



SEEING THE ATTACKER'S VIEW: A PEOPLE-CENTRIC APPROACH TO THREAT PROTECTION

Gary Steele

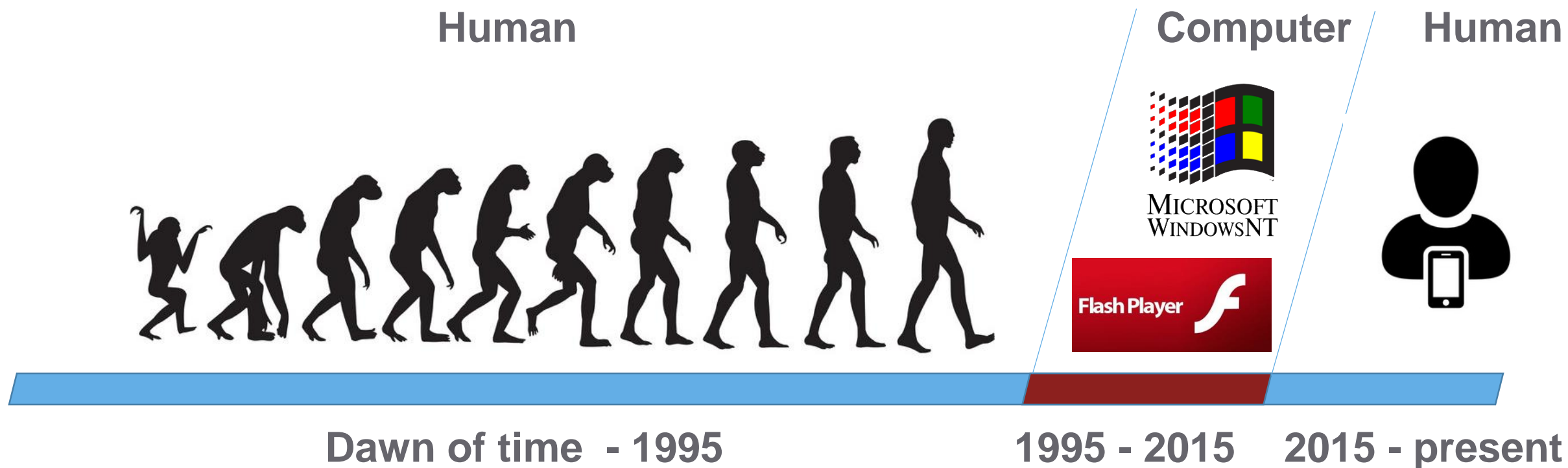
Chief Executive Officer, Proofpoint

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People influence security more than technology or policy, and cybercriminals know how to exploit human behaviors.

**Gartner 2019 MQ for SACBT*

Which is Easier to Fool?



Cloud Applications: It's How People Work

Organizations use
cloud apps across
all functions

What CIOs estimate
30-40 apps

The reality
+1000

Source: CIO Magazine"

0365 is the
#1 most-deployed
cloud application

verizon✓

"Email is the most
common attack vector
(96%)."



Gartner

"40% of organizations
will secure 0365 with a
3rd party solution."

Source: Gartner Survey, "Implementing Office 365"

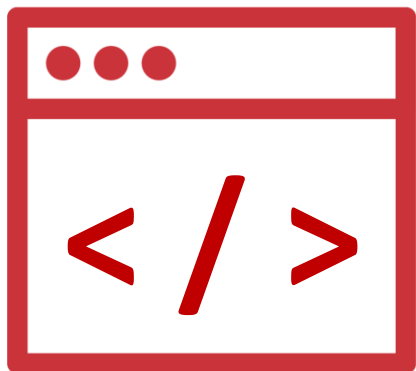
User Trends

Internal users will consume
more **apps delivered from
outside** the enterprise
network than from the inside.*

The future of work requires
employees to be able to
access the systems and data
they need – from **wherever,
whenever.**

Source: *Gartner, CARTA

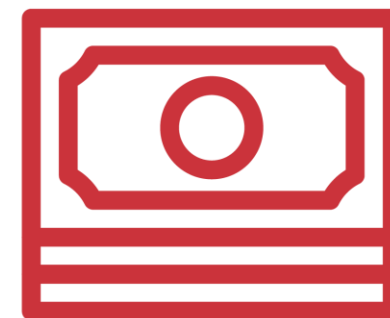
What Attackers Get People to Do



RUNNING ATTACKERS'
CODE FOR THEM

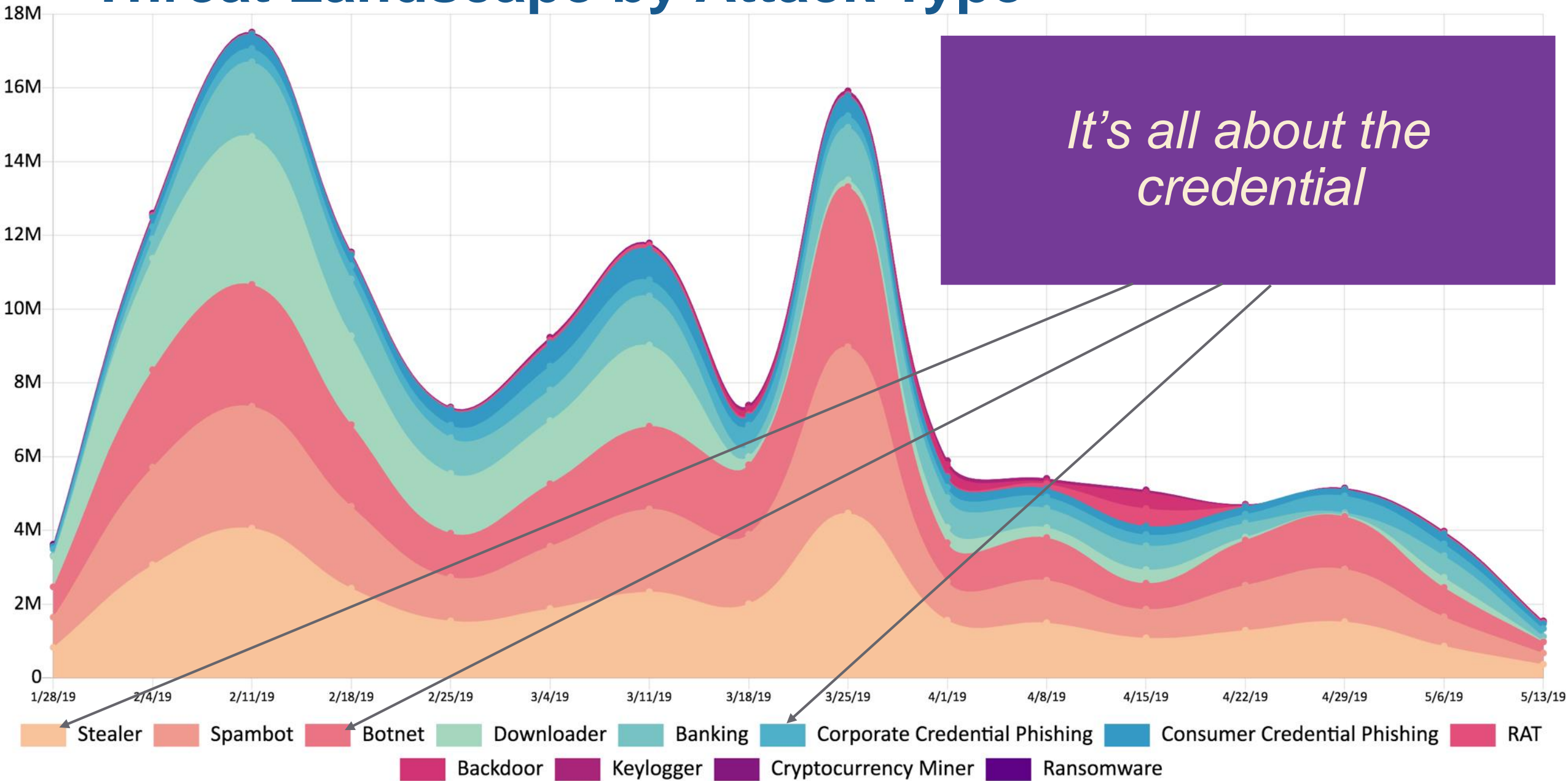


HANDING OVER
CREDENTIALS TO THEM

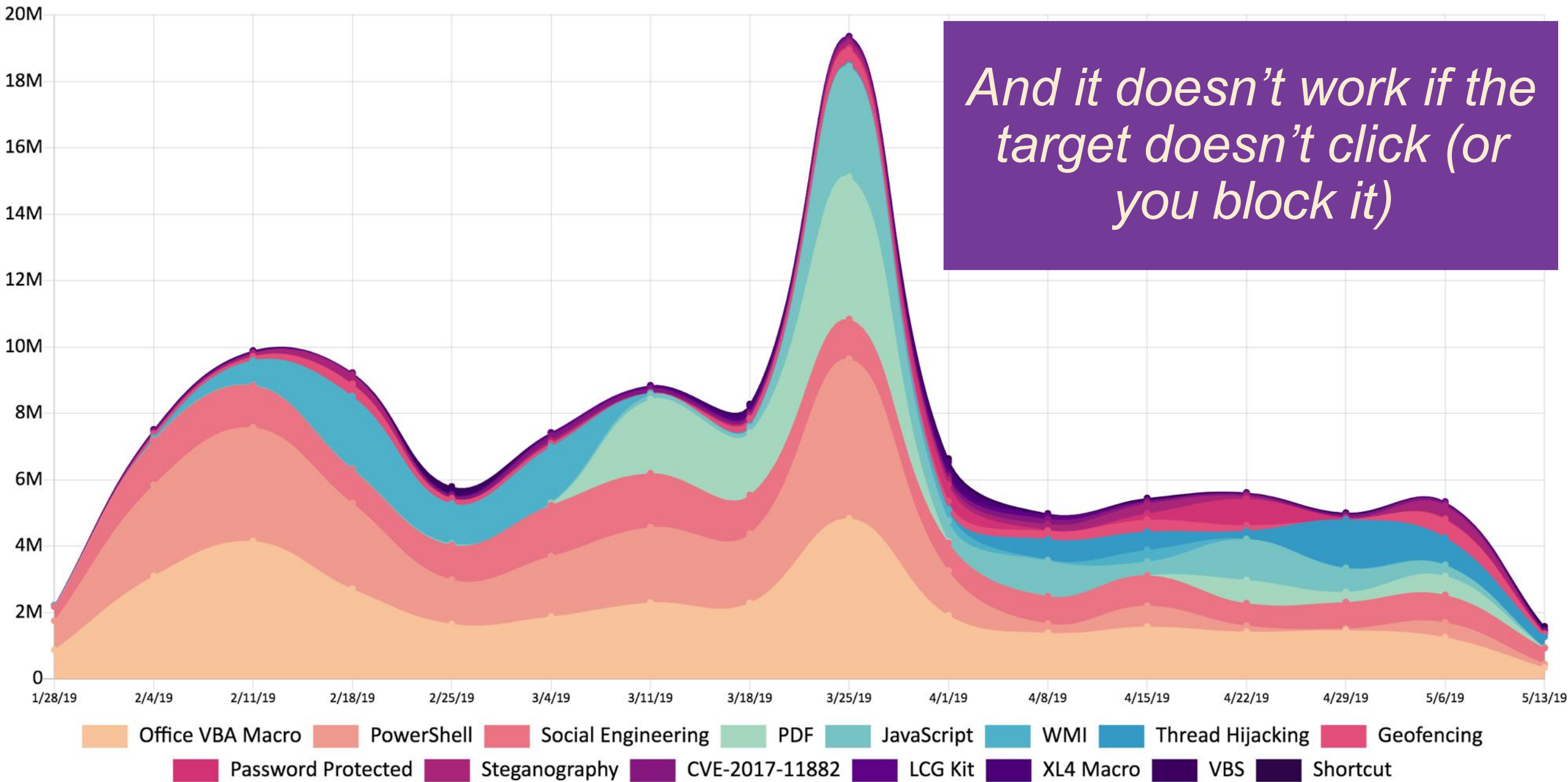


TRANSFER FUNDS OR
DATA TO THEM

Threat Landscape by Attack Type

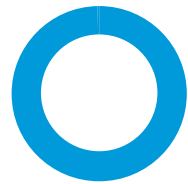


Threat Landscape by Exploit Type



Attacks increasingly target people, not infrastructure

THREATS USE SOCIAL ENGINEERING, NOT VULNERABILITIES



99%+

Malware attacks rely on user to run malicious code



300%+

Increase in corporate credential phishing

Source: Proofpoint Threat Data.

SHIFT TO CLOUD CREATES NEW THREAT VECTORS, DATA EXPOSURE



Account takeover of cloud apps is a growing problem

63%

Orgs exposed to targeted attacks

37%

Orgs detected successful breach

Source: Proofpoint Threat Data.

EMAIL FRAUD IS A BOARD-LEVEL ISSUE



\$12.5B+

Direct losses worldwide
(Oct 2013–May 2018)

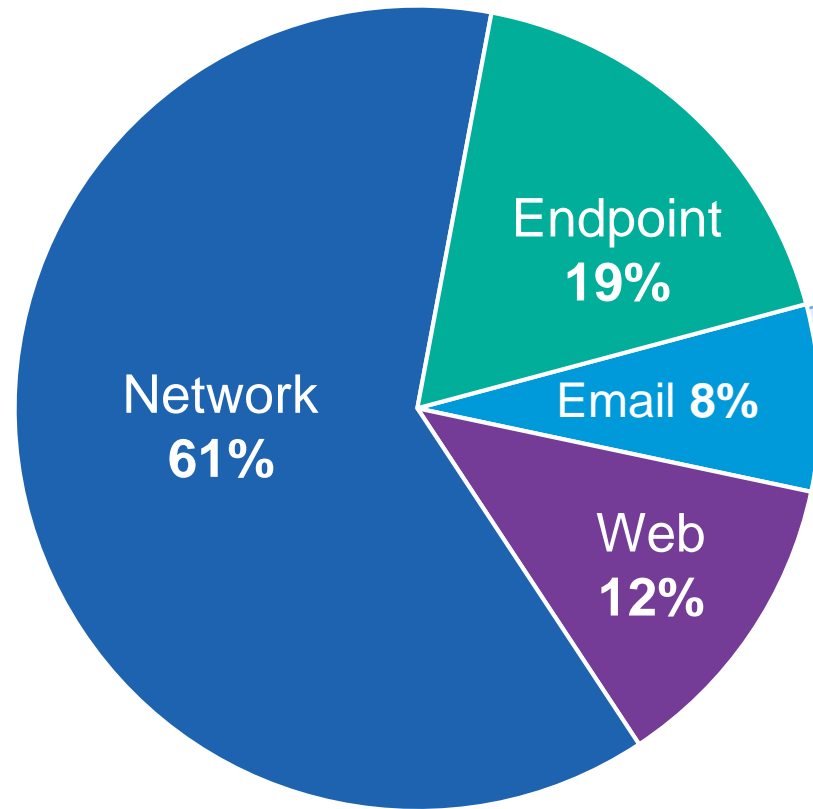
78,617

Incidents worldwide

Source: FBI.

Defenders don't focus on people, attackers do

SECURITY SPENDING



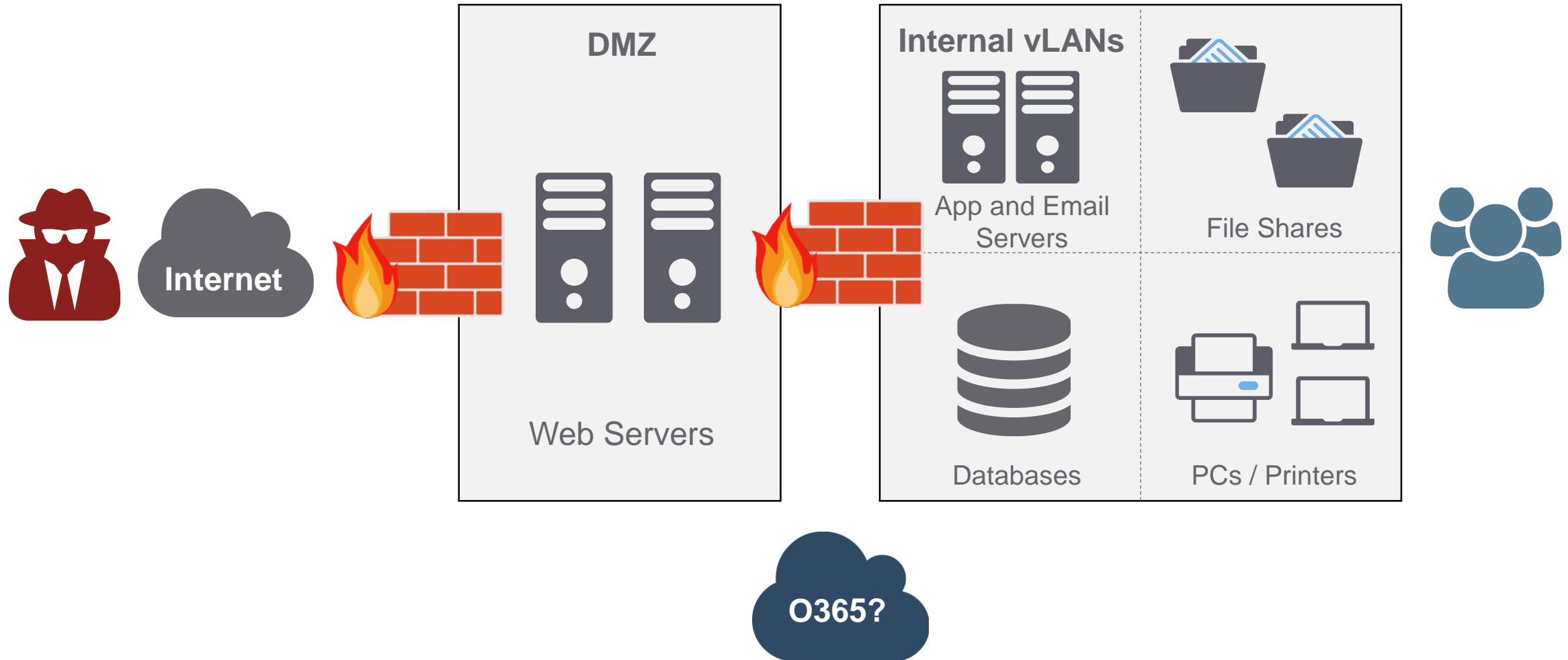
Source: Gartner Information Security, Worldwide
2016 – 2022, 1Q 2018 update (2018 forecast)

ATTACK VECTORS



Source: 2018 Verizon DBIR

Traditional Info Sec Point of View: Infrastructure



The Cybercriminal's Point of View: People

jbarker@bank.com



- VIP by role
- Thousands of connections
- Targeted by email fraud actors
- Impersonated to attack others

lbream@bank.com



- Interacts and processes payments from clients
- Impersonated to attack third-party partners

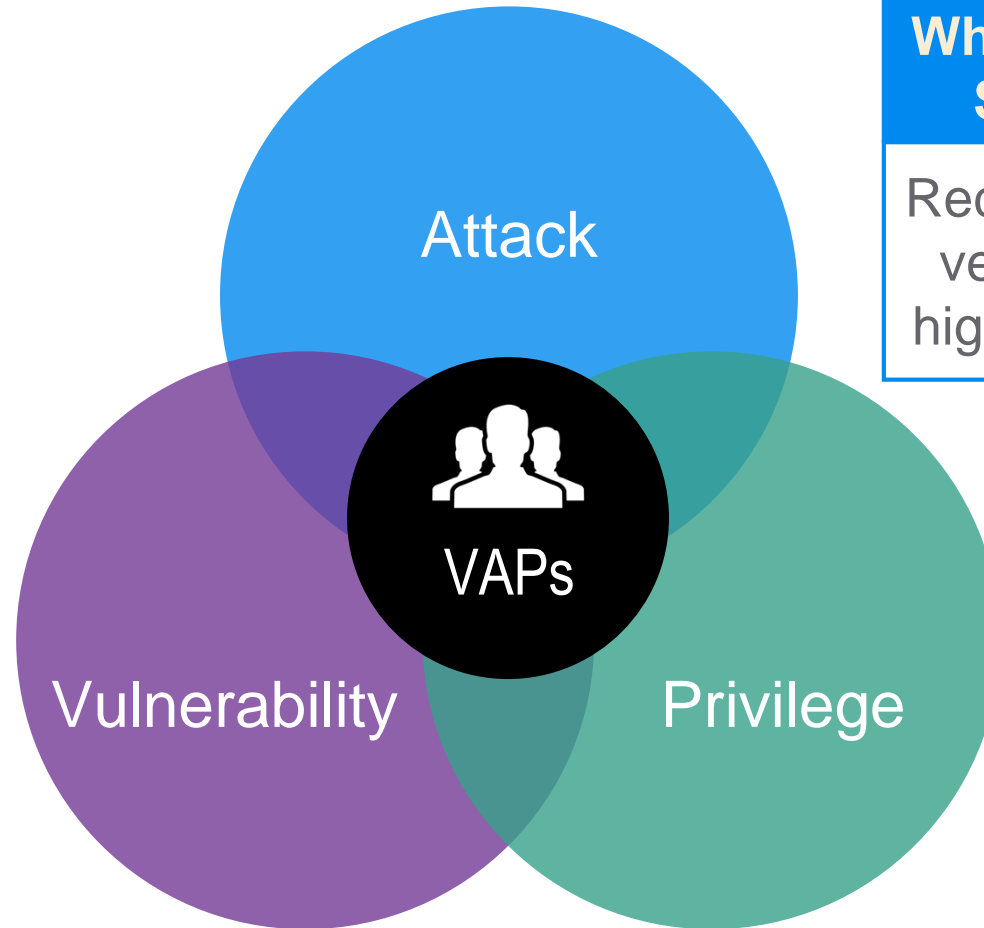
rhendricks@bank.com



- VIP by access
- Access to financial systems
- Targeted by financially motivated phishers



Who are your Very Attacked People (VAPs)?



Who is Likely to Fall for those Threats?

Clicks on malicious content, fails awareness training, or uses risky devices or cloud services

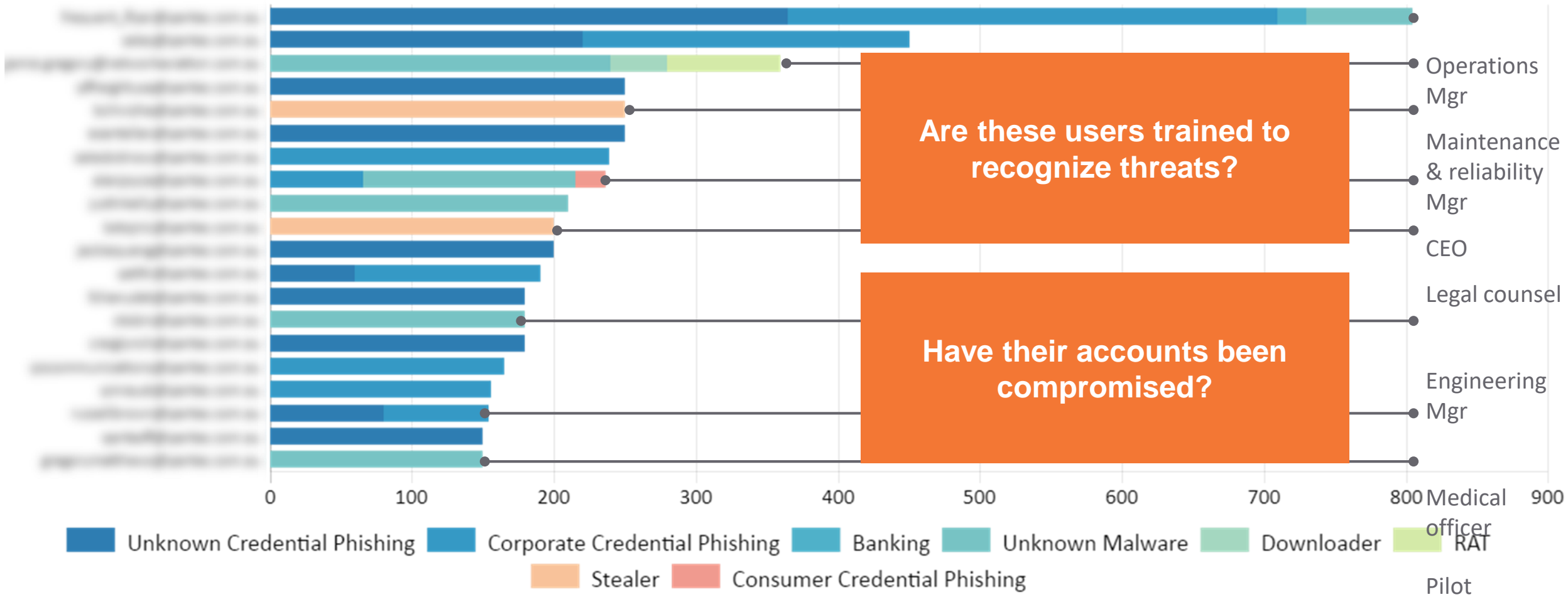
Who Gets Targeted by Serious Threats?

Receive highly targeted, very sophisticated, or high volumes of attacks

Who Represents Risk to the Organization?

Can access critical systems or sensitive data, or can be a vector for lateral movement

VAP View: Global Manufacturing Company



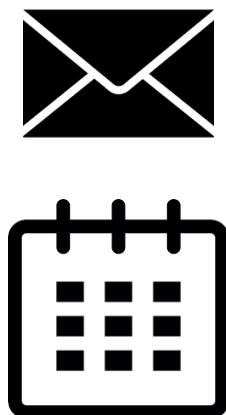
Compromised Account Risk: How It Works

CEO's O365 Account
Compromised

Attackers
Access
Email,
Calendar

Wait for
Supplier
Meeting

Email CFO
Requesting
Wire




From: Real CEO

To: Real CFO

Stuck in this meeting. Can you send a wire to acct 5551212? It's the last thing we need to close the deal.

People-Centric Visibility Drives Better Protection

lbream@bank.com



Laurie Bream
Financial Advisor at Bank Co
500+ connections

Very Attacked People (VAP) Scores

VULNERABILITY

MEDIUM

Phish Simulation test: no action
Risky device / network use: yes
MFA: inconsistent

ATTACK

HIGH

Max threat: 850
(top 10%)
30 day total: 9,143
(top 5%)

PRIVILEGE

HIGH

VIP: yes
Sensitive data: yes, CASB DLP
AD Score: High

Adaptive Controls

+ Access Control

CASB: steps up authentication

+ Threat Control

Email Protection: turn on classifiers

+ Training Control

Training: data protection

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