



proofpoint.

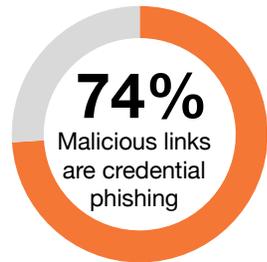
PEOPLE MAKE THE BEST EXPLOITS

Ryan Kalember
SVP Cybersecurity Strategy



Attacks Increasingly Target Individuals, Not Infrastructure

Threats use social engineering, not vulnerabilities



Mobile, social, SaaS threats ramp and evolve

150%

Increase in social media phishing

Customer Service @Ask_BankCA
Mr. Smith, sorry to hear you've been having trouble. To better serve you, please visit our site and login. banksite.com/CA/customerservice

RATs become common in mobile apps



BEC/impostor email fraud becomes board-level issue

\$3.1B

Direct losses since January 2015, up 1,300% year over year

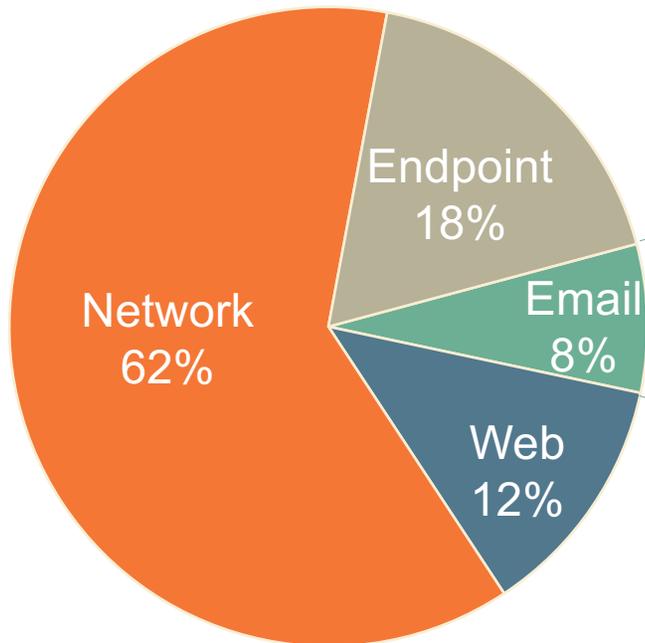
22,143

Organizations victimized in the US alone

Source: FBI

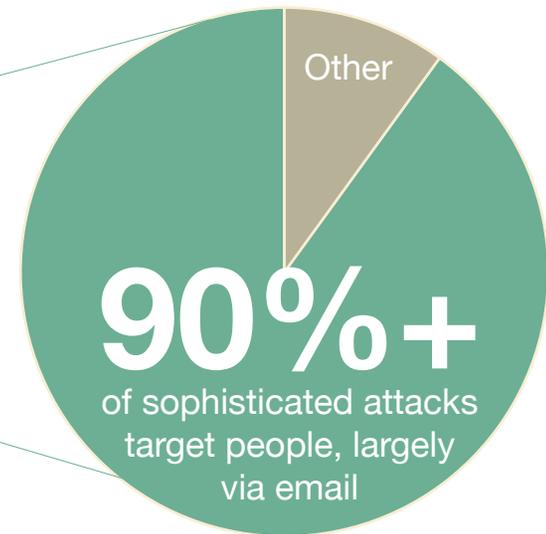
But Industry Is Not Aligned with the Threats

IT Security Industry



Source: Gartner (2017 forecast)

Attack Vectors



Source: Verizon DBIR, Trend Micro, FEYE, etc.

Email-based Financial Fraud Techniques

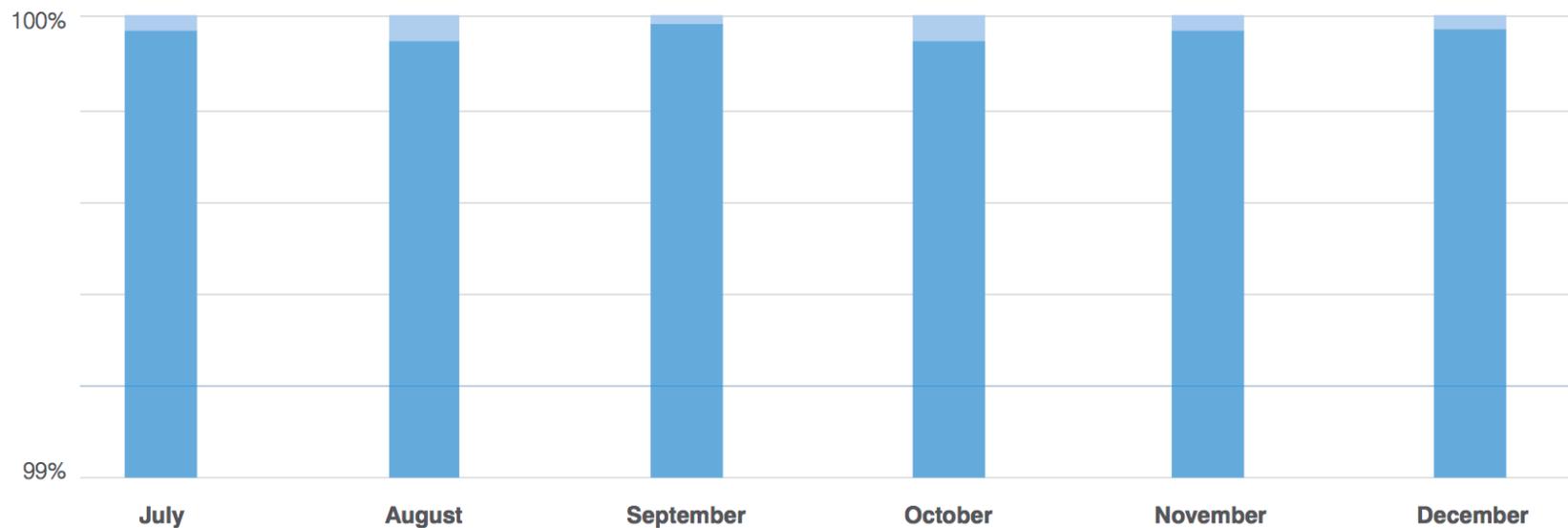


Figure 1: Ratio of email-based financial fraud threats relying on social engineering versus automated exploits, July-December 2016

Malicious URLs Point to Credential Phishing More Than Exploit Kits

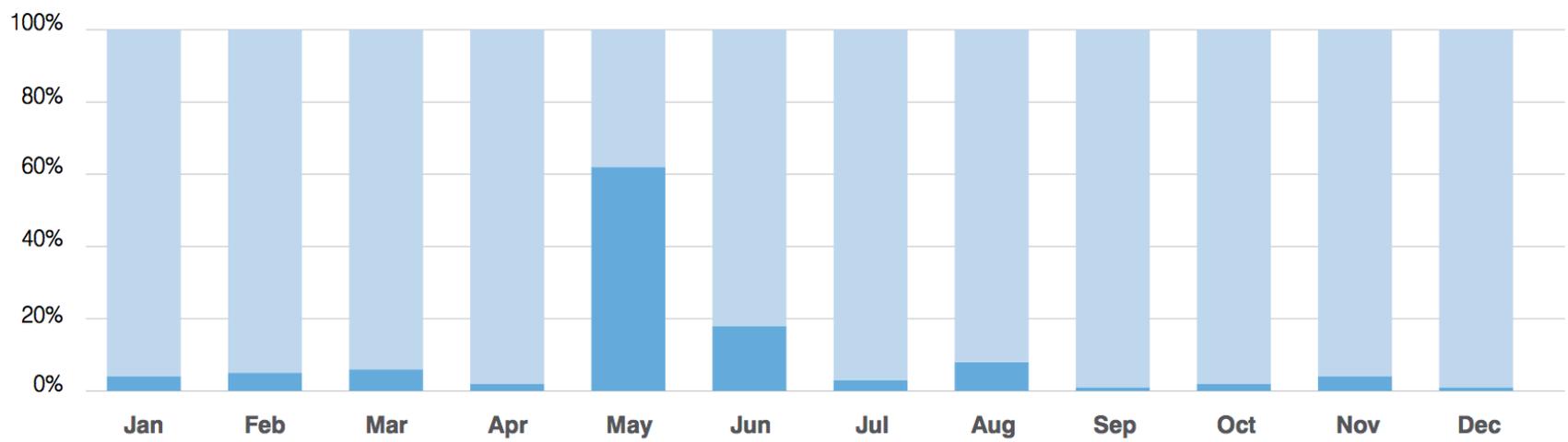


Figure 2: URLs in malicious messages linking to credential phish versus exploit kits

Top 10 Credential Phishing Lures of 2016

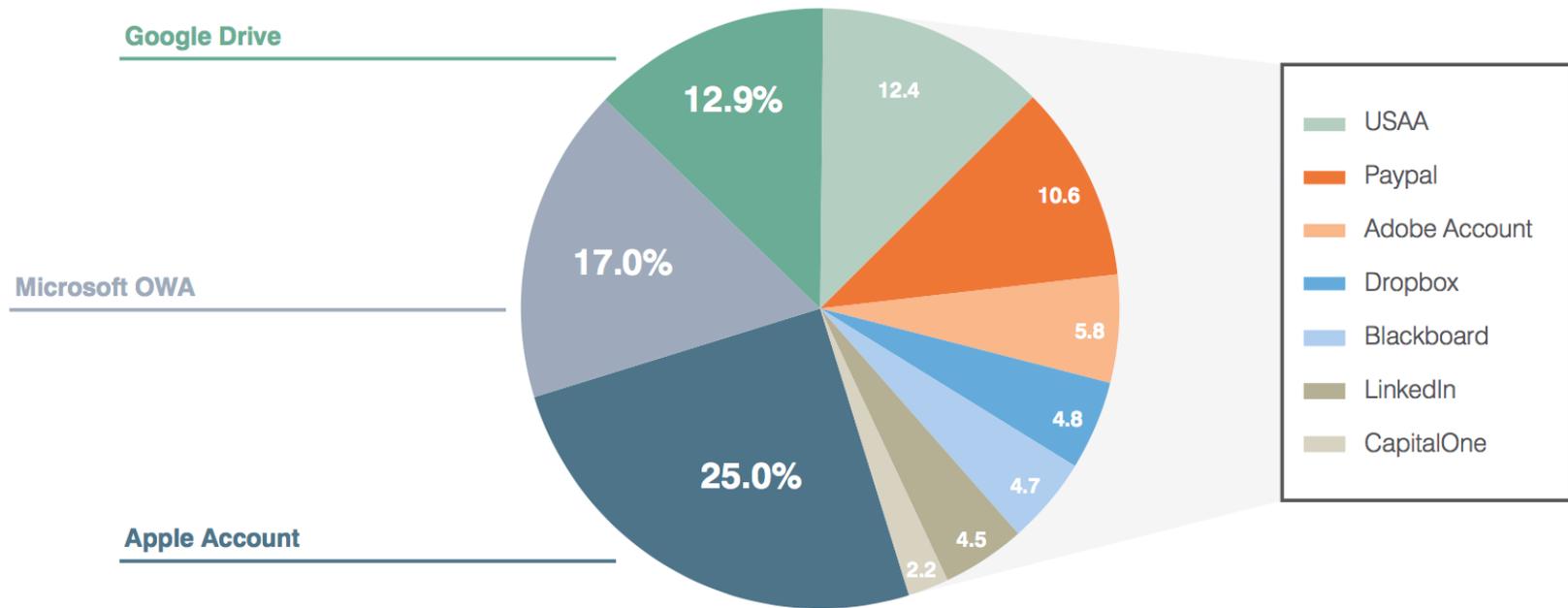
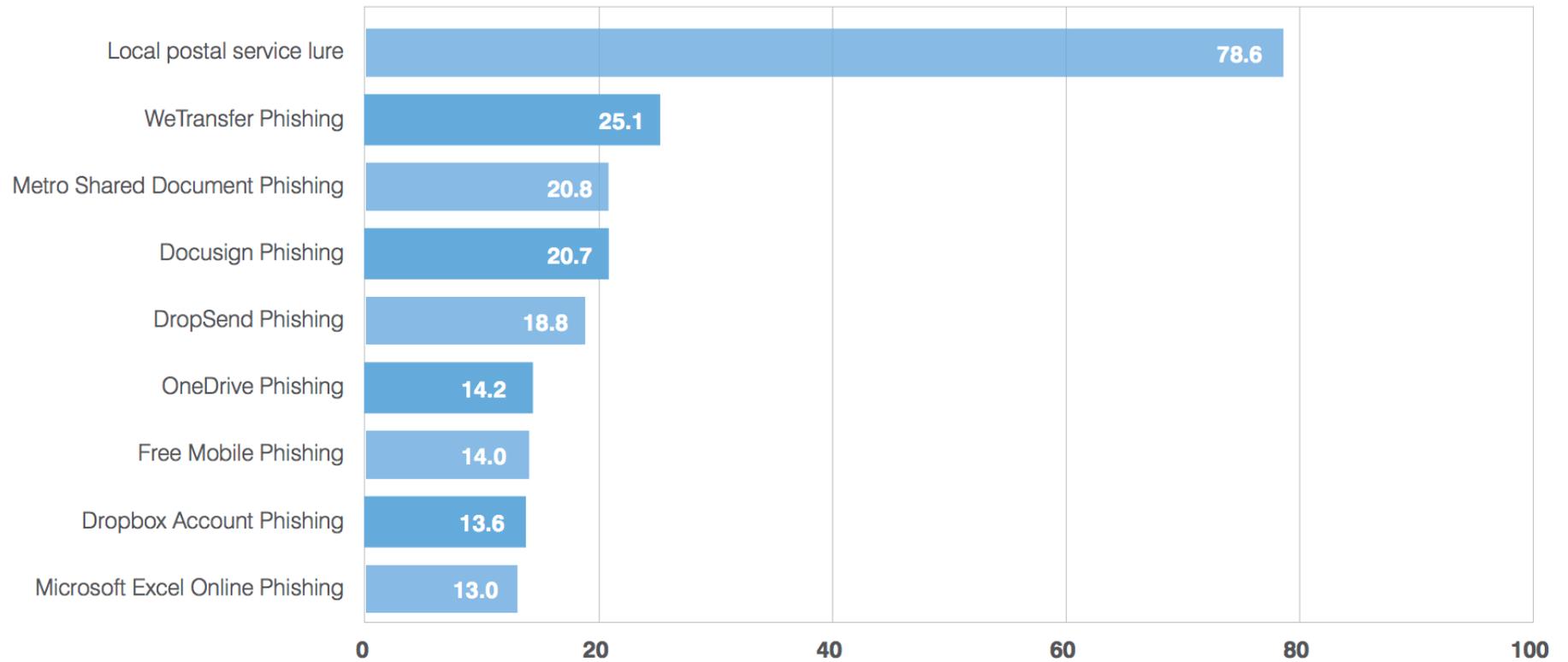
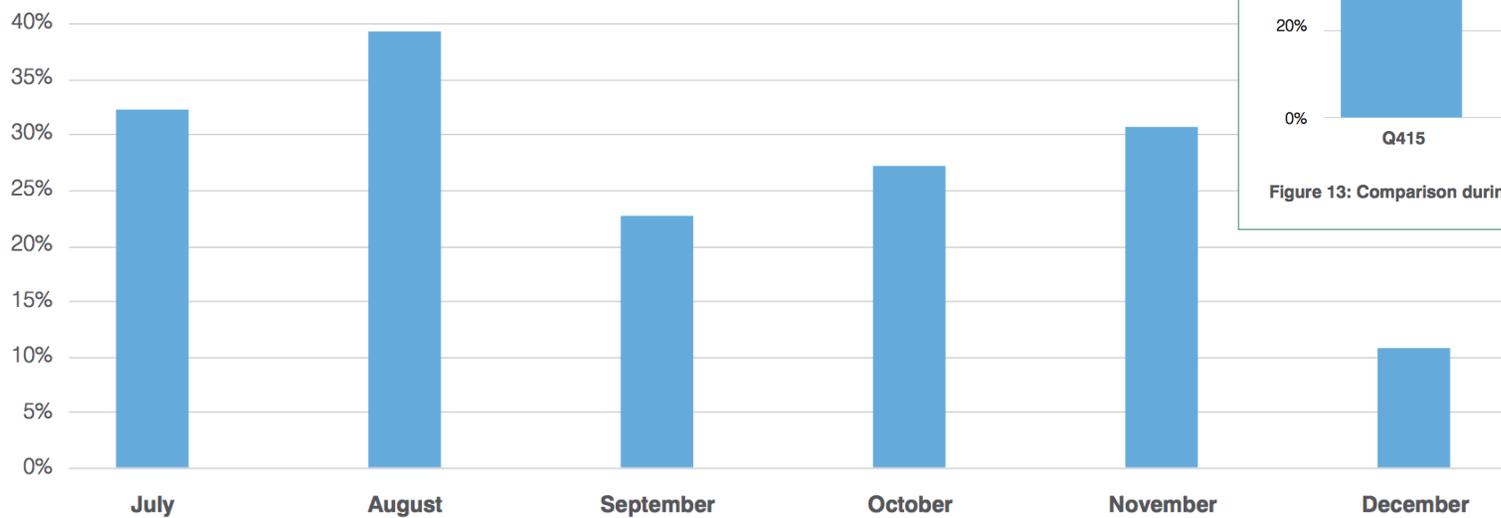


Figure 7: Top 10 credential phishing lures, with percent share

Click Rate for Small Campaigns (more than 100 messages)



**Percent of BEC Emails Spoofed as “CEO to CFO”
July-December 2016**



Email-based financial fraud attacks comparison

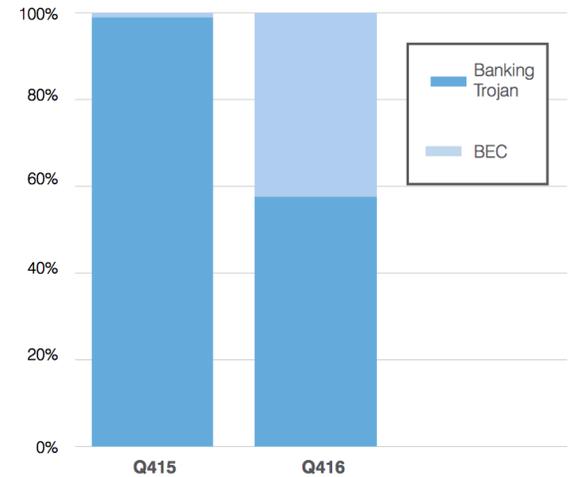


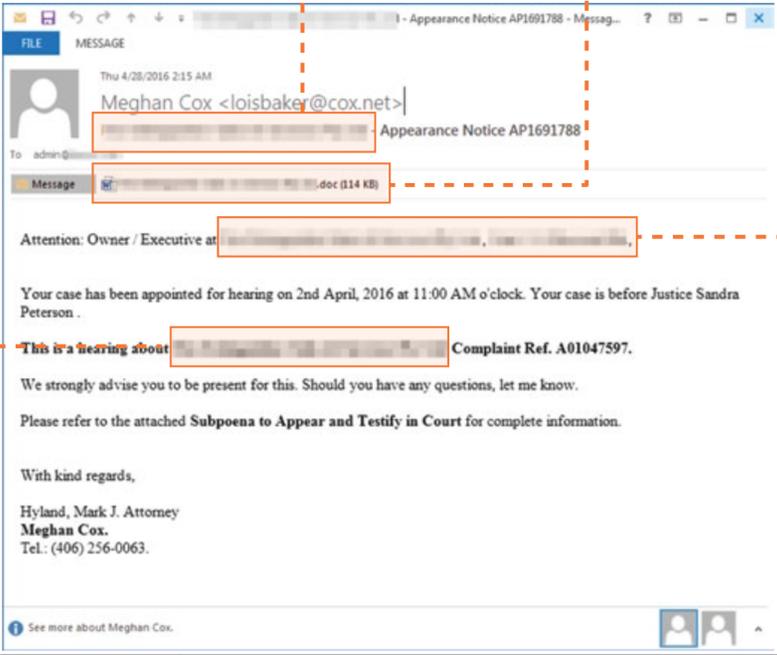
Figure 13: Comparison during Q4 2015 versus Q4 2016

Subject line includes the name of the recipient business

Company name appears in name of fake legal complaint

Attachment name is name of targeted company

Name and valid street address of targeted company



Top 5 OS Sources of User Clicks of 2016

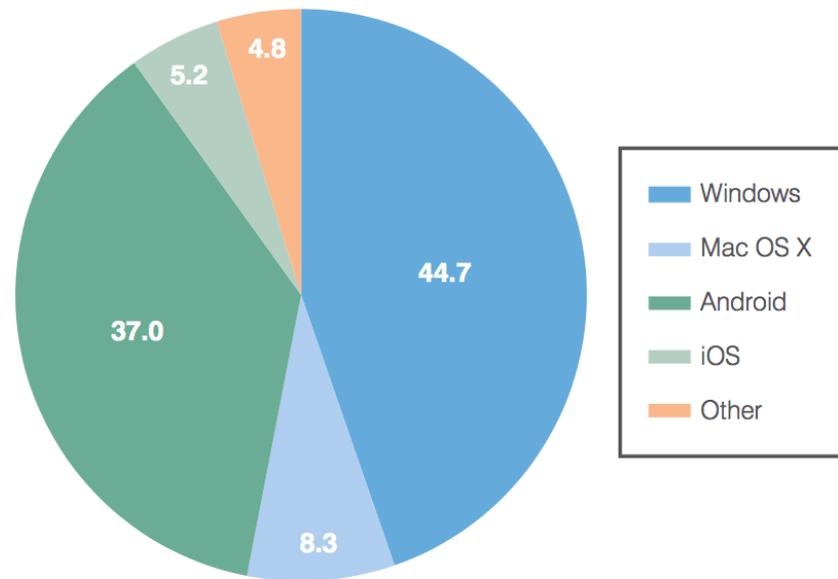
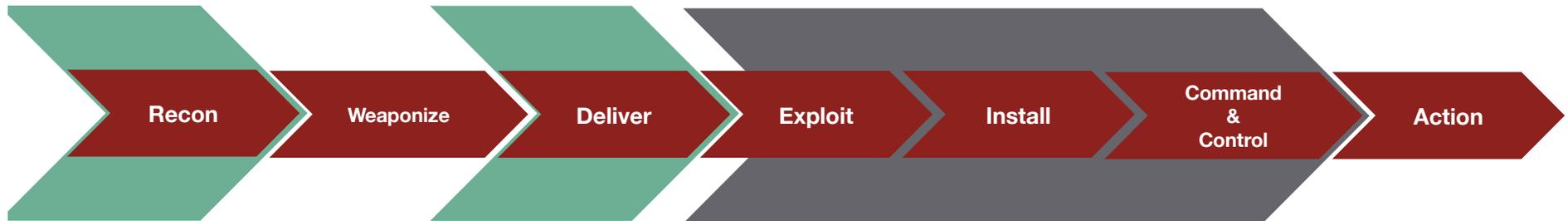


Figure 9: Top operating system sources of clicks, with percentage of total clicks

Effective Security: Be Where the Threat/Data Is



Effective Security: Better Protection at Delivery



- Better to stop attack before damage
- Better chance of detection
- Better intel and context for actors, campaigns

- Target already clicked, attacker has foothold
- Detection challenging, especially for malware-free attacks
- Difficult to put attack in context and link to campaign/actor

Recon/gateway effectiveness vs 90%+ of threats → Rapid improvement in security posture

Proofpoint at a Glance

LEADING CUSTOMERS

~50%
of the
Fortune 100

5000+
enterprise
customers

90%+
renewal
rate

DEEP SECURITY DNA

100+
threat ops and
research team

~20%
revenue invested
in R&D

300K+
daily malware
samples

UNIQUE VISIBILITY

1B+
messages
processed daily

500B+
node threat
graph

40M+
mobile apps
scanned

ENTERPRISE CLASS

8
straight years of
MQ leadership



splunk>

CYBERARK[®]

IMPERVA[®]

strategic ecosystem
integrations