



Privacy Disasters in Social Media – How Vulnerable is your Organization?

Abhilash Sonwane
Sr. VP- Product Management (Cyberoam)

Our Products

Unified Threat Management



Cyberoam – Endpoint Data Protection

- Data Protection & Encryption
- Application Control
- Device Management
- Asset Management



SSL VPN



www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Agenda of Presentation

- **Social Media Today**
- **Mechanism of Privacy Breach in Social Media**
- **Social Media and Employees: Keeping Controls, Preventing Privacy Breach**

www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Social Media Today

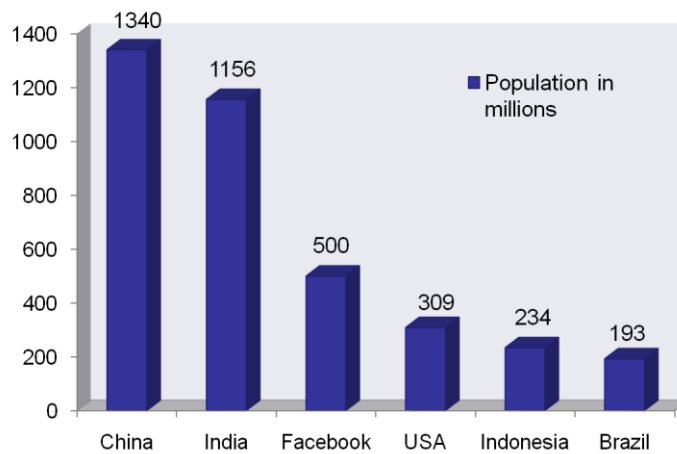
www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

If Facebook were a country?

www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

WTF! Dad joined Facebook!

www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Where else would you find?

- **75% global Internet users**
- **15% of total time spent online worldwide**
- **Average visitor spending (The Nielson Survey)**
 - 66% more time than a year ago
 - Almost 6 hrs in April, 2010 than 3 hrs 31 mins in 2009
- **Forrester Analysis**
 - Americans spending as much time on Internet as TV

www.cyberoam.com

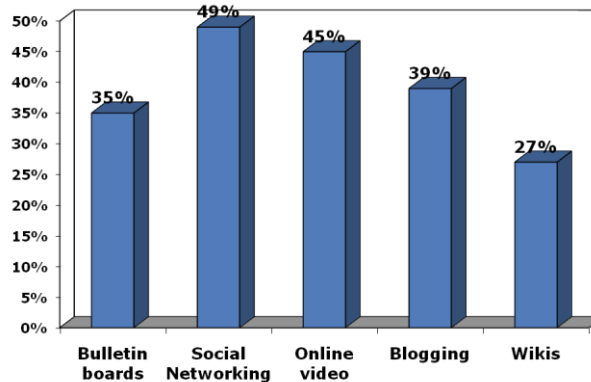
© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Corporate use of social media

- **57% of Fortune 500 companies into some form of social media activity**



www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

The flip side?

- **Breach of organizational privacy...unwanted or unexpected events which threaten disclosure of sensitive information**
- **Power of the organization's Eco System**
- **Undesired consequences**
 - Premature broadcasting of launches, conferences, quarterly earning calls, financials
 - Employees posting from their own Facebook & Twitter accounts
 - Wrongful marketing tactics can cause negative publicity

www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.

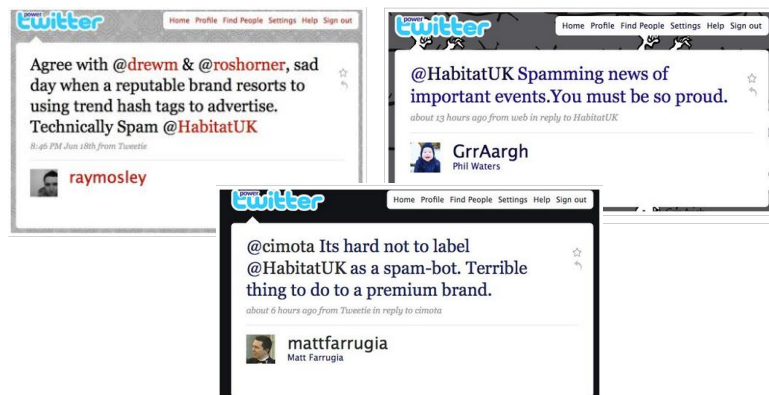
An example of wrongful marketing tactics

- Habitat, a UK-based furniture store
- 2900+ followers of Twitter account
- The blunder?
 - Misuse of Twitter's trend hashtags (#) to piggyback on the popularity of Iran's elections
 - Hashtags are considered spamming and inappropriate for corporate use



What happened next?

- Within moments, Habitat receives several online complaints for spamming tactics



The tip of the iceberg!

- **Keeping corporate information private has become increasingly difficult with the rising use of social media**
- **Do you want to prevent?**
 - Anti-competitive practices
 - Industrial espionage
 - Costly litigations due to data breach
- **Do you want to avoid disclosing?**
 - Future plans and activities
 - Client and trade secrets

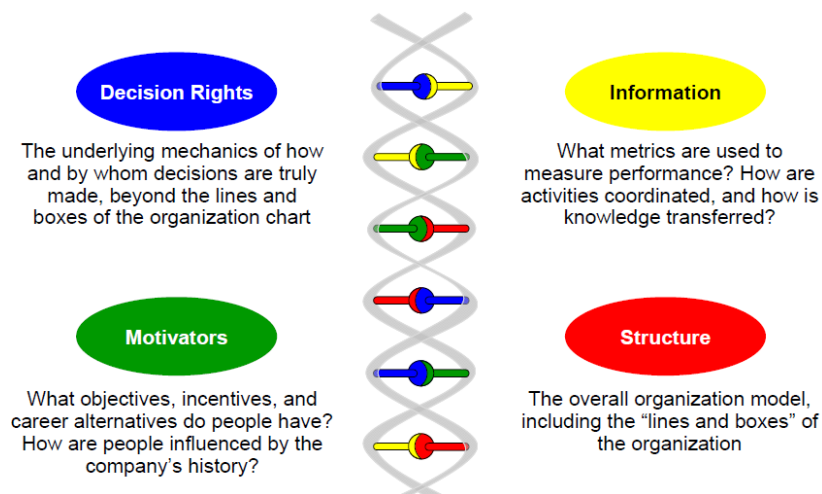


Mechanism of Privacy Breaches in Social Media

Research objectives

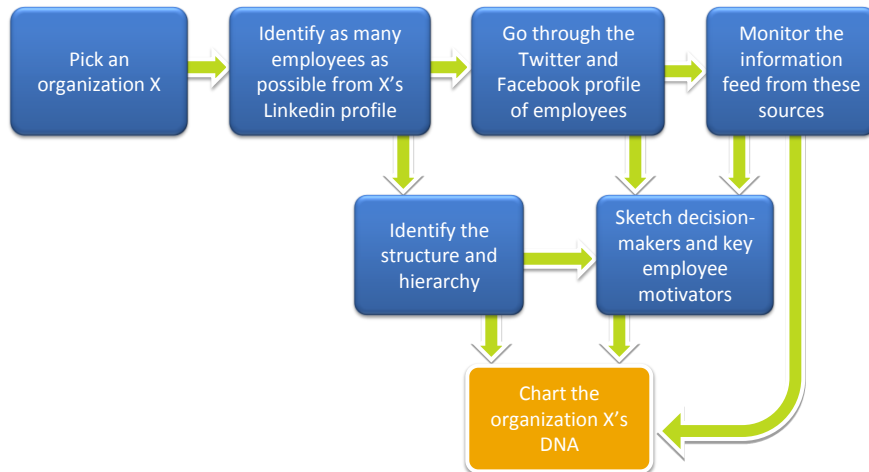
- **What we did?**
 - Monitored randomly selected 20 companies with active social media presence
- **Research objectives**
 - To verify the extent to which employees and organizations can breach their privacy on social media
 - To map the DNA of selected organizations.
- **What constitutes the DNA of organizations?**
 - INTANGIBLES: Core values, hierarchy, communication styles, industry environment, employee morale
 - TANGIBLES: Intellectual property, financial information, trade secrets

The four building blocks of DNA...



Cyberoam Securing You

How we did it...

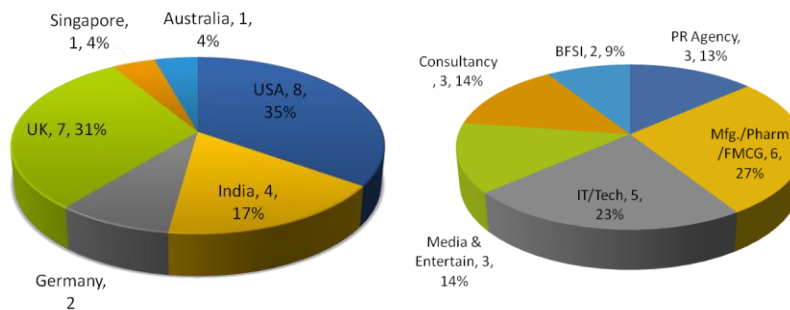


www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.

Cyberoam Securing You

Key demographics and distribution



www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Example 1: Company A

- **Singapore-based multimedia company**
- **Reason for selection?**
 - Asian corporation with impressive clients list
- **Employees monitored**
 - Sales director, department head, designers
- **Methods used**
 - Private tweets of all mentioned individuals

www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Social media profile – Company A

still gotta wait 2 wks & not even 100% sure if I'd be getting my sept + oct pay. Then Nov pay how? Dec gotta chase & worry again?

Well, my company/boss owe me my salary. I haven't gotten a single cent since I started in mid-sept. V angry & disappointed.

precisely if already facing cashflow prob then still hire me & DH for wat. Boss promise again to pay on Nov19
about 8 hours ago via web

BUT!!! he can't even pay me salary since last sept, I still continue for what? Later I spend time and do liao still dun get a single cent!
about 10 hours ago via web [Reply](#)

my DH & SD packed up and left. Only left me & the programmer...DH said boss might get me to be freelance to finish up current project.
about 10 hours ago via web

Employees not getting salary

+

Cashflow problems in organization

+


Bounced salary checks

+

Employees looking for new jobs

www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.

 Securing You

Social media profile – Company A

sigh... bad feeling abt this. Ytd morning boss announced abt coy cashflow problem, all paycheck bounced, today he not in office, no jiao dai
[about 11 hours ago](#) via web [Reply](#)

this is not good... I was given pay check last thurs. It bounced back today! My 1.5mth of salary!!!
 2:41 PM Nov 8th via web

Atmosphere in office very tense & quiet cos all of us will be going out of job (again) for mei SIGHI) soon. I have to look for jobs again~
 1:06 PM Nov 8th via web

[@mike](#) ya I started in mid Sept, not even 2 mths boss come and break the news. He said got cashflow difficulties and inform us.

it happened again... boss just told us that he might wind up business. I am barely 2mths in this company... how come I'm such a suay lang?
 11:18 AM Nov 8th via web [Reply](#)

[Cybercore Technologies \(Pte Ltd\)](#)
 Information Technology and Services industry
 September 2009 – February 2010 (6 months)

•Responsible for marketing of [Cybercore Technology \(Pte Ltd\)](#) and its subsidiary company
 •Responsible for all products, including market research, brand development, product and brand differentiation, using Direct Marketing Channel and Electronic Marketing Channel with relationship based marketing
 •Responsible for developing [Cybercore Technology \(Pte Ltd\)](#) product for [Cybercore Technology \(Pte Ltd\)](#), the e marketing and e commerce business solutions for SME

Department head resigned?

+

Sales director resigned?

+

Owner likely to wind up business

+

Organization is a subsidiary

www.cyberoam.com

 © Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.

 Securing You

Company A DNA results

- **Structure**
 - Organization is a subsidiary of another “Parent” company.
- **Decision rights**
 - Parent company, not evident from website.
- **Motivators**
 - Organization is about to close down business. General sense of apathy and panic.
- **Key information**
 - Loss-making organization. Serious crisis underway.
 - Clients outsourcing their projects to Company A might reconsider their commitments due to this privacy breach

www.cyberoam.com

 © Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Example 2: Company B

- **Based in USA**
- **Reason for selection?**
 - Manufacturing example
- **Employees monitored**
 - Accounting manager, CEO, CEO's son, minor employees
 - Facebook accounts monitored
- **Methods used**
 - Dummy female Facebook profile, monitoring Facebook posts

www.cyberoam.com

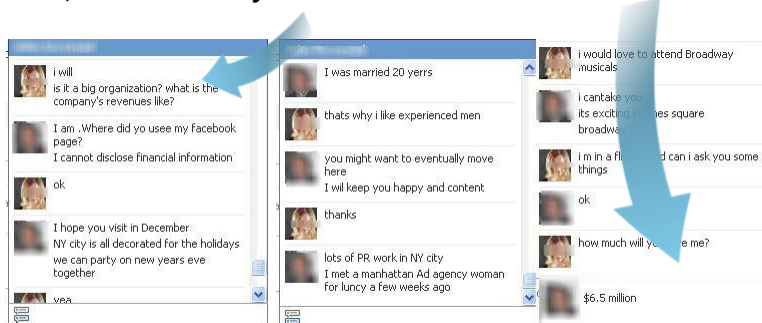
© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Social media profile – Company B

- **Employee leaks company's financial revenues on Facebook chat, confidential by his own admission**



www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Company B DNA results


- **Structure**
 - Company's hierarchy, major business concerns
- **Decision rights**
 - Key decision-makers identified. Organization type: military precision with conservative hierarchy.
- **Motivators**
 - Accounting manager's psychological profile created
 - Went through divorce, looking for single women
- **Key information**
 - Company's financials at risk from disclosure



Securing You

Example 3: Company C

- **Large retail chain**
- **Reason for selection?**
 - Large company with distributed network
- **Employees monitored**
 - VP, Operations
- **Methods used**
 - VP's personal twitter account, corporate twitter account and VP's LinkedIn account

 Securing You

Social media profile – Company C

is actively pursuing new VP of Operations opportunities in the Eastern U.S. and open to relocation throughout the South Eastern U.S.
Thu Aug 12 2010 19:07:11 (India Standard Time) via LinkedIn

VP looking for new job

Profitability, lease terms, etc.
Thu Sep 23 2010 21:32:15 (India Standard Time) via TweetDeck in reply to

+

Company about to close shop

We're still open for business. Whether specific stores stay open is
Thu Sep 23 2010 20:41:15 (India Standard Time) via TweetDeck in reply to

+

Chapter 11 filing

"I don't know what to say, except it's Christmas and we're all in misery."

+

LinkedIn profile reflects changing job status

Seeking VP or Senior Operations Leadership Opportunities
Area | Retail

Current

- VP of Operations
- Zone VP of Operations

www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.

 Securing You

Company C DNA Results

- **Structure**
 - Large retail company with nationwide chains
- **Decision rights**
 - Outgrown.
- **Motivators**
 - Employees looking to change job. Major restructuring underway
- **Key information**
 - Company files for Chapter 11 two months after its account was monitored by Cyberoam

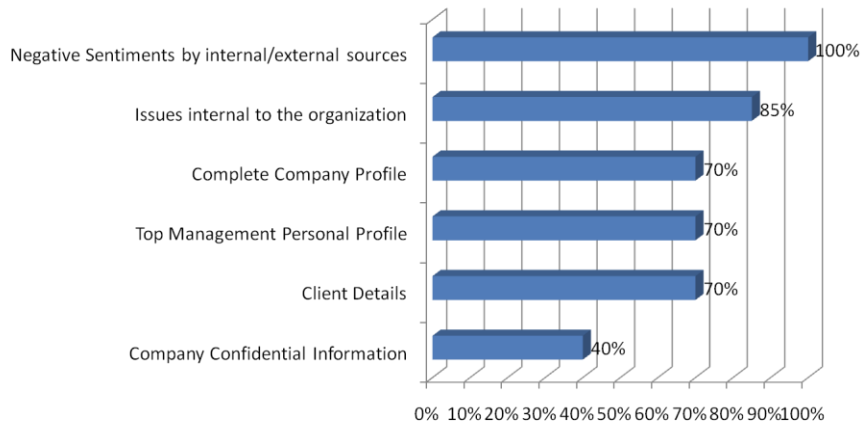
www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Summary of sample disclosures



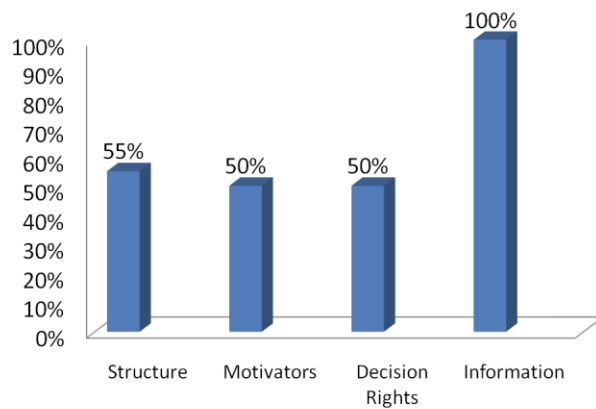
www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.



Securing You


Summary of sample disclosures



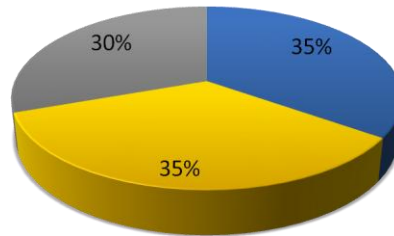
At least, 50% companies in chosen sample were fully decoded

www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.

 Securing You

Sources of information



- CEO, VP
- Other Employees
- External Party (Customer, Partner, Media)

 Securing You

Social Media and Employees: Keeping Control, Preventing Privacy Breach

Solving the jigsaw puzzle for privacy breaches



What you need to know...

- Information tidbits that you may not consider private in isolation, together build up a strong privacy breach scenario

"Anyone knows how ATX technology works? On SAP?" 29th Jan

"Busy...working on new project!" 2nd Feb

"@svengel excited about the next launch." 4th Feb

"Looking for partners." 14th Feb

"Looking for sales people with experience in SAP." 4th Feb

"In Taiwan right now." 11th Feb



Securing You

How to protect your organization's privacy interests...

Identify sources of potential embarrassment/leaks across social media

- Make interactions with analysts, stockbrokers and media full public events simultaneously with social media disclosures
- Attach press releases in company websites to avoid discrepancy

Pursue best corporate interest policies on social media behavior

- Choose official spokesperson to blog or tweet on behalf of your company
- Set up an online/social behavior policy for employees to ensure they know what can be communicated, and when?
- Avoid discussing project plans and other business-critical information under the supposed anonymity of social media

www.cyberoam.com

© Copyright 2011 Elitcore Technologies Pvt. Ltd. All Rights Reserved.



Securing You

Conclusion: Solving the social media jig-saw puzzle

Tidbits of information across the Web unravel the very DNA of an organization

Take corrective and preventive actions

Set up policies on social media behavior

Finally Educate your employees

www.cyberoam.com

© Copyright 2011 Elitcore Technologies Pvt. Ltd. All Rights Reserved.

Q&A
If any??



www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.

Thank you
abhilash@cyberoam.com



www.cyberoam.com

© Copyright 2011 Elitecore Technologies Pvt. Ltd. All Rights Reserved.

Current security solutions mainly focus on malware

- Why limit our knowledge and understanding of the impact of social media to security alone?

Facebook chat message leads to phony Facebook app and malware



LinkedIn invitations and reminders lead to malware and pharmacy sites

