

# Prevalence of Malware in Mobiles, Causes and Prevention

by

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# Abstract

- Prevalence of mobile utilization
- Blackhat hackers shifts to mobile gadgets
- Target platform for attacks and exploitations
- Companies' strategies to lessen security incidents

# Introduction

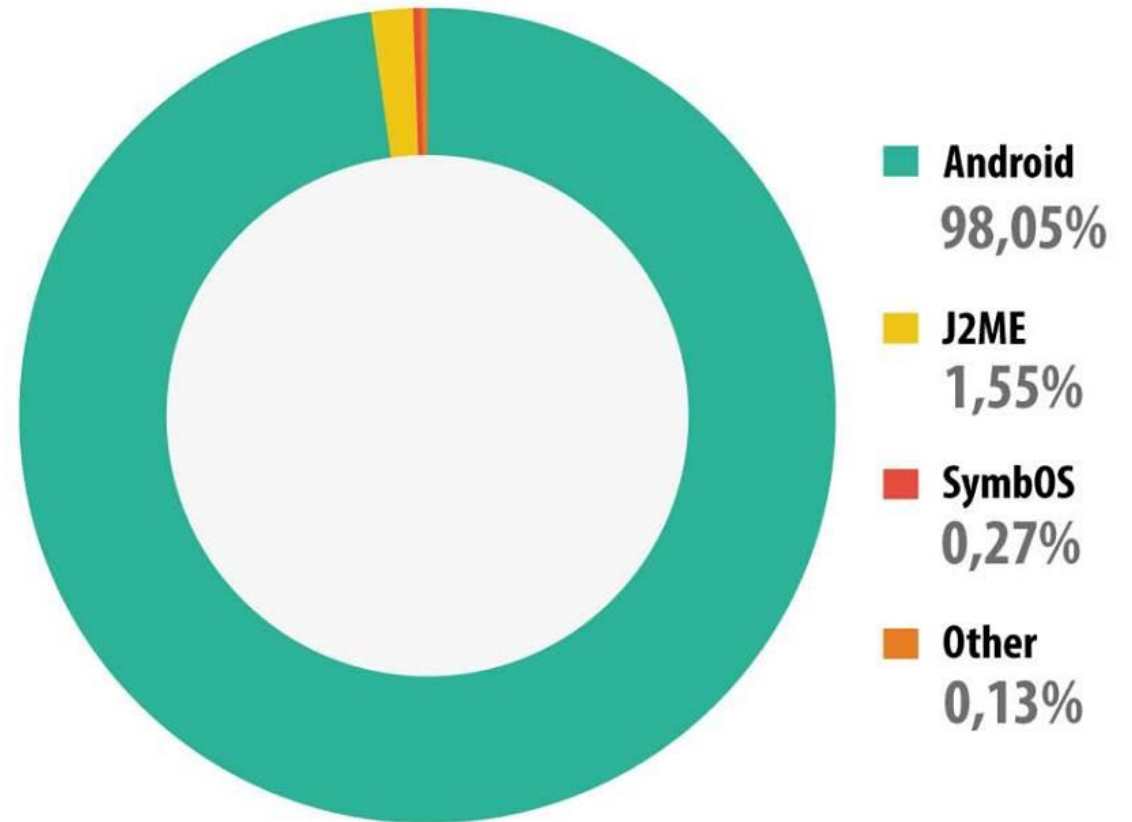
- Mobiles grow fast in the past decades
- Android devices attracted 98.5% of malware attacks
- Backdoor.AndroidOs.Obad
- Preventing the spread of mobile malwares
- Trojan horse
- Botnet (robot and network)

# Problem Statement

- What are the most attacked mobile platform in the market?
- Do security companies lessen the mobile platform's security incidents?
  - Are there new ways in protecting the attacked platform?
- Common ways on how the most targeted platform is attacked

# Results and Discussion

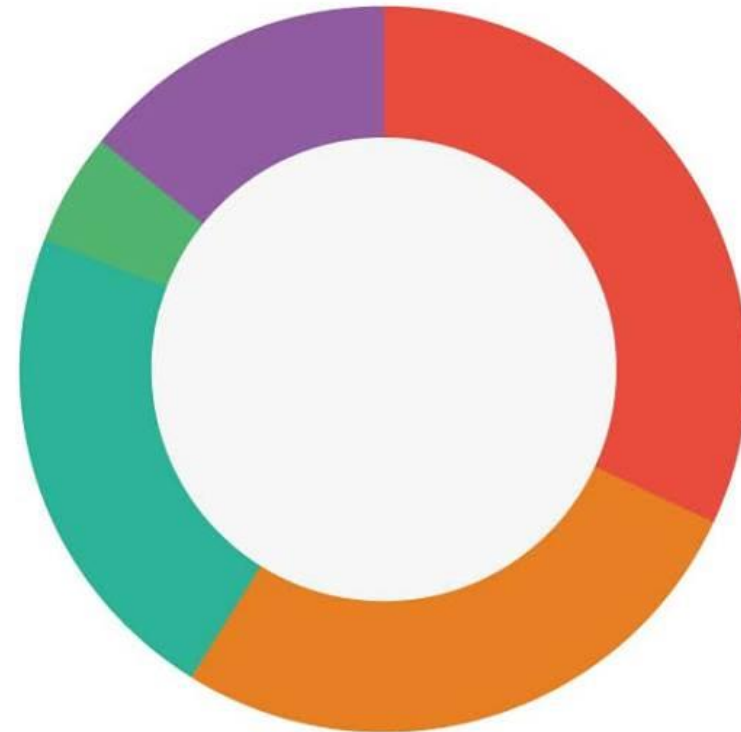
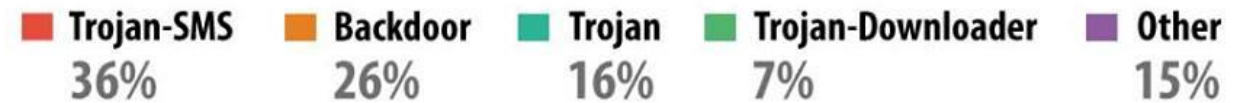
- Third Quarter: 26% increase of mobile malware
- Mostly attacked mobile platform: Android (97%)
- Remaining 3% goes to Symbian platform
- Blackhat hackers target the bigger share in the market
- Hackers are getting cleverer



# Results and Discussion

## Categories of Blackhat hackers' attacks:

- Malicious App
- Cellular Network
- Physical Access: Lost/Stolen Device
- Physical Access: Reuse After Loss of Control
- Malicious Email/Web Page



# Results and Discussion

- Androrat APK binder
- SMS-based attack
- ADRD
- Droid KungFu
- Droid Deluxe
- Fake installers

# Results and Discussion

## **Ways on how malwares are detected:**

- Signature-based detection
- Polymorphic-based detection
- Heuristic-based analysis
- Behavior-based analysis



# Results and Discussion

## **Research Domains in detecting malwares:**

- Network based detection
  - Software-Defined Networking (SDN)
- Signature and behavior based detection
- Wider and general manner
  - Distributed malware detection

# Conclusion

- Incidents increased through the years
- Malware attacks skyrocketed in 2012 – 2013
- Increase in users = cause of cybercriminals
- Most people prefer to go mobile

# Recommendation

- Regularly check your apps
- Keep an eye on your bill
- Install antivirus software
- Check phone settings
- Watch out for suspicious links
- Download from trustworthy marketplaces only