

# MORE THAN HALF OF TODAY'S CRIME HAPPENS ONLINE

- Ransomware spread through many channels
  - Online banking attacks and hoaxes
- Attackers use phishing to steal sensitive information
  - Mobile devices are the most used devices
  - F-Secure vs. free antivirus software

# RANSOMWARE

Ransomware attacks in 2017 increased by 415 percent compared with previous year.



- ❶ Ransomware is a type of malicious software that threatens to publish the victim's data or perpetually block access to it unless a ransom is paid.
- ❶ Crypto-ransomware encrypts the files on a computer, essentially scrambling the contents of the file so that you can't access it without a decryption key that can correctly unscramble it.
- ❶ A ransom fee is usually around \$300 to \$500 for a computer, and payment is often demanded in Bitcoins, a virtual currency that is difficult to trace.
- ❶ Ransomware spread e.g. through email attachments and links, through malicious websites and advertising, vulnerable software, and from computer to another.

# ONLINE BANK ATTACKS

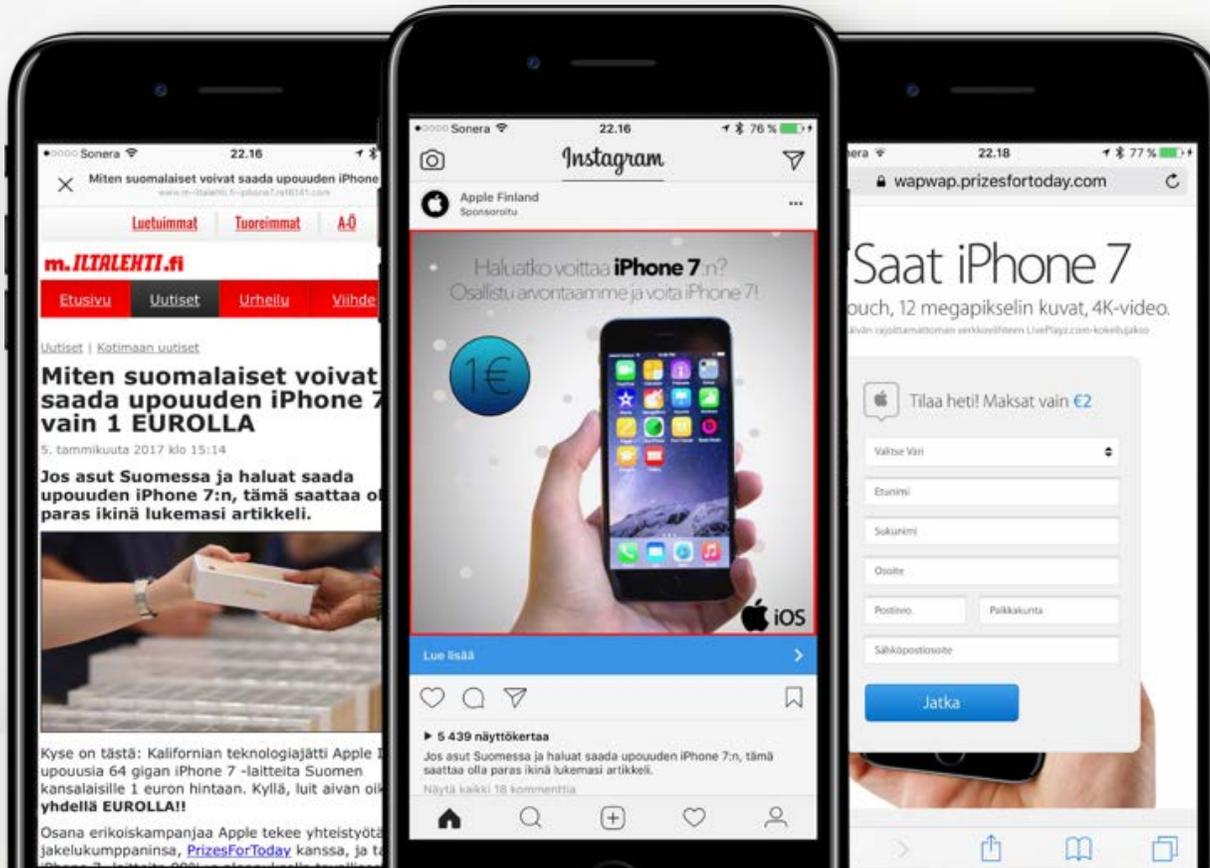
Banking trojans spread e.g. through malicious email attachments

- ❶ Usually users are infected when visiting an infected website or by clicking an malicious email attachment.
- ❷ A trojan sets up on a device and is able to identify when a user is visiting online bank.
- ❸ Trojan directs a user to a fake online bank site which looks like the original site.
- ❹ After that criminals have all the information and details they need for taking the money of the user.



# PHISHING

Internet and especially social media is full of different hoaxes



- ❶ Attackers use phishing emails to manipulate victims into disclosing sensitive information.
- ❷ The actual device is not necessarily infected but information is pried from a user.
- ❸ The hoaxes are usually done using good language and a well-known brand. The user trusts the brand and doesn't realize it's a hoax.
- ❹ Attackers are usually looking for credit card details, passwords, user identifications, and online banking access code.

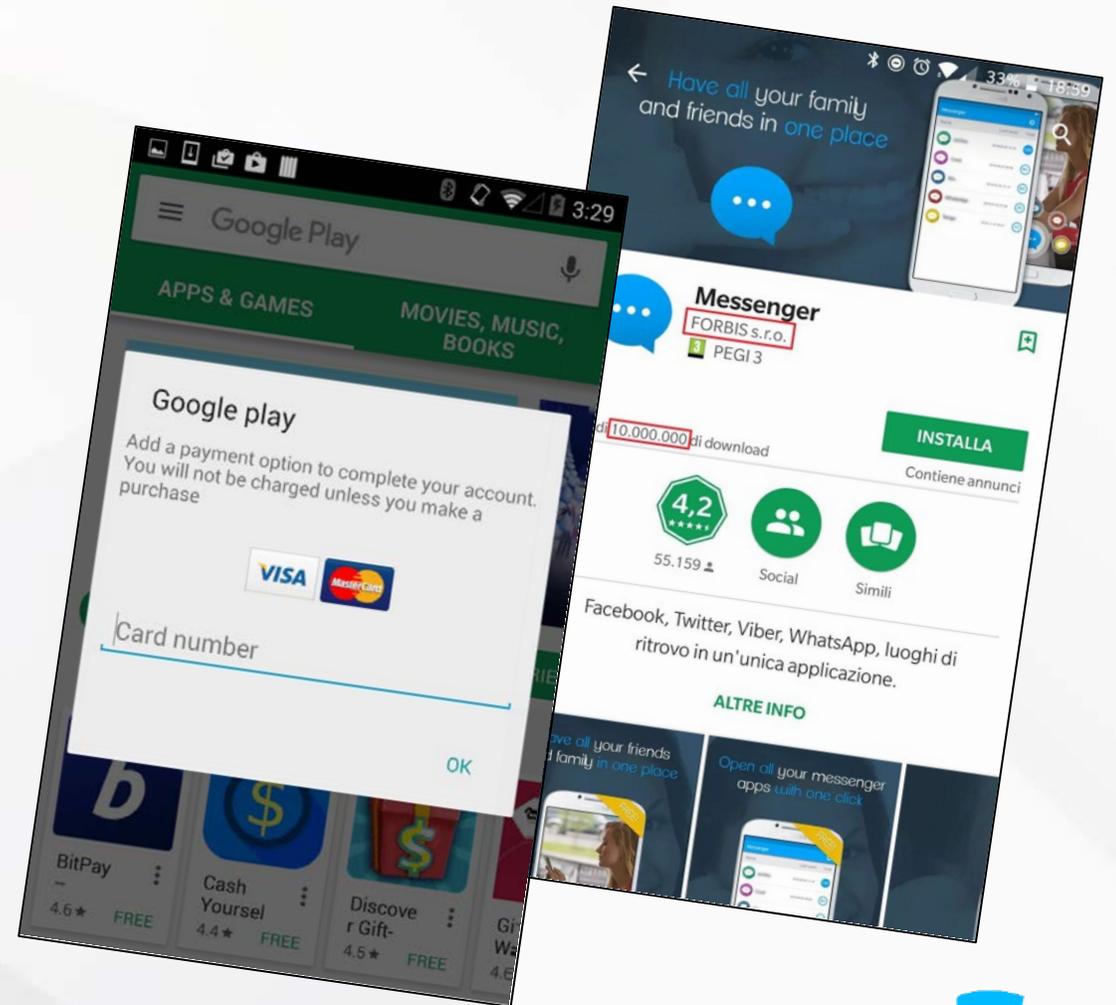
# MOBILE DEVICES ARE THE MOST USED DEVICES



- ❶ Phones are the most used and the most private devices of ours.
- ❶ Phones often include more information about us than any other device: social media content, pictures, emails, text messages, videos, etc.
- ❶ We used them for online banking and online shopping.
- ❶ In addition to personal information, mobile devices often have classified data about the company a user is working at.

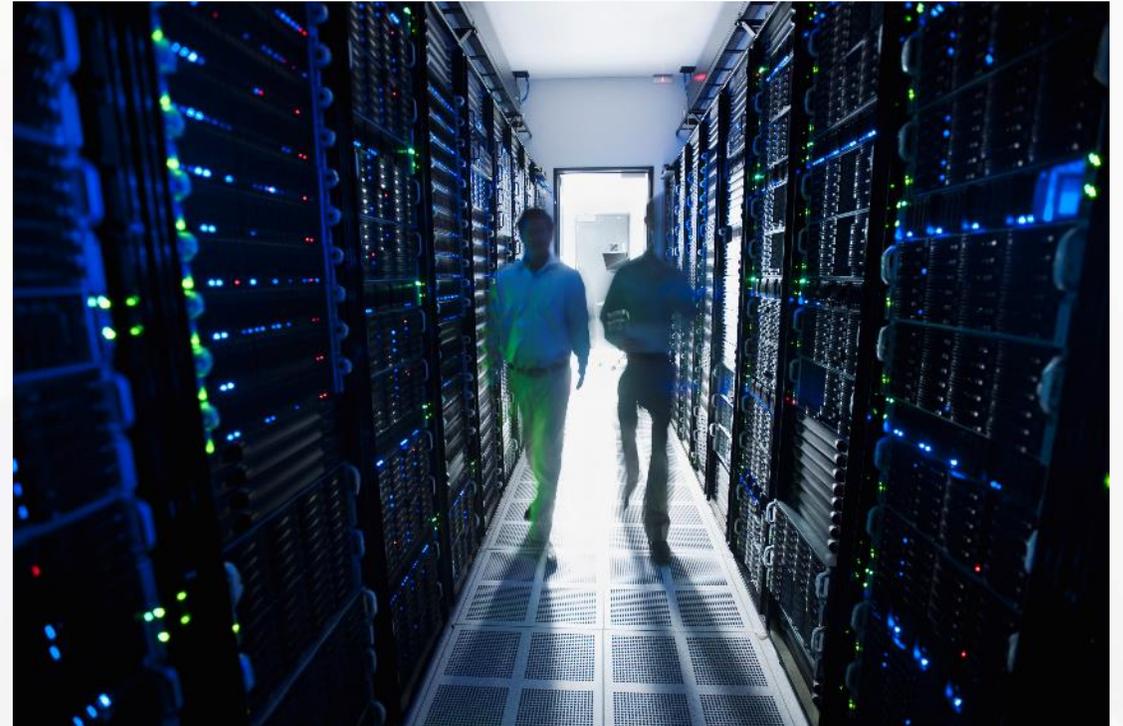
# WHAT DO ANDROID MALWAREM DO?

- ❶ Sends SMS text messages to chargeable numbers.
- ❶ Steals user account details, passwords, phone numbers, bank account details, and credit card details.
- ❶ Copies content like pictures and text messages etc.
- ❶ Hijacks your device for bitcoin mining.
- ❶ Spreads online bank trojans and ransomware.
- ❶ Also Google Play have had some online bank trojans!



# F-SECURE VS. FREE ANTIVIRUS

- ❶ Free antivirus software is often only to advertise the subject to a charge software – it doesn't provide full protection
- ❶ Only a paid version gives a full security and privacy protection
- ❶ F-Secure offers free customer support and service in case of any problems – free antivirus providers don't have this benefit
- ❶ F-Secure is the best in class and protects a user in a best possible way – F-Secure's labs is constantly developing F-Secure products and finding new ways to protect the customers





**F-Secure®**