



DIGITAL JOURNEYS

# INDIA EMBRACES MOBILE MONEY

The central bank has played a key role in the country's digital payment boom

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**T**he Reserve Bank of India's headquarters, opened in 1981, is a high-rise building clad in white towering over Mumbai's Fort district, a few blocks from the waterfront.

The RBI is also a pillar of the country's rapidly growing digital payment network and a lesson in cooperation between a central bank and private firms.

India's digital payment volume has climbed at an average annual rate of about 50 percent over the past five years. That itself is one of the world's fastest growth rates, but its expansion has been even more rapid—about 160 percent annually—in India's unique, real-time, mobile-enabled system, the Unified Payments Interface (UPI). Transactions more than doubled, to 5.86 billion, in June from a year earlier as the number of participating banks jumped 44 percent, to 330. Values nearly doubled in the same period. In addition, the RBI in March introduced a

UPI for feature phones (older devices with buttons instead of touchscreens) that can potentially connect 400 million users in distant rural areas.

The UPI system was introduced in 2016, just before the end of RBI Governor Raghuram Rajan's term. The shock of the demonetization initiative followed near the end of that same year, when high-denomination banknotes were withdrawn from circulation.

UPI was a response to the nation's patchwork of rules and paperwork for payments. The goal was to make transfers easier and safer by allowing multiple bank accounts on the same mobile platform for individual and business use alike. It rapidly came of age.

The UPI network's genesis traces back even further, to 2006, when the RBI and Indian Banks' Association jointly formed the National Payments Corporation of India (NPCI).

The goal was to be an umbrella institution for digitalization of retail payments, and it was incorporated as a nonprofit company intended to provide India's people a public good. This public good approach to providing digital financial infrastructure is relevant for all economies, whatever their stage of development, researchers at the Bank for International Settlements wrote in a 2019 paper.

### Going cashless

Growth for individual digital payment users is set to triple in five years to 750 million, according to NPCI Chief Executive Officer Dilip Asbe; merchant users could double to 100 million. The central bank fosters a varied ecosystem of payment systems, he said, including RuPay, a debit and credit card issuer with a large market share, the National Financial Switch cash machine network, and a payment system using the national identity program to bring banking to underserved areas.

"RBI was determined that a country our size needs multiple payment systems so citizens can choose from multiple payment options," he said. "A system like UPI cannot come into any country unless the central bank and the government of that country are keen to bring in such an innovation, which democratizes the payment system to the smallest value and the most reasonable cost. UPI is nearly free today for consumers in India, and the government is providing incentives for promotion of UPI merchant payments."

With a burgeoning cashless society, the old ways are increasingly forgotten by the country's hundreds of millions of young people. It is they who have helped swell the ranks of users of Paytm, one of the world's largest mobile money services providers, to more than 400 million.

Anjchita Nair, an entrepreneur and cofounder of the New Delhi-based arts and culture organization Culture, uses Paytm for sales and Razorpay's platform for online transfers. For personal use she prefers Google Pay, another of India's most popular platforms.

"Monetary transactions can be done quickly and conveniently," she said. "The younger generation are more and more using cashless methods such as UPI and wallets, and we wanted to make transactions easier for them. We also have small-value transactions happening for some of our products, and it reduces the hassle of handling cash."

With the memory of cash reliance already rapidly fading since the beginning of the smartphone era, the pandemic helped further accelerate the embrace of contactless digital transactions, especially for small amounts, as people tried to protect themselves from the virus.

### Unique digital infrastructure

This transition piggybacked on another unique domestic innovation, the India Stack, a digital identity and payment system built on an open application programming interface, or API. It has been a force for greater financial inclusion by making services easier for consumers to access, including by incorporating the national identity program, Aadhaar, with 1.3 billion users.

Open-stack technology is the foundation of UPI, which transformed India's digital payments, said Dinesh Tyagi, CEO of CSC e-Governance Services India, the government's operator of centers for electronic public services in villages and other remote areas.

"The government promoted open-stack technology so that people can try to integrate very quickly," he said. "We also promoted private fintech companies, in addition to traditional public sector banks, which is what [allowed] quicker adoption of these technologies. These services are also available at no cost to the citizen, and that is the uniqueness of India's digital transformation."

Meanwhile, policymakers are planning another big bet on the future of digital money, with even more far-ranging effects on the economy. The RBI is exploring a central bank digital currency (CBDC) designed to meet monetary policy objectives of financial stability and efficient currency and payment operations.

RBI Deputy Governor Rabi Sankar, who oversees payment systems and financial technology, said achieving such an advance would have advantages for currency management, settlement risk, and cross-border payments.

He said in a June address at an IMF event on digital money that a digital rupee would have big implications for crypto assets: "CBDCs could actually be able to kill whatever little case there could be for private cryptocurrencies." **FD**

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