

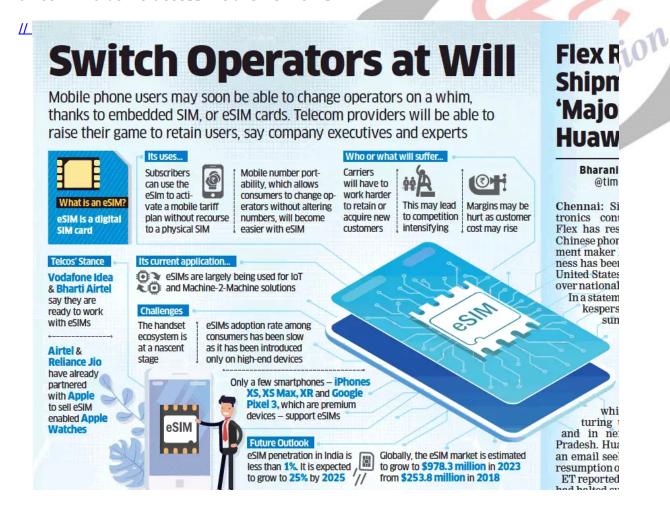
# eSIMs Technology

For Prelims: eSIMs Technology, Technology related to Telecommunication.

For Mains: Advantages and Disadvantage of eSIM Technology.

#### Why in News?

Apple Inc., an American multinational technology company, has come up without a **physical SIM slot** or an eSIM in order **to access mobile networks.** 



### What is an e-SIM?

- eSIMs were first established in 2012.
- It is an embedded SIM, which is permanently embedded in the same hardware of a regular sim

- card chip.
- Just like a traditional SIM card, an eSIM also consists of some components, which are part of a phone's internal organs. They also function the same way, acting as a unique identifier for telecom operators and other consumers to reach your exact smartphone when they make a call or send a text.
- However, being attached to the motherboard also allows re-programming, letting users switch operators without having to replace any physical SIM cards.

# What are the Advantages?

#### Security:

- An eSIM provides security to sim theft, as there is no physical element to pull out and use in another device.
- Attackers cannot use your phone after being robbed to breach your social media or bank accounts.

### One less opening on your phone:

- One less opening on the frame of your phone reduce the likelihood of elements like dust and water entering the phone.
- It also saves some space on the inside of the phone to be used elsewhere.

# What are the Disadvantages?

#### • Emergencies:

 If your phone stops working, runs out of battery or simply falls and gets a cracked screen, your communication is brought to a complete standstill with eSIMs. Traditional SIMs, meanwhile, can be quickly pulled out of the affected phone and into another backup device or secondary phone.

## • Unusable in countries with no eSIM support:

- eSIM phones cannot be used in a country where the telecom operators simply don't support the technology yet.
- This isn't an issue if your phone supports both eSIM and traditional SIMs, but is a problem on devices like the US-version iPhone 14, which will solely rely on eSIM alone.

#### Telcos have more control:

- An eSIM may save one's initial trip to the telecom operator's store to get a SIM card, but one has to rely on the operator while switching one's phone.
- Operators may charge extra for **eSIM plans or for switching phones,** in the future.

**Source: IE** 

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