



Social Engineering

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What is Social Engineering

- ▶ Social Engineering is the art of manipulating users to get personal information that can be used to get passwords or access to personal accounts

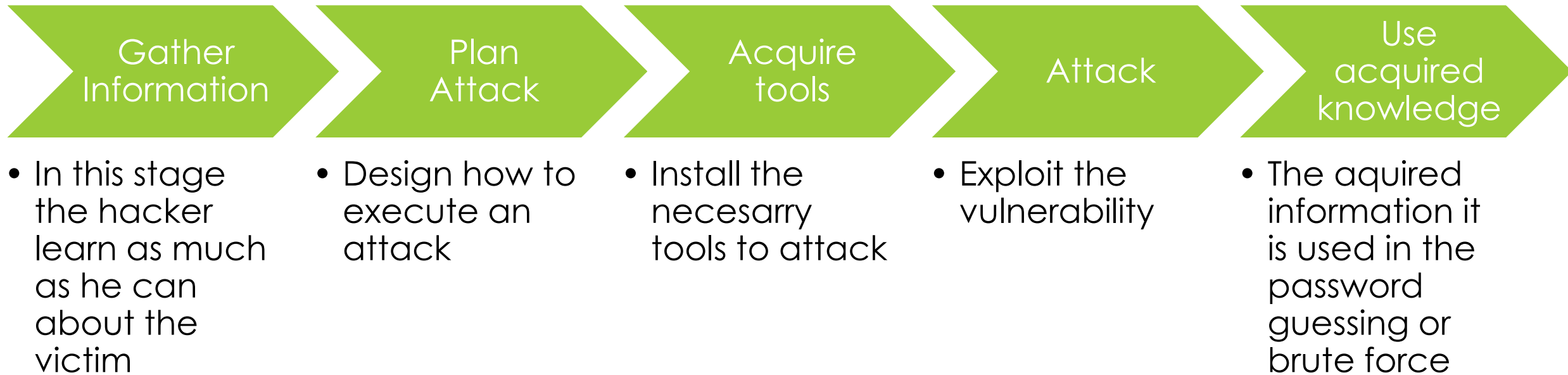
What is Social Engineering

- ▶ All Social Engineering techniques are based on ***bugs in human hardware***.
- ▶ It doesn't matter how much money you've invested in security, if you can trick the sysadmin to give you all the passwords!

What is Social Engineering

- ▶ *The most used social engineering attacks are made by using the phone (**vishing**).*
- ▶ <https://www.youtube.com/watch?v=lc7scxvKQOo&t=19s>
- ▶ Other examples

The process



Techniques

- ▶ Familiarity exploit
- ▶ Intimidating circumstances
- ▶ Phishing and vishing
- ▶ Tailgating
- ▶ Exploiting human curiosity
- ▶ Exploiting human greed

Techniques

- ▶ **Pretexting** – to be another person
- ▶ **Baiting** – CDs, USB memory, etc.
- ▶ **Quid pro quo** – questionnaire.

Real scenarios

► PayPal Account

- Your transaction is successfully for your payment to Apple Store (Payment for iPhone 7 : \$769)



Transaction ID: 9A090161RY1905356

Notice Your PayPal Account

Dear Costumer,

Case ID Number : PP-007-318-238-678

Your PayPal Account has temporarily **Locked!** We Detect unauthorized Login Attempts to your PayPal Account from another IP address. (218.17.XXX.XXX)

You have sent a payment of \$ 769 USD to Apple Store

Seller
Apple Store

Instructions to merchant
You have not entered any instructions.

Information	Unit charge	Quantity	amount
Apple iPhone 7	\$769 USD	1	\$769 USD
Subtotal			\$769 USD
Total			\$769 USD
Payment			\$769 USD
Payments sent to support@apple.com			

Please re-confirm your identity today or your account will be locked, to concerns we have for the safety and integrity of the PayPal community.

To re-confirm your PayPal account, We recommend that you go to

[Resolve This Problem](#)

Real scenarios

- ▶ Email address

● **PayPal** <donotreply@resolution-center.com>

- ▶ The redirect link

www.btw-marketing.de/securelink.la.php



Tools and instruments

- ▶ **Kali SET**
- ▶ **Ghost Phisher**
- ▶ **Maltego**

Countermeasures

- ▶ **Training for employees;**
- ▶ **Security protocols** (policies and procedures);
- ▶ **Periodically tests;**

References

- ▶ <https://www.youtube.com/watch?v=lc7scxvKQOo&t=19s>
- ▶ *Francois Mouton, Louise Leenen, H.S. Venter*, Social engineering attack examples, templates and scenarios, computers & security 59 (2016) pp. 186–209.
- ▶ Waldo Rocha Flores, Mathias Ekstedt, Shaping intention to resist social engineering through transformational leadership, information security culture and awareness, computers & security 59 (2016), pp. 26–44.

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