

SAFEGUARDING TRUTH

UNDERSTANDING CYBER
DISINFORMATION ATTACKS AND
DEFENDING AGAINST THEM

Roy Zinman

Senior OSINT and Cybersecurity consultant, Israel

- ☐ Information warfare is the tactical and strategic use of information to gain an advantage
- ☐ Using information to mislead, subvert and paralyze the opponent
- ☐ Information Warfare existed throughout the ages
- The information age and social media made information warfare infinitely more potent, dangerous and effective:
 - Accurate intelligence
 - Powerful and fast dissemination
 - ☐ Immediate feedback cycle





"Propaganda works best when those who are being manipulated are confident that they are acting on their own free will"

State level strategic attack exposed

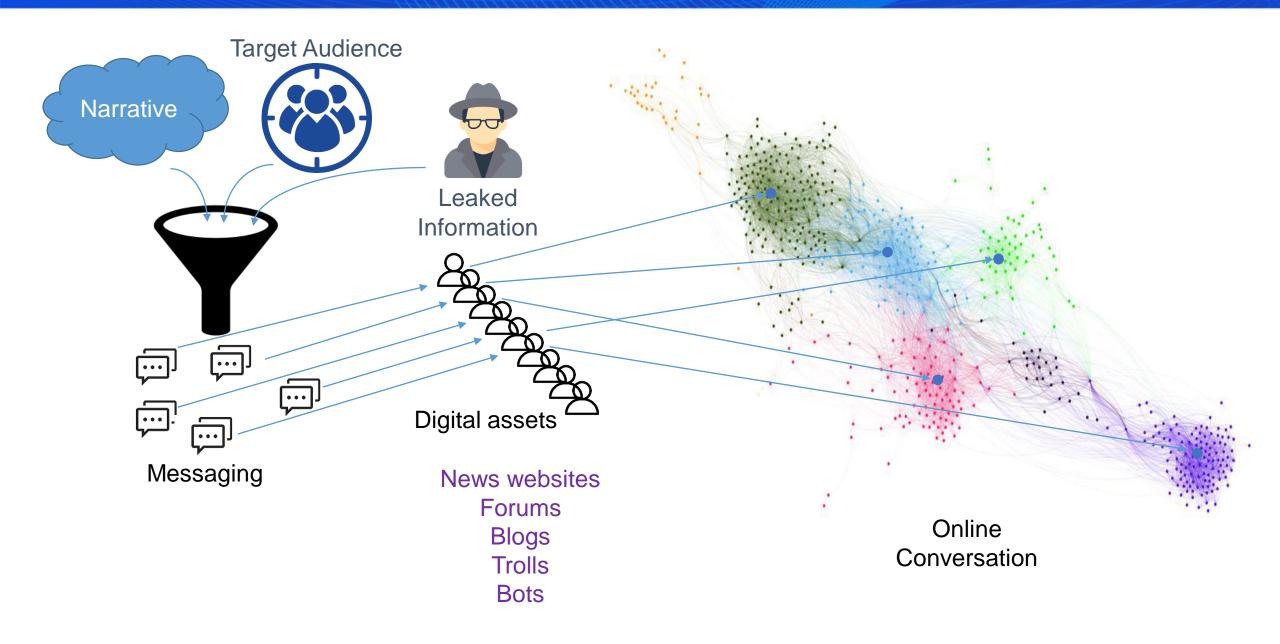
Other state and private actors imitate methods and tools

Everyday attacks

INFORMATION WARFARE GLOSSARY



INFORMATION WARFARE CAMPAIGN

















- Combining tools and methods from state-sponsored arrays with influencer marketing technologies and know-how
- > Affecting competitors by amplifying negative news
- Manipulating the price of traded stocks by leveraging sentiment based trading algorithms
- Most affected verticals:

Pharmaceuticals



Automotive



Natural Resources



SHORT AND DISTORT



Attackers obtain negative information on the target



Attackers accumulate short stock positions



Negative information is released and amplified in multiple outlets



Social discourse is directed at the negative information



Short position is closed

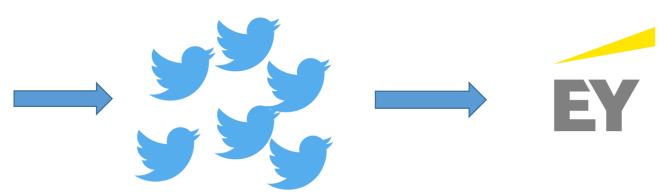


Information is rebuked – Too late!

AG WIRECARD - CASE STUDY





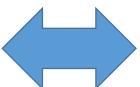




\$TSLA VS. \$TSLAQ

A raging war on twitter between supporters and short sellers Abundant use of false identities, anonymous blogging, hashtags and memes



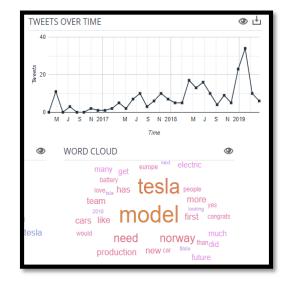




300-400 Network members

Some members tweet up to ~150 tweets on a single day / ~3000 tweets per months

Tweet frequency correlates with major market events

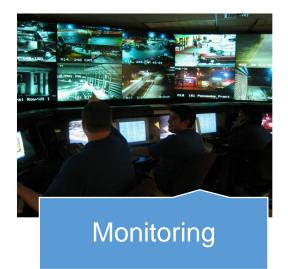


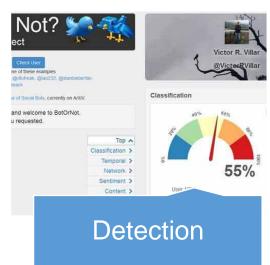


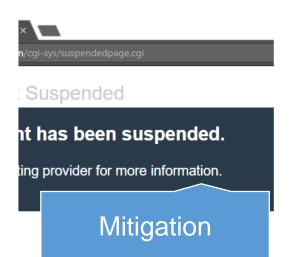
It is not clear who is responsible for information warfare security

CISO? PR? Marketing? Authorities? Social Media Platforms?

IW attacks are not perceived as cyber attacks
There are not enough solution with a clear ROI









MONITORING FOR IW ATTACKS

Monitor your brand and online assets in real time
Understand and monitor the threat actors
Follow IW attacks on competitors, industry members

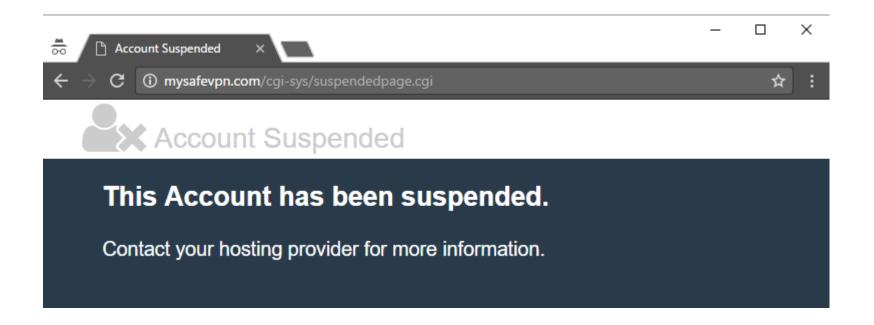


DETECTION FOR IW ATTACKS

Consider information leaks as potential attack vectors
Detect and identify the adversary narrative
Identify adversary media assets
Identify fake profiles promoting adversary narrative
Create and keep a database of rival assets



Be transparent - Minimize exposure to leaks and damaging rumors Prepare and maintain your own online assets and community Prepare your counter – narratives

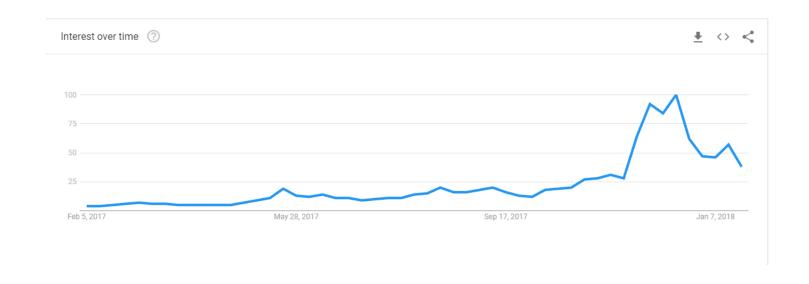


INCIDENT RESPONSE FOR IW ATTACKS

Rapid takedown of adversary assets

Expose fakery and inauthentic behavior

Disseminate counter-narrative with force



SUMMARY

- ☐ Government and corporate organizations are exposed to IW attacks more than ever
- □ A carefully planned IW attack can be more damaging than any cyber attack, affecting stability, brand equity and stock prices
- ☐ Defending against IW requires a cybersecurity mindset, but also an understanding of social behavior, psychology and narrative
- ☐ Correct stance, tools and analysis can minimize the effect and even prevent dangerous IW attacks



THANKS 2019北京网络安全大会 2019 BEIJING CYBER SECURITY CONFERENCE