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Social Engineering

Techniques, Methods, Tools & Mitigation

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Agenda

- **Social Engineering Methodology**
- **Attacks & Techniques**
- **Demos**
- **Tools of the trade**
- **Prevention Methods and Advice**

What is Social Engineering?

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Invest in Products…

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Is Our Security Focus Wrong?

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Why Security Fail???

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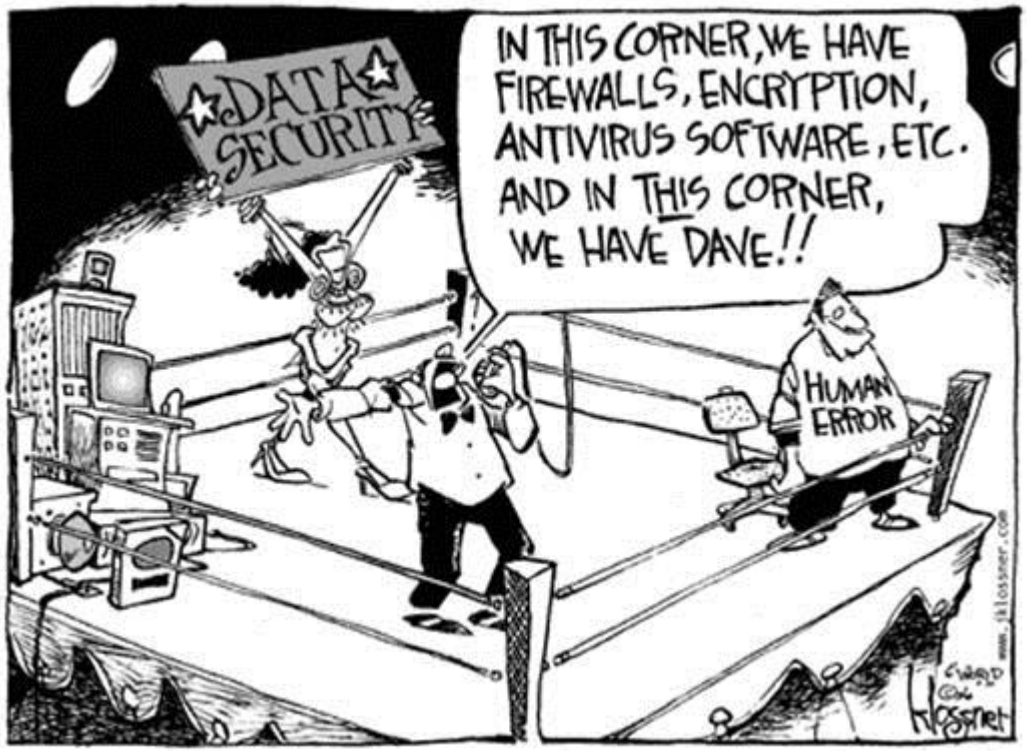

Who Are The Threat Actors?

- Aggrieved ex-employees
- Internal Employees
- Activists
- Corporate Espionage
- Blackhat Hackers

Who Are The Targets?

HR department

It Only Needs One…

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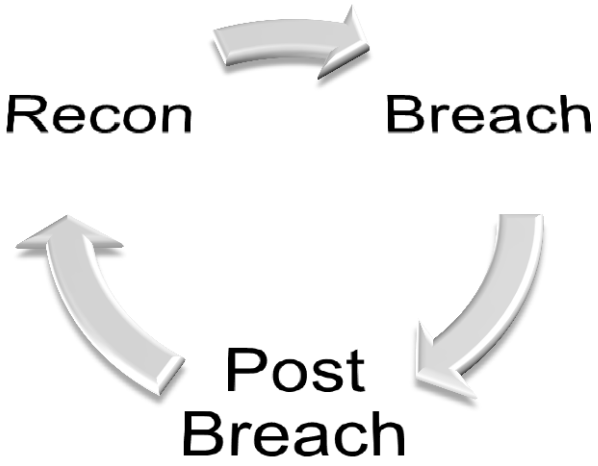
Social Engineering Methodology



Social Engineering - Recon

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Digital

- Search Engines
- Email Harvesting
- DNS Records
- Social Medial
- Metadata
- Public Records

Physical

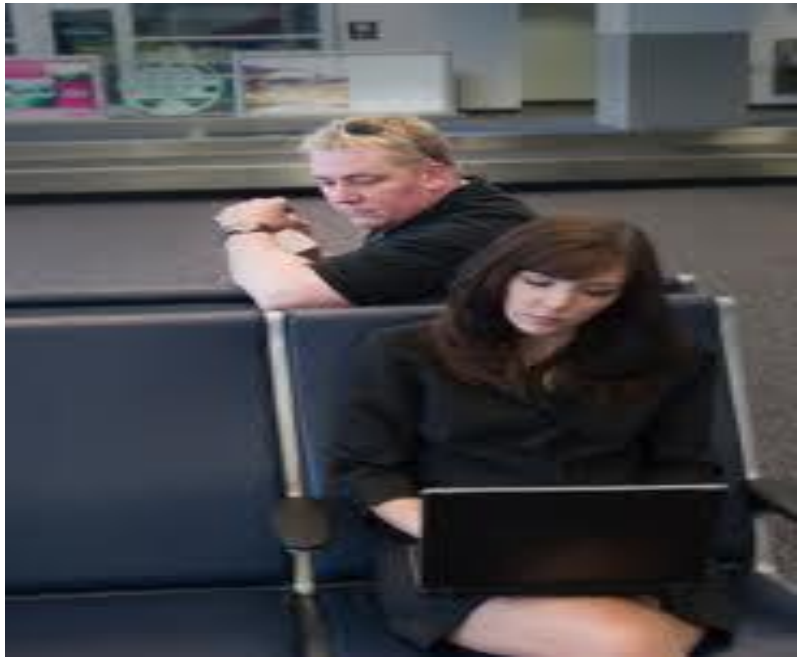
- Physical Walk
- Dumpster Diving
- Tailgate Employees to Lunch Breaks

Social Engineering - Breach

- Obtain Domain Credentials via Phishing Attacks
- Obtain Network Level Access via Spear Phishing Attacks
- Bypass Physical Security Defences and Obtain Corporate Documents

Attack Vectors

- Physical
- Phishing
- Telephone
- Shoulder Surfing
- Tailgating



Social Engineering Tactics

- Impersonation (Spoofed Emails, Telephone Attacks, Scenario-based attacks)
- Urgency
- Obligation
- Authority
- Flattering
- Fear

Do you recognize the signs?

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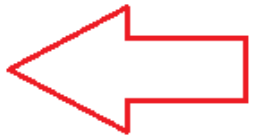

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NCC Test Case

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Outlook migration

support@[redacted]

Sent: Tue 22/04/2014 14:17

To: [redacted]

All,

As part of [redacted]'s migration to a new IT infrastructure we request that all users confirm that they are able to login to the email portal by 29/04/2014. Any accounts that have been dormant for over 2 months will be disabled.

Go to http://[redacted]/owa/auth/logon.aspx?logon=[redacted] and enter your username and password. These will be the same as your regular Windows credentials.

Thanks in advance for your assistance regarding this matter.
Kind Regards,

IT Helpdesk

Why This Attack Was Successful?

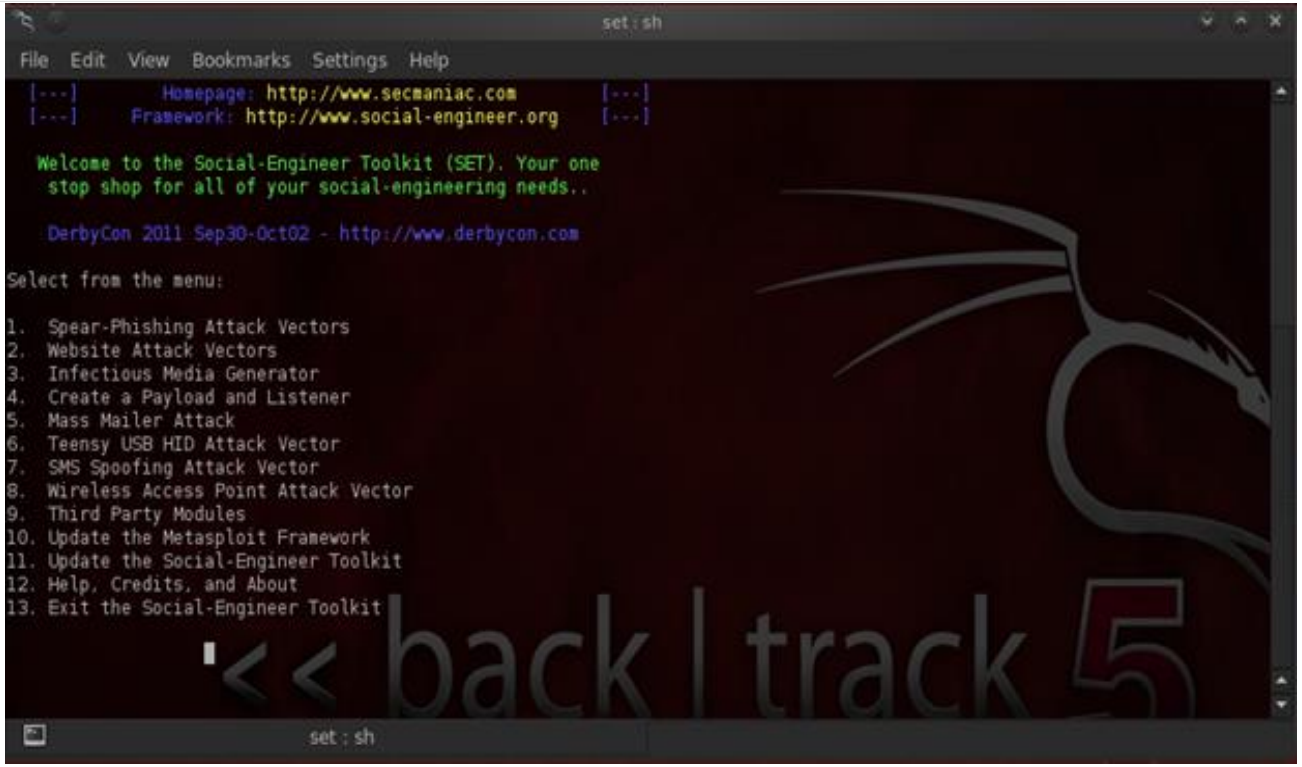
1. Trusted Source // IT Helpdesk
2. Promotes Fear // Accounts will be disabled

Lesson Learned?

Always Validate the Origin of the Information!!!

Tools of The Trade

- SET
- TheHarvester
- Recon-NG
- Phishing Frenzy
- PwnPlug Devices



Physical to Cyber is Just One Port Away….

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Do You See These Stuff Often Internally?

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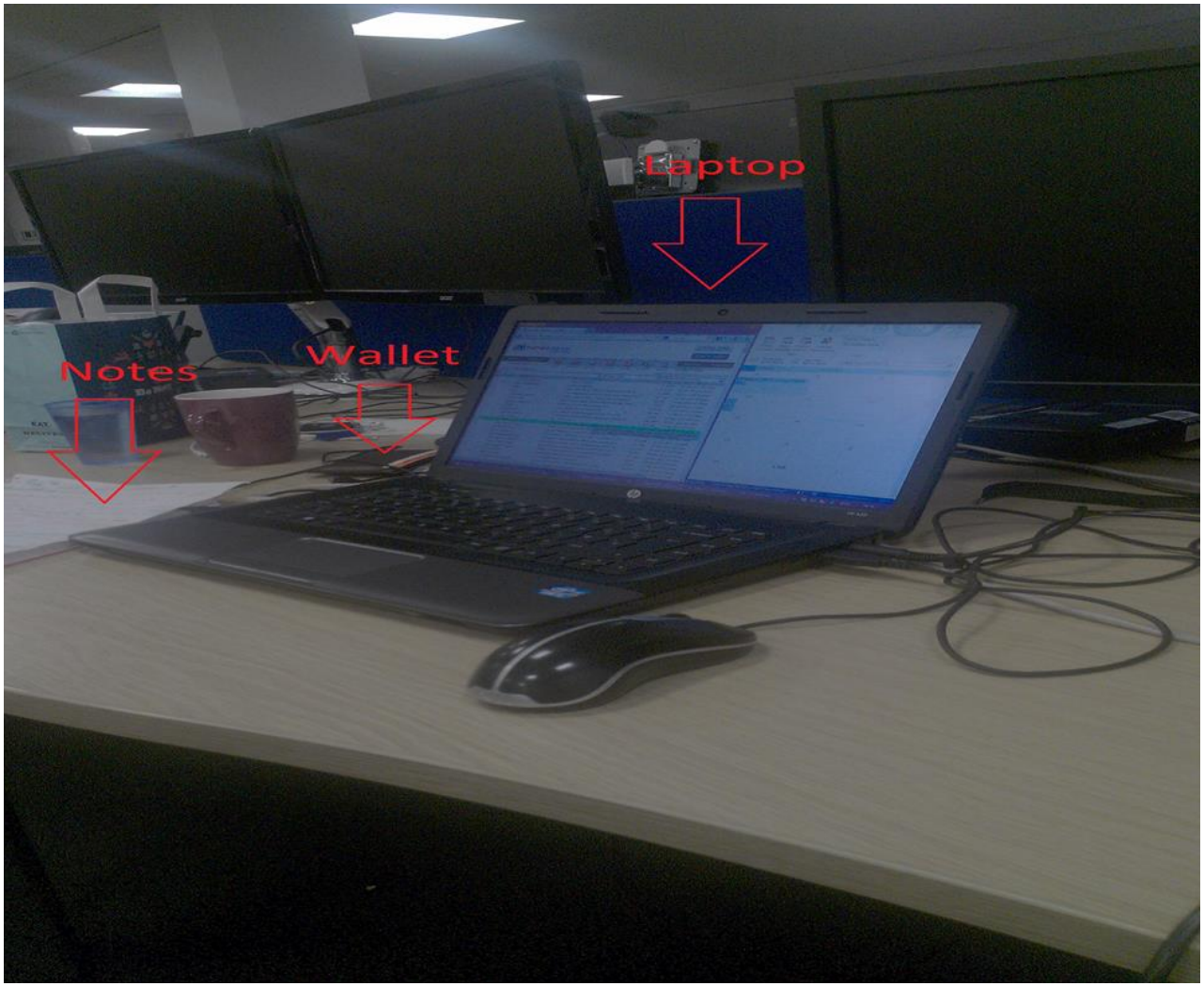

Mitigations

- **Limit Online Exposure**
- **Email and Web Gateway Solutions (URL Sandboxing etc.)**
- **Anti-tailgating Barriers**
- **Social Engineering Assessments**
- **Increase User Awareness via Trainings**
- **Policies (Escort visitors etc.)**

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Conclusion

- **False Sense of Security (PCI DSS, Products etc.)**
- **Management People are Reactive NOT Proactive**
- **Strong Physical && Weak Human == Pwned**

- **Employees Must Feel Safe to Click Any Link Inside Their Company Environment!!!**

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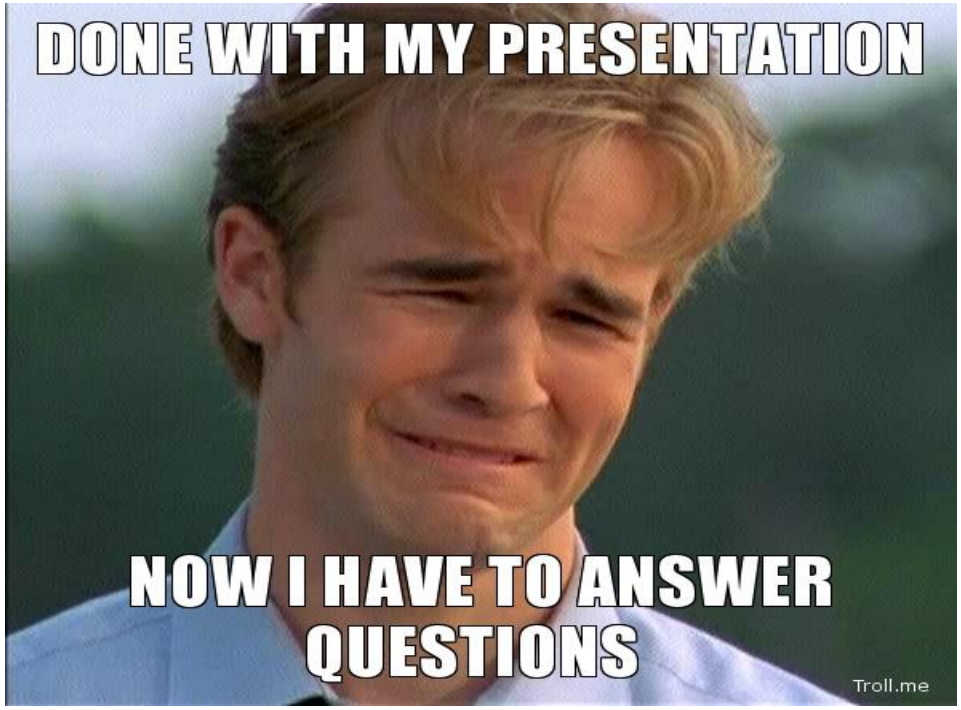
Any Questions???



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from NCC Group

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