



Responding to Data Breaches

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Agenda

- ➡ A wider concern than « Telecom Package »
- ➡ French SME-SMIs, some facts
- ➡ Insurance/Business Incentives
- ➡ Some preventions means and tools
- ➡ CLUSIF, a non profit association

A wider concern than “Telecom Package”

We live in a (more and more) digitalized society

- ⊕ Any size (including SME-SMI)
- ⊕ Any sector of activity

Various equipments at stake

- ⊕ Storage media (historically), laptop, CD, DVD, USB stick, Hard Disk disposal...

Wherever the data

- ⊕ Database (File Server)
- ⊕ Data Flow (communication)
- ⊕ “Broadcast” (through social networks)
- ⊕ Outsourced, clouded...

A wider concern than “Telecom Package”

Nature of content

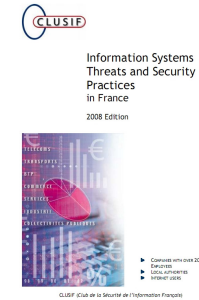
- ⊕ Financial records (historically)
- ⊕ ID
- ⊕ Trade secrets (business espionage)
- ⊕ ...

TWO victims... most of time

- ⊕ Data “owner” (aka end-user or citizen)
- ⊕ Enterprise or Local Authority who have been hacked or accidentally disclosed information
 - ☞ Indirect or collateral damages

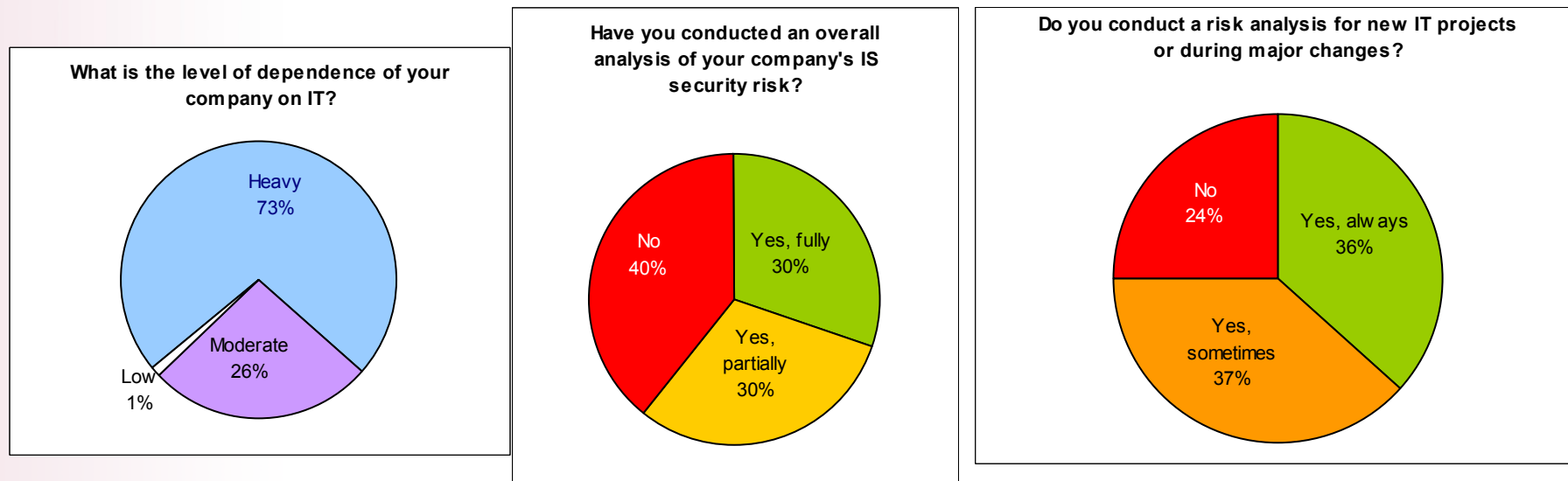
French SME-SMIs, some 2008 facts

Source:



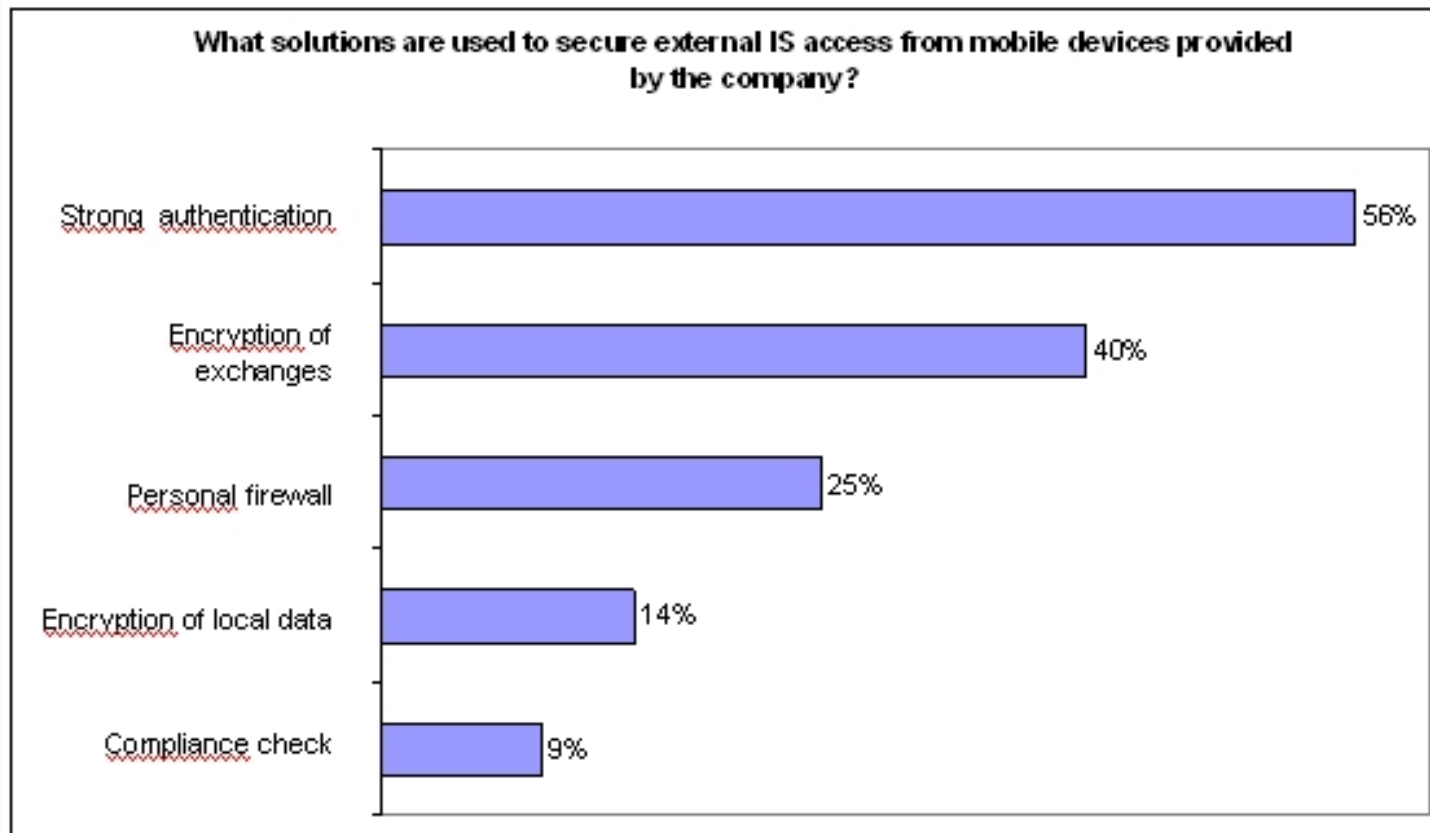
Lack of Risks Assessment

A paradox: Very dependant... very unaware!



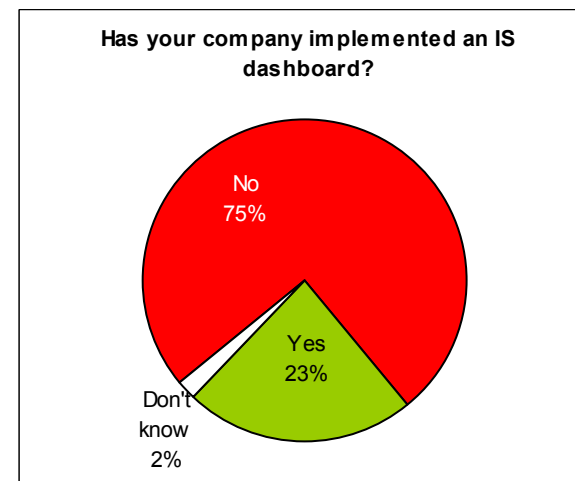
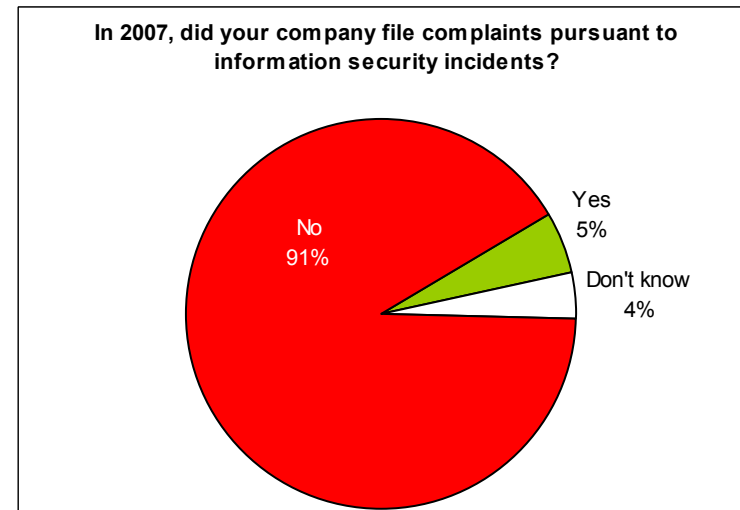
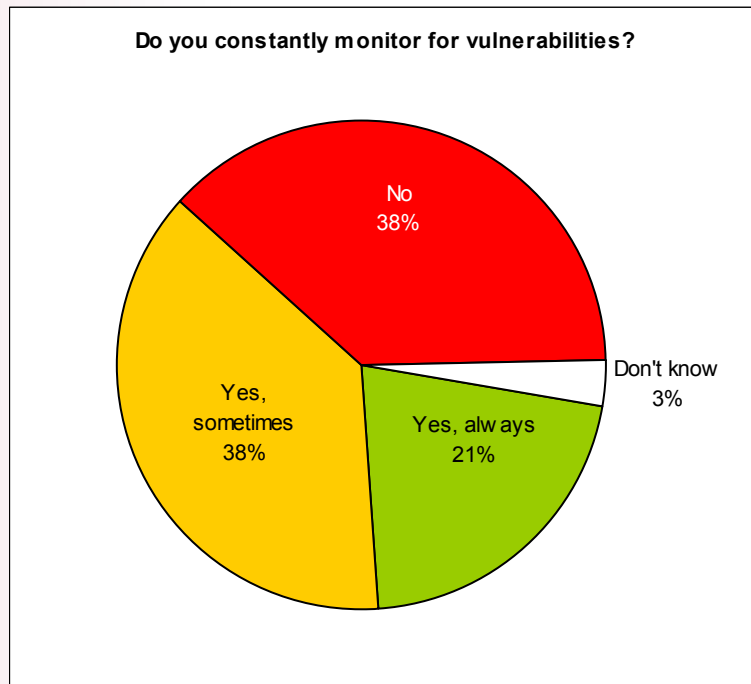
French SME-SMIs, some 2008 facts

Lack of confidentiality



French SME-SMIs, some 2008 facts

Lack of dashboards and logs



⊕ “only 28% of companies evaluate the financial impact of security incidents “

Insurance/Business incentives

Requirement to notify

- ⊕ you will be much more “inclined” to implement security means if you are exposed to fines or could go to jail (without forgetting reputation)!

Be prepared for an investigation

- ⊕ Penal investigation (making the evidence to help the victimized enterprise)
- ⊕ Insurance claims settlement
 - 👉 Identify cause of loss
 - 👉 Quantum of financial impact



Insurance/Business incentives

Think about indirect or collateral damages

- ⊕ Restoration costs for data, resources, investigation, etc.
- ⊕ Salaries (extra hours), expert fees, ransom, extra expenses to maintain activity, etc.
- ⊕ Lack of profit, penalty fees, crisis communication, notoriety and reputation, loss of contracts...
- ⊕ Possible legal and 3rd party damages, class action, etc.

Indicative matrix to identify possible costs for various scenarios (3 columns qualifying occurrence):

INTERNAL SABOTAGE	"standard"	usual	seldom
DIRECT & INDIRECT LOSSES			
Data & Service restoration	✓		
Discovery/investigation	✓		
Extra Expenses (crisis management)	✓		
Extra Expenses (production)			✓
Business Interruption			✓
Brand and Notoriety		✓	
Hardware and IT infrastructure			✓
Financial Fraud (refunding)			✓
Cyber-extortion (ransom)		✓	
Lack of Supplier / Outsourcing			✓
Penalty Fees			✓
.../...			
SERVICES			
Expert Fees	✓		
Pre Loss Analysis			✓
Post Loss Mitigation Measures	✓		
.../...			

Recent case: Payment Terminal Fraud

New England (USA), March 2008. Hannaford a grocery store chains discovers a credit card breach.

Around 4.2 million numbers were hacked (card number, expiry date but not the cardholder name). The information obtained was sent overseas. The breach began in December. 300 servers were affected, in stores in Florida (106), New England (165) and in franchises (24).

Consequences

- ⊕ **1.800 proven cases** of fraud over the course of March
- ⊕ **Re-issuing fees** for approx. 100,000 cards
- ⊕ **\$5 million class action** suit led by a firm law
- ⊕ Millions of dollars **invested in security**: encryption of data in transit, 24-hour monitoring system
- ⊕ Hannaford **compliant with the PCI-DSS standard**... which was quickly modified to account for the operating mode!

Recent case: Data theft and Ransom Demand

Saint-Louis (USA), November 2008. Express Scripts a company which manages medical prescription information is blackmailed via e-mail (threat to release 75 patient files, information on millions of patients is stored on database).

Ransom amount is not disclosed to the public but as some consequences

- ⊕ Creation of a **crisis website** to inform patients and **manage complaints**
- ⊕ **Identity restoration service** offered by consultant/security firm
- ⊕ Commitment to **pay any monetary losses**
- ⊕ Use of an **investigation firm**
- ⊕ **\$1 million reward** offered helped to catch the blackmail artists!



Summing-up, some preventions means and tools

- ☺ Requirement to notify
- ☺ Cipher tools implementation
- ☺ Risks assessment promotion toward SME-SMI (Grundschutz, eBios, MEHARI, etc.)
 - ⊕ ISO checklist or « best practices » is not sufficient enough
 - ⊕ Compliance doesn't mean security (see numerous ISO 27001 hacked or damaged enterprise and defrauded PCI-DSS compliant enterprises)
 - ⊕ Security leads to compliancy



www.clusif.asso.fr a non profit computer security association

CLUB DE LA SECURITE DE L'INFORMATION FRANCAIS

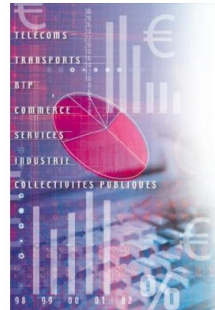
Free downloads...



Cybercrime Overview 2008
January 15 2009



Information Systems
Threats and Security
Practices
in France
2008 Edition



- ▶ COMPANIES WITH OVER 200 EMPLOYEES
- ▶ LOCAL AUTHORITIES
- ▶ INTERNET USERS

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