Identity Theft and Identity fraud

Introduction

- More than 10 million people get affected every year
- Due to computer theft, loss of backups, compromised information system
- Frauds are undertaken for
  - Economical gain
  - Getting access to secure or privileged area
  - Border entry (terrorists desiring concealment)
- Personal identity has become a commodity

Introduction

- Identity fraud is committed when **a credible identity is created** by accessing others credit cards, financial or employment record, computer system
- Created credible identity is used for criminal activity
  - Small time criminals– use the credentials for placing some order for personal use
  - More Sophisticated criminals –use it for creating additional line of credit, separate bank account – to maximize the profitability of theft

Identity Theft

- The illegal use or transfer of a third party's personal identification information with unlawful intend

Identity fraud

- Illegal activity based on fraudulent use of identifying information of a person

Identity Theft/Fraud

- Identity fraud is committed when **a credible identity is created** by accessing others credit cards, financial or employment record, computer system

- Created credible identity is used for criminal activity
  - Small time criminals– use the credentials for placing some order for personal use
  - More Sophisticated criminals –use it for creating additional line of credit, separate bank account – to maximize the profitability of theft

Identity Theft/Fraud

- Credentials are used for
  - Names
  - Address
  - Date of birth
  - Social security number
  - Taxpayer Identification number
  - Registration number
  - Passport number
  - City of birth
  - Mother maiden name
  - Biometric information
    - Fingerprints
    - Voice prints
    - Retinal image

Identity fraud

- Credentials
  - Names
  - Address
  - Date of birth
  - Social security number
  - Taxpayer Identification number
  - Registration number
  - Passport number
  - City of birth
  - Mother maiden name
  - Biometric information
    - Fingerprints
    - Voice prints
    - Retinal image

- Credentials are collected from
  - Private citizen
  - Company employee
  - Corporate executives
  - Government workers

- Theft – Perpetrated by
  - Individual
  - Social or business network
  - Terrorist group
  - Criminal organizations

Typology of Internet fraud/theft

- Financial or nonfinancial

  - Assumption of Identity
  - Theft for employment and/or Border entry
  - Criminal record identity theft/fraud
  - Virtual identity theft/fraud
  - Credit identity theft/fraud

Typology of Internet fraud/theft

- Assumption of Identity
  - Rarest and difficult form of threat
  - Simply assume the identity of victim
- Theft for employment and/or Border entry
  - This is to make illegal immigration or alien smuggling or to obtain employment

Typology of Internet fraud/theft

- Criminal record identity theft/fraud
  - It is a nonfinancial identity theft. The thief commits a separate crime and provides the victim's name and address to avoid prosecution and a criminal record on him. A victim becomes aware of this crime only when arrest warrant was issued against him.
  - Reverse criminal record identity theft, in this crime the thief hides his true identity and provides the victim's identity to gain employment.
  - Mostly such crimes are committed by friends or relatives
  - Victim faces legal obstacles to rehabilitate his identity. Victim must prove that he did not commit the crime and must receive a judge order to clear the falsely recorded crime on him. In addition to this legal burden, has to face financial burden.

Typology of Internet fraud/theft

- Virtual identity theft/fraud
  - It involves the creation of personal, professional and other identity to develop a fraudulent virtual personality
  - Virtual personal information is often used for online dating, protecting from prosecution, extramarital affairs, role play and accessing deviant site

- Credit identity theft/fraud
  - Use stolen personal information to create fraudulent account, gaining credit card or lending loan

Physical method of identity theft

- Two broad categories of identity theft are physical or virtual
- Physical
  - Mail theft
  - Dumpster Diving
  - Theft of computers
  - Bag operations
  - Child identity theft
  - Insider
  - Card Skimming and ATM Manipulation anf Fraudulent Machines

Physical method of identity theft

- Mail theft
  - Physical mail boxes in the roadside of the houses contain valuable information like bank statement, insurance detail etc. in it and are often taken by non intended person

- Dumpster Diving
  - It is the process of searching valuable information from commercial or residential trash. The trash information include account number, social security number, tax payer identification number, password. It may be in paper form or in discarded computer media. To avoid paper shredders or disk wiper can be used.

Physical method of identity theft

- Theft of computers
  - Physical theft of computer is common technique of identity theft. People store personal information in their computer and for thief it is easy to search for information in computer then in paper. Computer is considered as warehouse of information and it has value in black market. Private residential building, hotel rooms, rest rooms, public transport, airport, government office are areas which is vulnerable to computer theft.
- Bag operations
  - It is a covert entry into hotel rooms to steal photocopy, photos, magnetic media and copy data from laptop. It is mostly done by host government security with the cooperation of hotel staff.

Physical method of identity theft

- Bag operations
  - It is a covert entry into hotel rooms to steal photocopy, photos, magnetic media and copy data from laptop. It is mostly done by host government security with the cooperation of hotel staff.
- Child identity theft
  - Identity of children who is less than 18 years are used by criminals to get credit cards. It is very difficult to find this fault as it can be detected only when the child first apply for their credit at the age after 18.
- Insider
  - In corporate and government sectors the insider are the greater risk.

Physical method of identity theft

- Fraudulent companies
  - Thieves create fake companies and try to collect personal financial information.
- Card Skimming and ATM Manipulation and Fraudulent Machines
  - Creating dummy card by card skimming – copying the personal information from the magnetic strip of the original credit card. Even thieves have developed fraudulent ATMs.

Virtual or Internet Facilitated Methods

- Phishing
- Spyware
- Trojans
- Keyloggers and Password stealers

Virtual or Internet Facilitated Methods

- Phishing
  - This is a form of collecting information through email. The victim is asked to do some update service of their account or asking to fill some form, leading to fake website.
  - Broad categories of phishing
    - Spoofing – sending email hiding under others email
    - Pharming – Redirect the connection between an IP address and its target server
    - Redirectors – redirect network traffic to undesired site by modifying DNS
    - Advance fee fraud – victim give their personal information believing they will receive great financial gain
    - Trojan or spyware – malicious program attached as executable files in email
    - Floating windows –fake site to steel personal information.

Virtual or Internet Facilitated Methods

- Spyware
  - Spyware aims to gather information without the victim's knowledge. Spyware get installed while the victim download attachment, free software, screensavers, song, image, video, adult website.

- Trojans
  - It is a malware housed within the commercial utility and used to commit criminal acts. Key-logger, backdoors, password stealer are some of the examples of torjan.

Virtual or Internet Facilitated Methods

- Keyloggers and Password stealers
  - Keyloggers are devices or software programme to record the key stroke and send the information to the perpetrator. Helps in capturing password and other informations. It can even take screenshots. It may be a hardware, software or even a USB.

Crimes facilitated by identity theft/fraud

- Identity theft is used by criminals to steal identity related information and use them to facilitate criminal activity. It is a four phase process.
  - Procurement of stolen identifier
  - Breed document is created or obtained
  - Breed document is used to create additional fraudulent documents
  - The fraudulent identity is employed in commission of criminal act
- Criminal activity done using the fraud identity are student loan fraud, immigration fraud, social security fraud, insurance fraud, credit card fraud, tax fraud, internet scam, weapons trafficking and organized crime. Fraud identity helps to protect from law enforcement.

Crimes facilitated by identity theft/fraud

- Insurance / Loan fraud
  - Distance education and online courses increases the loan fraud as students need not be physically present in the campus. Insurance fraud are done to gain free medical care.

- Immigration fraud / Border crossing
  - Immigration fraud is conducted by individual or organization to gain secure border crossing or used for terrorist activity.