

Susan Fowler

Social Engineering

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- Background
 - BS Information Assurance
 - MS Computer and Information Science
 - SANS Immersion Academy for Women
 - Currently a Forensic Examiner



What is social engineering?

- It is the art of tricking you do something you shouldn't do or to give up your confidential information



- Image source: Lynda.com

Twitter Hacked



Twitter Hacked

Sent: Tue 4/23/2013 12:12 PM

From: [An AP staffer]

Subject: News

Hello,

Please read the following article, it's very important :

<http://www.washingtonpost.com/blogs/worldviews/wp/2013/04/23/>

[A different AP staffer]

Associated Press

San Diego

mobile [removed]

- Image source: Opendata security.io



Why does it work?

- Social engineering is about exploiting your natural tendency to trust or to help others
- People want to trust others
- People want to be helpful



Social engineering methods

- Phishing
- Spear phishing
- Smishing
- Vishing
- Baiting
- Scareware
- Typo squatting
- Social media request



- Image source:
- [Malwarebytes.com](https://malwarebytes.com)



Email Phishing statistics



- Image source: [Broadband.net](https://www.broadband.net)



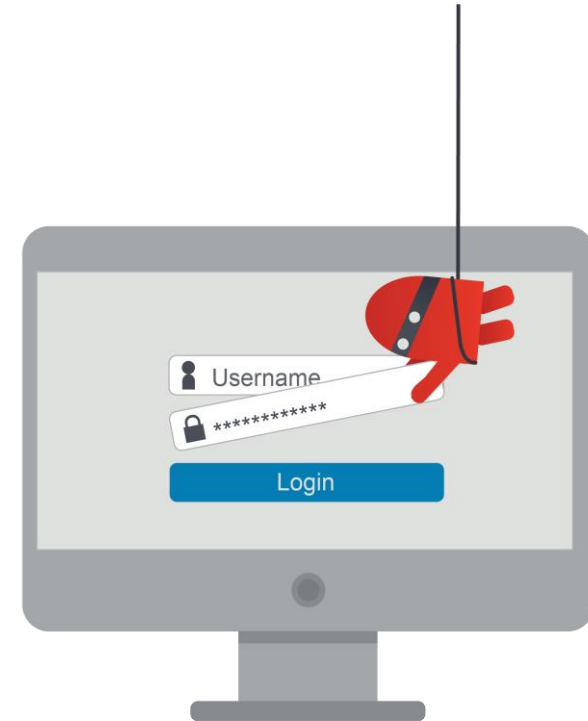
How to spot a Social Engineering attack

- Are they trying to make me anxious?
- Does this message come from a legitimate sender?
- Look at the email address carefully
 - 'user@**examle.com**' instead of 'user@**example.com**'
- Does the website I'm on look right?
- Does this sound too good to be true?



How to spot a Social Engineering attack

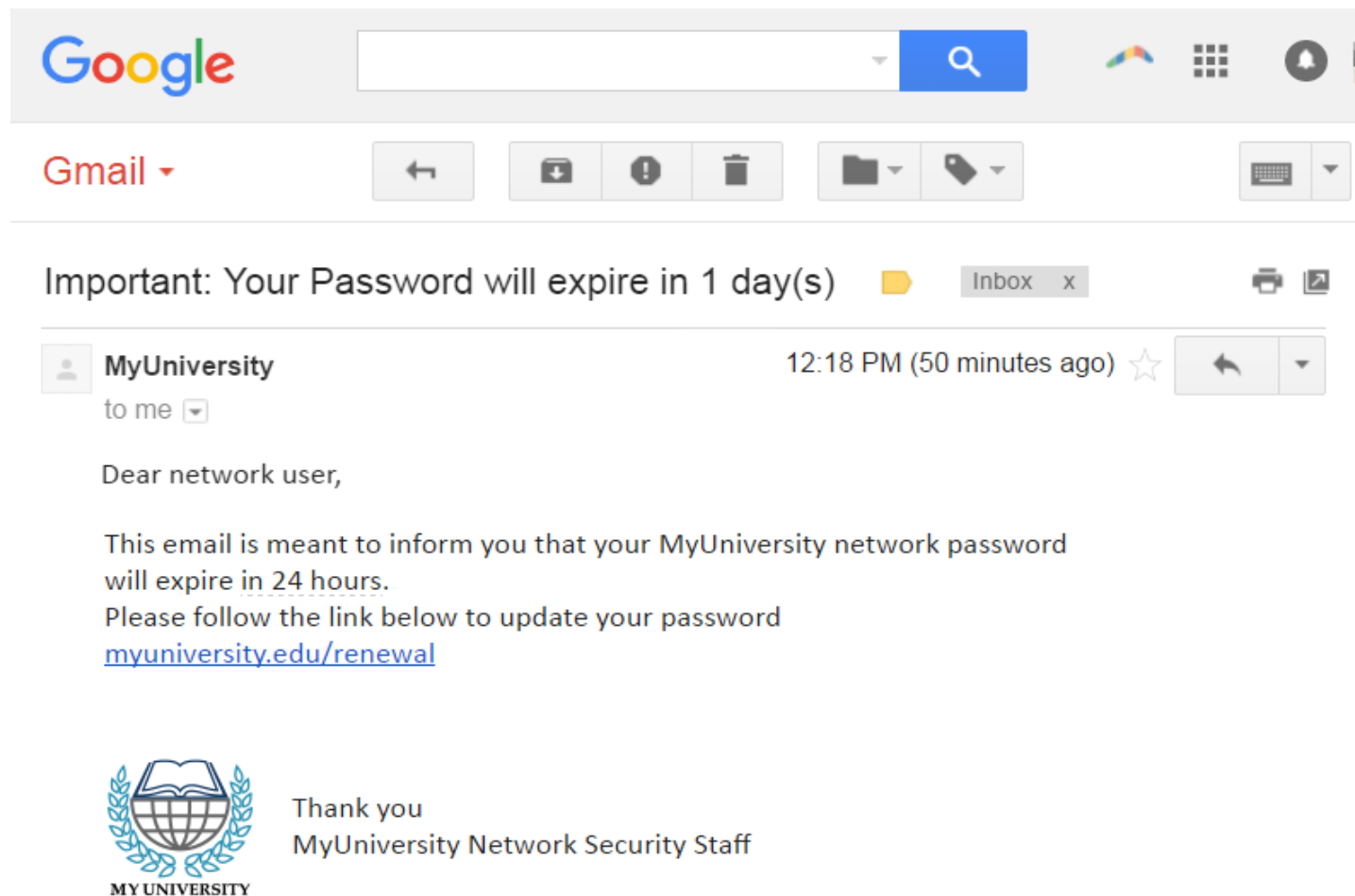
- Are there links or attachments?
- Can the sender prove who they are?
- Are they asking for information they should already have?



- Image source:
- SANS.com



How does it work?

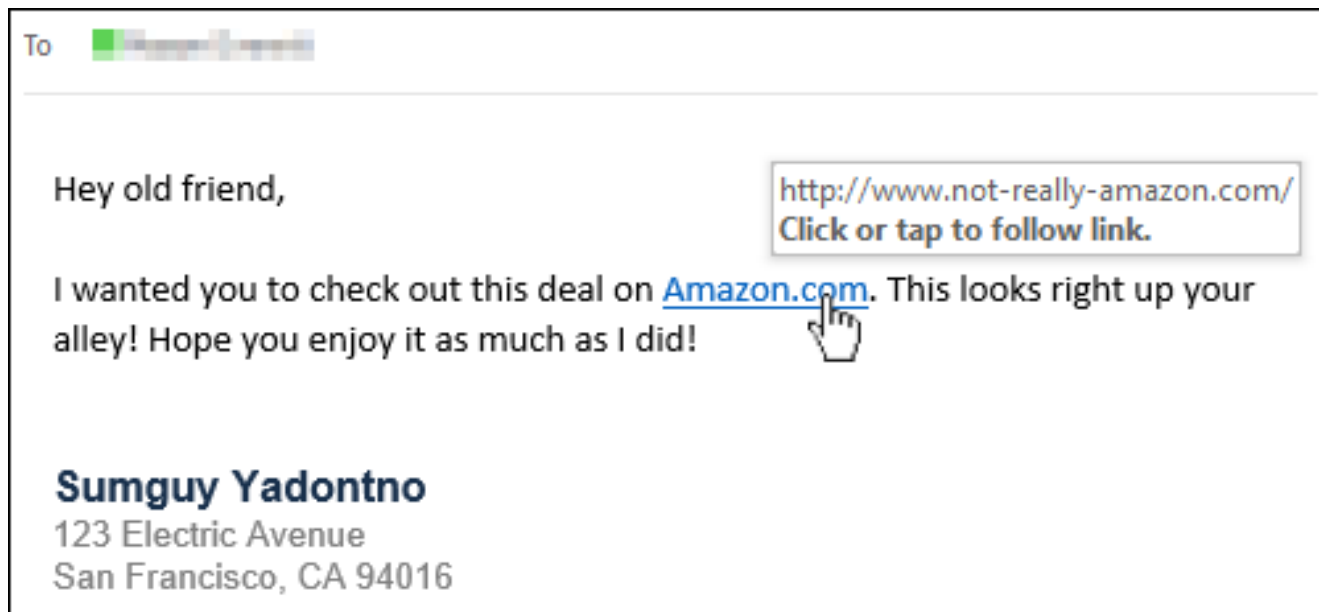


Source:

Imperva.com 2020



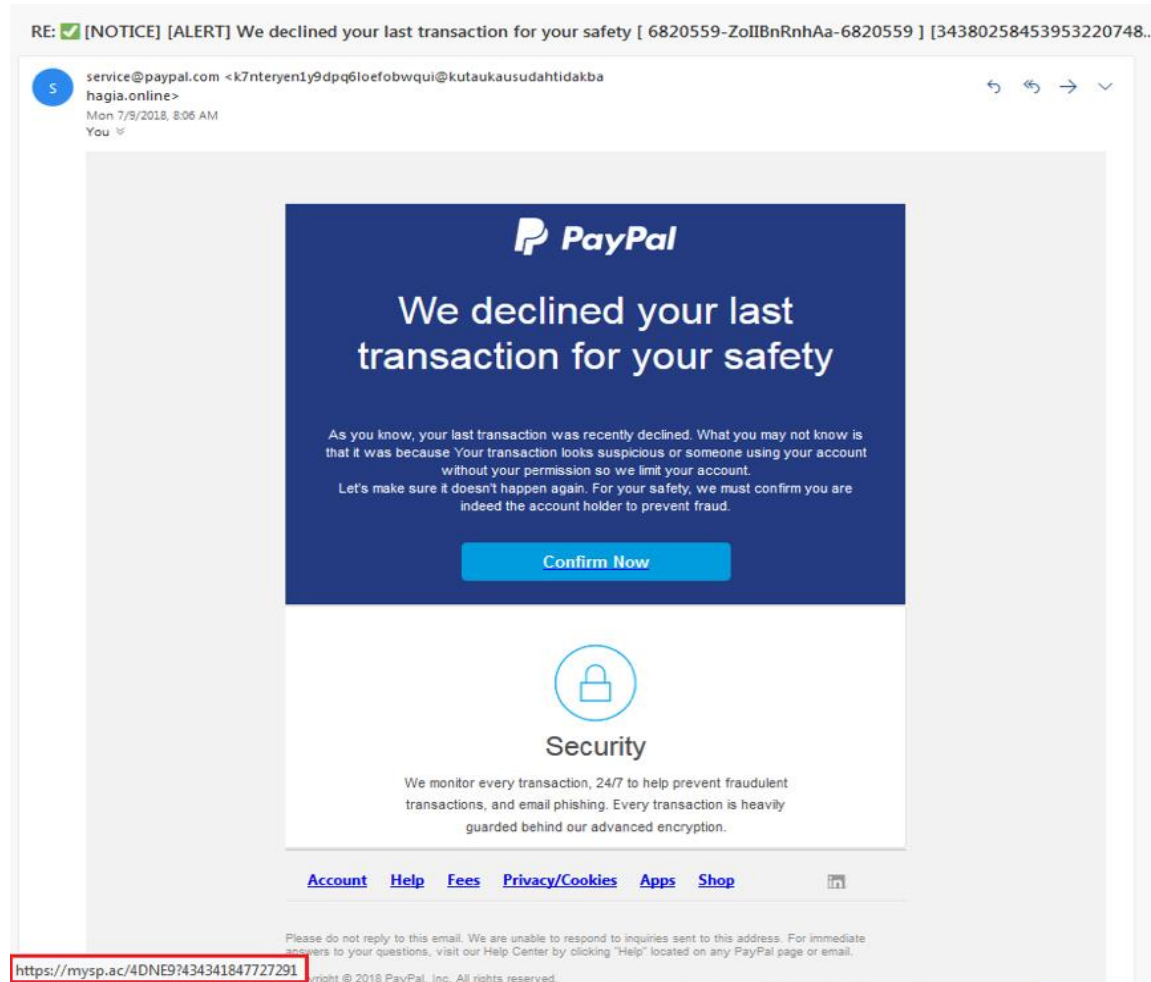
How does it work?



Source:
SecantCorp.com



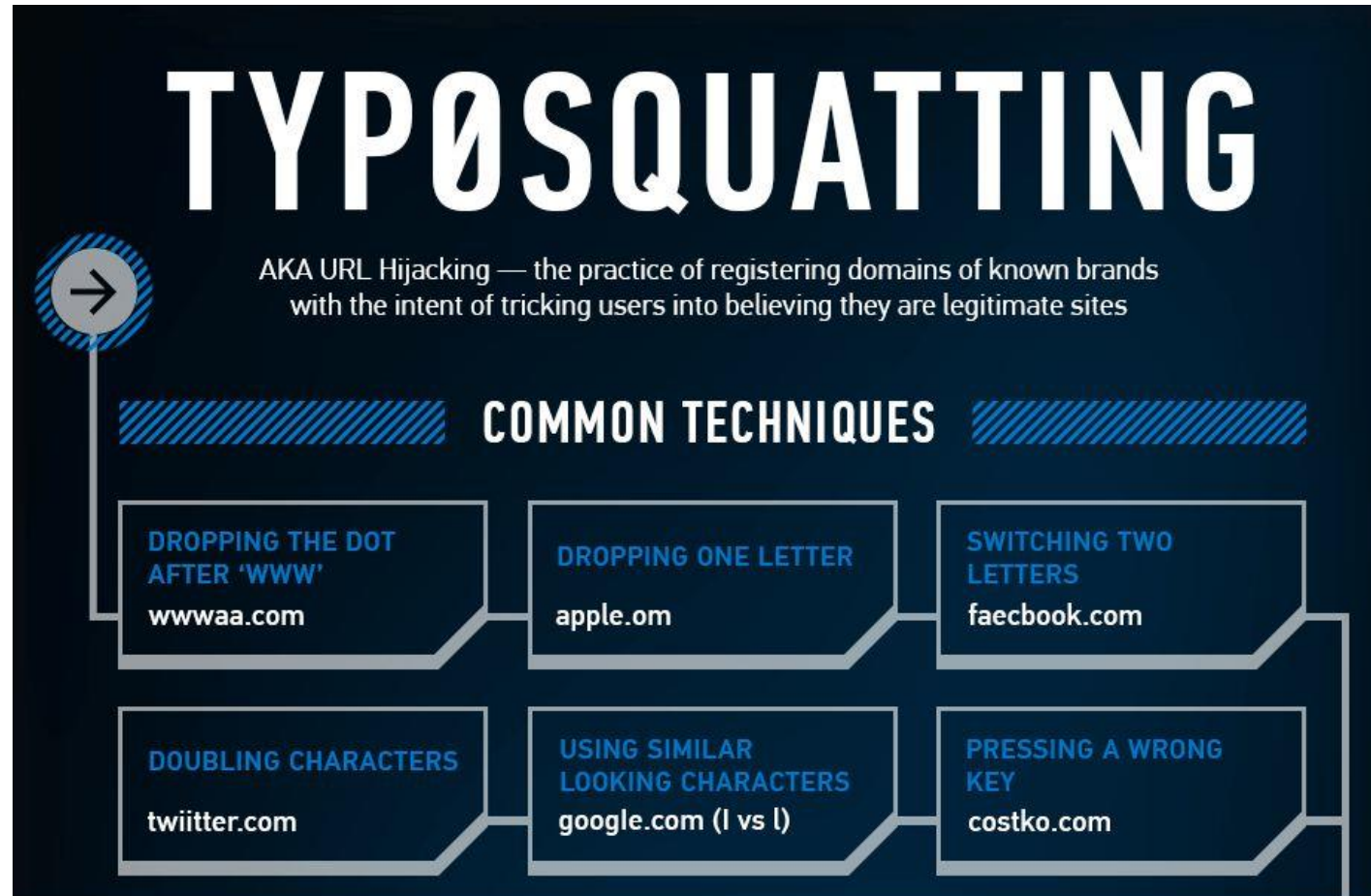
How does it work?



Source:
Malwarebytes.com



How does it work?

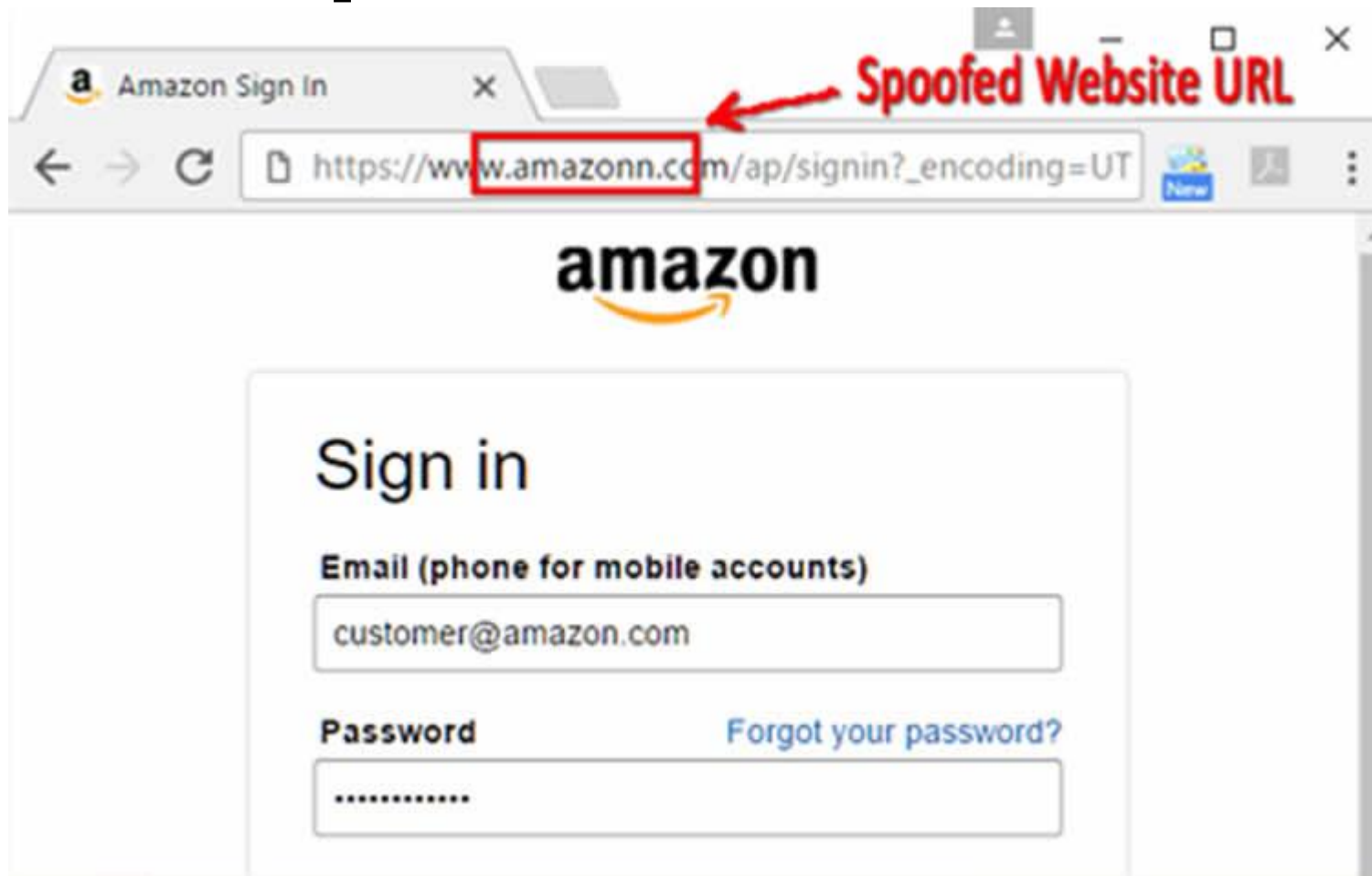


Source: <https://www.anomali.com/resources/infographics/typosquatting-more-than-just-a-typo>

Source:
CyberHoot.com



Example of fake website



- Image source: Broadbandsearch.net



Most impersonated companies

The most impersonated brands overall for Q1 2020 were:



- Image source: [Tessian.com](https://tessian.com)



What can you do?

- Slow down – If the message wants you to act fast, ask yourself why.
- Find the facts – If you are not expecting an email, be suspicious
- Be cautious of links – Hovering over a link will show you the actual URL at the bottom of the page but can still be spoofed by a good fake.
- Even if a sender appears to be someone you know, if you are not expecting an email containing an attachment or a link, it's a good idea to check with the sender before downloading or opening.
- Be wary of messages containing bad spelling or grammar
- If you don't remember entering a contest, you probably can't win the prize.



What can you do?

- Be aware of downloading anything you weren't expecting or know who sent it to you
- Anything from a foreign country, such as a lottery notice or unexpected money from someone you don't know will almost always be a scam
- Don't give out your username and password to a form from an email
- Never give out information to calls, texts, messages or emails that you do not know and trust
- If someone calls you asking you to verify information about yourself, do not provide it to them.



What can you do?

Social media

- Be careful and think about what you are posting to social media.
- Accept connections on social media from people you know and trust.
- Always make sure you sign out of social media accounts if you are using a public computer.



What can you do?

Social Media

- Avoid sharing the following on social media:
 - Full names
 - Pet's name
 - Birthday
 - Hometown
 - Schools and graduation dates
 - Clubs, sports teams and hobbies



- Image source:
Terranovasecurity.com

Bottom line

- Beware of threats – keep your personal information private
- Know common social engineering tactics
- Share the knowledge with your family and friends, especially to young and elderly users

“Social engineering – The art of replacing what works with what sounds good” - Thomas Sowell



Questions?

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