Unified Payments Interface

Why in News?

The **International Monetary Fund (IMF)** released a note titled *Growing Retail Digital Payments: The Value of Interoperability,* emphasizing the role of the **Unified Payments Interface (UPI)** in transforming India's digital payment ecosystem.

What is Unified Payments Interface (UPI)?

- **About:** UPI is a real-time mobile payment system developed by **National Payments Corporation of India (NPCI)**
  - It allows users to link multiple bank accounts into one app for seamless peer-to-peer and merchant transactions.
- **Working:** UPI enables both **push (send) and pull (receive) transactions** using a **Virtual Payment Address (VPA),** with two-factor authentication, eliminating the need to enter bank details each time.
- **Technologies Used:** UPI is built on **IMPS (Immediate Payment Service)** and integrates **Aadhaar Enabled Payment System (AePS).**
  - IMPS facilitates funds transfer to an account of the beneficiary with a participating bank, based on beneficiary's Mobile Number & Mobile Money Identification Number (MMID) or Account number & Indian Financial System Code (IFSC).
  - The AePS allows basic banking services like cash withdrawal, deposit, balance enquiry, and money transfer (interbank or intrabank) using Aadhaar authentication.
- **BHIM App:** **Bharat Interface for Money (BHIM)** is a UPI-based payment app developed by NPCI.

How Has UPI Transformed India's Digital Payment Ecosystem?

- **Scale and Adoption:** UPI processed Rs 24.03 lakh crore through **18.39 billion transactions in June 2025.**
  - UPI now serves 491 million users and 65 million merchants, connecting over 675 banks on one platform.
  - India's UPI is now the **world's top real-time payment system,** processing over 640 million daily transactions more than **Visa's 639 million** and powers **85% of India's digital payments** and nearly 50% of global real-time payments.
  - UPI has integrated digital payments into daily life in India, enabling instant 24/7 transactions and easy management of all bank accounts through one app.
    - **Two-factor authentication** ensures safety, while **UPI IDs** protect privacy by avoiding the need to share sensitive bank details. **Quick Response (QR) codes** make payments at shops fast and easy.
- **Interoperability:** UPI enabled seamless, platform-agnostic payments by removing the **limits of closed-loop system**s like restricted wallets or bank-specific transfers.
  - It allows users to transact across different apps and banks, making digital payments easier and more flexible.

- This openness also pushed apps to compete and improve, driving innovation and better user experience.
  - **Financial Inclusion:** UPI's **zero-cost, real-time transfers** have made digital payments **accessible for small vendors and first-time users.**
    - It has empowered **millions of kirana stores and micro-businesses**, while also promoting digital literacy and building trust in digital finance.
  - **Global Reach and Diplomacy:** UPI is now live in **7 countries,** including the UAE, Singapore, Bhutan, Nepal, Sri Lanka, France, and Mauritius.
    - Its launch in France marks its entry into Europe. India is also pushing for UPI to be adopted across **BRICS nations**, which would boost **remittances** and simplify payments for Indians abroad.

Digital Foundation Behind UPI

- UPI's global success is rooted in years of investment in digital infrastructure, with India building a strong foundation through the **JAM trinity** (Jan Dhan Yojana (financial inclusion), Aadhaar (digital identity), and Mobile connectivity) along with affordable internet.
  - As of mid-July 2025, **Jan Dhan Yojana** opened over 55.9 crore bank accounts, bringing millions into the formal financial system and enabling direct benefit transfers.
  - **Aadhaar** gave every resident a unique biometric-linked identity. With over 142 crore Aadhaar numbers generated by June 2025, it enabled secure authentication and underpinned services like UPI.
  - **Connectivity** improved rapidly with one of the **world's fastest 5G rollouts** (4.74 lakh base stations now cover almost all districts).
    - Data costs dropped from Rs 308/GB in 2014 to Rs 9.34 in 2022, supporting 116 crore mobile users.
- These pillars made UPI the world's top real-time payment system and a global model for digital finance.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q1. With reference to digital payments, consider the following statements: (2018)

1. BHIM app allows the user to transfer money to anyone with a UPI-enabled bank account.
2. While a chip-pin debit card has four factors of authentication, BHIM app has only two factors of authentication.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q2. Which of the following is a most likely consequence of implementing the 'Unified Payments Interface (UPI)'? (2017)

(a) Mobile wallets will not be necessary for online payments.
(b) Digital currency will totally replace the physical currency in about two decades.
(c) FDI inflows will drastically increase.

(d) Direct transfer of subsidies to poor people will become very effective.

Ans: (a)

Q3. Consider the following statements: (2017)

1. National Payments Corporation of India (NPCI) helps in promoting the financial inclusion in the country.
2. NPCI has launched RuPay, a card payment scheme.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

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