

Cyber Forza Threat Matrix: Insiders vs Outsiders

WHAT'S THE GREATER CYBERSECURITY THREAT?

WHAT ARE **INSIDER**  **OUTSIDER** THREATS?

INSIDER THREATS

OUTSIDER THREATS

ORIGINATE FROM WITHIN A BUSINESS

Can include any party that introduces risk through malicious or unintentional behaviors

ORIGINATE FROM EXTERNAL SOURCES

Can be any threat actor that isn't affiliated with the business directly



Employees



Contractors



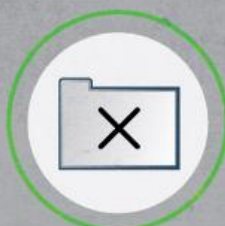
Cybercriminals



Nation state-sponsored
attackers



Business
partners



Compromised
internal
accounts



Competition-
sponsored
attackers



Hacktivists



MOTIVES

INSIDER THREATS

OUTSIDER THREATS



Financial
gain



Personal
advantage



Economic
gain



Corporate or nation
state-sponsored
espionage



Professional
revenge



Outsider
influence

competitor / nation state / criminals



Political
or military
advantage



Political or social
change



In 2015, 59% of
insider incidents were
motivated by finance
or espionage

59%

Finance or
Espionage

Verizon 2016 DBIR

In 2015, 89% of **all**
data breaches were
motivated by finance
or espionage

Finance or
Espionage

89%

Verizon 2016 DBIR





TARGETS

INSIDER THREATS



Intellectual property and trade secrets



Business plans and corporate secrets



Products / R&D information



Source code



Personnel information



Financial information

OUTSIDER THREATS



Cybercriminals

LIKELY TARGETS

Financial and personnel information



Nation state-sponsored attackers

LIKELY TARGETS

Trade secrets, business information, critical infrastructure, employee / customer personal information



Competition-sponsored attackers

LIKELY TARGETS

Trade secrets and business plans



Hacktivists

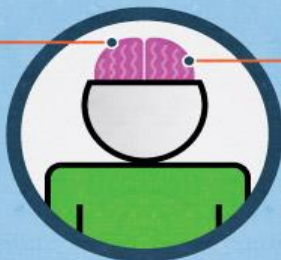
LIKELY TARGETS

Corporate secrets and business information



Verizon 2016 DBIR

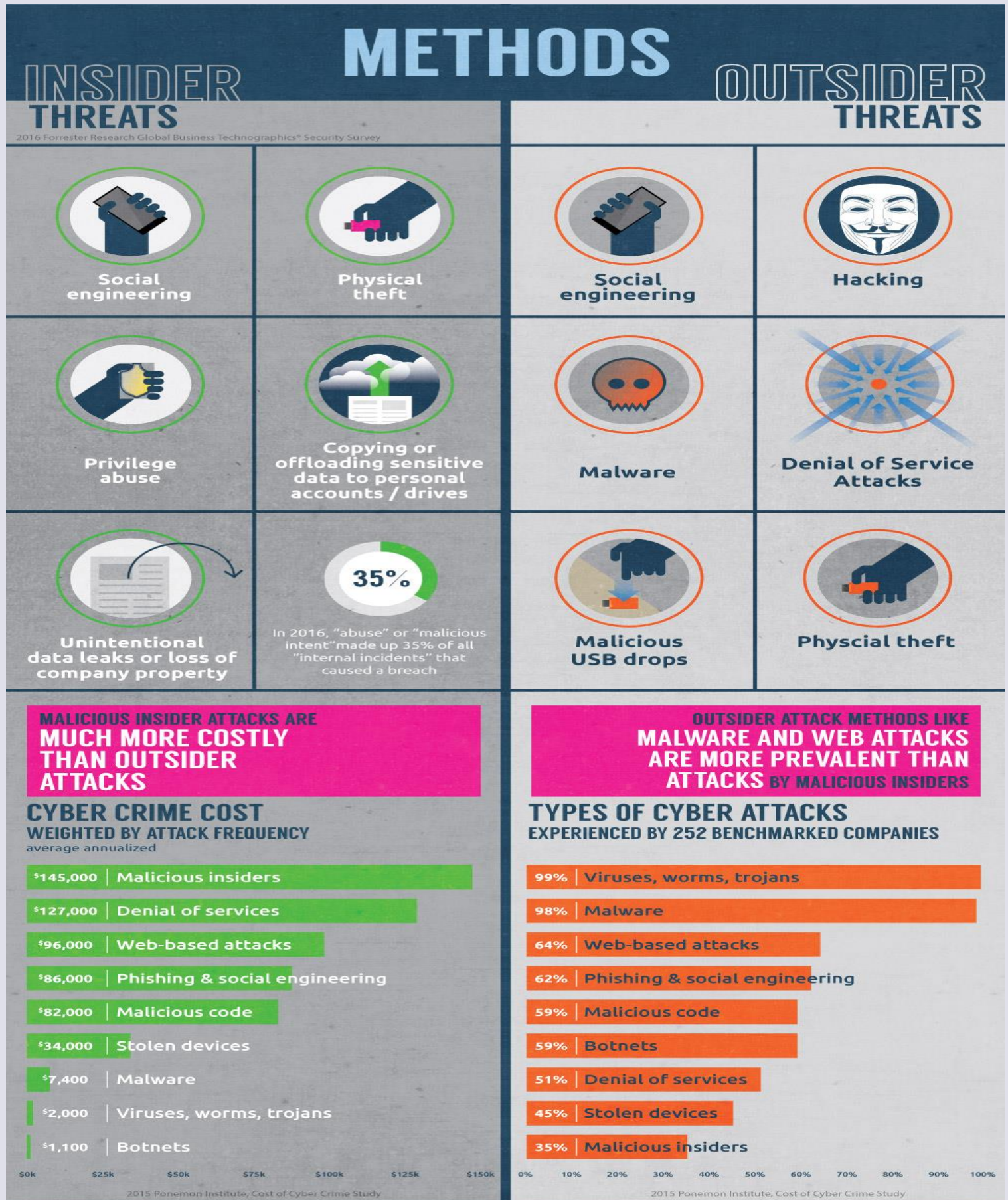
Cyberespionage breaches **capture trade secrets or proprietary information**



Companies believe that their **knowledge assets are targeted by nation state attacks**



2016 Ponemon Institute, The Cybersecurity Risk to Knowledge Assets





ARE INSIDERS OR OUTSIDERS A **BIGGER THREAT TO YOUR BUSINESS?**

TRICK QUESTION

BOTH!

THE MOST LIKELY ROOT CAUSES OF DATA BREACHES



Careless
Insider

1.67



Malicious or
criminal insider

2.45



External
attacker

2.89



Combined insider
and external
attackers

3.49

MOST BREACHES INVOLVE BOTH INSIDER AND OUTSIDER THREATS

2016 Ponemon Institute, The Cybersecurity Risk to Knowledge Assets

1 = most likely
4 = least likely

DATA PROTECTION

THE BEST DEFENSE AGAINST INSIDER AND OUTSIDER THREATS

TIPS FOR SECURING DATA

AGAINST INSIDER AND OUTSIDER THREATS:

IDENTIFY

and classify your most sensitive data so that you can protect it

MONITOR

for irregular data activity or egress and implement controls to mitigate risk

ENCRYPT

sensitive data before it leaves your network

RESTRICT

use of data egress channels such as external devices, removable storage, and unauthorized web apps

TRAIN

employees on security hygiene and safe data handling habits

EXTEND

data protection policies and controls to business partners and third parties

Data breaches are most commonly caused by a combination of insider and outsider threats — be prepared to defend your data against both from every angle!