The Changing Face of End Point Security

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Agenda

- **The Change…**
- The Effect…
- Root Cause Analysis
- Strategy to deal
- Conclusion

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The change is visible …

PAY IS IMPORTANT, BUT SOCIAL MEDIA IS A PERK FOR YOUTH

A majority of college students and youth are entering the work-force with the expectation of liberty to access personal sites at work, and work from everywhere else, a survey by tech giant Cisco has found.

2,800 Number of college students and young professionals surveyed, across 14 countries

69% Share of workers who felt it was unnecessary to be in an office to work - up from 60% last year

60% Share of those who think they have a right to work remotely with a flexible work schedule

RIGHT TO INFORMATION -ON SOCIAL MEDIA

67% students will ask about a company's social media policies during job interviews - the figure is 41% in India

56% will not accept jobs from companies that ban social media, or will look for ways to circumvent the policy

STATUS MESSAGE

33% students and young professionals put social media freedom and device flexibility at a higher priority than salary

68% employees and 71% college students believe corporate devices should be used for social media and personal use as well

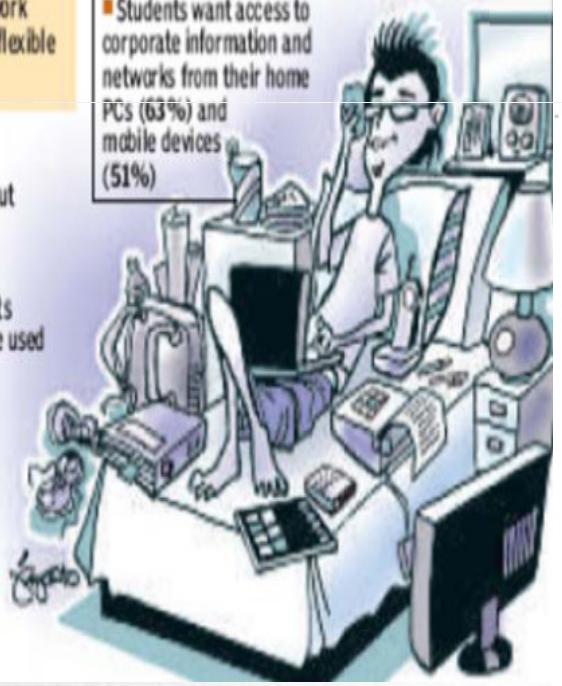
HONCHOS ARE LISTENING

41% employees said companies marketed a flexible device and social media policy to recruit them

33% believe their device and social media comfort level was a factor in their getting hired

FLEXI-TIME, FLEXI-PLACE

- As much as 80% of college students want the freedom to choose an access device for their jobs
- Students want access to corporate information and networks from their home PCs (63%) and mobile devices (51%)



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EDITORIAL : ET | 09 NOV 2011

A Revolution

Internet usage is reaching critical mass in India, raises fresh challenges

A report by the Internet and Mobile Association of India and IMRB finds that by end-2011, 10% of Indians would be Internet users, 97 million of them active users. Nor is Internet usage a big city habit: 37% of Internet users are in small towns. The development has immense potential for disruptive creativity in all facets of life: in governance, education, healthcare, entertainment, media and communications and all businesses in general. Significantly, only about 9% of users access the Internet from mobile devices. Now, more than 600 million Indians already use mobile phones, which means that it is not very difficult to raise Internet usage to about 50% of the population and make India the biggest national base of Internet users in the world (China has about 500 million Internet users). Every phone connection can easily become an Internet connection, with some improvement in the handset and changes in the networks. A

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What has changed in IT

- Mobility
- Extended Enterprise
- Cloud Computing (IT Off-the-shelf)
- User's mindset – don't stop me…

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User's mindset

- Perimeters are bad for communication as they are just blockers
- Can't access resources even though available – USB/private mail
- Mobility and efficiency are synonyms

Facts:

- Roaming makes perimeter less clear and more vulnerable
- Perimeter does not address data security

- If it is less effective, more annoying. why have it ?

- If we don't have it, information goes anywhere.

Side effects are very difficult to predict and assess...

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Data as Currency

- For most organizations, data stored in databases, file management systems, flat files, spreadsheets, and other information storage formats, not their physical holdings – are the costliest assets

- Protection of sensitive information was fueled by industries (e.g., financial services, banking, healthcare) that needed to comply with various government and industry regulations.

- A privacy failure, or even the mere perceived failure to protect customer data, can result in loss of consumer trust, affect customer retention, and cause significant damage to brand and company reputation.

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Control….

- 70 percent of corporate data is out of the IT department's control?
- "Distributed data" lives at the edge of the network on remote machines – typically outside the layers of traditional security accorded to a data center.
- End-point data is vulnerable to a host of threats including inconsistent backup practices, hardware theft and loss, viruses and human error.

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Motivation…

- Money making
  - Corporate espionage
  - Adversary-bashing
  - Extortions
  - Illegal money transfers
- Hactivism & Cyber Terrorism
- Government-sponsored psychological warfare
- And many more…

The initial Sony attack has been linked to what some say was a heavy-handed Sony legal response to a gamer.

"I can almost guarantee that as part of their threat model, most organisations lack a plan for dealing with an ideologically motivated adversary"

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Means…

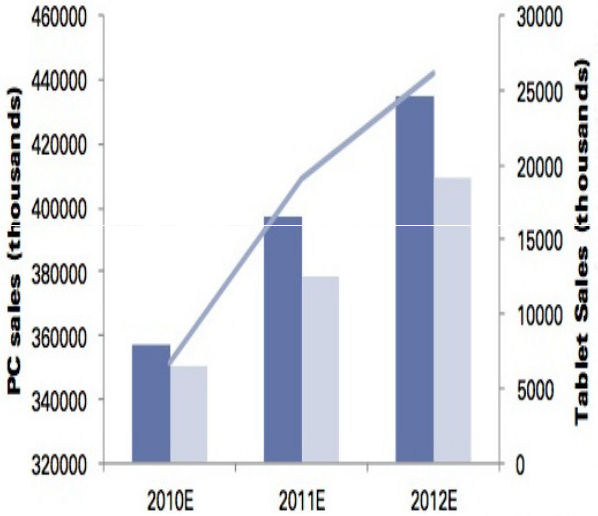
- Loose End-points:

  -> USB stick : Survey report - Half trillion by 2015 (Mostly brought by individuals, not corporate but used in office)

  -> Laptops: 300m (Mostly corporate)

  -> Smart phones: 1600m

- Poor Administration
- Ignorant users
- Bottleneck at the top



How safe is data (currency)?

Weak Controls

+

Great Motivation

+

Easy Means

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Is it not a perfect recipe for ‘Corporate Tsunami’ ?

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But they do not get along due to…

- More focus on perimeter
- Loose end-points
- Lack of integrated logging and monitoring
- No consideration of user-ignorance
- Less emphasis on integrated automation that helps systems administrators manage access control (DAD) and data security issues in operation mechanism (MOM)

DAD – MOM Conflict?

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How can we resolve?

We will succeed only if we can tie DAD & MOM in ‘security ring’ to stay longer together in whatever way they want to live….

Soul-searching

- Do I know all end-points registered (including mobiles configured for mail)?
- Do I recognize sensitive data in my endpoint device?
- Are my sensitive data encrypted?
- Am I sure, all my endpoints are properly patched/AV updated?
- If not, can I force basic hygiene before allowing access to NW?
- Can I control the endpoint : restriction of access, wiping of data
- Do I communicate official information through private email accounts such as yahoo, gmail, rediff etc?
- What do we do if we find a pen-drive? Or, when we lose it?

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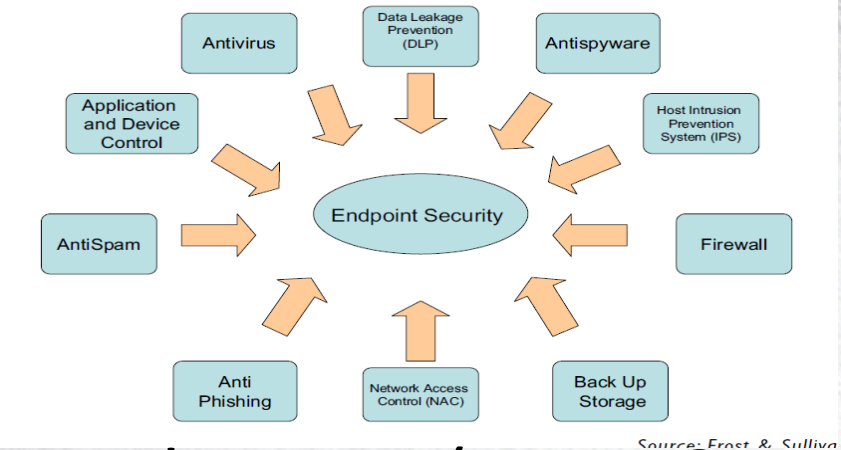
Shift focus to End-point



Source: Frost & Sullivan

- Know your end-points (Asset & Risk)
- Ensure basic hygiene of end-point (Patching, AV updates, NAC, Licensed SW)
- Control your end-points (access, wipeout)
- Protect data (Classification, Encryption)
- Train the end-point owners (Do-Don’ts)
- Monitor end-point usage (Warn, Act)

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Technical Solution

- Ease of installation and use
- Richness of report
- Flexibility for setting rules/policies
- Number of devices required
- Integration capability
- Offline use of endpoints and log synchronization
- Safety of endpoint agent and its ‘life’ report

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Manage The Change

- Security must be balanced with usability (ease of use)

  Most secure = Least usable

  Most usable = Least secure

- Decide the balance you need based on interactions with business users
- Demonstrate cost saving and change in Internet behaviour
- Use carrot & stick methodology
- Involve top management in compliance

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Tips to sell idea to CEO/CFO

- Benefits of change – user demand, expectation, ease and need to be part of change.

  He Buys. 

- Cost of protection.

  He rejects. 

But..

- Demonstrate future cost saving and change in Internet behaviour
- Read Section 43A of ITAA 2006 and Rule 4 of ITAA Rule 2010
- Demonstrate your ability to manage change

He agrees 

Key to Success

Report of End-point protection tool should be able to translate restrictions into monetary benefit

Conclusion

Thank You

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