



# Alta Pro Insurance Services

## **KnowBe4 Webinar Manuscript April 17, 2020**

**Live webinar  
Date: June 18, 2020**

### **TITLE**

#### **No Rest For The Wicked (Cybercriminals)**

*Law Firm Email Security Awareness and Training*

Cybercriminals are not ones to let any major event go unexploited and the COVID-19 pandemic is no exception. Even at the best of times these talented attackers use human behaviors against you in the never-ending quest to separate you from your money.

Using social engineering techniques, the bad actors have continued to attack organizations across industries at a furious pace. While you may believe you are too small to be a target, if you have an email address or if your organization shows up on a Google search, they will use automated tools to attack you.

In this webinar, cybersecurity expert Erich Kron will discuss the current threats and cyber attacks, how the attackers are evolving to target those working from home, the social engineering tricks they use and what we can expect in the near future.

In this webinar, you will learn the following:

- Tricks the bad actors are currently using
- Why remote working can be more dangerous
- How social engineering attacks work
- How to defend against attacks and scams

## **AGENDA**

### **(One-Hour CLE Webinar)**

#### **Part One (0:00 – 0:15)**

##### **Current Threats**

This will discuss the current tactics being used by the attackers, especially as it relates to email phishing (the #1 method of attack) and text message smishing and will go over current themes behind these attacks. They vary by the timing of events, however we can expect to see COVID-19 themes around returning to work, opening the economy back up, etc. These examples will be specific to recent events

Example Questions (subject to change based on current events):

- What types of attacks are we currently seeing in the wild?
- Is it always focused on making money or are there other motivations?
- Where do the attackers come from and why do they do this?

#### **Part Two (0:15 – 0:30)**

##### **Working From Home**

This section will discuss how attackers are using the move to working from home to exploit the changes, adjustments and new vulnerabilities present due to this operational change.

Example Questions (subject to change based on current events):

- Why do the bad actors feel that it is worth the effort to ramp up attacks while people have started working from home?
- What types of things make working from home more dangerous than in an office environment?
- What habits should we change when working from home vs. in the office?

#### **Part Three (0:30 – 0:45)**

##### **Social Engineering**

This section will focus on the psychology behind how the attackers use email, text messaging and phone calls to attack the victims. It will discuss the concept of focus redirection, disruption of critical thinking steps and perception filters.

Example Questions (subject to change based on current events):

- Why are these attacks so effective and why can't we seem to make scams stop?
- What is the best way a person can defend against these sorts of attacks?
- What do I do if I fall for an attack and realize it?

## **Part Four (0:45 – 0:60)**

### **What we can expect in the future**

This will focus on upcoming and expected events that will open up doors for attackers. This includes the shift to working back in the office, the reemployment rush and the fears of a second wave as well as the upcoming presidential elections.

Example Questions (subject to change based on current events):

- Why do we expect that the attackers to keep using COVID-19 themed attacks even after things are settling down?
- Will this cycle ever end?
- What do you think is the most dangerous technology that is coming out?
- How can we be prepared?

## PRESENTERS

**Erich Kron** is the Security Awareness Training Advocate for KnowBe4. He is a veteran information security professional who has worked for more than 20 years in the medical, aerospace, manufacturing and defense fields. His experience ranges from large-scale technical project management to hands-on technical work. He is a popular speaker, trainer and author. [More about Erich here.](#)

**KnowBe4** is a security awareness training and simulated phishing company. Its new-school integrated platform lets subscribers train and phish their users, see their Phish-prone percentage™ improve over time, avoid social engineering scams and get measurable results.

**Jay Reeves** is the Risk Pro for Alta Pro Insurance Services. He practiced law in South Carolina and North Carolina for nearly 40 years, both in private practice and in-house (as corporate VP/Risk Manager). He has given numerous presentations to lawyers and bar groups in the US and Canada, including keynotes and CLEs. He is founder and owner of Your Law Life LLC, which helps attorneys add purpose, profits and peace of mind to their Law Lives. [More about Jay here.](#)



Welcome to the Alta Pro Live Webinar  
Chapter II of the Cyber Security series

# Raise Your Cyber Security Awareness



**Jay Reeves** is the Risk Pro for Alta Pro Insurance Services. He practiced law in South Carolina and North Carolina for nearly 40 years, both in private practice and in-house (as corporate VP/Risk Manager). He has given numerous presentations to lawyers and bar groups in the US and Canada, including keynotes and CLEs. He is founder and owner of Your Law Life LLC, which helps attorneys add purpose, profits and peace of mind to their Law Lives.

**Erich Kron** is the Security Awareness Training Advocate for KnowBe4. He is a veteran information security professional who has worked for more than 20 years in the medical, aerospace, manufacturing and defense fields. His experience ranges from large-scale technical project management to hands-on technical work. He is a popular speaker, trainer and author.



**KnowBe4** is a security awareness training and simulated phishing company. Its new-school integrated platform lets subscribers train and phish their users, see their Phish-prone percentage™ improve over time, avoid social engineering scams and get measurable results.



# Housekeeping

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- We're approved for 1 hour of CLE. **You must complete the survey to receive your credit.**
- **There'll be two codes** revealed during the webinar that you'll need to remember.
- **You must enter the codes** in the post attendee survey to receive the credit.
- If participating via phone, email us at [info@altaprorpg.com](mailto:info@altaprorpg.com) to get a form to fill out and received CLE.
- Please direct your questions to the Q&A button at the bottom of the screen.
- Unanswered questions will be answered in a post-attendee .pdf.



# Current Threats



# Phishing Attacks Have Exploded Since COVID-19

*The number of NEW phishing templates being spotted in the wild since COVID-19 hit has been unprecedented.*

*Attackers are taking advantage of the chaos and emotional impact these changes have made in our lives to profit for themselves.*

*This increase has been seen in not only typical cybergangs, but nation-state actors as well.*

## The Growth & Development of COVID-19 Phishing Templates

Week	New Templates
Jan. 19 - Jan. 25	0
Jan. 26 - Feb. 1	1
Feb. 2 - Feb. 8	5
Feb. 9 - Feb. 15	6
Feb. 16 - Feb. 22	5
Feb. 23 - Feb. 29	3
Mar. 1 - Mar. 7	16
Mar. 8 - Mar. 14	16
Mar. 15 - Mar. 21	36
Mar. 22 - Mar. 28	94

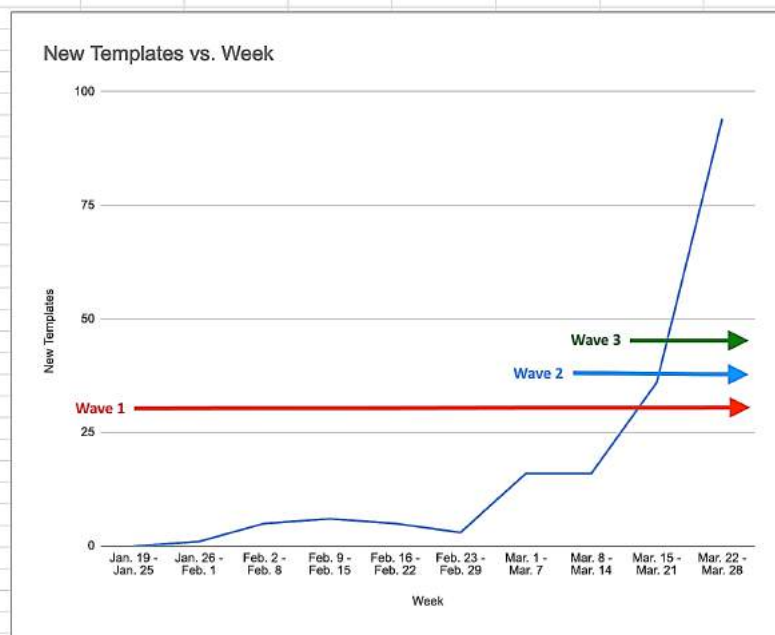
**Note:** "New Templates" means new and unique COVID-19 phishing templates encountered for the first time. Templates can be considered "new and unique" even if they are minor variations of earlier templates. Templates classified as "spam / scam" are not considered or included in this number.

### The Three Waves of Templates

**Wave 1:** Spoofs of authoritative sources of information (CDC/WHO/HHS/HR) purportedly offering information and updates on the outbreak.

**Wave 2:** New and novel templates designed exclusively for COVID-19 that move beyond merely offering new information on the outbreak.

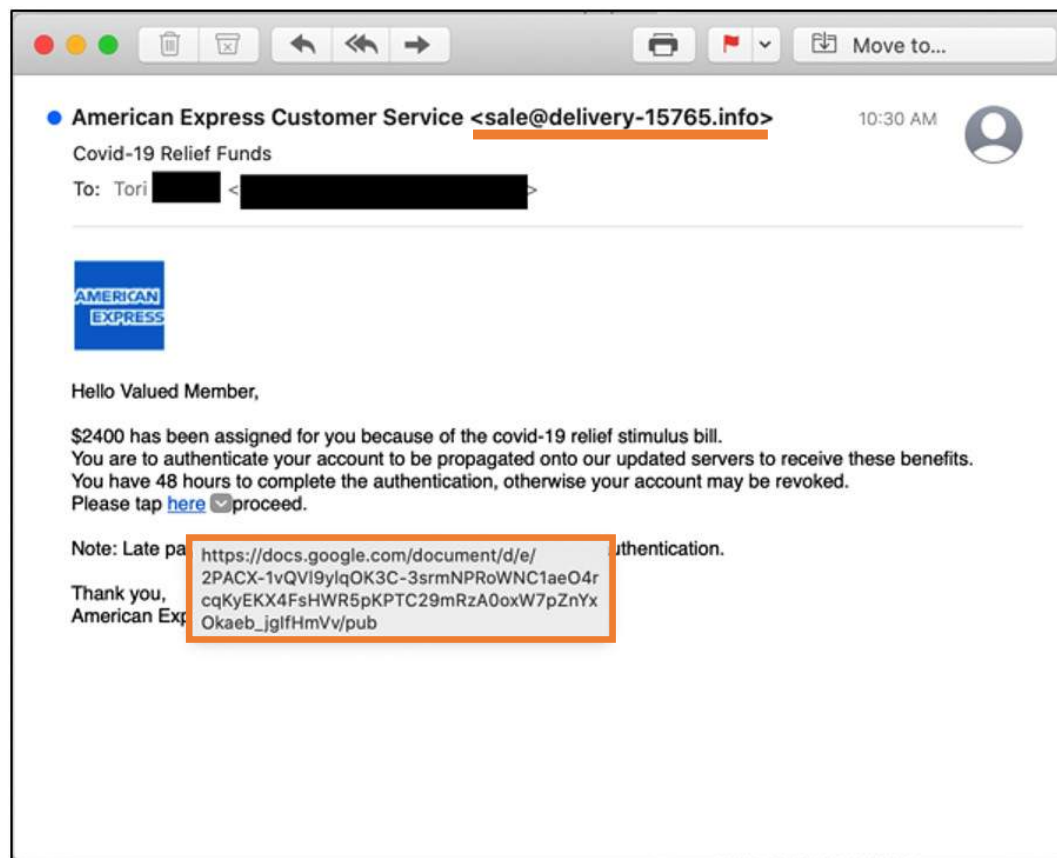
**Wave 3:** Re-purposed older templates and social engineering schemes modified and updated to include a COVID-19 theme or angle.





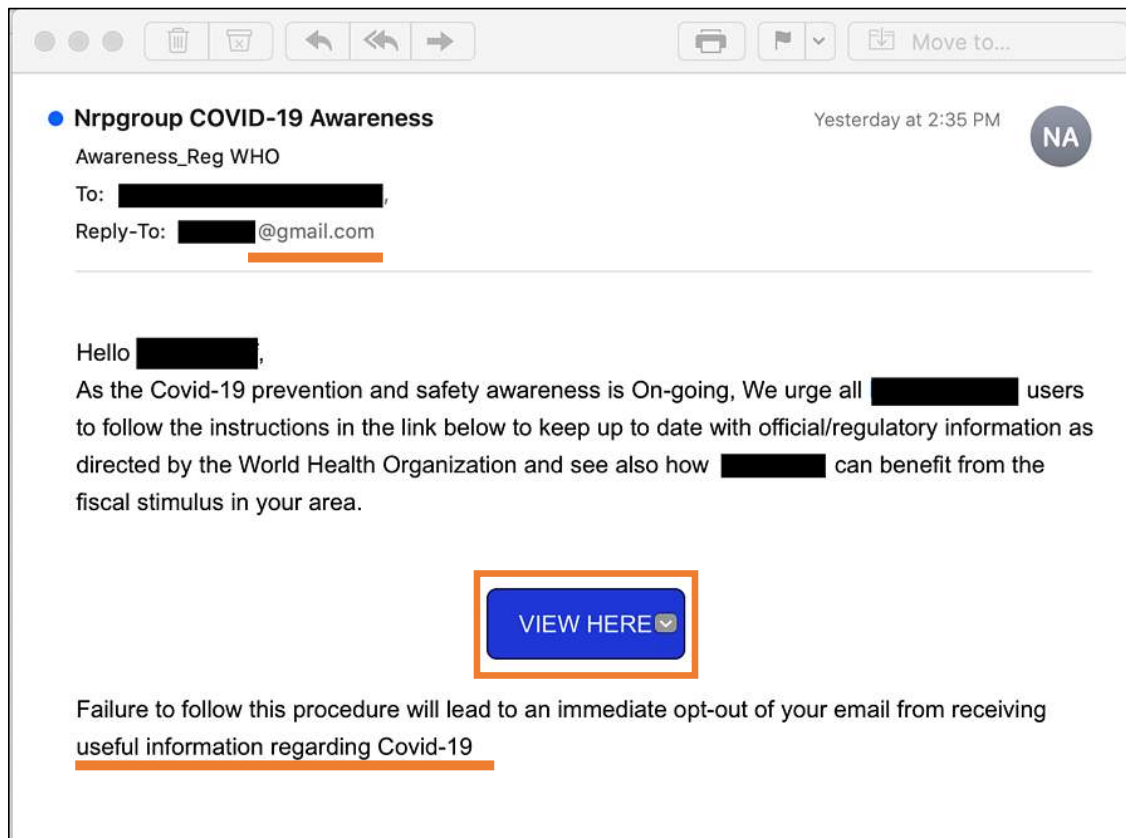
# Stimulus Focused Attacks

- It says it's from American Express, but it's obviously not.
- Hovering the link shows a link to a google doc. This is not how real organization would do business.
- They are targeting account information and bank credentials with this attack.



# Stimulus Focused Attacks

- Always be cautious of emails from free providers such as Gmail, Hotmail, etc.
- This uses a reputable organization (WHO) to lend credibility to the message.
- The link is likely tied to a site hosting malware but can also be used to present someone with a fake login portal to steal credentials.



# COVID-19 Focused Attacks

- Using the White House to make it seem credible.
- The note about extending to August 2020 is about fear and outrage.
- The link went to a site hosting a malware infected Word document that prompted people to “allow editing” and “enable content”.

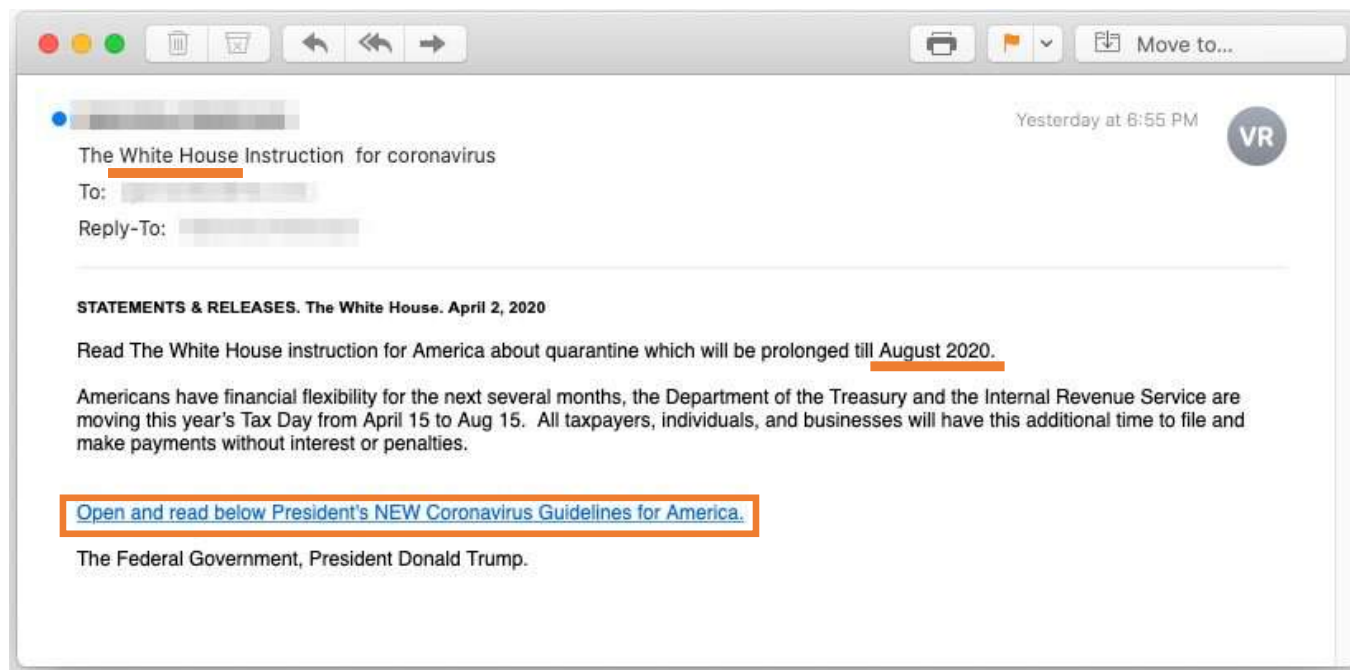
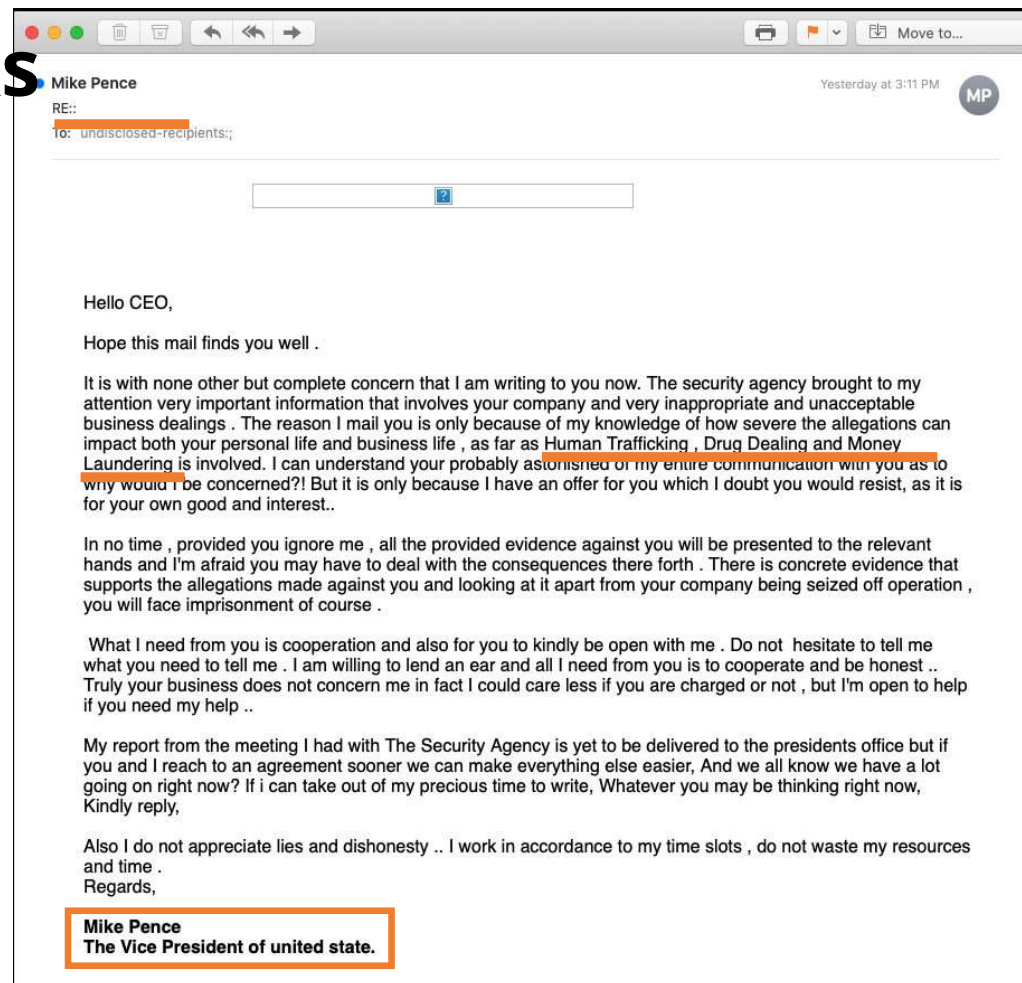


Image from: <https://www.bleepingcomputer.com/news/security/phishing-emails-impersonate-the-white-house-and-vp-mike-pence/>

# COVID-19 Focused Attacks

- Supposed to be coming from the VP of the United States.
- No subject line and full of grammar and spelling errors.
- The idea is open communication with the victim and convince them to pay a fine rather than face imprisonment.
- A lot of small business owners are already under great stress right now. This is an emotional attack.



# Clickbait: It's More Science Than You Think

They just wanted groceries... nobody expected THIS!



You WON'T Believe What They Caught The Cashiers Doing At This Supermarket... Watch CLOSELY!



- Leverages “pattern interruption” to create curiosity often based on the "information-gap" theory
- “Such information gaps produce the feeling of deprivation labeled curiosity. The curious individual is motivated to obtain the missing information to reduce or eliminate the feeling of deprivation.” - George Loewenstein, Carnegie Mellon
- Also leverages outrage and anger, which drives us to take action



# Working From Home



# Smart Devices and Privacy

- 3 in 10 (29%) households own at least 1 smart speaker at the end of 2019, an increase from 12% in 2017.
- The number of smart homes is at 41.3m in 2020, up 18.7% from the previous year.
- What about Siri, Bixby and Google digital assistants on phones?
- When enabled, these devices listen for keywords and commands. In addition, the audio can be sent to the manufacturer and audited by humans for improvement

# Smart Cameras

- Can you access any smart cameras in your home when you are away?
- Did you specifically open ports on your router to allow that access?
- Many smart cameras stream a video feed to their own servers, then you access that from the app or the web. Some license agreements state that employees might monitor these feeds on occasion for quality control or troubleshooting.
- Can your work be seen or heard by a smart camera?



# WiFi

- Many homes have WiFi, however they do not have the same protections in place as most corporate networks.
- If you live in a high-density area such as NYC or other urban spaces, a cheap \$99 device can be used to intercept WiFi signals if you are not looking for the signs.



## WiFi PINEAPPLE

\$99.99

The leading rogue access point and WiFi pentest toolkit for close access operations. Passive and active attacks analyze vulnerable and misconfigured devices.

The WiFi Pineapple® NANO and TETRA are the 6th generation pentest platforms from Hak5. Thoughtfully developed for mobile and persistent deployments, they build on over 10 years of WiFi attack expertise.

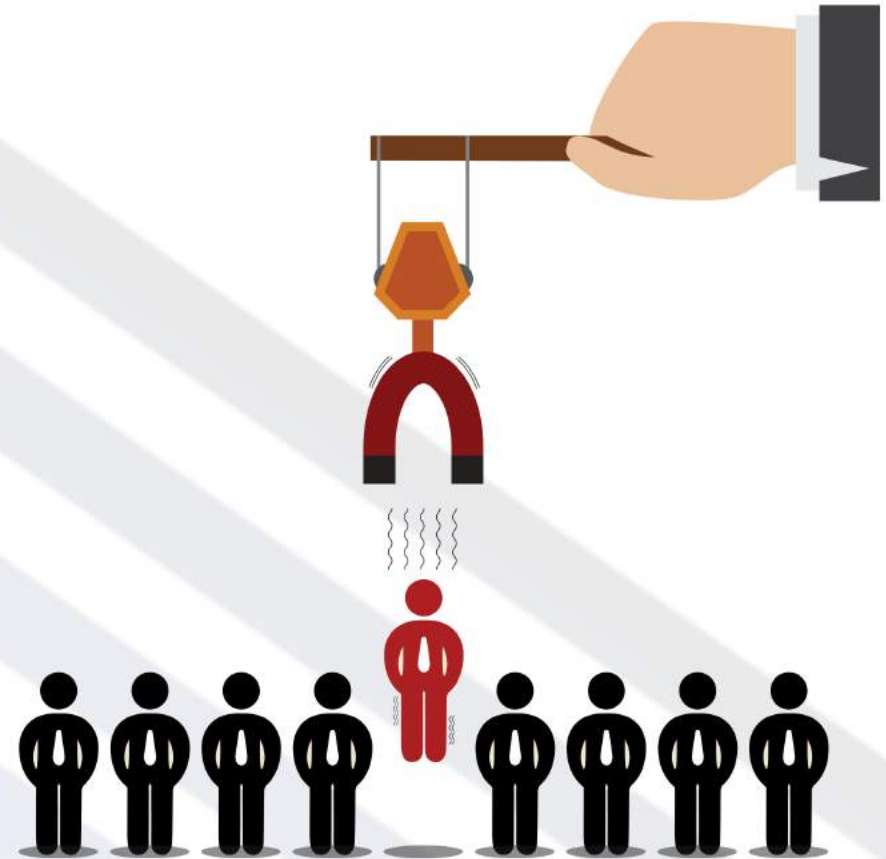
TETRA BASIC \$199.99	NANO BASIC \$99.99
<del>TETRA TACTICAL \$299.99</del>	<del>NANO TACTICAL \$129.99</del>

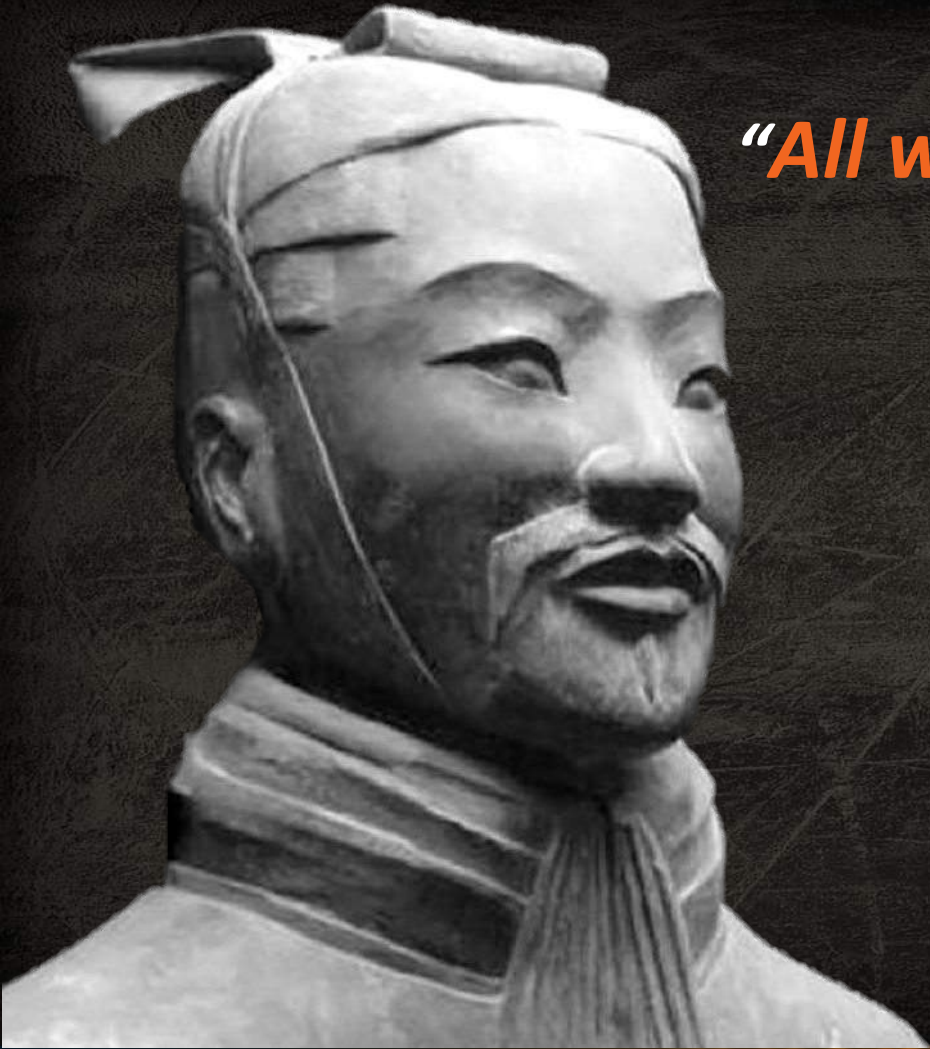
— 1 + [ADD TO CART](#)

# Our Mental State

- 2020 has been quite the year so far and attackers know this.
- People are under a great deal of stress, working conditions have changed and a lot of organizations were not prepared to do business from private homes.
- There has been an information overload, while also a lack of details that has people becoming mentally weary.
- Supply chains have been interrupted (e.g. toilet paper, alcohol and hand sanitizer) and people have started acting primal about this.

# Social Engineering





***“All warfare is based on deception.”***

- Sun Tzu, *The Art of War*



# Social Engineering

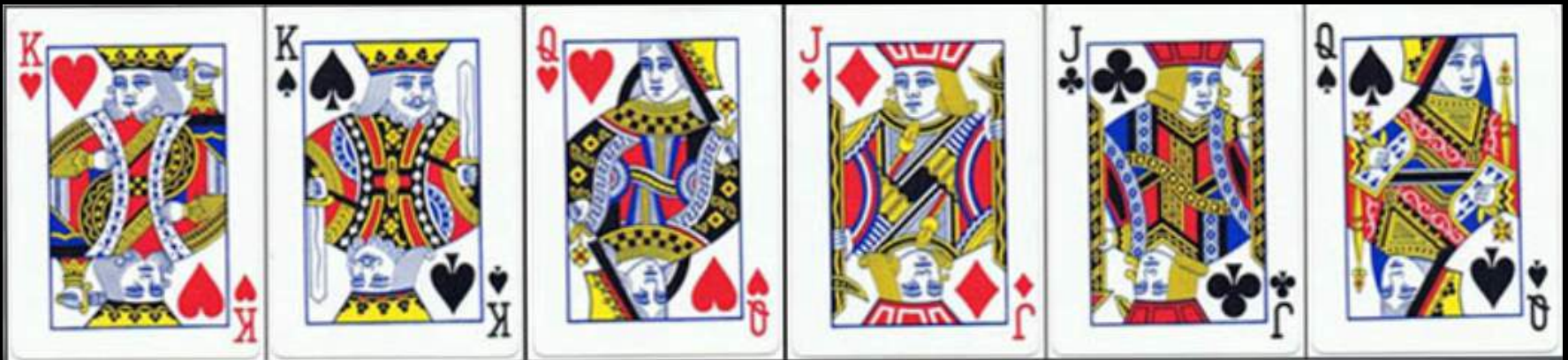
MagicalQuote

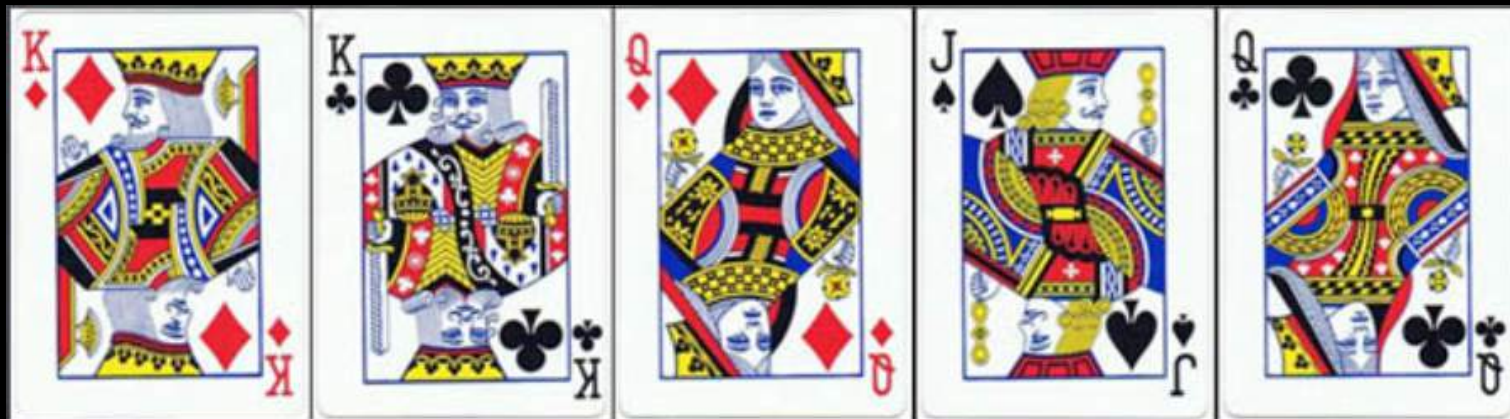
"I'VE NEVER FOUND IT HARD TO HACK MOST PEOPLE. IF YOU LISTEN TO THEM, WATCH THEM, THEIR VULNERABILITIES ARE LIKE A NEON SIGN SCREWED INTO THEIR HEADS."

Elliot Alderson



Pick a card!



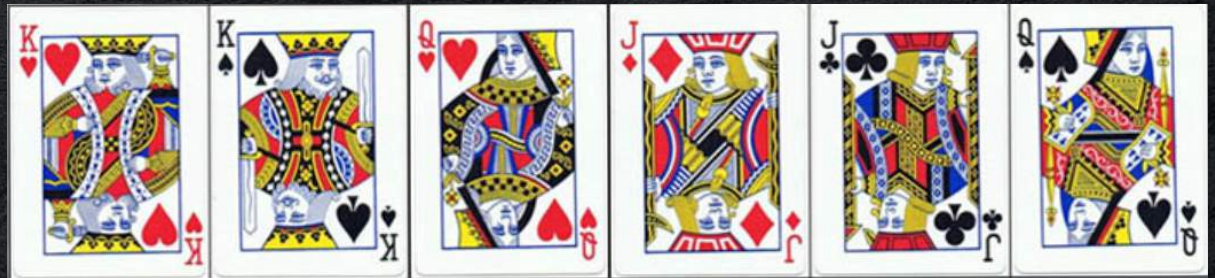


Is it gone now?

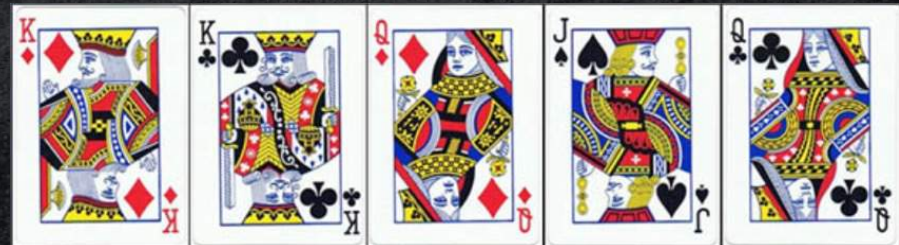


# How did we identify and remove your card?

Here's what we started with:



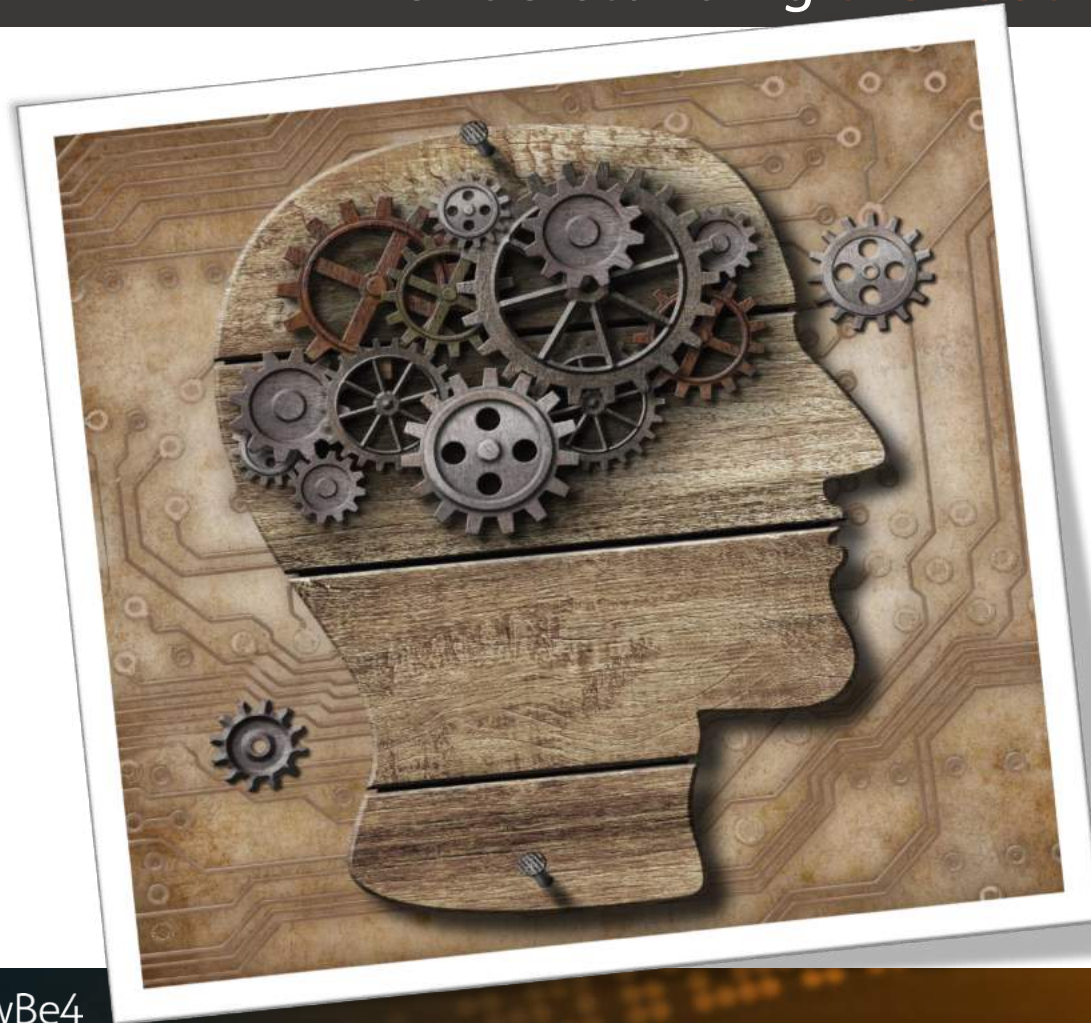
And here's what we ended with:



Yeah: These are two **completely different** sets of cards.  
But, by **rushing** you through the process, you probably didn't notice!



## Understanding *the root* of deception



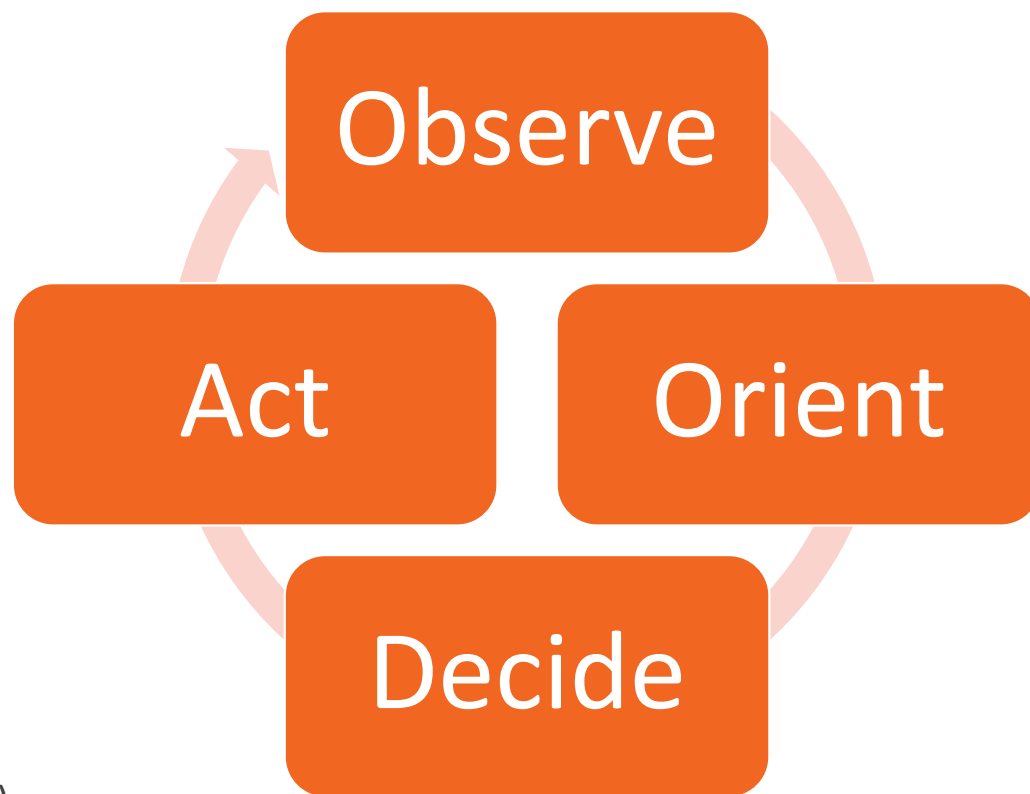
**Our brains' job  
to filter,  
interpret,  
and present  
'reality'**

**Spies, Magicians, Pickpockets, Con-artists  
and Cybercriminals all use the principles  
we are about to discuss**

# What is an OODA Loop and how do I mess with it?

*“In order to win, we should operate at a faster tempo or rhythm than our adversaries—or, **better yet, get inside [the] adversary's Observation-Orientation-Decision-Action time cycle or loop** ... Such activity will make us appear ambiguous (unpredictable) thereby generate confusion and disorder among our adversaries—since our adversaries will be unable to generate mental images or pictures that agree with the menacing, as well as faster transient rhythm or patterns, they are competing against.”*

-- John Boyd (creator of the OODA Loop)

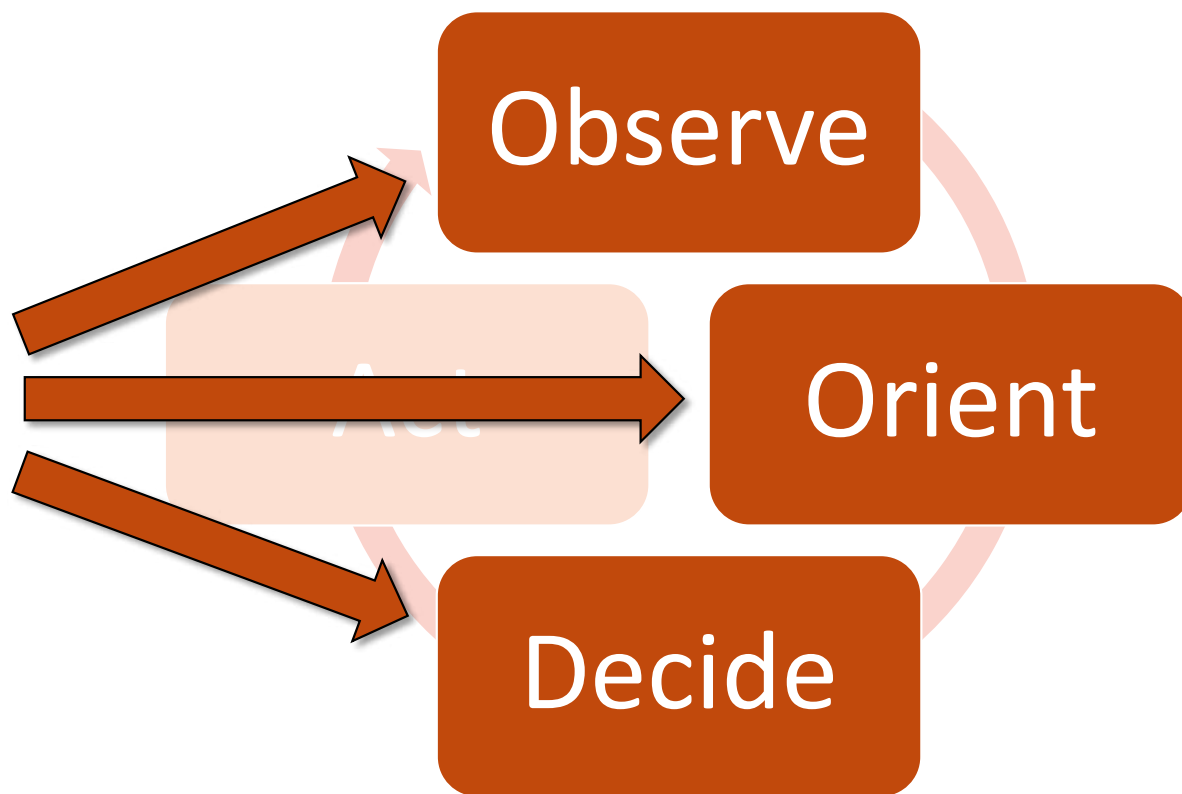


**The ideal situation for a social engineer is to hijack the OODA loop by creating a knee-jerk action that effectively bypasses the first three steps and results in the attacker's intended Action.**

# What is an OODA Loop and how do I mess with it?

*These are critical thinking steps*

*These all impact the final action*



# Future Expectations



# Business Email Compromise (The Phish Evolved)

- a.k.a. CEO Fraud
- No payload
- Low volume email targeting high value individuals
- Personalized
- Few to no 'traditional' spam/phishing tells (such as poor grammar, egregious misspellings, etc.)





# Business Email Compromise

## CEO Fraud hits B.C. lawyers for \$2 million

Stu Sjouwerman

Tweet Share Like 29 Share

Two B.C. law firms were targets of so-called **social engineering** frauds causing almost \$2 million in real estate and investment funds to be wired to people other than clients the firms believed they were sending money to.

In one case, a client had received instructions for a fund transfer in person. Before the transfer, though, the firm received an email purportedly from the client. It was, however, from the fraudster and directed the firms to wire funds to a different account.

The client never received the funds as the lawyer sent the funds to the fraudster's account. In this case, the email address used by the fraudster was identical to that used by the client.

The second firm redirected over \$1.5 million in investment funds held in trust for a corporate client raising capital in a securities transaction.





# Supply Chain and Invoice Fraud

- Criminals gain access to an email account and monitor incoming and outgoing emails.
- Bad actors create fake invoices or request payment to a different account.

# Two Unnamed US Companies Falls Victim to \$100 Million CEO Email Fraud

- This scam only surfaced as the U.S. government filed a civil forfeiture lawsuit in federal court in Manhattan seeking to recover tens of millions held in at least 20 bank accounts around the world.
- The scammer, a 48-year old Lithuanian managed to trick two American technology companies into wiring him **\$100 million**.
- What makes this remarkable is the amount of money he managed to score and the industry from which he stole it. The indictment specifically describes the companies in vague terms, but Apple, Cisco, HP and Facebook come to mind.




# More Social Media Influence

GEORGE FLOYD · Published June 5

## More than half of social media posts about George Floyd, police brutality, are from fake accounts: study

By Hollie McKay | Fox News



**Hollywood ramps up calls to defund police amid riots and looting**  
Fox Nation host David Webb pushes back on the 'dangerous' rhetoric of the Hollywood elites amid the George Floyd unrest.

As both peaceful protests and violent rioting continue to unfold across much of the country following the May 25 death of [George Floyd](#) while in Minneapolis police custody, an extensive social media assessment has found that the unrest has been significantly amplified by the monthslong [coronavirus](#) lockdown and that more than half the online narrative is being driven by fraudulent accounts and bots.

Source: <https://foxnews.com>

THE CORONAVIRUS CRISIS

## Researchers: Nearly Half Of Accounts Tweeting About Coronavirus Are Likely Bots

May 20, 2020 · 10:19 PM ET

BOBBY ALLYN



Researchers from Carnegie Mellon University say nearly half of all accounts tweeting about the coronavirus appear to be bot accounts.

Jeff Chisrup

Updated at 7:55 p.m. ET

Nearly half of the Twitter accounts spreading messages on the social media platform about the coronavirus pandemic are likely bots, researchers at Carnegie Mellon University said Wednesday.

Source: <https://www.npr.org/>



# Social Engineering

## **Are You Being Manipulated?**

-- understand the lures --

Greed

Curiosity

Self Interest

Urgency

Fear

Helpfulness



# Social Engineering Red Flags

## FROM

- I don't recognize the sender's email address as someone I **ordinarily communicate with**.
- This email is from **someone outside my organization and it's not related to my job responsibilities**.
- This email was sent from **someone inside the organization** or from a customer, vendor, or partner and is **very unusual or out of character**.
- Is the sender's email address from a **suspicious domain** (like micorsoft-support.com)?
- I **don't know the sender personally** and they **were not vouched for** by someone I trust.
- I **don't have a business relationship** nor any past communications with the sender.
- This is an **unexpected or unusual email** with an **embedded hyperlink** or an **attachment** from someone I haven't communicated with recently.

## TO

- I was cc'd on an email sent to one or more people, but I **don't personally know** the other people it was sent to.
- I received an email that was also sent to an **unusual mix of people**. For instance, it might be sent to a random group of people at my organization whose last names start with the same letter, or a whole list of unrelated addresses.

## HYPERLINKS

- I hover my mouse over a hyperlink that's displayed in the email message, but the **link-to address is for a different website**. (This is a **big red flag**.)
- I received an email that only has **long hyperlinks with no further information**, and the rest of the email is completely blank.
- I received an email with a **hyperlink that is a misspelling** of a known web site. For instance, [www.bankofamerica.com](http://www.bankofamerica.com) — the "m" is really two characters — "r" and "n."



## DATE

- Did I receive an email that I normally would get during regular business hours, but it was **sent at an unusual time** like 3 a.m.?

## SUBJECT

- Did I get an email with a subject line that is **irrelevant** or **does not match** the message content?
- Is the email message a reply to something I **never sent or requested**?

## ATTACHMENTS

- The sender included an email attachment that I **was not expecting** or that **makes no sense** in relation to the email message. (This sender doesn't ordinarily send me this type of attachment.)
- I see an attachment with a possibly **dangerous file type**. The only file type that is **always safe to click on** is a **.txt** file.

## CONTENT

- Is the sender asking me to click on a link or open an attachment to **avoid a negative consequence** or to **gain something of value**?
- Is the email **out of the ordinary**, or does it have **bad grammar** or **spelling errors**?
- Is the sender asking me to click a link or open up an attachment that **seems odd** or **illogical**?
- Do I have an **uncomfortable gut feeling** about the sender's request to open an attachment or click a link?
- Is the email asking me to look at a **compromising or embarrassing picture** of myself or someone I know?

# Questions?

**KnowBe4**  
Human error. Conquered.

Tel: 855-KNOWBE4 (566-9234) | [www.KnowBe4.com](http://www.KnowBe4.com) | [Sales@KnowBe4.com](mailto:Sales@KnowBe4.com)





# Thank You!

**Erich Kron – Security Awareness Advocate**  
**ErichK@KnowBe4.com | @KB4Erich | @ErichKron**

**KnowBe4**  
Human error. Conquered.

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# Conclusion

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[altaprorpg.com/postwebinar](http://altaprorpg.com/postwebinar)

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**Code #1 = ALTA**

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