Types of AI

- Nasscom has introduced "AI Adoption Index" in a bid to assess trends of AI adoption in India.
- The index was the first detailed assessment of AI adoption, beginning with four key sectors of banking, financial services and insurance (BFSI), consumer packaged goods (CPG), retail, healthcare and industrials and automotive.
- These sectors could cumulatively contribute more than 60% of AI's potential value-add of $450 to $500 billion to the country's GDP by 2025.
- The apex body said global investments in AI had more than doubled over the last couple of years, from $36 billion in 2020 to a high of $77 billion in 2021.

About AI

- Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems.
- Specific applications of AI include expert systems, natural language processing, and speech recognition and machine vision.

Strong AI vs. weak AI

- AI can be categorized as either weak or strong.
- Weak AI, also known as narrow AI, is an AI system that is designed and trained to complete a specific task. Industrial robots and virtual personal assistants, such as Apple's Siri, use weak AI.
- Strong AI, also known as artificial general intelligence (AGI), describes programming that can replicate the cognitive abilities of the human brain. When presented with an unfamiliar task, a strong AI system can use fuzzy logic to apply knowledge from one domain to another and find a solution autonomously. In theory, a strong AI program should be able to pass both a Turing Test and the Chinese room test.

What are the 4 types of artificial intelligence?

- Type 1: Reactive machines. These AI systems have no memory and are task specific. An example is Deep Blue, the IBM chess program that beat Garry Kasparov in the 1990s. Deep Blue can identify pieces on the chessboard and make predictions, but because it has no memory, it cannot use past experiences to inform future ones.

- Type 2: Limited memory. These AI systems have memory, so they can use past experiences to inform future decisions. Some of the decision-making functions in self-driving cars are designed this way.
- Type 3: Theory of mind. Theory of mind is a psychology term. When applied to AI, it means that the system would have the social intelligence to understand emotions. This type of AI will be able to infer human intentions and predict behaviour, a necessary skill for AI systems to become integral members of human teams.
- Type 4: Self-awareness. In this category, AI systems have a sense of self, which gives them consciousness. Machines with self-awareness understand their own current state. This type of AI does not yet exist.

THE HINDU

Open network for digital commerce (ONDC)
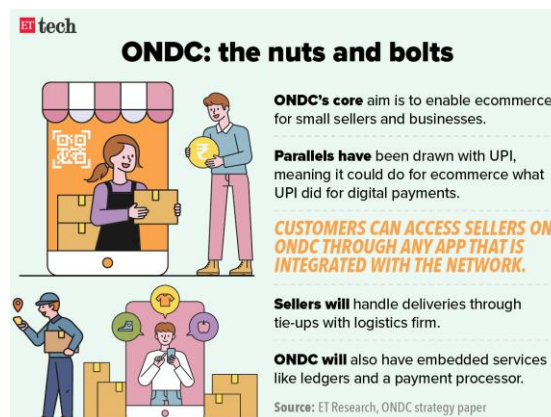
The story so far:

- The government of India announced the launch of the pilot phase of open network for digital commerce (ONDC) in five cities in late April with an aim to "democratise" the country's fast growing digital e-commerce space that is currently dominated by the two U.S.-headquartered firms Amazon and Walmart.
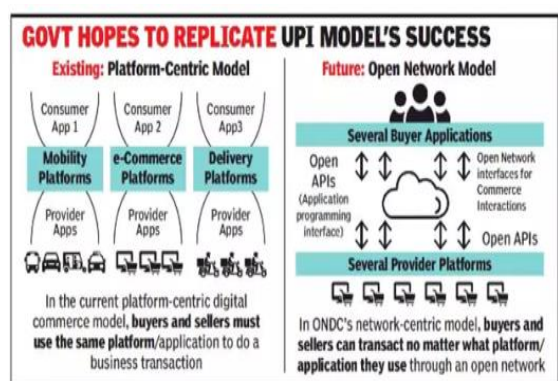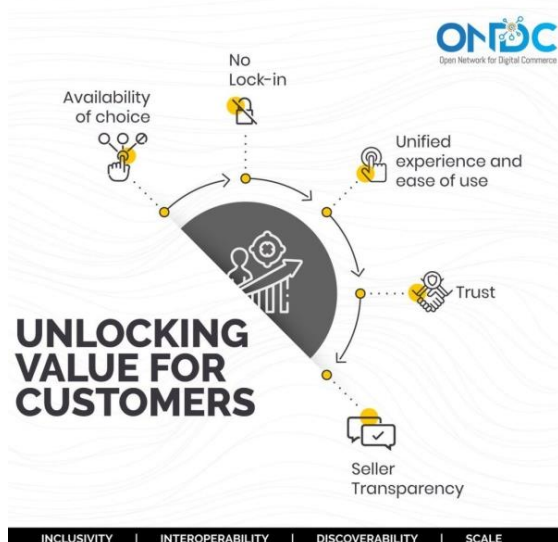
What is ONDC?

- As per the strategy paper on ONDC, it is a not-for-profit organisation that will offer a network to enable local digital commerce stores across industries to be discovered and engaged by any network-enabled applications.
- It is neither an aggregator application nor a hosting platform, and all existing digital commerce applications and platforms can voluntarily choose to adopt and be a part of the ONDC network.
- The ONDC aims to enable buying of products from all participating e-commerce platforms by consumers through a single platform. Currently, a buyer needs to go to Amazon, for example, to buy a product from a seller on Amazon.
- Under ONDC, it is envisaged that a buyer registered on one participating e-commerce site (for example, Amazon) may purchase goods from a seller on another participating e-commerce site (for example, Flipkart).

- The ONDC model is trying to replicate the success of the Unified Payments Interface (UPI) in the field of digital payments.
- UPI allows people to send or receive money irrespective of the payment platforms they are registered on.
- The open network concept also extends beyond the retail sector, to any digital commerce domains including wholesale, mobility, food delivery, logistics, travel, urban services, etc

What are the likely benefits of ONDC

- The ONDC will standardise operations like cataloguing, inventory management, order management and order fulfilment, hence making it simpler and easier for small businesses to be discoverable over network and conduct business.
- However, experts have pointed out some likely potential issues such as getting enough number of e-commerce platforms to sign up, along with issues related to customer service and payment integration.

THE HINDU

Economic crisis in Pakistan

- The Pakistani rupee (PKR) has been falling continuously; from 150 in April 2021 to 213 against the dollar on 21 June, an all-time low.

- Pakistan's foreign exchange reserves have been depleting during the last one year.
- According to State Bank of Pakistan data, from $17.2 billion in June 2021, the net reserves with the SBP have come down to $8.9 billion in June 2022.

Will the IMF bailout Pakistan?

- The IMF is willing to support but it wants Pakistan "to address high inflation and the elevated fiscal and current account deficits, while ensuring adequate protection for the most vulnerable
- Besides, the IMF wants Pakistan to be transparent about its debt situation, including what Islamabad owes to China, as a part of the China-Pakistan Economic Corridor (CPEC).
- Economists within Pakistan and elsewhere have been arguing for macroeconomic reforms, including the independence of financial institutions.
- The budgets have remained populist; the economic governance declined due to corruption, lack of financial institutions' independence, and the export decline. The subsidies in the energy sector fuel, oil and electricity remain high.

THE HINDU

Istanbul convention

- In December 2008, the Council of Europe set up an expert committee, the Ad Hoc Committee for preventing and combating violence against women and domestic violence (CAHVIO) composed of governmental representatives of Council of Europe member states.
- The CAHVIO met nine times and in December 2010, it finalised the draft text of the Convention which was later adopted by the Committee of Ministers and opened for signature in Istanbul on 11 May 2011. Following its 10th ratification by Andorra on 22 April 2014, it entered into force on 1 August 2014.
- The Convention has a strong focus on prevention. What does this mean for state parties?
- In simple terms, preventing violence against women and domestic violence can save lives and reduce human suffering. Governments that agree to be bound by the Convention will have to do the following:
- Train professionals in close contact with victims; regularly run awareness-raising campaigns; take steps to include issues such as gender equality and non-violent conflict resolution in interpersonal relationships in teaching material;

set up treatment programmes for perpetrators of domestic violence and for sex offenders; work closely with NGOs; involve the media and the private sector in eradicating gender stereotypes and promoting mutual respect.

How does the Convention improve the protection of victims?

- When preventive measures have failed and violence incidents have happened, it is important to provide victims and witnesses with protection and support.

- This means police intervention and protection as well as specialised support services such as shelters, telephone hotlines etc.

- It also means making sure that general social services understand the realities and concerns of victims of domestic violence and violence against women and support them accordingly in their quest to rebuild/resume their lives.

How does the Convention ensure the prosecution of perpetrators?

- The convention defines and criminalises the various forms of violence against women as well as domestic violence.

- This is one of the many achievements of the convention. To

give effect to the convention, state parties will have to introduce a number of new offenses where they do not exist.

- These may include: psychological and physical violence, sexual violence and rape, stalking, female genital mutilation, forced marriage, forced abortion and forced sterilisation. In addition, state parties will need to ensure that culture, tradition or so-called "honour" are not regarded as a justification for any of the above-listed courses of conduct

What are integrated policies?

- The convention is based on the premise that no single agency or institution can deal with violence against women and domestic violence alone. An effective response to such violence requires concerted action by many different actors.

- The convention therefore asks state parties to implement comprehensive and co-ordinated policies involving government agencies, NGOs as well as national, regional and local parliaments and authorities.

- The aim is that policies to prevent and combat violence against women and domestic violence are carried out at all levels of government and

by all relevant agencies and institutions.

Gender Perspective

- Violence against women and domestic violence cannot be addressed without looking at gender equality issues. Women may be subjected to violence because of their gender. Certain types of violence, in particular domestic violence, affect women disproportionately.

- The convention devotes an entire chapter to women migrants and asylum-seekers facing gender-based violence. It contains a number of obligations that aim at generating a gender-sensitive understanding of violence against migrant women and women asylum-seekers.

- The convention covers various forms of violence against women and domestic violence. Victims of such violence are typically girls and women of all ages.

- Boys and men, however, may also fall victim of certain types of violence that fall within the scope of the convention, in particular domestic violence and forced marriage.

THE HINDU