LASSONDE SCHOOL OF ENGINEERING

YORK UNIVERSITÉ UNIVERSITY

The Carbanak Hack

EECS 3482: Computer Security

- This Presentation
  - What happened?
  - How did it happen?
  - Implications

Let's Start with a video…

1

What Happened?

Let's explain the event itself

What is Carbanak?

Cybergang whose attack was targeting Financial Institutions. Discovered by Kapersky Lab in 2015

What happened first?

In late 2013, an ATM in Kiev started distributing cash at random times during the day! (Lucky customers being here...)

1,000,000,000$

Whoa!

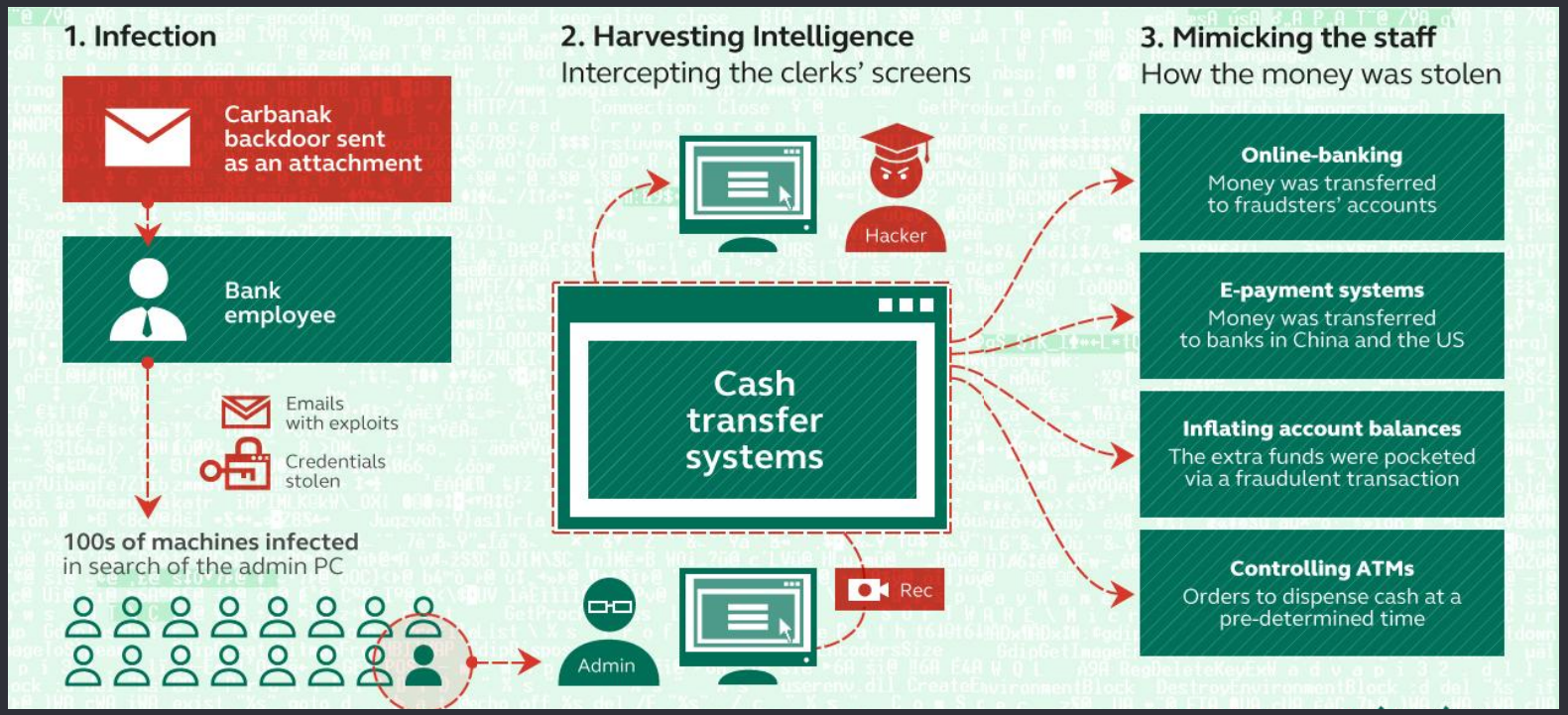
1 billion dollars: Estimated amount of money stolen by the cybergang Carbanak.

2

How did it Happen?

Let's explain the hack

How the Cabarnak Gang stole 1 billion



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One of the most sophisticated cyber-attacks ever.

Chris Dogget,

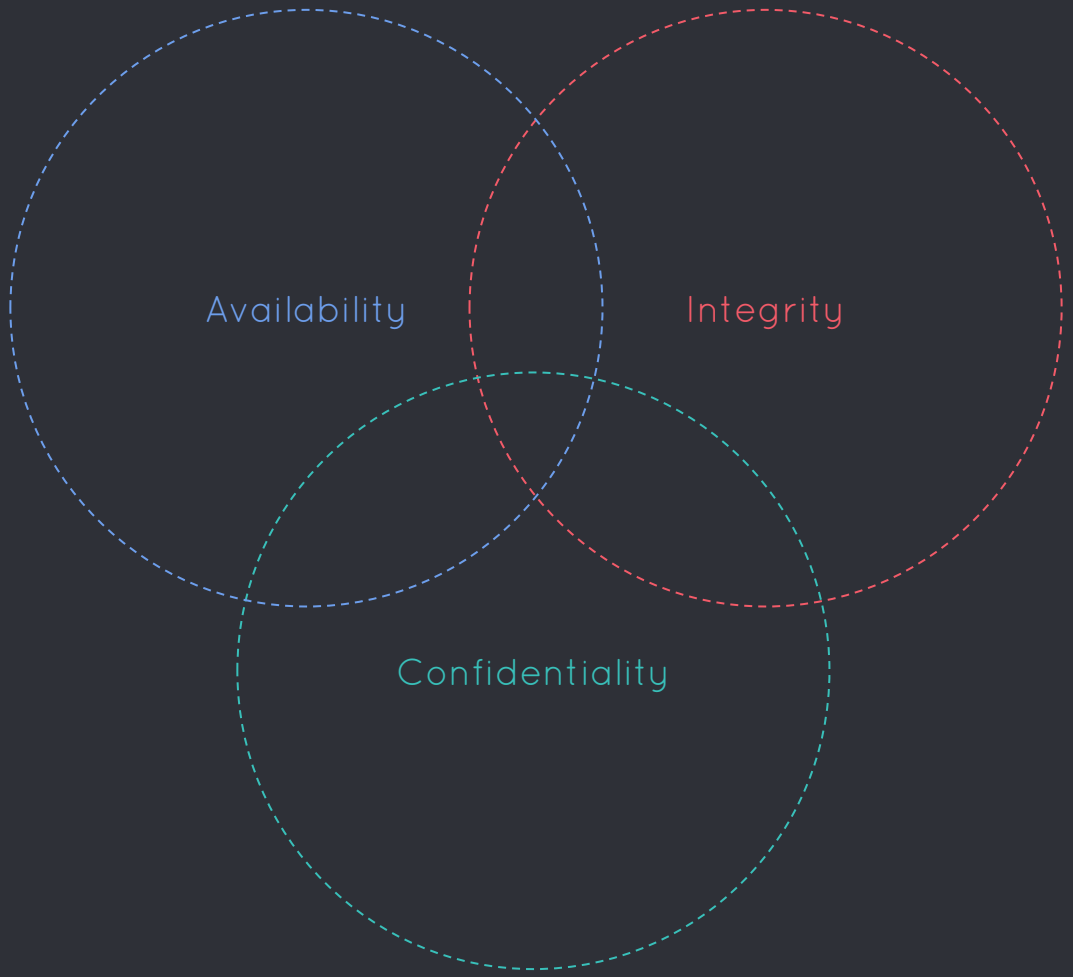
Managing Director of Kapersky North America

3

Implications

Society and Security

CIA Implications



Money is taken from accounts

Bank accounts Information are stolen

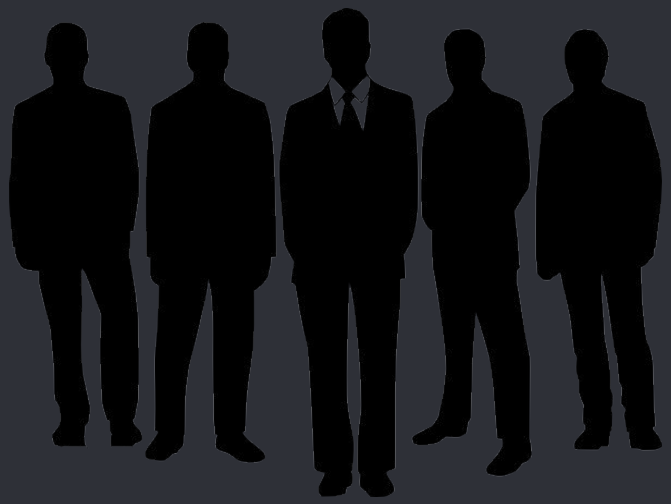
Problems

Invisibility

The Malware remained undetected for almost two years

Organized Crime

E.G: ATMs are dispensing cash while mules are here to pick it up



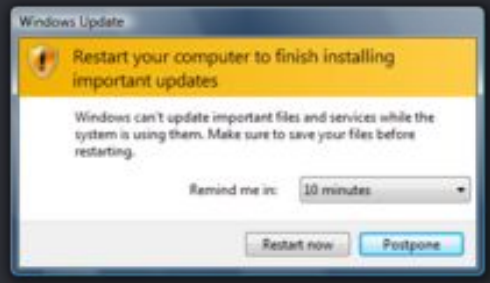
What can we do against it?

Kaspersky Lab

- Company working to secure bank systems against malwares.

Measures

- Awareness of employees and updating frequently.
- Detect malwares in existing banking systems and communication channels.



What can we do against it?

Questions

Approximately how much money was stolen?

Around 1 billion Dollars.

Why did the hackers wait for so long before going on the attack?

For the malwares to stay undetected and because of bad detection systems.

What measures could help prevent attacks like Carbanack in the future?

Awareness of employees, frequent updates and search for malwares

Actual References

- https://securityintelligence.com/carbanak-how-would-you-have-stopped-a-1-billion-apt-attack/
- http://www.nytimes.com/2015/02/15/world/bank-hackers-steal-millions-viamalware.html?partner=socialflow&smid=tw-nytimes&_r=1
- http://www.kaspersky.com/about/news/virus/2015/Carbanak-cybergang-steals-1-bn-USD-from-100-financial-institutions-worldwide

Thanks!

ANY QUESTIONS?