

[953] S&T.

4. voice biometrics technology can help financial institutions to prevent cyber frauds in the country. Explain.

Reserve bank of India highlights cyber frauds caused \$ 1 crore loss / day over last 7 years. cyber frauds has eisen 23.69% in 2021-22 compared to 2020-21. usage of emerging technologies like voice biometrics may help in reducing cyber frauds in financial institution.

Reasons for increasing frauds

1. Increased use of digital payments, telephone banking, online banking. - It is projected that, digital payments compound Annual Growth rate to increase 13.68% by 2027, 40-45% people ^{are} using digital format for payments

Implications

1. Rising losses for financial institutions
2. Increasing cases in law enforcement agencies

Voice Biometrics Technology.

1. Global adoption of Smartphone - the biometric based security is growing But it is vulnerable to deep fake.

Voice biometrics - using unique characteristics of voice as identification. That is Digital voiceprint can be compared with customer's voice to ensure authenticity.

Advantages in Financial Institutions

1. Increases security based on knowledge based authentication
2. passwords - easier to breach. e.g. 81% of password breach is due to weak passwords. Voice biometrics on other hand, is difficult to copy → highly challenging to breach.
3. Economical → cheaper and requires less/no special device and is compact.

Way forward

Though the technology is not 100% foolproof comparing technology like Face Assessment, it ensures accuracy. Beyond this, technology can also be used in police investigation for quidnuncies.