DIGITAL PAYMENTS IN INDIA:

WHY IN NEWS?

The digital payments system in India, led by UPI, has experienced significant growth, with **UPI payments** outpacing other modes, increasing its share to **27% by March 2023**. However, financial inclusion remains a challenge as many still have **inactive bank accounts**, and there are notable **gender and rural-urban gaps** in digital transactions, highlighting the need for improved accessibility.

MODES OF DIGITAL PAYMENTS:

- Unified Payments Interface (UPI)
- Bharat Interface for Money (BHIM)
- UPI 123PAY
- UPI Lite
- Cards (including RuPay Debit Cards)
- Immediate Payment Services (IMPS)
- Aadhaar Enabled Payment System (AePS)

NPCI'S SYSTEMS
- National Financial Switch **(ATMs)**
- National Automated Clearing House **(NACH)**
- CTS Cheque Clearing
- Immediate Payment Systems **(IMPS)**
- RuPay Card
- Aadhaar Enabled Payment System **(AEPS)**
- Bharat Bill Payment System **(BBPS)**
- Unified Payments Interface **(UPI)**

ABOUT UPI:

Introduced in 2016 by the NPCI, the Unified Payments Interface (UPI) integrates various bank accounts into a single mobile app for seamless transactions. The NPCI, established in 2009 by the RBI and IBA, aimed to develop a strong payment and settlement infrastructure. UPI functions alongside the Immediate Payment Service (IMPS), designed by NPCI for instant fund transfers.

IMPS: - IMPS is a service offered by banks for immediate interbank funds transfer, ensuring real-time transactions.

- Unlike NEFT, which processes transactions in batches, IMPS clears transactions instantly.

- IMPS allows instantaneous fund transfers and has a transaction limit of INR 2 Lakh, while NEFT has no such limit.

- Multiple channels like mobile phones, ATMs, the internet, and SMS can be used to access the IMPS facility.

WHY UPI IS WIDELY ACCEPTABLE IN INDIA?

1. **Simplified Interface:** UPI offers a user-friendly and straightforward interface, enabling even individuals with limited digital literacy to conduct transactions seamlessly.
   a. Eg: - Farmers in rural areas can use UPI apps on their smartphones to receive payments directly for their produce, eliminating intermediaries and ensuring faster and secure transactions.
2. **Real-time Transactions:** UPI facilitates immediate fund transfers, making it highly suitable for time-sensitive payments and reducing delays in financial transactions.
   a. Eg: - Small businesses can use UPI to make quick payments to suppliers, ensuring a smooth supply chain and enhanced efficiency.

3. **Interoperability:** UPI is bank-agnostic, allowing users to link multiple bank accounts and conduct transactions across various banks through a single UPI application.
    a. <u>Eg: - Customers can easily transfer money from their savings account in Bank A to their friend's account in Bank B, irrespective of the banks they are associated with.</u>

4. **Government Initiatives:** Government support and promotion of UPI as part of its digital payment drive have played a crucial role in its widespread adoption.
    a. <u>Eg: - The implementation of UPI for various government schemes has enabled direct benefit transfers to beneficiaries, reducing leakages and ensuring financial inclusion.</u>
5. **Growing Merchant Acceptance:** A wide network of merchants accepting UPI payments, including local vendors and e-commerce platforms, has enhanced its popularity.
    a. <u>Eg: - Street vendors can now accept digital payments through UPI, broadening their customer base and contributing to the formalization of the economy.</u>
6. **Cashback and Incentives:** Many UPI apps offer cashback and rewards to users, encouraging them to shift from cash-based transactions to digital payments.
7. **Secure and Reliable:** UPI employs robust security features like two-factor authentication, making it a safe mode of conducting financial transactions.
    a. <u>Eg: - UPI's multi-layered security measures have instilled confidence in users, resulting in increased adoption for both personal and business transactions.</u>

RECENT INNOVATIONS IN UPI:

- **UPI 123Pay**: This is a new feature that allows users to **make payments using missed calls.** This is a simple and convenient way for users to make payments, especially for those who do not have smartphones.
- **UPI Single Block and Multiple Debits**: This feature allows users to block funds in their account for specific purposes. This can be used to make **payments for recurring expenses**, such as rent or insurance premiums.
- **UPI Linked with Credit Cards**: This feature allows users to link their credit cards with UPI. This can be used to make payments using credit cards, which can be helpful for those who want to earn rewards or cashback.
- **UPI for Offline Payments:** This feature allows users to make payments even when they do not have an internet connection. This can be done by generating a QR code that can be scanned by the merchant.
- **UPI for International Payments**: This feature allows users to make payments to merchants in other countries. This can be done by using a UPI-enabled app and entering the merchant's details.

CHALLENGES IN FURTHER SCALLING-UP UPI:

1. **Infrastructure Readiness:** Ensuring that the digital payment infrastructure, **including internet connectivity and smartphones**, is available and accessible to all segments of the population, especially in rural and remote areas.
2. **Security Concerns**: As UPI gains popularity, the risk of cyber threats and fraud increases, necessitating continuous efforts to enhance security measures and protect user data.
3. **Interoperability and Standardization:** As the number of UPI-enabled apps increases, ensuring smooth interoperability and adherence to standard protocols becomes crucial for seamless transactions.

4. **Merchant Acceptance:** While UPI usage is widespread among individuals, encouraging more merchants, especially small and local businesses, to adopt UPI as a payment method is essential for broader acceptance.
5. **Digital Literacy:** A significant portion of the population, particularly in rural areas and among older generations, lacks sufficient digital literacy, hindering UPI adoption and usage.

6. **Customer Support and Dispute Resolution**: As UPI volumes grow, the need for efficient customer support and dispute resolution mechanisms becomes paramount to address any transaction-related issues promptly.
7. **Regulatory Compliance:** Keeping up with evolving regulatory requirements, data privacy laws, and anti-money laundering measures presents an ongoing challenge for UPI providers and banks.
8. **Transaction Limits:** The existing transaction limits on UPI may restrict high-value payments, making it essential to strike a balance between convenience and security.
9. **Network Stability**: UPI's reliability is critical, and maintaining a stable and robust network to handle increasing transaction volumes is a key challenge.

WAY AHEAD & GOVERNMENT INITIATIVE TO ADDRESS THESE CHALLENGES:

- **Interoperability**: The National Payments Corporation of India (NPCI) is working on a project to make UPI interoperable with other payment systems. This will allow users to make UPI payments to merchants who are not part of the UPI network.
- **Security:** The NPCI is working on a number of security features to improve the security of UPI. These features include two-factor authentication, fraud detection, and encryption.
- **Acceptance:** The NPCI is working with merchants to encourage them to accept UPI payments. The NPCI is also providing merchants with the necessary infrastructure to accept UPI payments.
- **Awareness:** The NPCI is working with the government to raise awareness about UPI. The NPCI is also running a number of awareness campaigns to encourage people to use UPI.
- **Infrastructure:** The government is working to improve the internet infrastructure in the country. This will help to ensure that there is a reliable internet connection in all parts of the country.

WORLDCOIN: A CRYPTOCURRENCY

CONTEXT:

The CEO of OpenAI, Sam Altman, has reintroduced Worldcoin, a project initially overshadowed by the popularity of ChatGPT. The project involves users getting their irises scanned or becoming "Orb operators" to scan irises, creating a World ID that allows them to claim the WLD cryptocurrency for transactions.

ABOUT WORLDCOIN:

- Worldcoin is an initiative to create a digital network where everyone can claim a stake and participate in the global digital economy.
- The project aims to provide a World ID, a **unique identifier**, to individuals by scanning their **iris patterns** through a device called "**Orb**."
- Worldcoin is designed to be an open network accessible to people worldwide.

PRELIMS SPECIFIC: WHAT IS CBDC?

- The RBI's CBDC pilot in the retail segment utilizes blockchain technology.
- CBDCs are digital versions of paper currency and differ from unregulated cryptocurrencies, as they are legal tender issued and supported by a central bank.
- CBDCs are equivalent to fiat currency and can be exchanged on a one-to-one basis with physical currency.
- Digital currency, also referred to as the digital rupee or e-rupee, represents the digital form of the Indian rupee.

HOW DOES WORLDCOIN WORK?

- Worldcoin users can engage in the network through iris scanning or by becoming "**Orb operators**" who scan others' irises.
- Orb operators, as volunteers, undergo basic training and are provided with a biometric device to scan irises. They can even rent out the Orb for scanning purposes.
- Upon obtaining a **World ID** via iris scanning, individuals become eligible to claim **WLD crypto**, a token based on the **Ethereum blockchain**.
- Users can utilize WLD for transactions or investment purposes. Moreover, WLD can be bought or sold independently without undergoing the iris scanning process.
- Orb operators are rewarded with WLD incentives for enrolling more people into the Worldcoin network.

CHALLENGES & CRITICISM:

- Worldcoin encounters challenges related to the **availability of the Orb** and the expansion of its user base.
- To encourage registrations, the project intends to provide incentives such as coupons or access to loans.
- Worries revolve around the **privacy and security** of biometric data and the **risk of potential misuse.**
- The **feasibility and scalability** of reaching unbanked or underbanked populations are questioned.
- The value and practicality of the Worldcoin token, as well as its **competitiveness** compared to other cryptocurrencies or fiat currencies, are also under scrutiny.

LEGAL STATUS OF CRYPTOCURRENCY IN INDIA:

- The legal status of cryptocurrency in India is currently uncertain.

- The RBI has cautioned against using cryptocurrencies, citing investor risks and their non-recognition as legal tender.

- In 2018, the Supreme Court overturned an RBI circular that prohibited financial institutions from dealing with digital or cryptocurrencies.

- As of 2022, the Government of India has proposed a **30% tax deduction on the transfer of virtual currency/cryptocurrency assets in the Union budget 2022-23.**

- The government has also established a panel to investigate blockchain technology's potential applications and the feasibility of introducing a **Central Bank Digital Currency (CBDC).**

COCERNS AND CHALLENGES OVER CRYPTOCURRENCY:

- **Volatility:** Cryptocurrencies are highly volatile, meaning that their prices can fluctuate wildly. This can make them a risky investment.
    - Eg: - In 2017, the price of Bitcoin rose from $900 to over $20,000. This was a massive increase in a short period of time, and it made Bitcoin a very risky investment.
- **Fraud:** There have been a number of cases of fraud involving cryptocurrencies. Eg: - in 2017, a group of scammers stole over $2 billion worth of Bitcoin from investors.
- **Illicit activity:** Cryptocurrencies have been used for illicit activity, such as money laundering and drug trafficking.
    - Eg: - In 2020, the Financial Action Task Force (FATF) warned that cryptocurrencies could be used to finance terrorism.
- **Lack of regulation**: This can make it difficult for investors to protect themselves from fraud and other risks.
- **Technological and Security Risks:** Cryptocurrencies' reliance on technology exposes them to potential vulnerabilities, such as hacking and cyberattacks, leading to loss of funds and user data.

WAY FORWARD:

- **Establish Clear Regulations:** Develop unambiguous and tailored regulations specifically for cryptocurrencies to provide legal certainty.
- **Prioritize Consumer Protection:** Implement measures to combat fraud, scams, and protect investors in the cryptocurrency market.
- **Mitigate Risks:** Conduct risk assessments and develop strategies to address financial stability, systemic risks, and vulnerabilities associated with cryptocurrencies.
- **AML and KYC Compliance:** Enforce strict adherence to Anti-Money Laundering (AML) and Know Your Customer (KYC) norms.
- **Foster International Cooperation:** Collaborate with international bodies and other jurisdictions to create standardized regulations.
- **Implement Regulatory Sandboxes:** Use regulatory sandboxes for controlled testing of new cryptocurrency products and services.
- **Promote Financial Education:** Educate the public about cryptocurrencies to empower informed decision-making.

BLACK SEA GRAIN INITIATIVE:

WHY IN NEWS?

African leaders met with Russian President Vladimir Putin, but little progress was made on resuming a grain deal from Ukraine or resolving the war in Ukraine. Putin promised to share some grain deal revenues with the "poorest nations" and send free grain to six African countries. Fewer leaders attended the summit due to concerns over Russia's invasion of Ukraine. The Presidents of Egypt and South Africa called for the grain deal's resumption, but no concrete resolutions were achieved. Putin agreed to review African leaders' peace proposal but was hesitant to halt the conflict.

ABOUT BLACK SEA GRAIN INITIATIVE:

- The Black Sea Grain Initiative aims to **address rising food prices** caused by **supply chain disruptions** resulting from Russian actions in the "**breadbasket**" region.

- Signed in July 2022, the deal facilitated a **safe maritime humanitarian corridor for Ukrainian exports**, particularly food grains, to stabilize markets and curb food price inflation.

- The **Joint Coordination Centre (JCC),** consisting of representatives from **Russia, Turkey, Ukraine, and the UN**, oversees and coordinates the initiative, requiring commercial ships to register with the JCC for monitoring and safe passage. Ships are inspected, and authorized to sail through the designated corridor to Ukrainian ports for loading.

IMPORTANCE OF BLACK SEA GRAIN INITIATIVE:

- **Ukraine is a major global exporter of wheat, maize, rapeseed, sunflower seeds, and sunflower oil**, benefitting from its access to deep-sea ports in the Black Sea, facilitating trade with Russia, Europe, and grain importers from the Middle East and North Africa.
- The Black Sea Grain Initiative has been credited with significantly impacting the global cost of living crisis, **shipping around 9.8 million tonnes of grains since its inception**. This has discouraged hoarding and compelled sellers to address the supply crunch.

> **SIGNIFICANCE OF BLACK SEA:**
> - The Black Sea has historically served as Russia's access point to Europe's warm waters.
> - For Russia, the Black Sea not only provides a route to the Mediterranean but also acts as a strategic buffer between NATO and its territory.
> - Russia views the Black Sea as a means to display its influence in the Mediterranean and secure access to crucial markets in southern Europe.
> - Following the Crimean crisis of 2014, Russia has been actively striving to establish full control over the Black Sea.

- While the initiative alone may not solve global hunger, it has the potential to prevent the escalation of the global food crisis, especially as the region is still recovering from previous years' production levels.
- **Regional Cooperation:** The establishment of the **Joint Coordination Centre (JCC)** comprising representatives from **Russia, Turkey, Ukraine, and the UN demonstrates** the importance of regional cooperation in addressing pressing food security issues.

- **Strengthen Regional Cooperation:** Encourage active collaboration and cooperation between Black Sea countries involved in the grain trade to enhance the effectiveness of the initiative.
- **Expand Participation:** Encourage more countries in the Black Sea region to join the initiative to increase the volume and diversity of grain exports and stabilize global food prices.
- **Address Environmental Concerns:** Implement measures to minimize the environmental impact of maritime traffic in the Black Sea while facilitating the smooth movement of grain shipments.
- **Enhance Logistics and Infrastructure:** Invest in upgrading and modernizing port facilities and transportation networks to improve the efficiency of grain export and reduce transit times.