

SOCIAL ENGINEERING

HOW AND WHY IT WORKS

(A “SOFT” KILL IS STILL A KILL)

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OVERVIEW

- **SOCIAL ENGINEERING (SE) DEFINED / INTRODUCTION**
- **PSYCHOLOGICAL FACTORS**
- **DEFENSES / COUNTERMEASURES**
- **CONCLUSION**

SOCIAL ENGINEERING DEFINED

- WEBSTER:

THE PRACTICE OF MAKING LAWS OR USING OTHER METHODS TO INFLUENCE PUBLIC OPINION AND SOLVE SOCIAL PROBLEMS OR IMPROVE SOCIAL CONDITIONS

MANAGEMENT OF HUMAN BEINGS IN ACCORDANCE WITH THEIR PLACE AND FUNCTION IN SOCIETY

- WIKI:

IN THE CONTEXT OF CYBERSECURITY, REFERS PSYCHOLOGICAL MANIPULATION OF PEOPLE INTO PERFORMING ACTIONS OR DIVULGING CONFIDENTIAL INFORMATION

INTRODUCTION

- EXPLOIT METHOD
- HUMAN IS AS HUMAN DOES
- WHO'S ON THE OTHER SIDE?

SCRIPT KIDDIE?

INDUSTRIAL ESPIONAGE?

TERRORIST / ADVERSARY?

WEAPONS OF INFLUENCE

- DR ROBERT B. CALDINI -- CMCT
 - *INFLUENCE: THE PSYCHOLOGY OF PERSUASION*
- SIX PSYCHOLOGICAL PRINCIPLES / “PILLARS”
 - RECIPROCITY
 - COMMITMENT / CONSISTENCY
 - SOCIAL PROOF
 - AUTHORITY
 - LIKING / SIMILARITY
 - SCARCITY

RECIPROCITY

- **RULE OF OBLIGATION**
- **NO EXCEPTION IN HUMAN SOCIETY**
- **BENEFACTOR BEFORE BEGGAR STRATEGY**
- **REJECTION THEN RETREAT TECHNIQUE
("CONCESSION")**
- **DON'T BE OUTLANDISH**

COMMITMENT / CONSISTENCY

- **RULE OF DISSONANCE /
RULE OF EXPECTATION**
- **COMMITMENT IS KEY**
- **THE MORE PUBLIC, THE BETTER**
- **ALTERED SELF - IMAGE**

SOCIAL PROOF

- **RULE OF SOCIAL VALIDATION**
- **UNCERTAINTY**
- **“PLURALISTIC IGNORANCE”**
- **FUNDAMENTAL DECISION ON LIFE**

LIKING / SIMILARITY

- RULE OF CONNECTIVITY
- HALO EFFECT
- OPINIONS, LIFESTYLE, SCHOOL, ETC.
- DIVIDE, *COMPETE*, ... AND CONQUER
- COOPERATE


AUTHORITY

- **DEEP SEATED SENSE OF DUTY**
- **DON'T DEFY THE BOSS**
- **APPEARANCE IS ENOUGH**

SCARCITY

- RULE OF SCARCITY

- ITS ABOUT LOSS, NOT GAIN

- AVAILABILITY  = VALUE 

- PSYCHOLOGICAL REACTANCE THEORY

SE TACTICS, TECHNIQUES, AND PROCEDURES (TTP)

- SEX
- PHONE
- DUMPSTER DIVING
- SNAIL MAIL / SURVEYS / INSERTED MEMOS / THUMBS DRIVES
- PHYSICAL ACCESS

SE TACTICS, TECHNIQUES, AND PROCEDURES (TTP)

- POP UP WINDOW
- IRC / CHAT ROOMS
- SPAM / CHAIN LETTERS / HOAXES
- WEBSITES

SE SCENARIOS

- **SMALL ENGINEERING FIRM**
- **INSURANCE COMPANY REPORT**
- **IN PRINT / ONLINE / OPEN SOURCES**
- **STARBUCKS**
- **STUDENT: YOUR BOSS'S BOSS, ...**

SE SCENARIOS

- **I'M FROM "X" THE MAGAZINE**
- **I'M A CONSULTANT, ...**
- **CUSTOMER / SUPPLIER / VENDOR**
- **"I'M MR / MS X's EXEC ASSISTANT**
- **"I'M FROM THE FLORIDA OFFICE"**

DEFENSES / COUNTERMEASURES

- **RECIPROCITY: SEE IT, CALL IT**
- **COMMITMENT / CONSISTENCY: GUT**
- **SOCIAL PROOF: BAD DATA**
- **LIKING / SIMILARITY: SO SUDDEN**
- **AUTHORITY: TRUE EXPERT? GAIN?**
- **SCARCITY: POSSESS VS UTILITY**

SOCIAL ENGINEERING IN 2023

- **CHRIS HADNAGY:** www.social-engineer.org
CEO of Social Engineer, LLC

- **TRAINING:**
 - ADVANCED PRACTICAL SE TRAINING -- SEPP
 - 2 - DAY SOCIAL ENGINEERING BOOTCAMP
 - ADVANCED OPEN SOURCE INFORMATION FOR SE

- **BOOKS**
 - PHISHING DARK WATERS: The Offensive and Defensive Sides of Malicious Emails
 - SOCIAL ENGINEERING: The Art of Human Hacking
 - UNMASKING THE SOCIAL ENGINEER: The Human Element of Security

SOCIAL ENGINEERING EXPERTS

- KEVIN MITNICK
- BADIR BROTHERS
- JB SNYDER (BANCSEC, INC)
- DAVID BANNON
- PETE HERZOG (ISECOM)
- PETER FOSTER
- AARON CRAWFORD
- ~~FRANK ABAGNALE ???~~
- STEVEN JAY RUSSELL

GRAB A SNACK OR DINNER, AND A DRINK!

The image shows a YouTube search results page for the query "social engineering". The page layout includes a left-hand navigation menu with options like Home, Shorts, Subscriptions, Library, and History. The search bar at the top contains the text "social engineering". Three video results are displayed:

- What is Social Engineering?** by GraVoc, 274K views, 5 years ago. The video thumbnail features a cartoon character in a server room with the text "WHAT IS SOCIAL ENGINEERING?".
- How To Build Trust with Anyone Using Social Engineering | Christopher Hadnagy | Art of Charm** by Art of Charm, 3.4K views, 1 year ago. The thumbnail shows Christopher Hadnagy with the text "How to Build Trust" and "EPISODE #923".
- What is Social Engineering? | Proofpoint Cybersecurity Education Series** by Proofpoint, 41K views, 3 years ago. The thumbnail shows a person in a server room with the text "proofpoint." and "What is social engineering?".

Each video result includes a title, view count, upload date, channel name, and a brief description. The first video also has a chapter bar showing "Intro | Phishing | Physical Breach | Pretext Calling".

~~**SOCIAL ENGINEERING**~~

MISSION ACCOMPLISHMENT

FOR CYBER PROFESSIONALS

- **RECIPROCITY**
- **COMMITMENT / CONSISTENCY**
- **SOCIAL PROOF**
- **AUTHORITY**
- **LIKING / SIMILARITY**
- **SCARCITY**

THE LINCHPIN?

- **“On the corporate side, as an employee, it all comes down to user awareness and education”**
- **“The best means of defense, in this case (SE), is education”**
- **“The simple answer to preventing these attacks is education”**

THE LINCHPIN?

- **“The level of protection against such attackers (SE) depends upon the amount of education that employees have about the subject”**
- **“The best defense is simple: it’s education, training, and awareness”**
- **“Continued awareness throughout the organization is key to ongoing protection”**

THE LINCHPIN!

LEADERSHIP

BY SENIOR MANAGEMENT

SUMMARY

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QUESTIONS?

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