030.

A trillion-dollar aspiration

India's ambitious target of a \$1 trillion digital economy by 2030 brings with it the challenge of ensuring consumer protection and awareness. The digital economy in India is remarkably diverse, as people from various backgrounds are quickly embracing mobile payments and online commerce. The sevenfold increase in cyberattacks from 2018 to 2022 underscores the urgent need for technologies like tokenisation to secure India's digital future.

Regulatory foresight

The Reserve Bank of India (RBI) has been a visionary regulator in India's tokenisation journey. Since 2019, the RBI has permitted the storage of tokenised card data on various electronic devices, with adequate prescribed safeguards being in place, extending this to include laptops, wearables, and IoT devices in 2021. Since the October 2022 mandate prohibiting any entity except card issuers and networks, from storing Card on File data has taken effect, a collaborative effort between regulators and the industry, along with comprehensive guidelines, has enabled smooth and extensive uptake of Card on File (CoF) tokenisation across a range of stakeholders.

Collaborative adoption

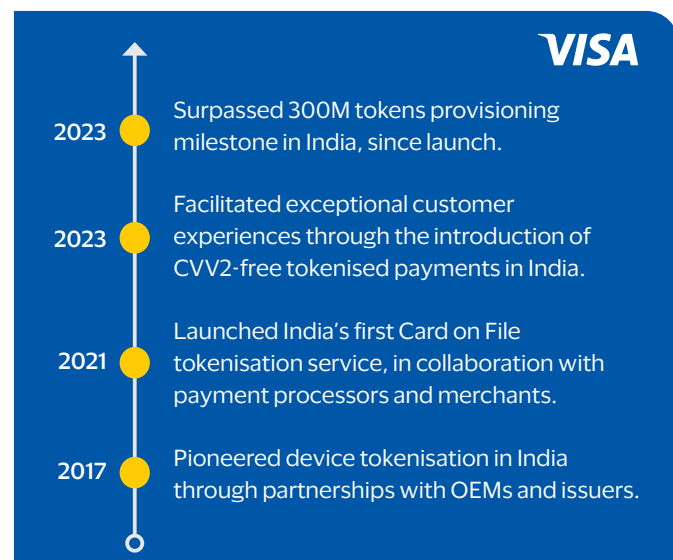
The success of tokenisation in India is also a testament to the collaborative spirit of the country's payment ecosystem. A diverse range of stakeholders, including financial institutions, payment service providers, tech providers, and merchants, have come together to implement this technology at scale. This collective effort is further amplified by consumer education initiatives, ensuring that the benefits of tokenisation are well-understood and consent is explicitly given by consumers (as backed by the appropriate authentication mechanism prescribed by the RBI).

As tokenisation continues to evolve in India, it promises to unlock a diverse array of commerce opportunities and digital

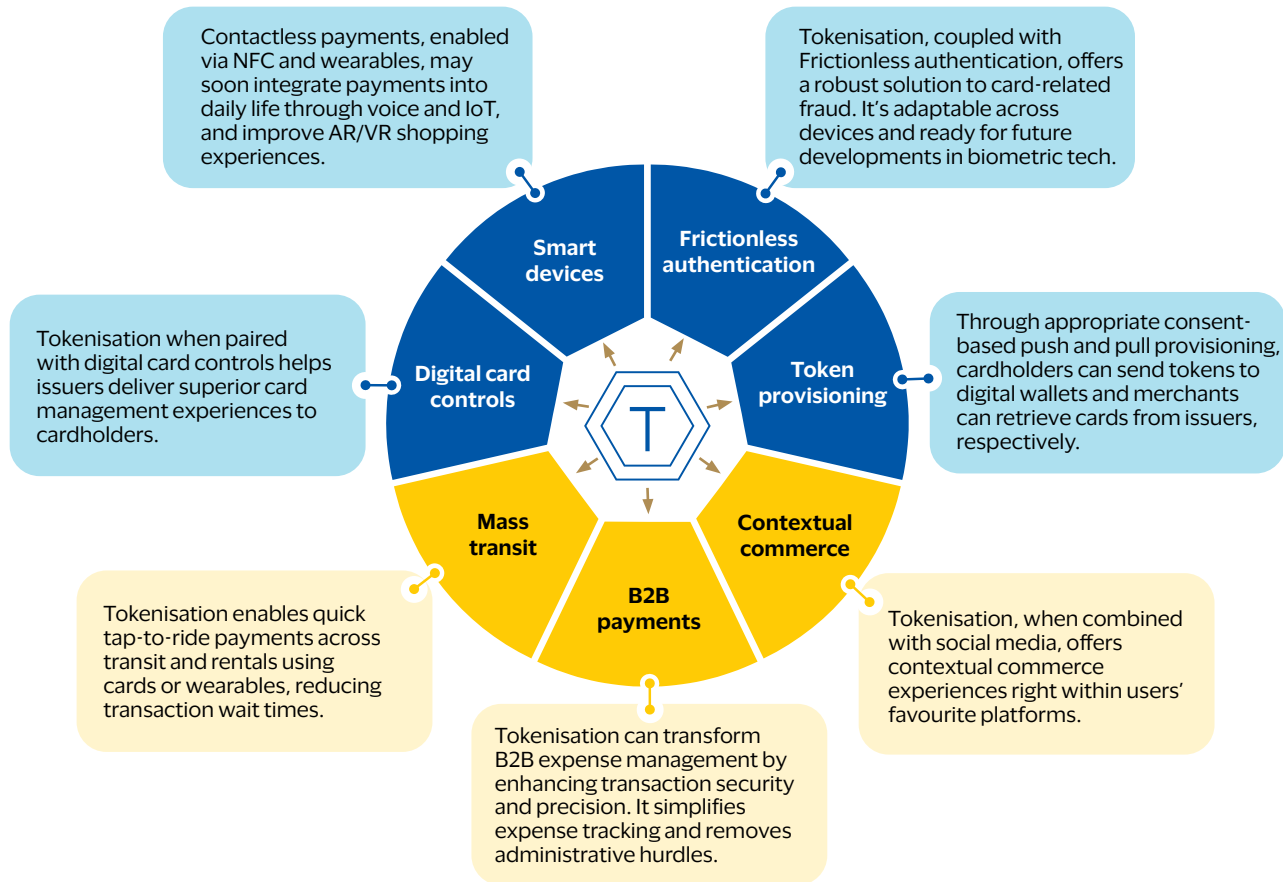
payment scenarios. Let's explore the future landscape of tokenisation in India. Tokenisation isn't merely a technological advancement; it's a pivotal catalyst shaping India's digital economy ambitions. When coupled with emerging technologies like smart devices, wearables, and biometrics, tokenisation has the potential to unlock a myriad of futuristic use cases that go beyond traditional transactional boundaries:

The convergence of speed and security

One of the most compelling trends driving modern commerce experiences is the convergence of speed and security. For instance, in the realm of mass transit and contactless payments, tokenisation synergises with NFC technology to enable quick tap-to-ride payments across various transit options. This eliminates the cumbersome wait times associated with traditional transaction methods while ensuring top-notch security. Similarly, the push and pull provisioning capabilities of tokenisation are making commerce experiences not just instant but also secure, a feature that becomes increasingly important as IoT devices become more prevalent in executing transactions.



Tokenisation is ready for primetime in India



Empowering consumers and businesses

Another underlying trend is the empowerment of consumers and businesses to have greater control over their financial transactions. Digital Card Controls paired with tokenisation are giving cardholders an unprecedented level of control and security. On the B2B front, Visa Payables Automation is leveraging tokenisation to offer enhanced transaction controls, thereby making business payments as seamless and secure as consumer transactions.

Building trust and contextual engagement

The third trend focuses on trust and contextual engagement. Frictionless authentication methods, when integrated with tokenisation, is elevating the trust factor in digital commerce to the level of physical card-based payments. In the realm of social

commerce, tokenisation is merging with social media platforms to offer a more contextual and secure form of engagement, transforming the way consumers shop and interact online.

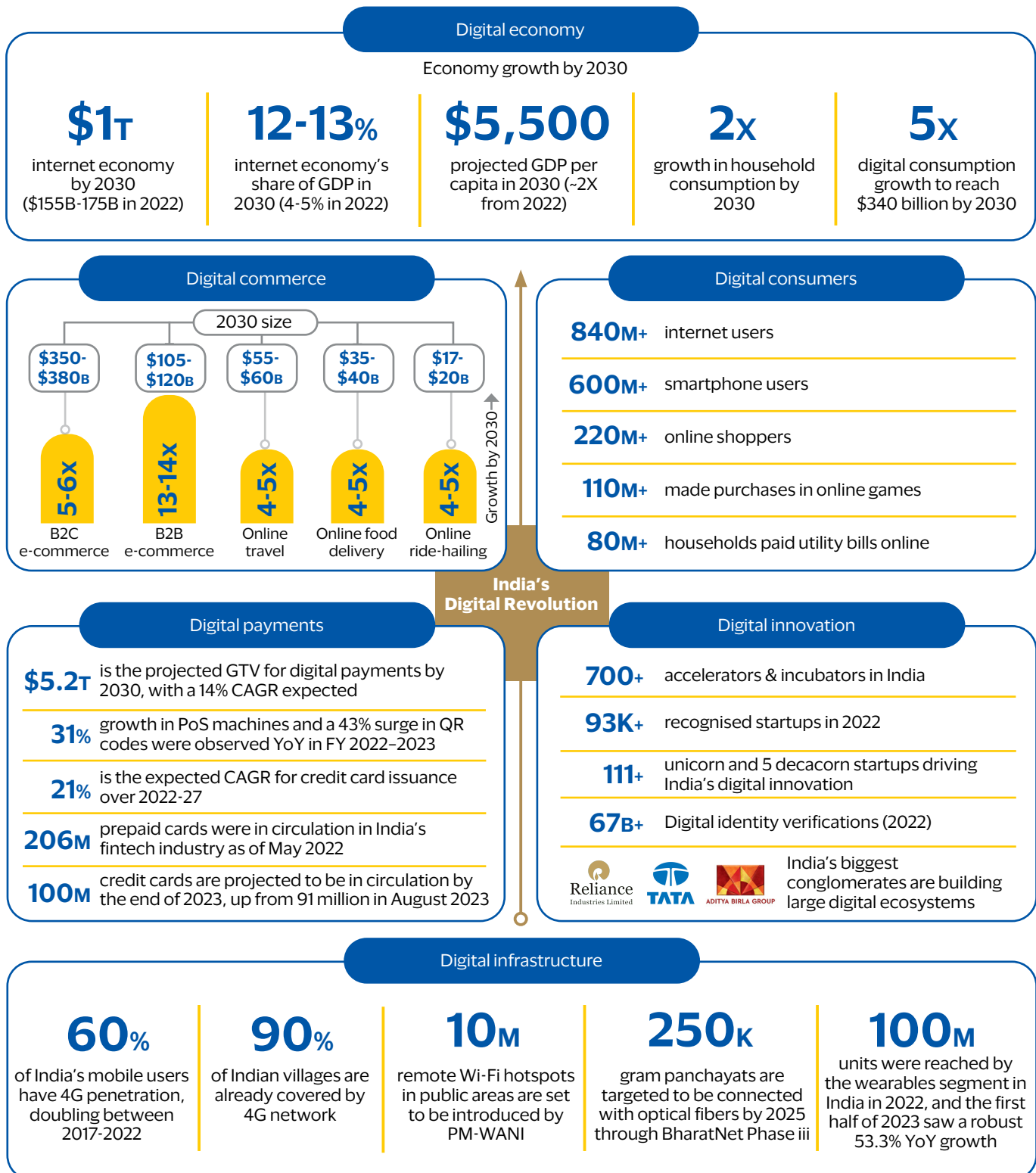
As tokenisation technology matures in evolving markets like India, it is set to catalyse a wide range of innovative commerce experiences. The technology not only boosts the security of payment transactions but also accommodates a plethora of new payment experiences - ranging from contactless transit payments to digital B2B operations and seamless subscription payment experiences. Furthermore, the incorporation of advanced security measures, such as biometric authentication, further reinforces trust and control among consumers and businesses alike. Altogether, these innovations are laying the groundwork for a robust, secure, and rapidly expanding digital economy in India.



Tokenisation for a trillion-dollar digital economy

As India strides towards its ambitious goal of a \$1 trillion digital economy by 2030, the journey demands a harmonious blend of growth, sustainability, and consumer protection. The nation's vast digital landscape, with 500 million+ non-English speaking internet users, underscores the need for comprehensive awareness and robust consumer protection measures. This is

vital to harness the full potential of digital adoption. Alarming, India has seen a sevenfold surge in cyberattacks, escalating from 0.2 million in 2018 to approximately 1.3 million in 2022. Tokenisation could emerge as a pivotal technology, poised to address these challenges and catalyse India's connected vision.



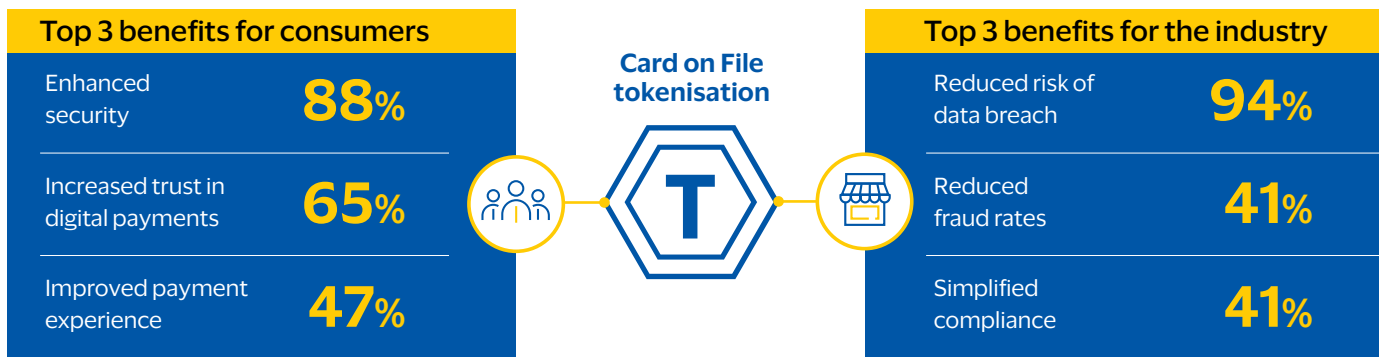
Sources: The Indian payments handbook - 2022-2027, PwC India ; India e-Economy Report 2023 - Google, Temasek, Bain ; Democratising digital commerce in India - 2023, McKinsey & Company ; International Data Corporation (IDC); RBI

Survey insights

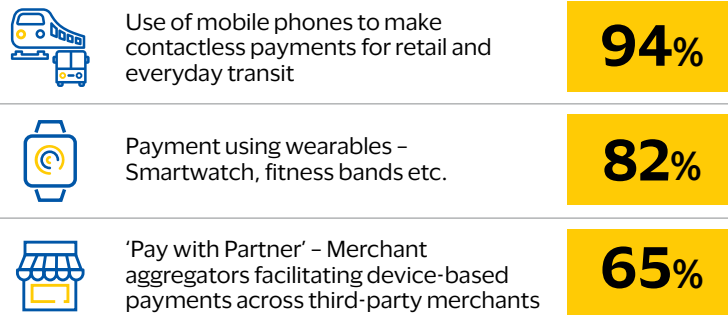
Visa conducted a survey among industry executives across card issuers, payment acquirers/processors, and merchants to understand the industry viewpoints on the implementation of CoF tokenisation.

Industry leaders' opinion on benefits of tokenisation:

There are several benefits of tokenisation for consumers and the industry. The most agreed upon benefits by industry executives are as follows.



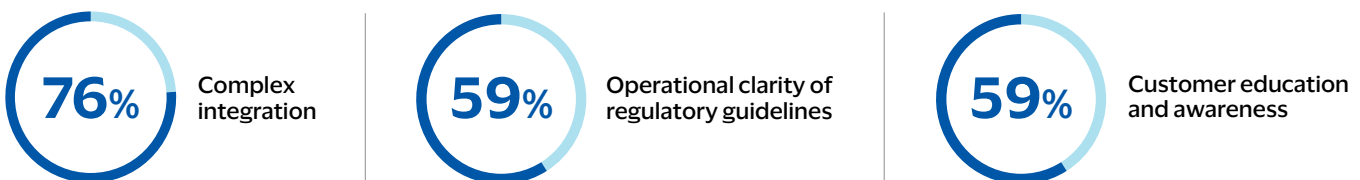
In terms of future potential, the top 3 use cases that executives believe have maximum potential are:



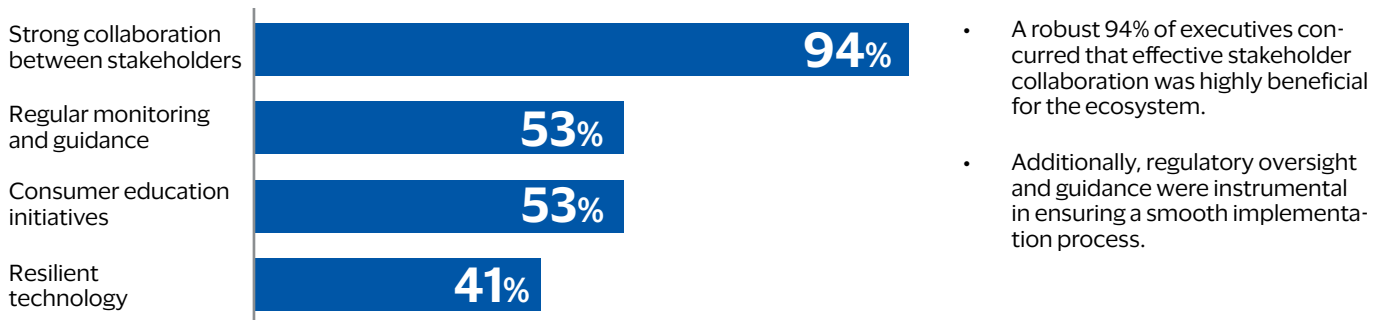
Enormous untapped potential for tokenisation in India



Three-quarters of executives found the implementation of tokenisation to be generally smooth, experiencing only minor issues in some instances. The primary challenges organisations encountered while adopting tokenisation were:



Key catalysts to successfully implementing the tokenisation mandate



* Survey insights are based on responses from 17 industry executives.