Data breaches in the finance industry in the last 10 years.

Major Breaches & Impact

- First American Financial Corp (2019) 885M records exposed (bank details, Social Security numbers).
- Equifax (2017) 147M affected (personal data, credit scores, financial history).
- Experian (2015) 15M T-Mobile customers had sensitive information stolen.
- Robinhood (2021) 7M users compromised, including financial details.
 - LoanDepot (2024) 16.9M individuals suffered financial and personal data leaks.

Alhassane Samassekou ITAI 2372

Causes & Solutions for Data Breaches in the Finance Industry

Causes of Data Breaches

- Cyberattacks (Hacking, Phishing, Ransomware) Criminals exploit weak systems.
- Weak Security Systems Poor encryption and outdated software create vulnerabilities.
- Insider Threats Employees (malicious or negligent) mishandle sensitive data.
- Third-Party Risks Vendors with weak security expose financial institutions.
- Poor Access Control Weak authentication leads to unauthorized access.

Consequences of Financial Data Breaches

- ❖ Financial Losses Breaches cost billions in fines, settlements, and security upgrades.
- ❖Identity Theft Stolen data enables fraud, scams, and unauthorized transactions.
- ❖ Loss of Trust Customers lose confidence in financial institutions, damaging reputation.
- Regulatory Actions Stricter compliance requirements (e.g., GDPR, CCPA) after major incidents.
- Operational Disruptions Companies face lawsuits, investigations, and system overhauls.
- Solution: Stronger cybersecurity, real-time monitoring, encryption, and user education!

Technologies to Prevent Data Breaches

- ✓ Encryption & Tokenization Secures data by making it unreadable.
- ✓ Multi-Factor Authentication (MFA) Strengthens login security.
- ✓ AI & Machine Learning Security Detects fraud and cyber threats in real-time.
- ✓ Zero Trust Security Model Requires continuous identity verification.
- ✓ Cloud Security & Data Backups Protects against ransomware and data loss.
- ✓ Regulatory Compliance (GDPR, CCPA, PCI-DSS) Enforces strict security policies.