

AWARENESS OF PHISHING SCENARIO

Name Of The Presenter: Vasileios Fotis

Month Year: Nov 2020

PHISHING DEFINITION





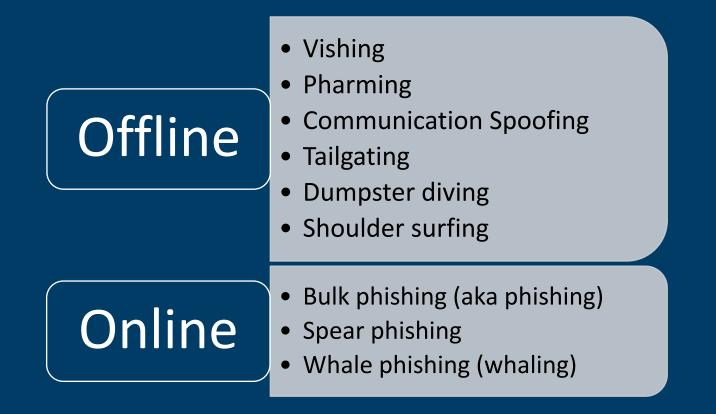
Definition

- Acquisition of confidential data
- Persuade to provide sensitive data
- Access account information and results in:
 - identity theft
 - ➢ financial loss
- Uses Social Engineering



➤ What is it?

Exploiting the generally trusting nature of people





🙆 Google - Windows Internet Explorer			
G) + @ http://adventuresinsecurity.com/	Google		
Eile Edit View Favorites Tools Help Google 8 → Search + W → ≫	• 🔦 • 🔵 tom.ol • 🏼 👂 • 🗍 Favorites 🍟		
🚖 🎄 🌈 Google			
Web Images Maps News Shopping Gmail more ▼			
GO	Advanced Search Preferences		
Google Search	I'm Feeling Lucky		
ىرى بىرى بىرى بىرى بىرى بىرى بىرى بىرى	a na a tha na an an an an antairte a thatach a tha an an that an an an an air an an air an an air an air an air		











































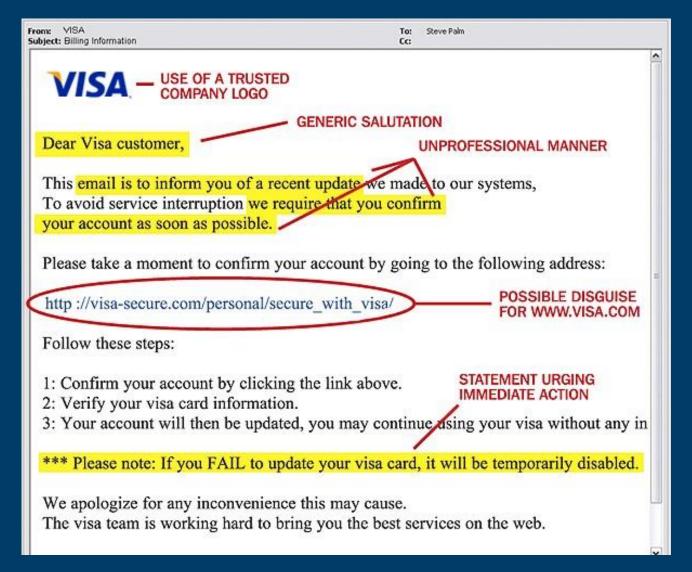




Categories of phishing

Bulk phishing (aka Phishing)

- Sending emails purporting to be from <u>reputable sources</u>
- General attack: it is like spam email, sent to a large pool of people





Categories of phishing

Spear Phishing

- sending emails

 ostensibly from a
 known or trusted
 <u>sender</u> to targeted
 individuals
- Specific Attack: sent from a person who we know in order to make the email more trustful





Categories of phishing

Whale phishing (Whaling)

- Sending email to wealthy, powerful, or prominent individuals.
- Specific Attack:

 addressed to people
 by whom it is possible
 take greater
 advantages because
 of their hierarchy
 position

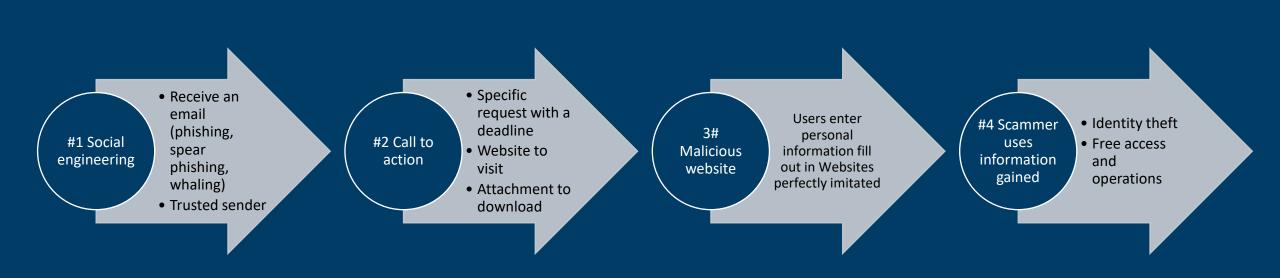




PHISHING ATTACK KILL CHAIN



Main stages of the phishing attack





Importance of social engineering in a phishing attack

- Enhance effectiveness of the attack itself by undertaking advantage from
 - ✓ human weak behaviours
 - ✓ habits
 - ✓ believes

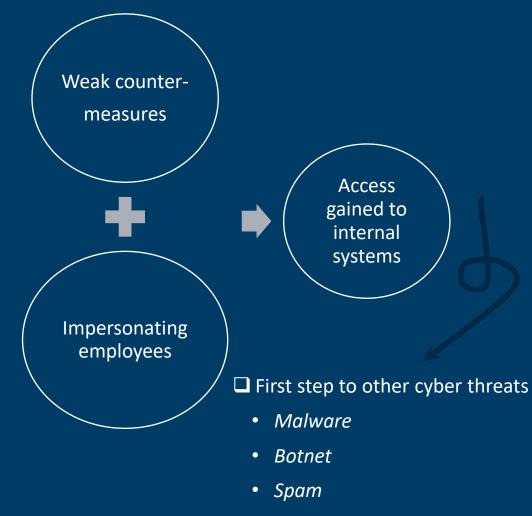
Humans are more likely to comply with - a request under certain circumstances



PHISHING IS STILL SO POPULAR



Who is using phishing and the need to use it



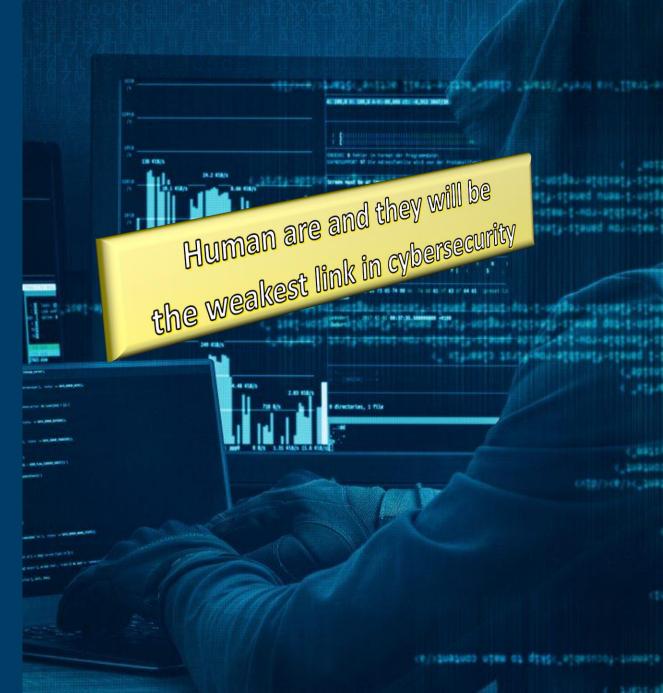
- Information leakage
- Data breaches



Phishing increasingly threat

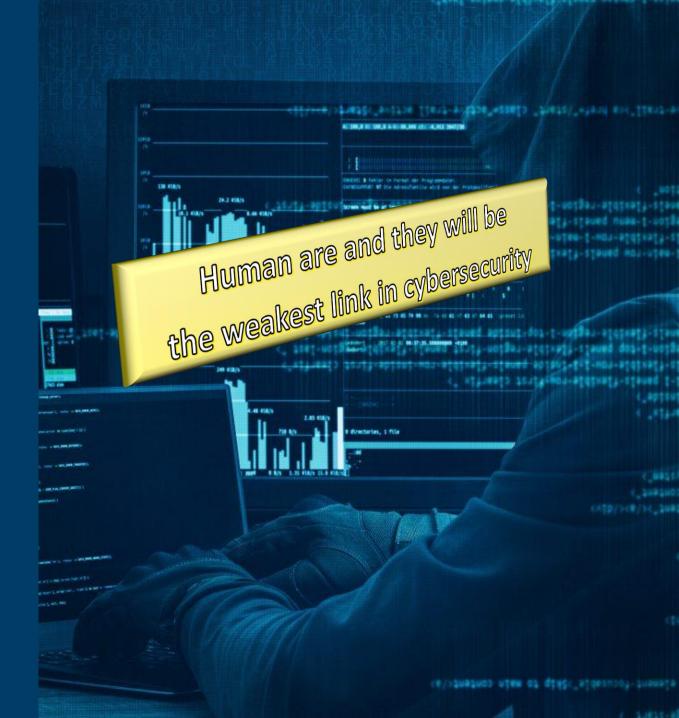
Employees have not enough awareness

- -> Attacks based on social engineering
- -> Only one person necessary to have a successful attack
- Sophisticated and targeted attacks Harder to detect



Latest statistics (2019-2020)

- Business processed are targeted
 76% of businesses have reported being a victim of a phishing attack
 - 33% of breaches included social attacks
 - 29% of breaches involved use of stolen credentials (Symantec)
 - 94% of malware was delivered via email (Verizon Data)

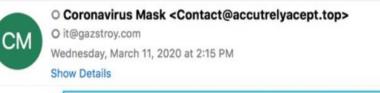


Latest Phishing Trends

Criminals use COVID19 phishing emails.

WHO reported that at the beginning of the pandemic everyone got spoofed

 Hackers hiding behind file sharing services: phishing emails impersonating Microsoft SharePoint and OneDrive. Anti-fog, anti-PM2.5, anti-poll, anti-dust, trend, anti-road violence mask





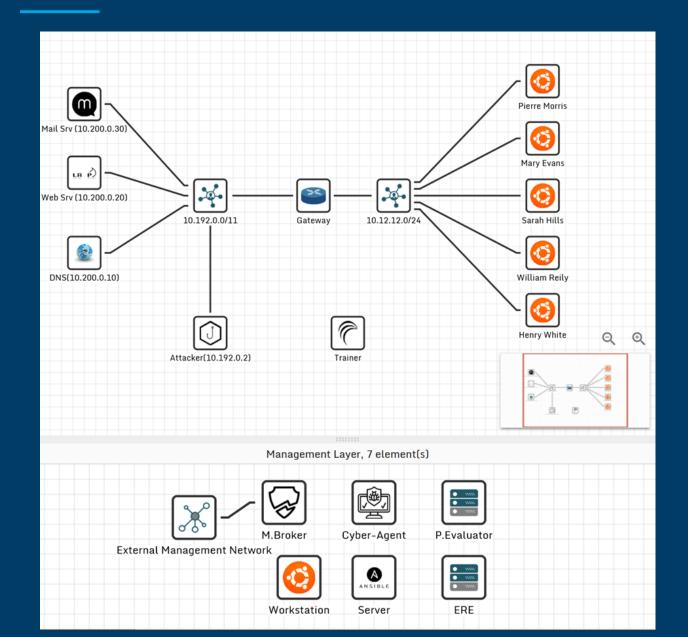
Discover the Highly Effective Anti-Pollution Clean Air Breathing Mask



CYBERWISER HANDS-ON SCENARIO



Phishing attack exercise





User actions to identify Phishing indicators

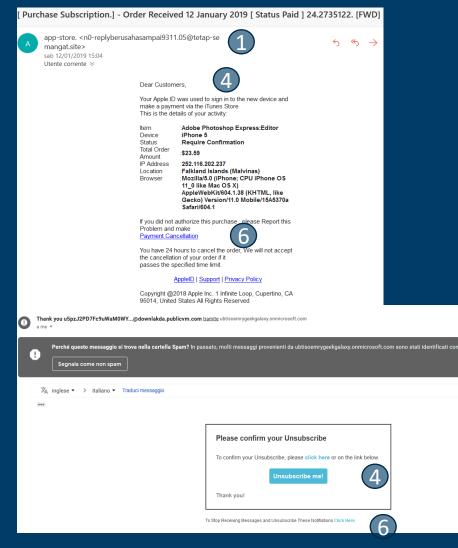
	Re:						
	vinghji25@q.com gio 14/03/2019 08:44 Petra %	5		\rightarrow			
	Sent: Thu, 14						
	I NEED YOUR HELP						
В	bnl.it <4yh177@private.bnl.it> ven 11/01/2019 13:47 Utente corrente 🛛						
	ATT00001.bin 13 KB						
	Gentile Cliente, cons88@hotmail.it						
	Ti informiamo che avete il diritto a ricevere un rimborso BNL da noi per un importo di 43,00 € è disponibile online.						

ACCEDI AL SERVIZIO : <u>https://online.bnl.it</u> /login?ssl=aggiornare?id=cons88@hotmail.it

- 1. Verify the sender's address
- 2. Verify the recipient's address
- 3. Hover over the link
- 4. Don't trust a company you don't do business with
- 5. Notice grammatical error
- 6. Don't click on any links
- 7. Don't open any attachments



Identify Phishing indicators



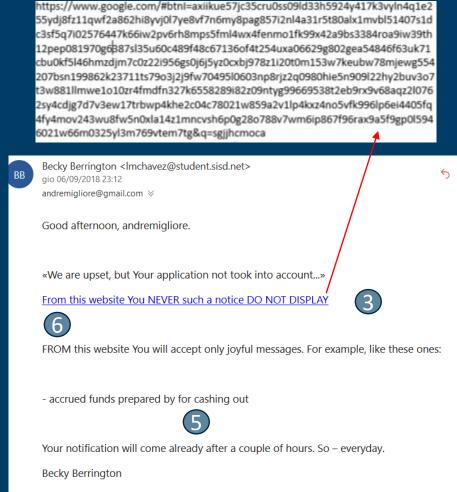
- 1. Verify the sender's address
- 2. Verify the recipient's address
- 3. Hover over the link
- 4. Don't trust a company you don't do business with
- 5. Notice grammatical error
- 6. Don't click on any links

mar 5

7. Don't open any attachments



Identify Phishing indicators



26

- 1. Verify the sender's address
- 2. Verify the recipient's address
- 3. Hover over the link
- 4. Don't trust a company you don't do business with
- 5. Notice grammatical error
- 6. Don't click on any links
- 7. Don't open any attachments



Identify Phishing indicators



- 1. Verify the sender's address
- 2. Verify the recipient's address
- 3. Hover over the link
- 4. Don't trust a company you don't do business with
- 5. Notice grammatical error
- 6. Don't click on any links
- 7. Don't open any attachments



User actions evaluation on handling an email

- Open an email: +1
- **Open** a link or an attachment in a legitimate email: +1
- **Report** a malicious email to the SOC: +1
- **Delete** of a malicious email: +1
- **Open** a *link* or an *attachment* in a malicious email: -1
- **Report** a legitimate email to the SOC: -1
- **Delete** of a legitimate email: -1



User Performance evaluation tool

Flags	× +	S.			
← → ♂ @ 0	0 10.254.0.5:90	000/userl			
CYBERWISER.eu Cyber Range & Capacity Building in Cybersecurity					
Performance E	Evaluator	Evaluation	Pierre Morris	Mary Sarah Evans Hills	William Henry Reilly White
8 Right Actions	4 Wrong Ac	tions You	r current sc	ore is: 0.5 out of	5
Name		0			
		Open	Clicked	Reported	Deleted
IT1_PHISHING		False	False	False	False
IT1_PHISHING					
-		False	False	False	False
IT2_PHISHING		False True	False True	False False	False False



Economic Risk evaluation

Qualitative Quar	ntitative Indicators Info						
Risk Status Quantitative							
	Overall risk status:						
	Typical Loss: 91,173.40 EUR						
	Worst Case: 268,625.18 EUR						
Events: 5.452							
Threat:	WRP11: Phising	Typical Loss: 91,173.40 EUR 💌					
Risk WRP11-R1:	Hacker gains access to confidential company data A1: Confidientality	Typical Loss: 308.49 EUR 💌					
Target Machine	10.200.0.20	Typical Loss: 308.49 EUR 💌					
Risk WRP11-R2:	Employee loses access to company data A2: Availability	Typical Loss: 90,848.82 EUR 👻					
Risk WRP11-R3:	SOC is occupied with non-malicious emails A3: Funcionality	Typical Loss: 16.09 EUR 👻					



Phishing attack exercise

- Identify phishing indicators in an email.
- Distinguish phishing from legitimate emails.
- Understand the right actions to be taken when receiving a phishing email.
- Understand the importance of having training on cyber risks topics.



Exercise presentation



