

**07– 04 – 2022**

**News:** Near Field Communication (NFC) Technology

- Google Pay has recently launched a new feature in India, “Tap to pay for UPI”, in collaboration with Pine Labs. The feature makes use of Near Field Communication (NFC) technology.

## **Near Field Communication (NFC) technology**

- Near Field Communication (NFC) is a **short range wireless connectivity technology that allows NFC enabled devices to communicate with each other and transfer information quickly and easily with a single touch - whether to pay bills, exchange business cards, download coupons, or share a document.**
- NFC transmits data through **electromagnetic radio fields, to enable communication between two devices.** Both devices must contain NFC chips, as transactions take place within a very short distance.
- NFC enabled devices **must be either physically touching or within a few centimeters from each other for data transfer to occur.**
- In 2004, consumer electronics companies, Nokia, Philips and Sony together formed the NFC Forum, which outlined the architecture for NFC technology to create powerful new consumer-driven products.

- Nokia released the first NFC-enabled phone in 2007.

### **Other applications of NFC technology**

- NFC is used in contactless banking cards to perform money transactions or to generate contact-less tickets for public transport.
- Contactless cards and readers use NFC in several applications from securing networks and buildings to monitoring inventory and sales, preventing auto theft, and running unmanned toll booths.
- It is present in speakers, household appliances, and other electronic devices that are controlled through smart phones.
- It also has an application in healthcare, to monitor patient stats through NFC-enabled wristbands. NFC is used in wireless charging too.

### **Safety features**

- NFC technology is designed for an operation between devices within a few centimetres from each other. This makes it difficult for attackers to record the communication between the devices compared to other wireless technologies which have a working distance of several metres.

- The user of the **NFC-enabled device determines by the touch gesture which entity the NFC communication should take place with**, making it more difficult for the attacker to get connected.
- The **security level of the NFC communication is by default higher** compared to other wireless communication protocols.
- Since the receiving device reads data the instant one sends it, NFCs also reduce the chance of human error.

### **Comparison with other wireless technologies**

- The **IrDa (Infrared) technology is a short range (a few metres) connection based on the exchange of data over infrared light where the two communication devices must be positioned within a line of sight**. Today, this technology is **mainly used for remote control devices**.
- For larger data communication with computer devices **this technology was replaced by Bluetooth or WiFi connections**.
- However, **for these technologies' receiver devices need their own power supply** due to the larger working distance.
- Therefore, the **receiving device cannot be powered by the Radiofrequency (RF) field like in NFC**.

- Another consequence of the larger working distance is the **need for the user to configure their device and to pair them** together for communication. Connection cannot be initiated by a simple touch gesture like in NFC.

### **News:** Broadcast Seva Portal

- Recently, Broadcast Seva Portal has been **launched by Ministry of Information and Broadcasting**.

## **Broadcast Seva Portal**

- Broadcast Seva Portal is a **360° digital solution that will facilitate stakeholders in seeking permissions, applying for registration, tracking applications, calculating fees and executing payments**.
- This portal will provide its services under the wider umbrella efforts of Digital India to **all stakeholders including private satellite TV channels, teleport operators, Multi Service Operators (MSOs), community and private radio channels, etc.**

## Objective

- The objective of the portal is to provide a single point facility to the stakeholders and applicants to apply for various registrations, permissions and licences issued by Information & Broadcasting Ministry for broadcast related activities.

## Significance

- It will reduce the turnaround time of applications and, at the same time, will help applicants track the progress.
- Improving India's business climate is one of the key focus areas of the Government of India and the Broadcast Seva Portal exemplifies the government's commitment to ease of doing business and empowering the broadcasting sector.
- The portal will enable establishment of an efficient and transparent system for the growth and management of the Broadcast sector.
- It is in line with the vision of promoting Make in India and Digital India initiatives.