

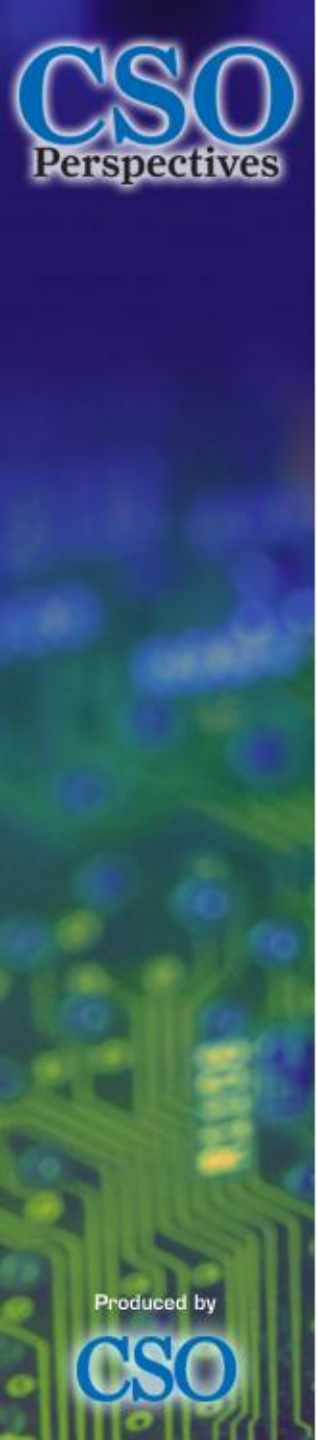


Leading the Way to
the Highly Secure and
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Perspectives

April 5-7, 2011 | Naples Grande | Naples, Florida



Striking a Culturally-Acceptable Balance Between Supporting Consumerized IT and Practical Security Boundaries

**Al Raymond, CIPP, CISSP
Chief Privacy Officer & IT Risk Mgmt
PHH Corporation**

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PHH Corporation

- One of the top five originators of residential mortgages in the US
- Largest private label mortgage company
- 2nd largest fleet vehicle management company in US & Canada
- 300+ of the country's largest financial institutions as clients – banks, thrifts, S&L's, credit unions
- Regulated directly by FTC (i.e. GLBA), 50 states
- Indirectly regulated via clients and their regulators

What is ‘Consumerized IT’? a/k/a... **BYOT... BYOD... BYOC**

- “The purchase pattern of a shift toward laptops, tablets and smart phones being bought by consumers, causing corporate products to have shorter and smaller upgrade cycles”
- “The increasing influence that our technology experiences as consumers—both hardware and applications—have on the technology that we expect to use at work”
- A ‘tyranny*’

Why is Consumerized IT here *now*?

- BYO *is* Consumerized IT
- It's all about productivity via familiarity
- Growing due to:
 - Better technology @ home vs. work
 - User demand (*I want my MTV*)
 - Business pressure to reduce costs
 - Holy Grail of employee satisfaction (especially Gen X & Y and Millennials)

How Prevalent is BYO?

Nov. 2010 Ovum report finds:

- 70% of employees allowed to use corporate devices for personal activities already.
- 48 % can use personally owned devices to connect to corporate systems.

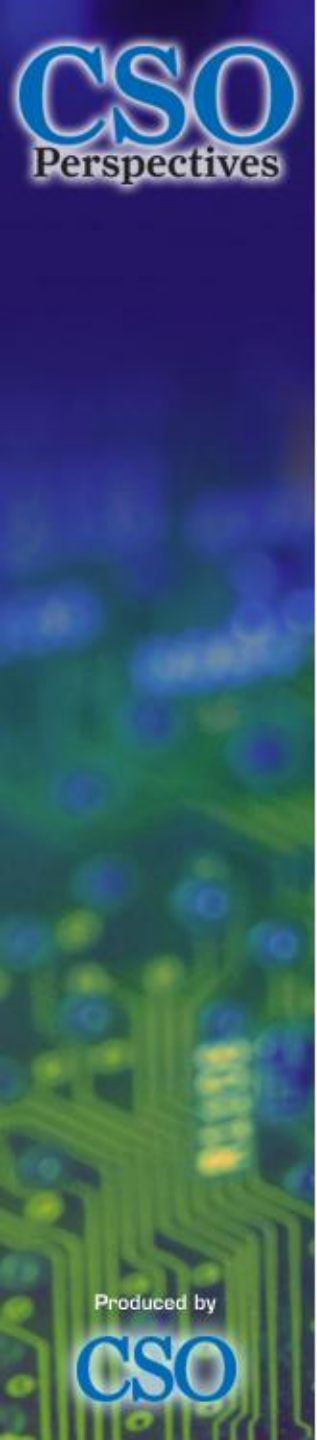
How Prevalent is BYO?

- Boundaries of a company's information network are not as clearly defined as in the past
- Mobile phone is now the mobile office
- *Work = Home = Work = Home*

Yet, Real Risks Exists....

- Consumer devices are rarely adequately secured against malware
- Losses/thefts not always reported
- Enables access through these devices to a gaping hole in the company's otherwise secure firewall.

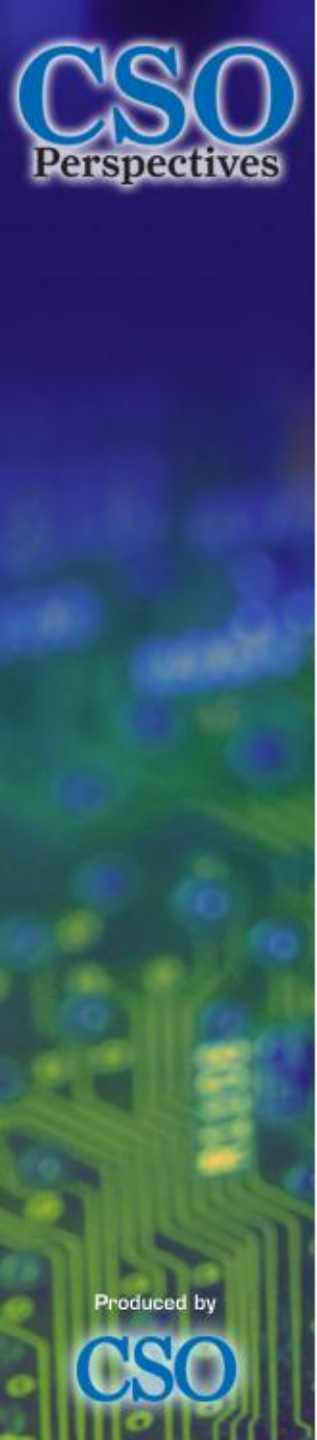
These risks have led many organizations to firmly resist consumerization by restricting personal devices/consumer electronics into the workplace.....



Good luck with that...

The (inevitable) Path Forward

- CISOs/CIOs/CTOs/CPOs must seek the culturally acceptable middle-way
- The reputation of IT as supporter of the business is greatly enhanced
- No longer about ‘yes’ or ‘no’ only
- Veritable Technological Tsunami



Which brings us to....

Classic Struggles
Throughout the Millennia

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Classic Struggles Throughout the Millennia



Classic Struggles Throughout the Millennia



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Classic Struggles Throughout the Millennia



Classic Struggles Throughout the Millennia

Information Security

Vs.

‘The Business’

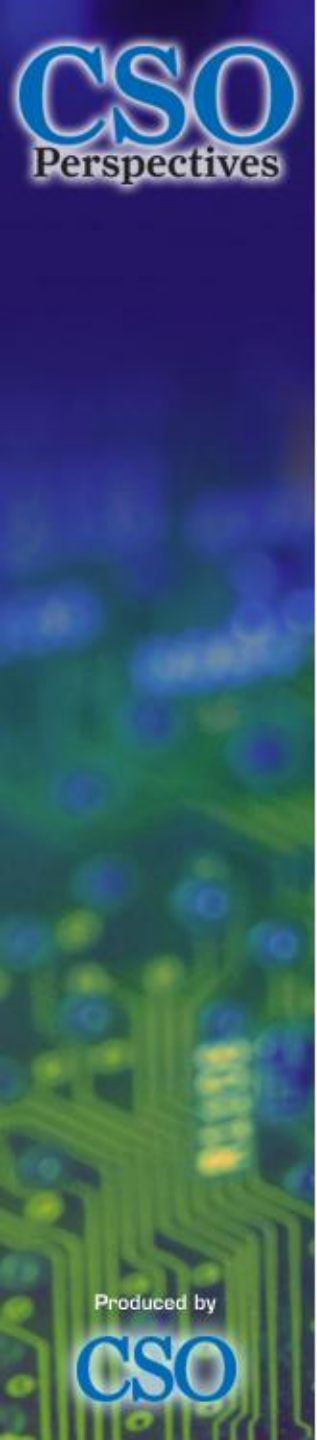
Bottom Line: It Is Ultimately
a Business Risk Decision

Gartner's Top IT Predictions for 2011

“Consumerization of IT is no longer a phenomenon to be contained or resisted.”

The attention of users and *IT* organizations will shift from devices, infrastructure and applications - and focus on information and interaction with peers. And this change is expected to herald the start of the post-consumerization era.

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Gartner's Top IT Predictions for 2011

Translation:
Resistance is Futile

*Gartner's Top Predictions for IT Organizations and Users, 2011 and Beyond: IT's Growing Transparency Nov 2010

*Watch for
Continued Convergence Ahead!*



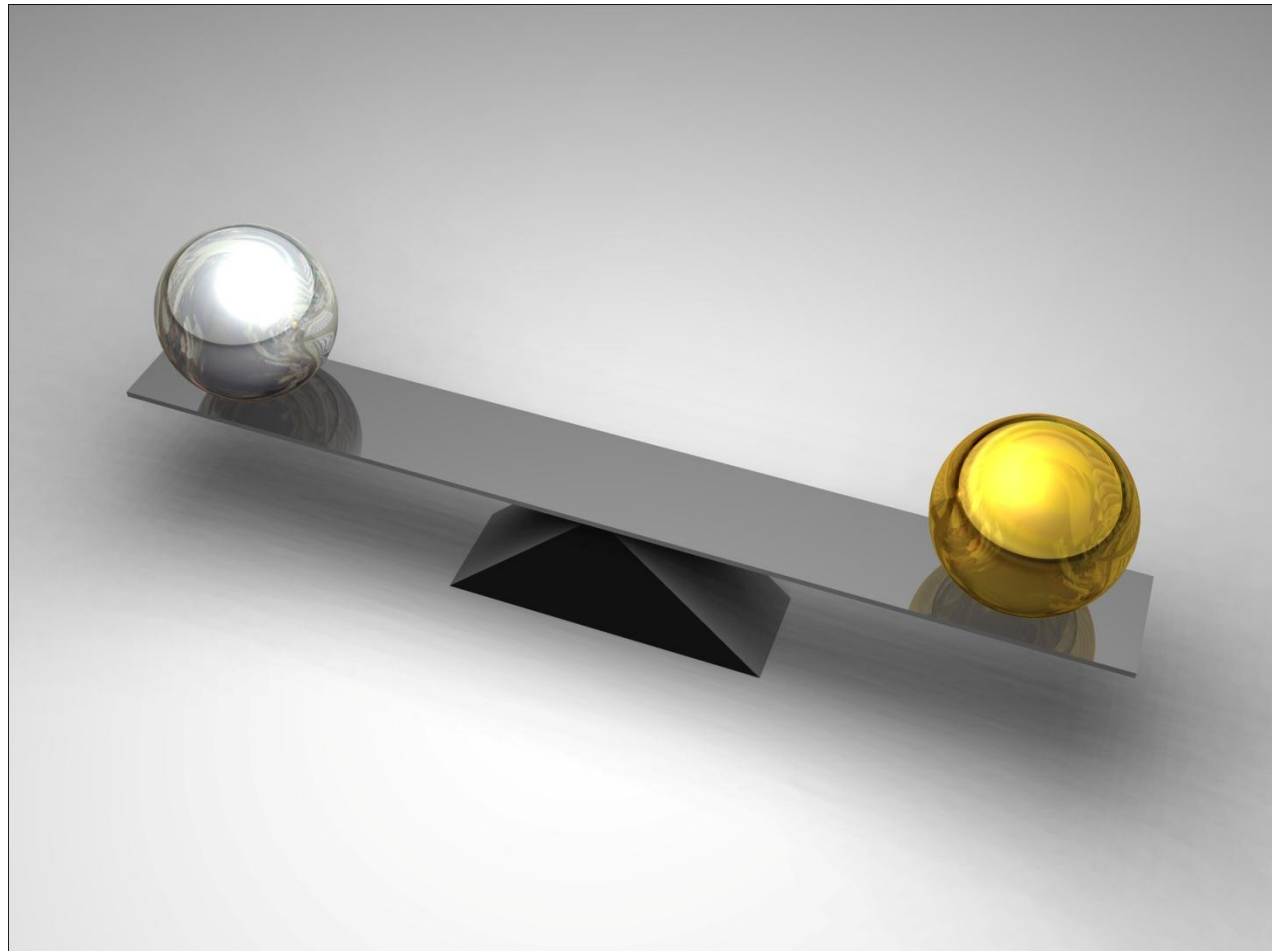
Models for mobile technology use

Understanding perceptions

5

Usage Model	Employee Perception	Company Perception
Company supplied mobile technology for business use with a company paid usage plan for business use	<p>No expectation of privacy</p> <p>No right to control device</p>	<p>No employee privacy (e.g., monitoring/acceptable use)</p> <p>Full right to control device</p>
Employee supplied mobile technology with company paid usage plan for business and personal use	<p>Limited expectation of privacy</p> <p>Partial right to control device (e.g., personal vs. business)</p>	<p>Limited employee privacy</p> <p>Partial right to control device (e.g., downloads vs. remote wipes)</p>
Employee supplied mobile technology and self-funded usage plan for business and personal use	<p>Full expectation of privacy</p> <p>Full right to control device</p>	<p>Limited employee privacy</p> <p>Partial right to control device</p>

Designing & Implementing The Balance



Prerequisites!!

- Tone set at the top
- Centrally managed risk management plan (DLP, for example)
- Anti-malware solutions to reduce infections and protect company systems.
- Firewall and intrusion prevention system (IPS) to monitor traffic to and from key assets

Prerequisites...continued

Policies, Policies, Policies

- Decision must explicitly include all possible components (phone, laptop, tablet)
- Policies must be flexible as new technology becomes available

Policies

The policies should make clear:

- Which devices will be supported
- Which apps, or categories of apps, are authorized/forbidden
- What company data is allowed on personal devices
- How & Who to get support from/for devices and applications

The policies should also answer:

- When a device is no longer used or employee leaves, what are the responsibilities for deletion of secure data?
- Where and how will devices be backed up?
- Who is responsible for backup?
- Timely notification of loss or theft

Prerequisites... *continued*

- Sign specially crafted mobile/personal device agreement / acknowledgement
- Update your incident handling policy
- Get buy in from HR & Legal & Internal Audit
- Decide if you will allow Consumerization – formally or otherwise (because it *will* happen!)
 - Don't wait for it to happen and then rush to formulate policy and procedures

Prerequisites...*continued*

Finally,.....

Decide: Is the consumerization of IT really appropriate/culturally relevant in my company?

- Dunder Mifflin? *Probably.*
- CIA? *Probably not*

“Rules” and Best Practices

Separate personal and corporate identities

- Compartmentalize the environments to reduce the risk of leakage & loss.
- Allow access thru Citrix/VDI only
- Corporate issued iPhones, Droids, iPads/tablets – active sync; personal devices - sandboxed



Best Practices

- Remote wipe / kill / lockout
- Password protected
- Auto-lock after X minutes
- Device wipes after X failed log-ins
- On device encryption (if supported)
- SSL encryption of e-mail

Options

- Third party support and maintenance contract
- Stipend for personal hardware purchase
- Consider a pilot with the most technically astute workers first
- Build custom machines/devices for the Vanguard

Options

- Consider dividing employees into categories on how their usage might benefit company
 - Highly sensitive access users get company-owned and managed devices
 - Telecommuters or Road Warriors get significant subsidies for personal devices/plans
 - Other with some time away from office get partial subsidies
- “Connection Contract”
- Roll-out of limited feature set (camera turned off, YouTube denied, explicit content blocked, App store access denied)

Typical Settings Options



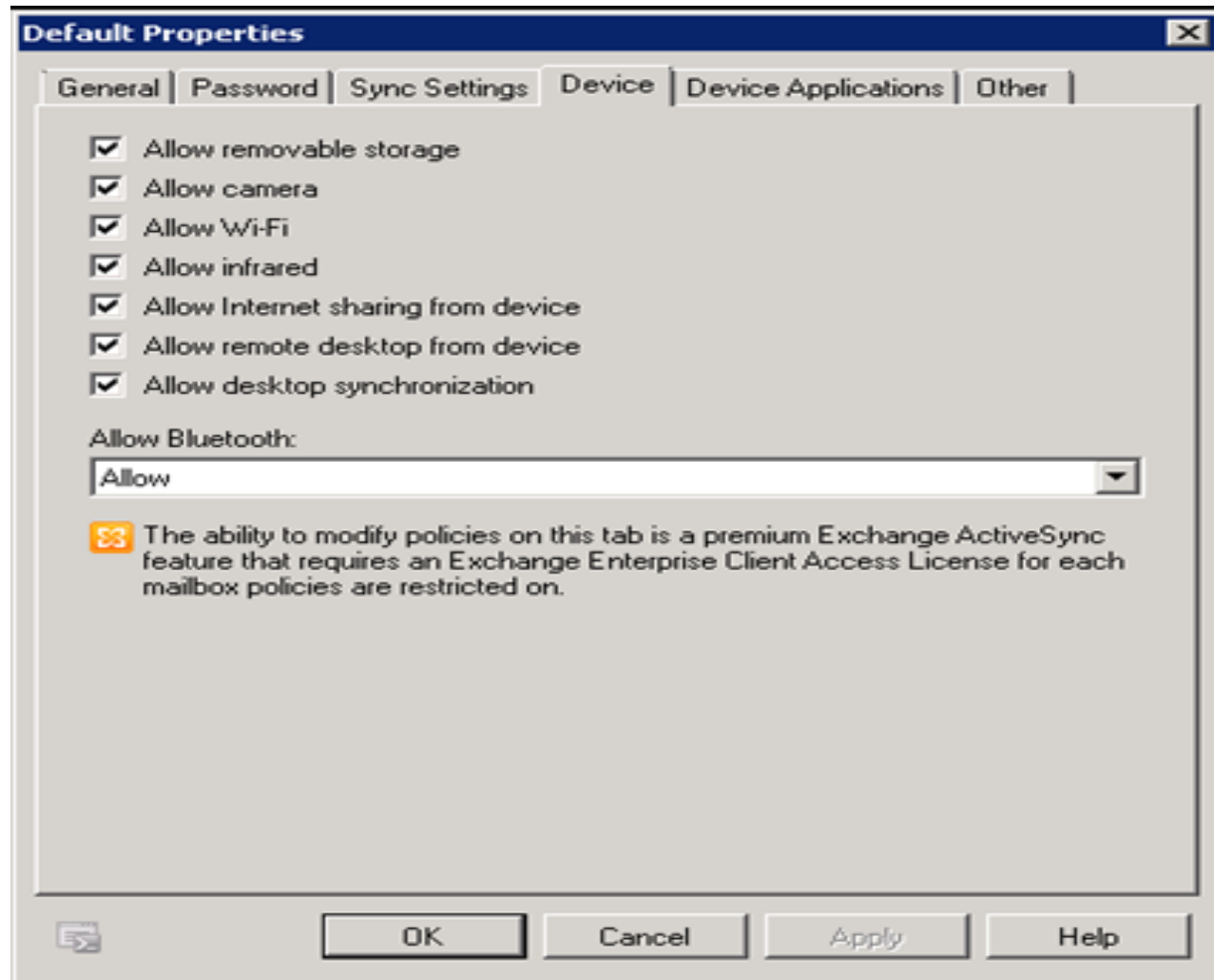
The image shows a screenshot of a Windows-style dialog box titled "Device Security Settings". The dialog box has a blue title bar with a close button (X) in the top right corner. The main area is light gray and contains several settings, each with a checked checkbox and a corresponding input field or button:

- E**nforce password on device
- M**inimum password length (characters):
- R**equire both numbers and letters
- I**nactivity time (minutes):
- W**ipe device after failed (attempts):
- R**efresh settings on the device (hours):
- A**llow access to devices that do not support password settings:

Below the last setting, there is a text label: "Specify an exception list of users that are exempt from the setting enforcement". To the right of this text is a button labeled "Exceptions...".

At the bottom of the dialog box, there are three buttons: "OK", "Cancel", and "Help".

Typical Settings Options



Developing a BYO Culture

- **Don't/Can't say no to “bring your own”:** The toothpaste is out of the tube. Employees are more productive when they have a vote on the tools they use. Show leadership & get it right so that the company is protected & users are (relatively) happy.
- **Listen to the end users:** Primary objective of consumerization is work and personal life on a single device. Tailor policies and guidelines to this end.
- **Research and test your approach:** Consider a pilot program before full rollout. Discover the range and types of best devices as well as what access users will need.
- **Document and communicate a clear set of policies for end users:** Everyone should know what the company policies are and where to find them. Review all policies as new technologies arrive and raise new issues.

Lastly, consider...

1. For employees: Implicit
Presumption: *You can now be
reached 24/7*

2. For employers: *Culturally
acceptable, but prudent? Worth the
trade-off?*

Questions?





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