Pulse
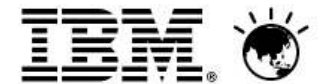**IBM SolutionsConnect 2013**

Managing and Securing the Mobile Environment

How IBM is handling it's own internal mobile device management challenges

13 June 2013

IBM

Managing and Securing the Mobile Environment

Agenda:

▪IBM's workplace overview: Today and tomorrow

▪Our mobile device strategy

▪Summary: Managing and Securing the Mobile Environment

▪Q & A

The New Work Paradigm:

- The enterprise is evolving towards global integration ...

THE NEW WORK PARADIGM IS SHIFTING TOWARDS MOBILE EMPLOYEES...

Freedom is working where I want, when I want.
With access to the information, support and collaboration
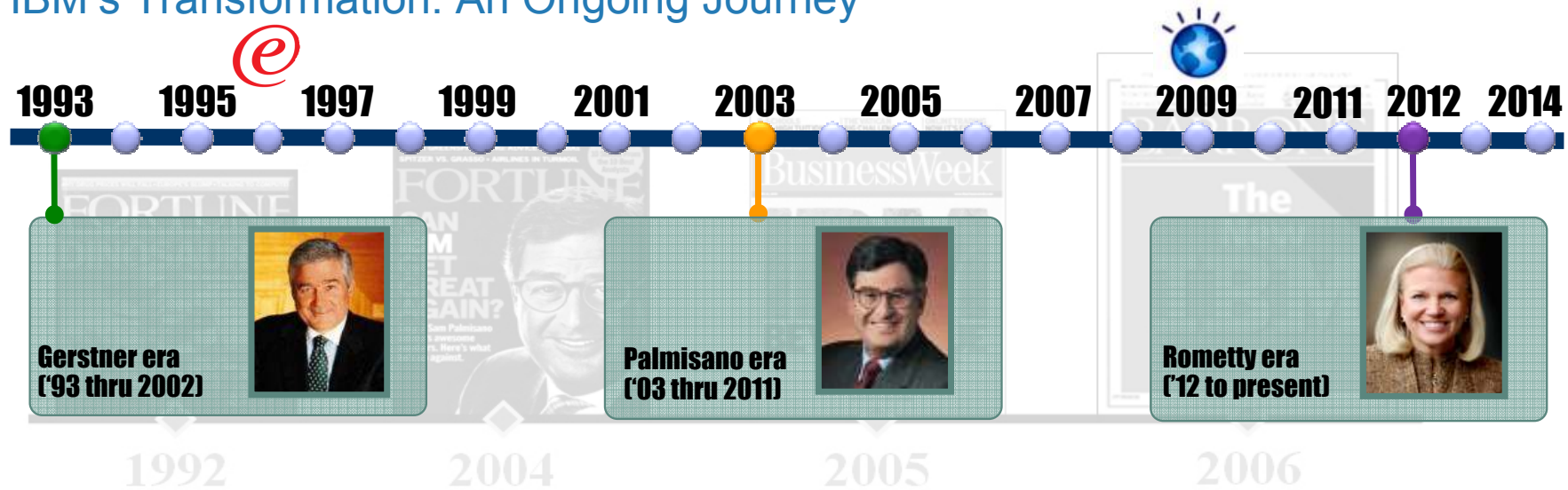*I need ... using any connection or device I choose.*

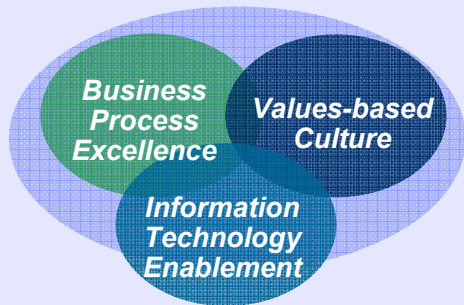*Work is no longer a place …. It's where I am!*

IBM's workplace overview: Today and tomorrow

IBM's Transformation: An Ongoing Journey

Timeline: 1993 · 1995 · 1997 · 1999 · 2001 · 2003 · 2005 · 2007 · 2009 · 2011 · 2012 · 2014

Gerstner era ('93 thru 2002)

Palmisano era ('03 thru 2011)

Rometty era ('12 to present)

IBM's Transformation Framework

- Business Process Excellence
- Values-based Culture
- Information Technology Enablement

IBM's Values

Dedication to every client's success.

Innovation that matters—for our company and for the world.

Trust and personal responsibility in all relationships.

IBM.

IBM's workplace overview: Today and tomorrow

The IBM Personally owned Device Case Study

- 95% (400K+) IBM employees are issued laptops

- Strong dependency on collaboration and social media tools to conduct IBM business and stay connected to clients, colleagues, etc.

- Over 115,000 smartphones and tablets and growing rapidly (primarily Android OS and Apple iPhones/iPad devices)

- 11k Apple Mac laptops at IBM (majority are personally owned)

- Personally owned devices can be used for business purposes – most employees pay for their own device/service

- Program is an augmentation to our enterprise policy

IBM's program "really is about supporting employees in the way they want to work. They will find the most appropriate tool to get their job done. I want to make sure I can enable them to do that, but in a way that safeguards the integrity of our business."
– IBM CIO Jeanette Horan

How did IBM become a "mobile" business?

- Established policies for mobile employees

- Established t's and c's for personally-owned devices

- Sold expensive office space and created world-wide mobility centers

- Launched small, focused "opt-in" BYOD pilots. Resisted the urge to "boil the ocean"

- Embraced collaboration and social media tools to enable self-support through communities

A highly diverse workforce:

- 425,000 employees worldwide

- 50% workforce has less than 5 years of service

- 50% of employees work remotely – not from a traditional IBM office

- 71% of employees are outside the US

IBM.

IBM's workplace overview: Today and tomorrow

Mobile Device user – A Day in the Life of Kimberly

"I help clients create enterprise mobile strategy"

Employment Status:

Full time IBM

**Country:**

Australia

Equipment used:

Personal Smartphone, Personal tablet

Environment:

IBM, Client, Public

SOLUTION

✓ IBM Endpoint Manager (IEM) provides encryption capability for MicroSD cards on Smartphones
✓ IBM Advisor checks for jail-broken phones and provides VPN authentication
✓ IEM requires mobile device registration and enforces security settings
✓ IBM Secure Backup solution eliminates the need to use unsecure cloud storage services
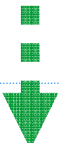
8:00 AM

I install **IBM Endpoint Manager on my personal Android phone, and use it to secure my MicroSD** card to store client presentations.
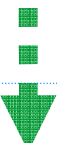
12:00 PM

I am **required to install IBM Advisor on my Android phone to check for jail-broken phone** before connecting to the IBM network.

3:00 PM

At an IBM office, I try to connect my Android tablet to the IBM WiFi **but the end point registration system asks me to register my device and check for security settings before allowing access to the IBM network.**

4:30 PM

I download a remote desktop application but **IEM detects the software and advises me to uninstall it because of security concerns.**

5:30 PM

I copy a few **IBM confidential presentations to IBM Secure Backup solution.**
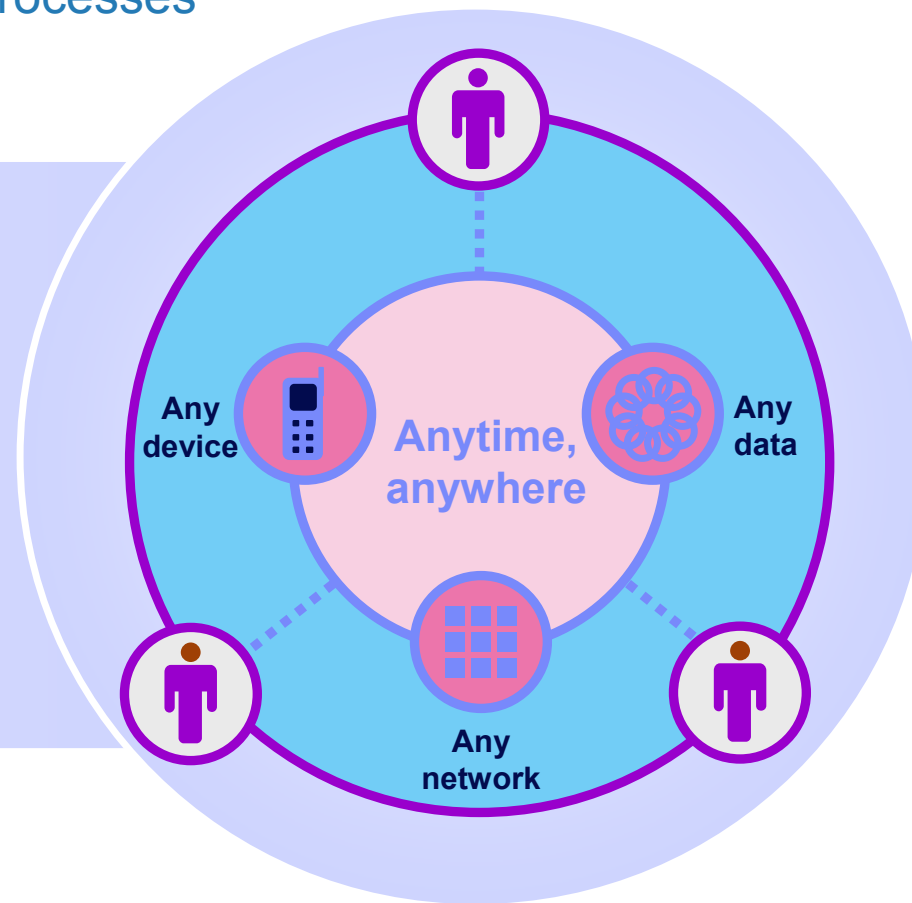
Pulse

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Our mobile device strategy

Enabling people and the collaborative work processes

Find expertise and build a robust network of colleagues

Connect to relevant information, applications, processes and people

Interact with employees, partners, suppliers and customers

Transact business in realtime

Our mobile device strategy

Mobility Challenges: enable work anytime, anywhere, on any trusted device

- Protect our assets

- Provide device choice

- Provide anywhere access

- Provide tools and applications

- Manage platforms

Our mobile device strategy

Create innovative capabilities that enable work to be performed anywhere, anytime, with anyone in a secure and socially collaborative way to enable a smarter workforce

WoF Vision

- **Ubiquitous**
  - Quick connectivity through many devices
  - Always available and accessible
- **Protected**
  - Right balance of precaution and productivity
- **Collaborative and cultural**
  - Feeling connected
  - Open conversations
  - Sense and respond through listening
  - "I'm an IBMer"
- **Cost effective**
  - Available at price points based on role and consumption
- **Geared for speed**
  - Easy to find experts and resources, information, tools and best practices

Audio/Video

Connected

Collaborative

Social

Cloud

Mobile

Anytime /
Anywhere

Secure

Strategic Programs

- **Secure Workplace of the Future** - Protect IBM's and Client's assets while supporting an innovative and flexible workplace.
  SWoF Roadmap

- **Mobile Adoption** - Provision the right applications to the right employees at the right time, on their secured device of choice.
  Mobile Roadmap

- **Collaboration and Social Business** - Transform IBM into a Globally Integrated Enterprise by driving adoption of social and collaboration capabilities.
  Social & Collaboration Roadmap

Our mobile device strategy

Enabling mobile

Provide employees the right device and the right tools to perform their work, based on their role

By 2016, over 350 million will use their smartphones for work. – Forrester, April 2012

90% of companies will support corporate applications on personal mobile devices by 2014 – Gartner, Nov. 2011

80% of the current global population will have a mobile device by 2016. – IBM Five in Five, Dec. 2011

73% of senior executives agreed that their mobile device is now their primary communications tool - Forbes, 2010
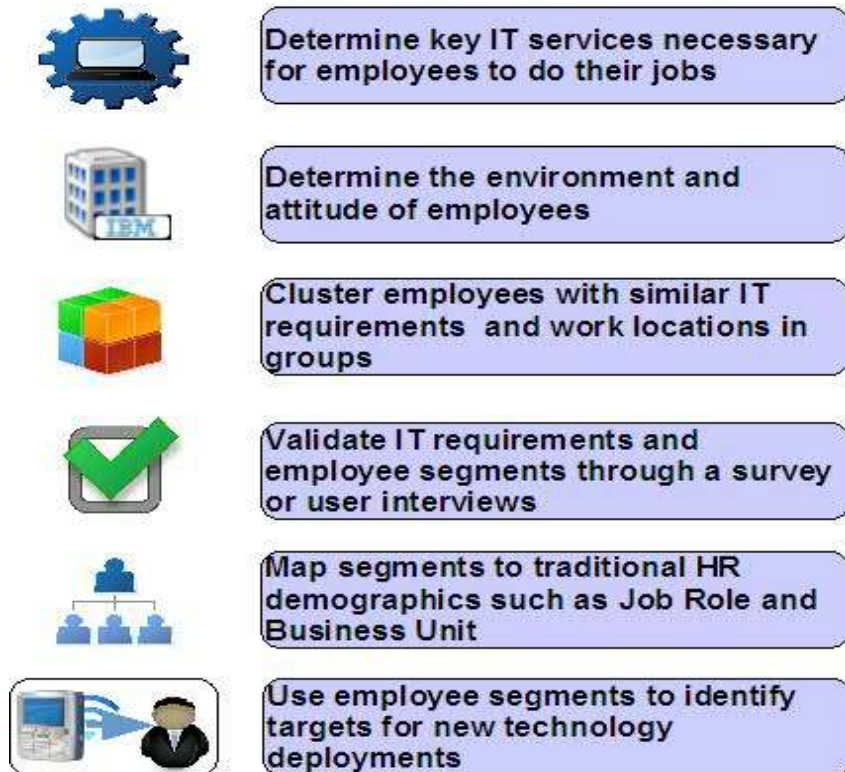
Foundational Principles for Mobile

1. Use *employee segmentation* to determine device requirements appropriate for their role.

2. Allow employees to *use an IBM authorized personal device* to the workplace and provide them with basic connectivity, security, and work tools, and a self-support model powered by social.

3. Require all *devices to be registered and secured* with appropriate controls.

4. Define a mobile application development framework to enable the *strategic application portfolio*

5. Provide an *enterprise app store* to efficiently deliver business applications to employees on mobile devices.

Our mobile device strategy

Execute based on segmentation

Approach

- Determine key IT services necessary for employees to do their jobs
- Determine the environment and attitude of employees
- Cluster employees with similar IT requirements and work locations in groups
- Validate IT requirements and employee segments through a survey or user interviews
- Map segments to traditional HR demographics such as Job Role and Business Unit
- Use employee segments to identify targets for new technology deployments

Identified Personas

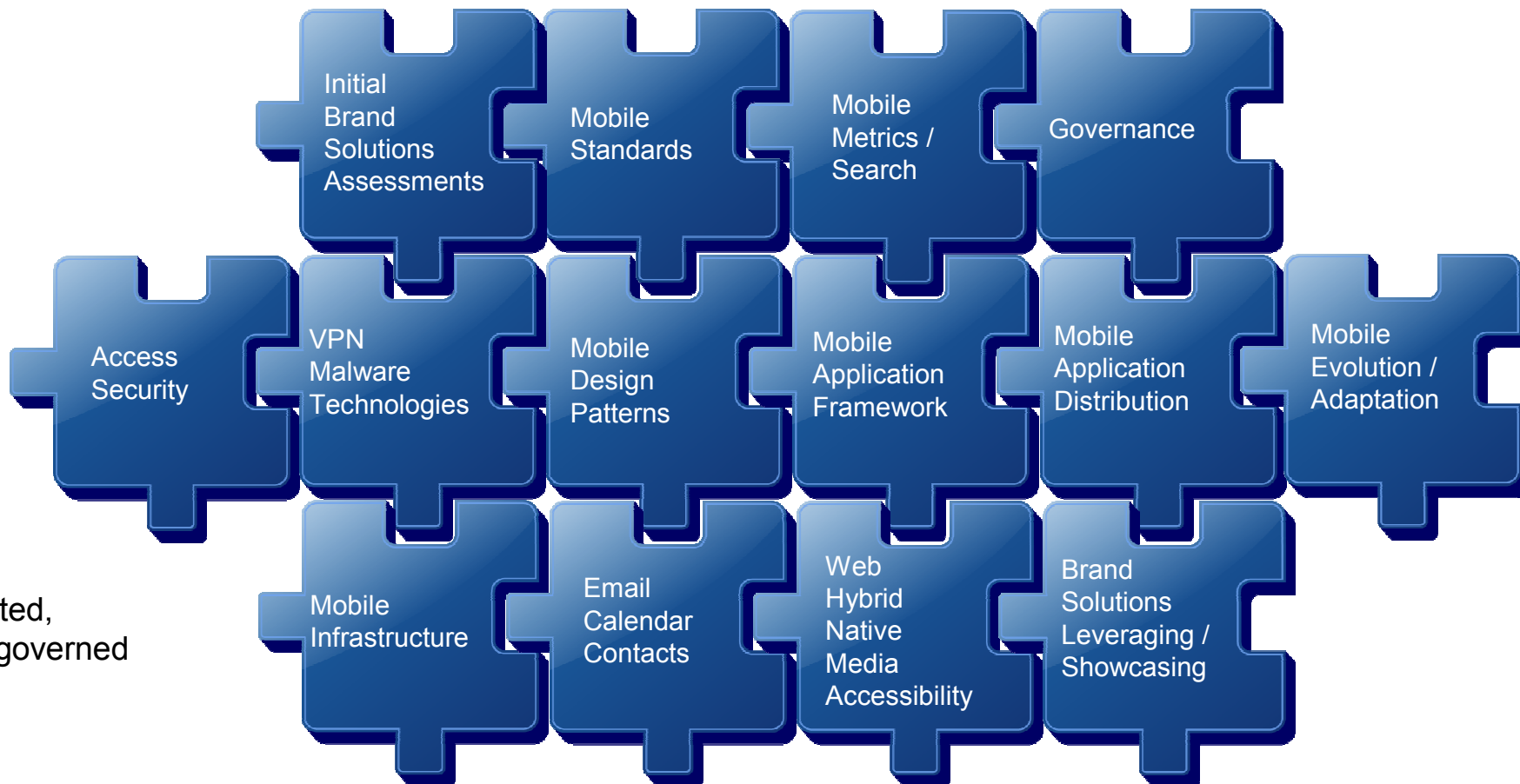| 13 Personas based on the IT requirements of IBMers	
Customer facing IBMer	IBM office based employee
Growth market employee in a global support role	Work at home employee (non-traveller)
Manufacturing and other non-traditional office employees	Employee with a basic software and application need
Researcher, SW and HW development engineer with a high end workstation requirement	Employee with accessibility requirements
Employee with low technology adoption attitude score	Employee in a leadership or executive role
Employee with a high technology adoption attitude score	Frequent traveller – non customer facing (e.g. Education, internal auditor etc)
Employee joining through an acquisition (Before systems integration)	

Our mobile device strategy

Cost Considerations:

▪Roadmap for BT/IT Shared Service includes yty expense reduction while workforce grows

▪Corporate managed program by role/segments
- Mobility tool for guidance and options
- Compliance Process & Validation

▪Cost management
- Employees can leverage IBM contracts
- Negotiate local geo/country contracts with global mobile carriers including ongoing service cost reductions
- Strict Reimbursement policy

▪A consistent mobile rendering of IBM web applications will require some investment and re-engineering (target apps based on relevance)

▪IBM is investing in Mobile Device Management to improve security and systems management of these mobile devices

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Our mobile device strategy

The Comprehensive Mobile Ecosystem

Provide an integrated, standards based, governed mobile ecosystem

Initial Brand Solutions Assessments

Mobile Standards

Mobile Metrics / Search

Governance

Access Security

VPN Malware Technologies

Mobile Design Patterns

Mobile Application Framework

Mobile Application Distribution

Mobile Evolution / Adaptation

Mobile Infrastructure

Email Calendar Contacts

Web Hybrid Native Media Accessibility

Brand Solutions Leveraging / Showcasing

IBM

# Summary: Managing and Securing the Mobile Environment

Addressing the challenges with a four-pronged approach

Technology:

- Sunset legacy devices (Symbian, Win Mobile)
- Cross link Traveler accounts with IEM registration
- Digital Certification for all mobile devices (1st step authentication)
- Cross link digital certs to IEM and network access
- WiFI protection via enforced registration
- Containerization solutions
- Remote wipe capability
- Enable and deploy high value applications

Support:

- Self-support model, powered by social software
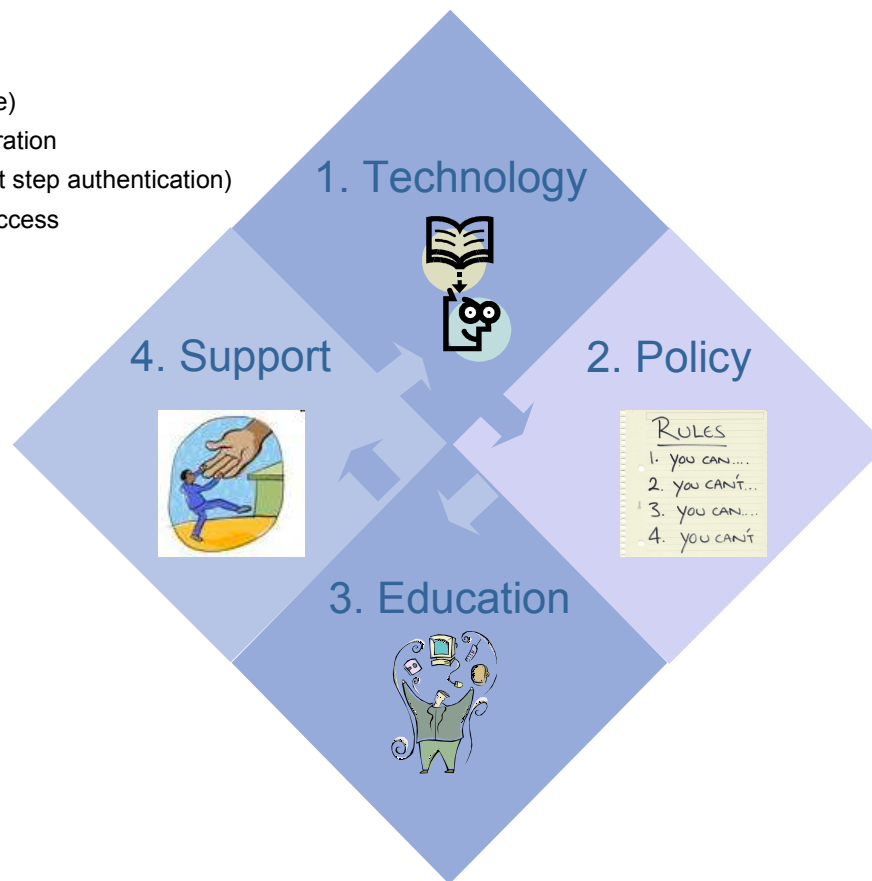
Policy:

- Security policy
- Client Standard
- Connection tools and service expense eligibility All mobile devices must be registered in IEM

Education:

- Provide education and certification to enable employees to be "security aware"
- Annual Business Conduct Guidelines certification
- "Ask the experts"

1. Technology
2. Policy
3. Education
4. Support

Thank you for your time !

Steve Godbee

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