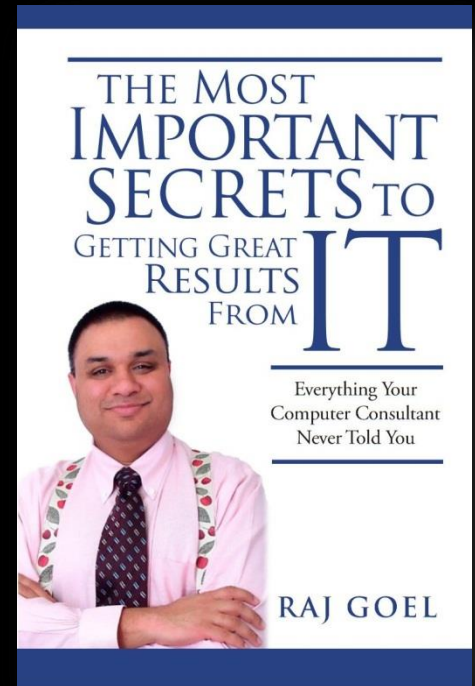


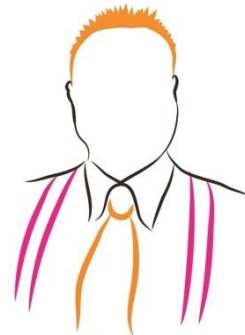
Protect Your Company From CyberTheft

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Chief Technology Officer
Brainlink International, Inc.
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Agenda

- Spyware / SPAM / Phishing
- Fraud makes the world go around
 - Real Estate frauds
 - Fake Receipts
 - Fake Equipment
- Government & Vendors
- Steps You Can Take

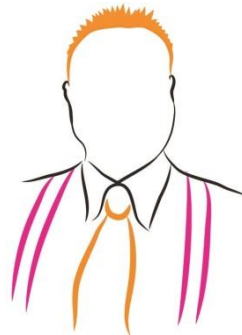


Cyber Criminals: At the forefront of Innovation



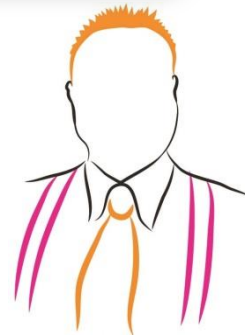
289,874- the number of REPORTED incidents in 2012

\$525,441,110 the amount of REPORTED funds stolen in 2012



Some Examples...

- Cyber crooks steal \$588,000 from Maine-based Patco Construction Company
- New Year's Eve burglary leads to billing firm bankruptcy.
- Hackers stole 160 million credit cards
- \$1.5 Million cyberheist ruins Escrow firm
- Energy company attacked through their suppliers



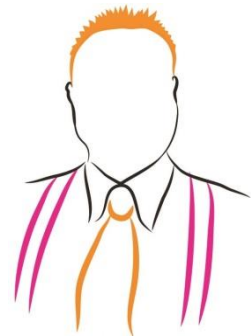
Economics of SPAM

- The Securities and Exchange Commission said that its actions to freeze proceeds from a suspected high-tech pump-and-dump stock scheme and its suspension of stock trading on 35 companies touted in spam...
- Dimitri Alperovitch, principal research scientist at Secure Computing, described such spamming and pump-and-dump schemes as part of the same unified spam economy.
- Profits from that economy start at botnets or zombie PCs, which are rented out to spammers. Spam goes out touting the value of a chosen company. Excited victims buy into the scheme and buy up stocks in the touted companies. The spammer within a few days sells the stock, pocketing a tidy profit, leaving victims with stocks that are virtually worthless.
- "A lot of these guys we believe are renting botnets from spammers distributing Viagra and other types of spam," Alperovitch said in an interview with eWEEK. "A lot [of the botnet controllers] may be getting paid in ... the stock of the company they're trying to promote. They can use the increased price of the stocks to sell it off and make their profit that way."
- With the ill-gotten profit, he said, the spammers/pump-and-dumpers then buy stock in another company whose value they will tout, and the cycle begins anew.
- Secure Computing estimates that 30 percent of all spam is stock spam, and spam itself makes up "well over 90 percent of all e-mail," Alperovitch said. [...]that is up from over 70 percent a year ago.
- - eWeek, March 11, 2007



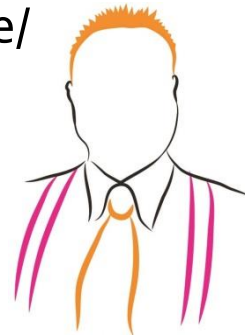
Priceline, Travelocity, and Cingular fined for using adware

- Priceline, Travelocity, and Cingular, three high-profile companies that advertised through nuisance adware programs have agreed to pay fines and reform their practices, according to the New York Attorney General.
- “Advertisers will now be held responsible when their ads end up on consumers’ computers without full notice and consent,” Andrew Cuomo said. “Advertisers can no longer insulate themselves from liability by turning a blind eye to how their advertisements are delivered, or by placing ads through intermediaries, such as media buyers. New Yorkers have suffered enough with unwanted adware programs and this agreement goes a long way toward clamping down on this odious practice.”
- - PressEsc.com January 29, 2007

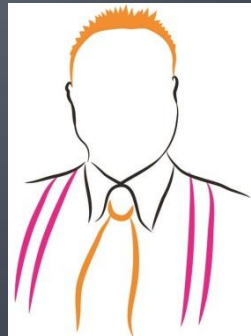


Cryptolocker Virus

- CryptoLocker, which first surfaced early last month, leaves users in danger of losing important files forever unless they pay \$300 (or more)
- CryptoLocker appeared in attachments to supposed customer complaint emails sent to firms
- The malware encrypts a wide variety of file types on compromised Windows PCs before displaying a ransom message demanding payment within by a fixed deadline, that typically falls within three or four days from the date of infection. Payment is demanded in the form of anonymous prepaid cash services such as MoneyPak, Ukash, cashU or through the Bitcoin digital currency.
- Fabio Assolini, Kaspersky Lab, **"It's not possible to recover the files encrypted by CryptoLocker. It's not a good idea pay the ransom, backup is your friend."**
- - http://www.theregister.co.uk/2013/10/18/cryptolocker_ransomware/

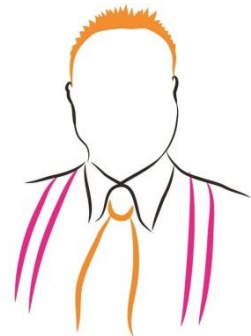


Fraud Around The World



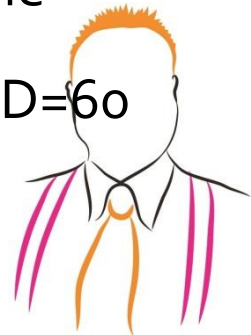
Spyware - Israel's TrojanGate

- “Executives of top telecom firms accused of spying on each other. A jealous ex-husband suspected of monitoring his former in-laws. Private investigators implicated in computer-hacking-for-hire; one now involved in a possible attempted suicide. So much bad publicity, government officials worry it might impact the entire nation’s economy.
- Published reports indicate mountains of documents have been stolen from dozens of top Israeli firms. Some 100 servers loaded with stolen data have been seized.”
- - MSNBC, June 9, 2005
<http://www.msnbc.msn.com/id/8145520/>



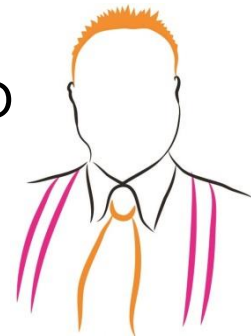
Spyware - Bank Of America / Joe Lopez lawsuit

- “ A Miami businessman is suing Bank of America to recover \$90,000 that he claims was stolen and diverted to a bank in Latvia after his computer was infected by a "Trojan horse" computer virus.
- Although consumers are routinely hit with "phishing" E-mails carrying bank logos intended to dupe them into revealing IDs and passwords, this is the first known case of a business customer of a U.S. bank claiming to have suffered a loss as a result of a hacking incident.
- In a complaint filed earlier this month, Joe Lopez, owner of a computer and copier supply business, accused Bank of America of negligence and breach of contract in not alerting him to the existence of a virus called "coreflood" prior to April 6, 2004, the date the alleged theft took place.” -
<http://www.informationweek.com/showArticle.jhtml?articleID=60300288>



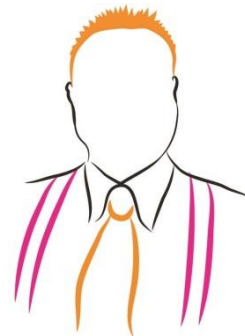
ID Theft – Bank Of America & Margaret Harrison

- Margaret Harrison, a young wife and mother living in San Diego, first noticed the problem four years ago when she applied for unemployment.
- [...] She investigated and found out a laborer named Pablo has been using her Social Security number. And while Margaret pays for credit monitoring, she says the Equifax credit reporting bureau never noticed the problem until she told the agency. Now Equifax has put a fraud alert on her account. And then there's this: Last month, the Bank of America sent her a new debit card bearing her name and Pablo's picture!
- Margaret says the Bank of America claims it can't take any action against Pablo because he pays his bills on time — that her case is in what they call "a reactive state."
- - MSNBC Feb 6, 2006 "Hey, that's not me! A new wrinkle in ID theft"



Homeowners lose houses in property scams

- Reviczky purchased the property at 220 Sheppard Ave. W. in 1980 for \$67,500 to generate a rental income that would help pay for the education of relatives back in Hungary.
- ...
- Reviczky could not believe his ears on June 26 when his neighbour, a real estate agent, told him she had noticed on the computer that he had sold his rental property in May.
- ...
- Police believe Reviczky's most recent "tenants" forged his name on a power of attorney that purported to give a grandson named "Aaron Paul Reviczky" authority to sell the home on his behalf.
- ...
- "I don't have a grandson named Aaron," Reviczky says. "I don't have any grandsons."
- ...
- On May 15, "Aaron Paul Reviczky" sold the property on his behalf for \$450,000 to a purchaser named Pegman Meleknia, who took out a mortgage of \$337,500.
- ...
- Reviczky's lawyer, Tonu Toome, says it was "very painful" to have to break the news to Reviczky that he may lose his house forever — even though he was an innocent victim of fraud — because Ontario law recognizes the transaction as valid where the purchaser is unaware of the scam.
- - Toronto Star, August 26, 2006



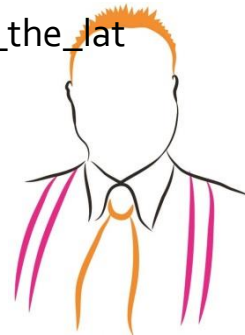
ID Theft + Mortgage Fraud = House Stealing

- The con artists start by picking out a house to steal—say, YOURS.
- ... Next, they assume your identity—getting a hold of your name and personal information (easy enough to do off the Internet) and using that to create fake IDs, social security cards, etc.
- ... Then, they go to an office supply store and purchase forms that transfer property.
- ... After forging your signature and using the fake IDs, they file these deeds with the proper authorities, and lo and behold, your house is now THEIRS.

- ... Or, Con artists look for a vacant house—say, a vacation home or rental property—and do a little research to find out who owns it. Then, they steal the owner’s identity, go through the same process of transferring the deed, put the empty house on the market, and pocket the profits.

- ... Or, the fraudsters steal a house a family is still living in...find a buyer (someone, say, who is satisfied with a few online photos)...and sell the house without the family even knowing. In fact, the rightful owners continue right on paying the mortgage for a house they no longer own.

- ... Or, Offer to refi properties. Use stolen Ids or straw buyers to “purchase” these properties. Pocket borrowed money, do NOT pay mortgages. Home owners lose title, Banks lose loans, you win...or go to jail!
- -
http://www.mortgagefraudblog.com/index.php/weblog/permalink/la_fbi_comments_on_the_lat_est_scam/



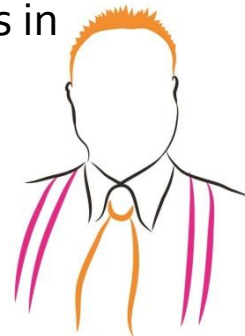
Forged deeds in Florida

- State and county officials say they're not sure whether they'll ever be able to stop con artists from using forged deeds to steal property. Most of the land was owned by people from across the nation and around the world who died years ago and whose property taxes were going unpaid.
-
- Some deed scammers have forged signatures using dead owners and fake witnesses and have hijacked the stamps and seals of notaries who say they had no idea what was going on. [...] At least two notaries in Belgium said their signatures and seals were forged on deeds filed in Lee County by USA Real Estate Solutions Inc. of Punta Gorda.
-
- Scam artists apparently are finding victims — from as far away as China, Taiwan, Spain and the Congo — by using the Internet to research vacant lots with overdue property taxes.
- Florida sues Singapore man, accuses him of land fraud
-
- Florida Attorney General Charlie Crist is suing a man he says used a Marco Island address, fraud and threats to profit from hundreds of vacant lots owned by others. According to the suit, Teal used the Internet to locate his victims, who usually lived in other states and often were elderly
- - News-press.com, March 19, 2007



Mortgage Fraud around the US

- Las Vegas couple indicted for 227 Straw purchases. 118 of 227 in foreclosure. Properties worth \$ 100M, banks lose \$ 15M.
- **HIPAA Violation + ID Theft + Mortgage Fraud trifecta**
- - Erica Kaprice Pollard, vocational nurse at Kaiser Permanente, steals ID of 72-year old woman. 3 other women involved in cashing out \$ 165,000 of victim's equity
- **Insider Collusion, Mortgage Fraud**
- Wachovia loan officer, Mortgage broker and title attorney find attractive properties. Recruit straw buyers, fool Wachovia using false HUD-1 settlement forms. Get Wachovia funds, falsify buyer assets, apply for first mortgages. Rinse, repeat and buy \$ 37M worth of condos.
- **Beverly Hills Fraudsters**
- "Two high-profile Beverly Hills real estate agents and two licensed appraisers were indicted Thursday on charges of joining in a sophisticated scheme that lenders said cost them more than \$40 million in fraudulent loans for homes in some of Southern California's most expensive neighborhoods."
- Lehman is suing them for \$ 40M in losses.
- - all from <http://www.mortgagefraudblog.com>



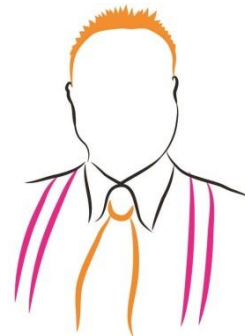
Supply Chain Risk – Menu Foods

- Menu Foods revealed that a "significant customer" [Procter & Gamble] that represented 11 per cent of last year's sales decided to end its contract to purchase cuts-and-gravy products with the company.
- The Mississauga-based company ended its tumultuous day with a loss of \$1.04, closing at \$3.05.
- The stock is now trading at half the price it was when news of tainted pet food hit front pages across North America in March after the company said melamine-laced wheat gluten from China made its way into its product line.
- - <http://www.theglobeandmail.com/servlet/story/LAC.20070613.RM-ENU13/TPStory/Business> June 13, 2007



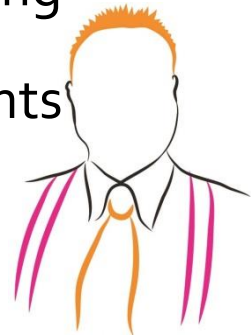
Supply Chain Risk – Menu Foods

- Larry Klimes, Paul Lavoie and Richard Mueller filed the lawsuit in U.S. District Court on Thursday. The suit seeks to be certified as a class action on behalf of all pet owners whose animals have allegedly been made sick by food made by the company.
- The lawsuit alleges Menu Foods engaged in unlawful and deceptive business practices, violated its warranties and breached its contracts with consumers by selling its "cuts and gravy" style wet pet foods.
- <http://www.canada.com/nationalpost/financialpost/story.html?id=f917841f-9d78-468c-b310-ac52ff6de562&k=93293>
- April 7, 2007



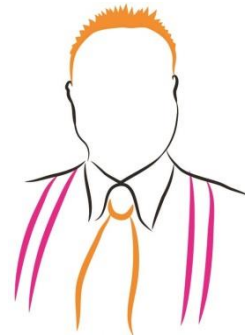
Fake Receipts, Chinese Style

- “ More than 1 million bogus receipts worth 1.05 trillion yuan (147.3 billion U.S. dollars) were confiscated in the case. The national treasury would lose more than 75 billion yuan in tax revenue if the receipts were put into circulation, officials said.”
- - <http://english.people.com.cn/90001/90776/6359250.html>
- Good News:
- Ringleader gets 16 years in jail.
- Bad News:
- One of their customers claimed his company was NASDAQ listed and raised \$50M from unsuspecting investors.
- How many of YOUR vendors are claiming financial health using fake receipts?
- How many of YOUR employees padded their expense accounts using fake receipts?



Thieves steal \$ 700K via POS/PIN-pad hacking

- Cyber-thieves who hacked into the [debit card] information of at least 800 retail customers in California and Oregon have stolen as much as \$700,000 from personal accounts during the last two months, according to police reports.
- People who used [debit] cards to purchase items at Dollar Tree, a national retail toy store chain, in Modesto and Carmichael, Calif., and Ashland, Ore., have turned in reports of unauthorized withdrawals in the computer-based scam.
- ...
- Local police said that more than 600 accounts were drained of approximately \$500,000, according to the report.
- - eWeek.com Aug 4, 2006



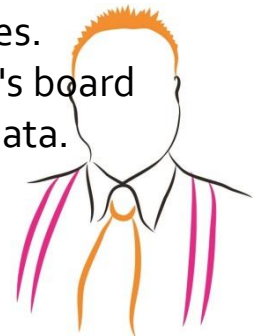
TJX (TJ Maxx, Winners, HomeSense) Breach

- TJ Maxx Parent Company Data Theft Is the Worst Ever
- Courtesy of Information Week
- MARCH 29, 2007 | TJX Co., the parent company of T.J. Maxx and other retailers, on Wednesday dropped a bombshell in its ongoing investigation of a customer data breach by announcing in an Securities and Exchange Commission filing that more than 45 million credit and debit card numbers have been stolen from its IT systems. Information contained in the filing reveals a company that had taken some measures over the past few years to protect customer data through obfuscation and encryption. But TJX didn't apply these policies uniformly across its IT systems and as a result still has no idea of the extent of the damage caused by the data breach.
- - http://www.darkreading.com/document.asp?doc_id=120810



TJX (TJ Maxx, Winners, HomeSense) Breach

- Information stolen from the systems of massive retailer TJX was being used fraudulently in November 2006 in an \$8 million gift card scheme, one month before TJX officials said they learned of the breach, according to Florida law enforcement officials.
- Florida officials said the group used the increasingly common tactic of using the bogus credit cards to purchase gift cards and then cashing them at Wal-Mart and Sam's Club stores. The group usually purchased \$400 gift cards because when the gift cards were valued at \$500 or more, they were required to go to customer service and show identification, Pape said.
- - eWeek.com March 21, 2007
- Arkansas Carpenters Pension Fund, which owns 4,500 shares of TJX stock, said the company rebuffed its request to see documents detailing the safeguards on the company's computer systems and how the company responded to the theft of customer data.
- The suit was filed Monday afternoon in Delaware's Court of Chancery, under a law that allows shareholders to sue to get access to corporate documents for certain purposes.
- Court papers state the Arkansas pension fund wants the records to see whether TJX's board has been doing its job properly in overseeing the company's handling of customer data.
- - Forbes.com, March 20, 2007



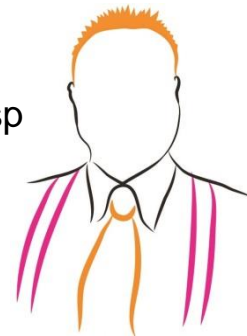
Cost of carelessness

Lose Data, Lose Customers The Ponemon Institute surveyed 14 different companies. The average data loss was 100,000 records. The most costly aspect by far was the loss of existing customers. Here is the breakdown:

ACTIVITY	DIRECT COSTS	INDIRECT COSTS	LOST CUSTOMER COSTS	TOTAL COSTS
Detection & Escalation				
- Internal investigation	\$19,000	\$488,000	N/A	\$507,000
- Legal consulting	463,000	51,000	N/A	514,000
Notification				
- Letters	547,000	193,000	N/A	740,000
- E-mails	5,000	N/A	N/A	5,000
- Telephone	913,000	105,000	N/A	1,018,000
- Published media	48,000	N/A	N/A	48,000
- Web site	3,000	N/A	N/A	3,000
Ex-Post Response				
- Mail	4,000	3,000	N/A	7,000
- E-mails	1,000	1,000	N/A	2,000
- Internal call center	287,000	479,000	N/A	766,000
- Outsourced call center	27,000	N/A	N/A	27,000
- Public or investor relations	289,000	14,000	N/A	303,000
- Legal defense services	1,288,000	N/A	N/A	1,288,000
- Free or discounted services	810,000	N/A	N/A	810,000
- Criminal investigations	286,000	13,000	N/A	299,000
Lost Business				
- Lost existing customers	N/A	N/A	6,728,000	6,728,000
- Lost new customers	N/A	N/A	730,000	730,000
AVERAGE COST PER COMPANY	\$4,990,000	\$1,347,000	\$7,458,000	\$13,795,000
PER LOST RECORD COST	\$50	\$14	\$75	\$138

SOURCE: PGP CORP.

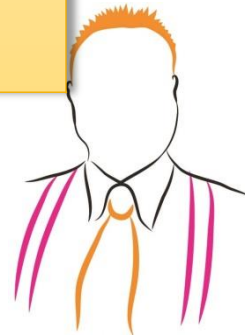
The Cost of Carelessness 12/5/2005 - <http://www.ciainsight.com/article2/0,1540,1906158,00.asp>



The Cost of Breaches 2005-2011

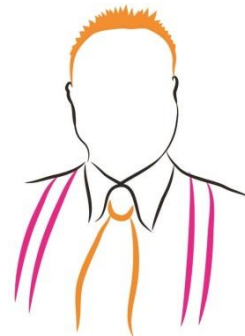
Year	Direct Costs	Indirect Costs	Costs Per Record	Total Cost Of Cleanup
2005	50	88	138	\$4.54M
2006	54	128	182	\$4.79M
2007	52	145	197	\$6.36M
2008	50	152	202	\$6.66M
2009	60	144	204	\$6.75M
2010	73	141	214	\$7.24M
2011	59	135	194	\$5.50M

Ponemon Institute 2011 Cost of Data Breach Study



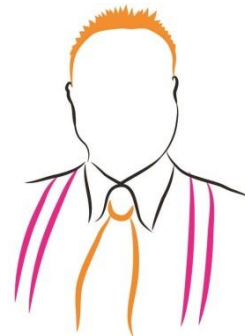
The Cost of Breaches 2005-2011

- 1st Time Victims Cost: \$ 243/record
- Experienced victims Cost: \$ 192/record
- Churn Rates:
 - Average 3.6%
 - Healthcare 4.2% @ \$282/Record
 - Financial Services 5.6%
- 88% breaches due to insider negligence
- 44% due to external parties



Privacy Breach – BJ's Wholesale Club

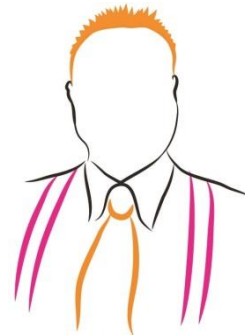
- “According to the FTC, BJ's failed to encrypt customer data when transmitted or stored on BJ's computers, kept that data in files accessible using default passwords, and ran insecure, insufficiently monitored wireless networks.
- ...affected financial institutions filed suit against BJ's to recover damages. According to a May securities and Exchange Commission filing, BJ's recorded charges of \$7 million in 2004 and an additional \$3 million in 2005 to cover legal costs.
- Under terms of the settlement, BJ's will implement a comprehensive information-security program subject to third-party audits every other year for the next two decades.
- “
- - InformationWeek 6/16/2005



Privacy Breach - DSW

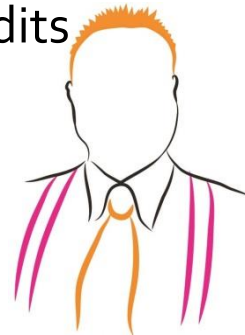
- “Shoe retailer DSW Inc. agreed to beef up its computer security to settle U.S. charges that it didn't adequately protect customers' credit cards and checking accounts,...
- The FTC said the company engaged in an unfair business practice because it created unnecessary risks by storing customer information in an unencrypted manner without adequate protection....
- As part of the settlement, DSW set up a comprehensive data-security program and will undergo audits every two years for the next 20 years. “
- - ComputerWorld.com 12/1/2005

- According to DSW's SEC filings, as of July 2005, the company's exposure for losses related to the breach ranges from \$6.5 million to \$9.5 million.
- This is the FTC's seventh case challenging faulty data security practices by retailers and others. - www.ftc.gov 12/1/2005



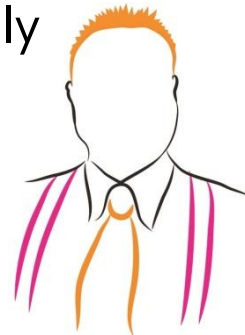
Privacy Breach - Choicepoint

- “The \$10 million fine imposed today by the Federal Trade Commission on data aggregator ChoicePoint Inc. for a data security breach is yet another indication of the increasingly tough stance the agency is taking on companies that fail to adequately protect sensitive data, legal experts said.
- And it's not just companies that suffer data breaches that should be concerned. Those companies that are unable to demonstrate due diligence when it comes to information security practices could also wind up in the FTC's crosshairs, they added.
- ChoicePoint will pay a fine of \$10 million...
- In addition to the penalty, the largest ever levied by the FTC, ChoicePoint has been asked to set up a \$5 million trust fund for individuals...
- ChoicePoint will also have to submit to comprehensive security audits every two years through 2026. “
- - ComputerWorld.com 01/26/2006



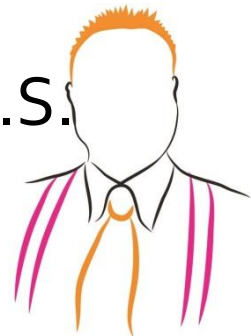
Click Fraud

- [Stuart Cauff, CEO JetNetwork] discovered that up to "40 percent, maybe more" of the clicks on his keyword ads apparently came not from potential customers around the nation but from a single Internet address, one that belonged to a rival based in New York City. "If we get clicked fraudulently, it uses up our ad budget,".
- Boris Elpiner noticed something odd about the Web traffic coming to his company from its PPC ads. As vice president of marketing for RingCentral, an online telecommunications firm in San Mateo, California, Elpiner is in charge of its affiliate-ad program, which hired Yahoo! to distribute RingCentral's ads onto Web sites with compatible content. Poring over his records, he discovered that a keyword term ("fax software download") that had previously generated almost no clicks was suddenly pulling them in. The total cost to RingCentral for the clicks - \$2,500 over about four weeks - "was significant, but not immediately noticeable."
- - <http://www.wired.com/wired/archive/14.01/fraud.html>



Walgreens To Pay \$35M To Settle Drug-Fraud Suit

- CHICAGO (STNG) — Deerfield-based Walgreens will pay \$35 million to settle Medicaid prescription drug-fraud claims initiated by a whistleblower, federal and state officials announced Wednesday.
- The United States, 42 states and Puerto Rico will receive \$35 million from Walgreen Co., which allegedly substituted different versions of prescribed drugs (such as tablets for capsules) solely to increase the cost and profit rather than for any legitimate medical reason, according to a release from the U.S. Attorney's office.



Payment-chain supply-side risks

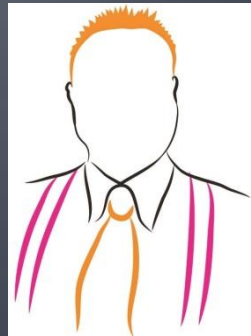
- 2008: Malware and/or break-ins compromise 100 million+ records at Heartland Payment Systems.
- Jan 2009: Inauguration day – Heartland discloses breach
- May 2009: Heartland has spent \$ 12.6 million (and counting) in dealing with the breach.

- Feb 2009: Angie's list notices 200% increase in auto-billing transactions being declined. Auto-billing declines increased from 2% to 4%.
- May cost them \$ 1 million in lost revenues so far.

- “The trouble is that convincing customers who had once set up auto-billing to reestablish that relationship after such a disruption is tricky, as many people simply don't respond well to companies phoning or e-mailing them asking for credit card information”
- -
http://voices.washingtonpost.com/securityfix/2009/05/heartland_breach_dings_members.html?wprss=securityfix



Government & Vendors

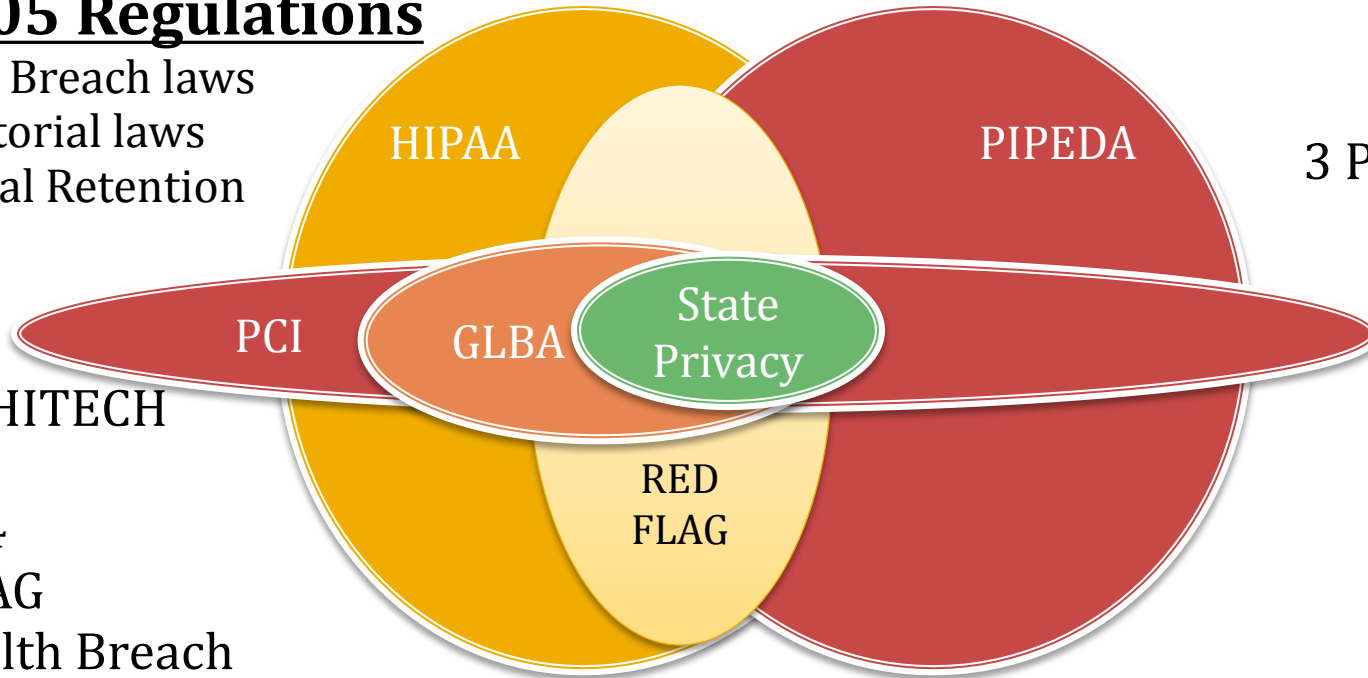


Standards Explosion

US – 105 Regulations

46* State Breach laws
3** Territorial laws
50 Medical Retention

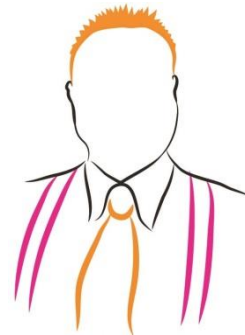
PCI
HIPAA/HITECH
GLBA
SOX-404
RED FLAG
FTC Health Breach



Canada

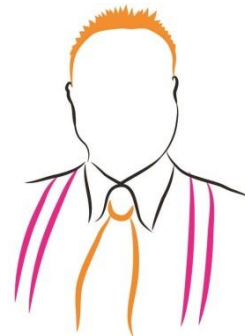
PIPEDA
3 PIPA/PPIPS
laws

- *Texas State law covers the 4 states Alabama, Kentucky, New Mexico, and South Dakota
- ** Territories: Washington DC, Puerto Rico, US Virgin Islands



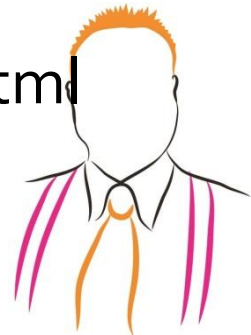
Every Law Has Protected Fields

- Names
- Postal address
- Tel & fax number
- Email address
- SSN
- Medical record number
- Health plan number
- Certificate/license number
- Vehicle ID or license
- Device identifiers
- Web URLs
- Internet protocol
- Biometric ID
- Full face, comparable image



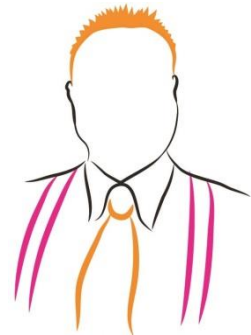
Social Security Numbers – A Brief History

- 1936 - SSNs established
- 1938 - Wallet manufacturer includes secretary's SSN card inside a wallet. 40,000 people thought it was their SSN. 12 people used it in 1977.
- Pre-1986 - kids under 14yrs not required
- Post-1990 - Kids get SSN # with Birth Certificate
- Repeatedly, laws state that “we” oppose the creation of a national ID card. SSNs become defacto national ID numbers.
- Result: Experian, TransUnion, Equifax
- http://en.wikipedia.org/wiki/Social_Security_number
- <http://www.socialsecurity.gov/history/ssn/ssnchron.html>



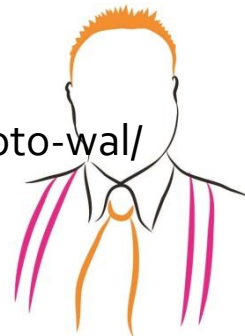
Social Security Numbers Fraud – Target: Kids

- The numbers are run through public databases to determine whether anyone is using them to obtain credit. If not, they are offered for sale for a few hundred to several thousand dollars.
- Because the numbers often come from young children who have no money of their own, they carry no spending history and offer a chance to open a new, unblemished line of credit. People who buy the numbers can then quickly build their credit rating in a process called "piggybacking," which involves linking to someone else's credit file.
- If they default on their payments, and the credit is withdrawn, the same people can simply buy another number and start the process again, causing a steep spiral of debt that could conceivably go on for years before creditors discover the fraud.
- <http://www.foxnews.com/us/2010/08/02/ap-impact-new-id-theft-targets-kids-social-security-numbers-threaten-credit-737395719/>



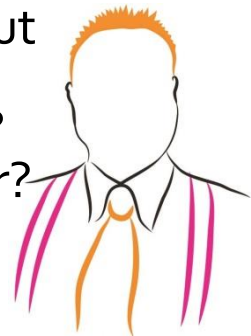
Walmart, Amazon, etc. used as infection vectors

- Jan 2009 – Hundreds of thousands (millions?) of picture frames sold by Walmart, SamsClub, Amazon ship from the factory with embedded malware.
- NOTE: Picture frame sales
- 2007 - 5 million
- 2008 - 7.4 million
- 2009 - 9.8 million
- http://articles.sfgate.com/2009-01-02/business/17196259_1_frames-digital-photo-wal/

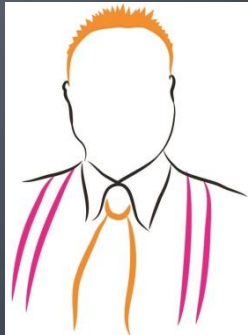


We Make it Easy (to commit crimes)

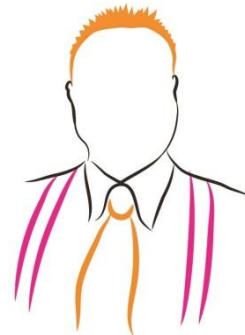
- Criminals have existed as long as society has. And they always will.
- However, we as IT/Security/Business/Government professionals make it easy for them to commit crimes:
 - - "It's not MY problem syndrome"
 - - Bank Of America ID Theft, UK Banking rules, No liability for software vendors
 - - Burden for compromise is on the victims (ID theft, house theft, spyware)
 - - The selfish gene
 - - Sony DRM rootkit, RIAA lawsuits, expired DRM
 - - Stupid IT tricks (sorry Dave)
 - - Shipping with default passwords
 - - Textbooks, documentation showing insecure or poor coding practices
 - - Poor Privacy/Security planning
 - - ID theft is a growing problem today, because no one thought about limiting scope of SSN usage in 1934
 - - What do Facebook, MySpace, Gmail teach our kids about privacy?
 - - Are you looking at security and privacy in a holistic, global manner?



Steps You Can Take



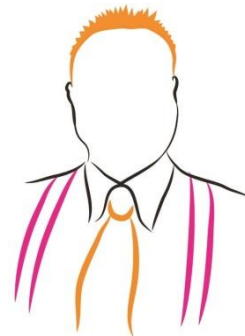
Your Biggest Asset and your Biggest Liability



Employees cause 87% of breaches

Trace Type	Data
File	D:\RoamingProfiles\Desktop\ [REDACTED] My Documents\REVIT2012\Crack\xf-adesk2012x64.exe
Archive	D:\RoamingProfiles\Desktop\ [REDACTED] My Documents\REVIT2012\Crack\xf-a2012-64bits.rar xf-adesk2012x64.exe
Archive	D:\RoamingProfiles\Desktop\ [REDACTED] My Documents\REVIT2012\Crack\xf-a2012-32bits.rar xf-adesk2012x32.exe
Archive	D:\RoamingProfiles\Desktop\ [REDACTED] My Documents\REVIT2012\AUTODESK.REVIT.ARCHITECTURE.V2012-ISO\rac2012\rac2012...
Archive	D:\RoamingProfiles\Desktop\ [REDACTED] My Documents\REVIT2012\AUTODESK.REVIT.ARCHITECTURE.V2012-ISO\rac2012\rac2012...

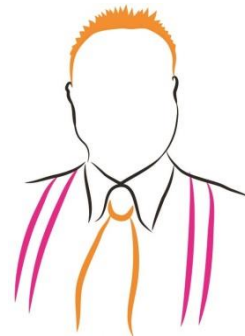
- Young architect downloaded pirated Autodesk.
- Banking trojans come along for the ride



Watering hole attacks

3/15/2013	Deep Scan	Quarantined	[REDACTED]	192.168.1.200	Remote Agents	[REDACTED]
Trace Type		Data				
File	D:\RoamingProfiles\Desktop\ [REDACTED] My Documents\Downloads\Metal Roof Rail Bracket Install Manual pdf(1).exe					
File	D:\RoamingProfiles\Desktop\ [REDACTED] My Documents\Downloads\Metal Roof Rail Bracket Install Manual pdf.exe					
2/14/2013	Deep Scan	Quarantined	COR-AD2	192.168.1.200	Remote Agents	CORNERSTONE
Trace Type		Data				
File	D:\RoamingProfiles\Desktop\ [REDACTED] My Documents\Downloads\FastDownload.exe					

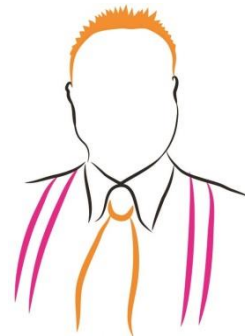
- Criminals infected a major supplier site
- Metal Roof Rail Bracket manuals were infected
- Nasty rootkit hidden in the files



Playoffs or Projects?

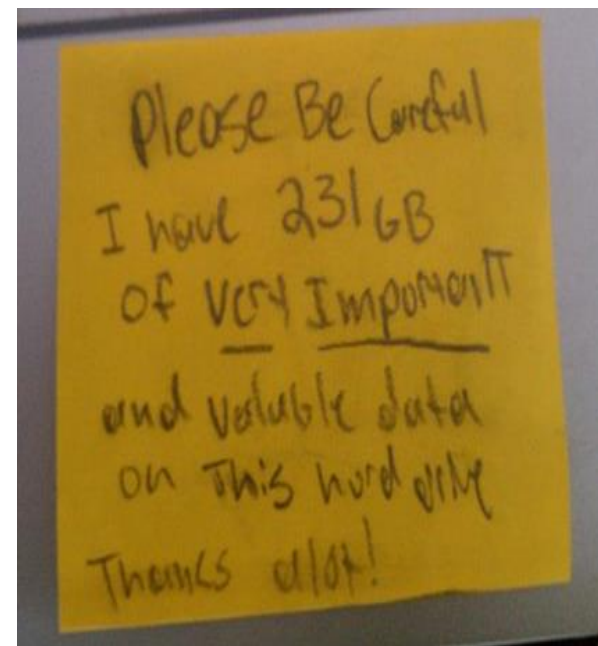
Top Web Users		
User	Hits	Bytes
N/A	39669	771.16 MB
[REDACTED]	22513	6.04 GB
media.newyork.cbslocal.com		3.71 GB
cbsnewwork.files.wordpress.com		8.68 MB

- During playoffs, a single employee consumed as much internet as everyone else combined.
- He spent the whole day watching baseball at work
- Next day, this report was in front of his manager.



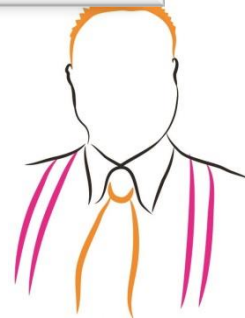
Tip #1: Backup your Data

- Run at a MINIMUM Daily Backups of your Critical Data
- Automated Offsite Backups are Invaluable
- Check/Test your data backups at a MINIMUM Monthly
- Assure all critical data is saved in the backed up location



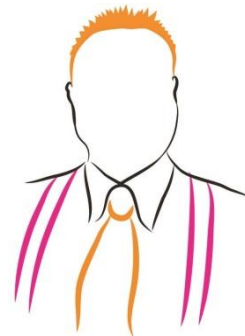
Tip #2: Better BANKING Practices

- **One Account for Payroll & Taxes**
 - NO DEBIT OR CREDIT CARDS ASSOCIATED WITH THIS ACCOUNT
- **One Account for Operations & Expenses**
 - AVOID DEBIT OR CREDIT CARDS ASSOCIATED WITH THIS ACCOUNT
- **Monitor Account Activity**
 - Alerts, Reporting
 - Banking Passwords



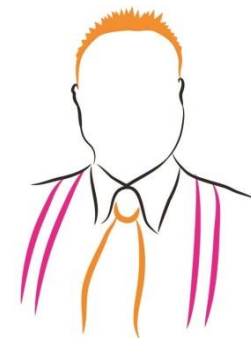
Tip #3: Upgrade Your Security

- **Regularly Patch Systems**
 - Windows, Applications, Java, etc.
- **Use a current anti-virus**
 - If it's expired or it came with your PC, it's useless
- **Implement a better firewall**
 - Blocks viruses, drive-by downloads, tracks web surfing
- **Password lock your iPhones, iPads, etc**
 - Hardware is replaceable. Your & your clients' privacy isn't.
- **Have your employees sign an Acceptable Use Policy**



Tip #4: Increase Your Productivity

- **Give Your Staff The Tools They Need To Succeed**
 - Managed Support means they can call for tech support whenever they need it, without increasing your costs.
- **Work with a fellow business owner, not just a tech-head**
 - As an owner, I had to learn how to market, sell, network, write a book, newsletters, present. I share all that with you.
- **Take More Vacations**
 - A week or more of no phonecalls, emails, etc.
 - Pure downtime = Mental Recharge.



Teach your Kids, Employees & Interns About Social Media



“Everything You Say Can And Will Be Used Against You, By Anybody, Now Or Decades Into The Future.” – Falkvinge

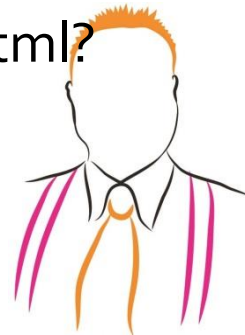
<http://www.brainlink.com/free-stuff/webinars/what-to-teach-your-kids-employees-and-interns-about-social-media/>

<http://www.youtube.com/watch?v=HpOg1Sgmpok>



Getting it Right

- “Anesthesiologists pay less for malpractice insurance today, in constant dollars, than they did 20 years ago.
- That's mainly because some anesthesiologists chose a path many doctors in other specialties did not. Rather than pushing for laws that would protect them against patient lawsuits, these anesthesiologists focused on improving patient safety.
- Their theory: Less harm to patients would mean fewer lawsuits. “
- - Deaths dropped from 1 / 5,000 to 1 / 200,000 – 300,000
- - Malpractice claims dropped 46% (from \$ 332,280 in 1970 to \$ 179,010 in 1990's!
- Premiums dropped 37% from \$ 36,620 to \$ 20,572.
- <http://online.wsj.com/article/0,,SB111931728319164845,00.html?mod=home%5Fpage%5Fone%5Fus>



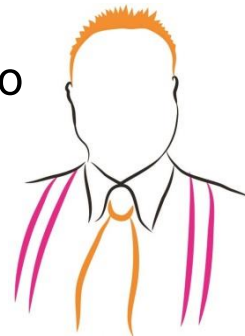
Getting it Right

- Medical marijuana advocates estimate that the aggregate annual sales tax revenue that's paid by the approximately 400 dispensaries in California is \$100 million.
- - <http://www.npr.org/templates/story/story.php?storyId=89349791>
- Cost of War on Drugs in 2009 (so far):
- \$ 20 Billion (and counting)
- - <http://www.drugsense.org/wodclock.htm>



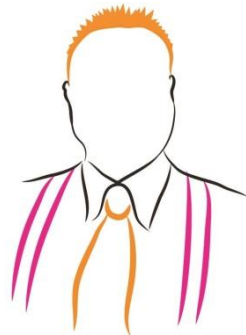
Recommended Reading

- <http://www.rajgoel.com/infosecurity-issue-6-%e2%80%94-data-leak-googling-away-your-security-and-privacy>
- <http://www.rajgoel.com/infosecurity-issue-7-%e2%80%93-trends-in-financial-crimes-2>
- <http://www.rajgoel.com/backing-up-documents-in-the-cloud>
- <http://www.rajgoel.com/how-much-does-facebook-know-about-you-about-800-pages>
- <http://www.rajgoel.com/how-do-spammers-credit-card-thieves-spyware-creators-make-money>
- <http://www.eff.org/cases/warshak-v-usa>
- <http://blog.jayparkinsonmd.com/post/92060107/the-promise-of-google-health-and-data-liquidity-in>
- <http://google.about.com/od/experimentalgoogletools/qt/GoogleFluTrends.htm>
- <http://www.schneier.com/news-062.html>
- http://threatpost.com/en_us/blogs/effect-snake-oil-security-090710



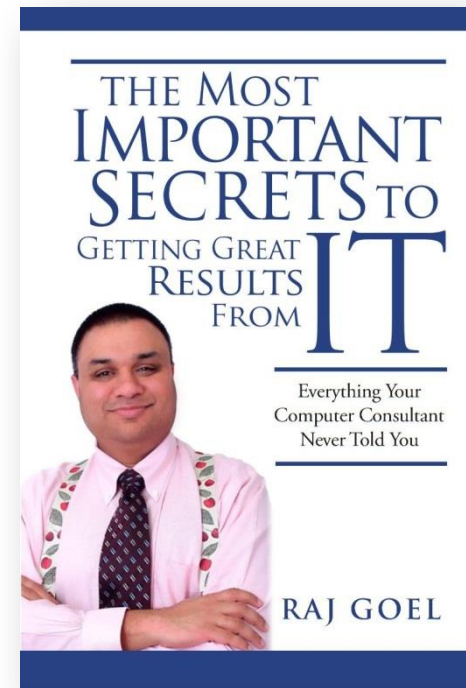
Need Help?

www.Brainlink.com



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- <http://www.amazon.com/gp/product/0984424814>

