



# Mobile Computing

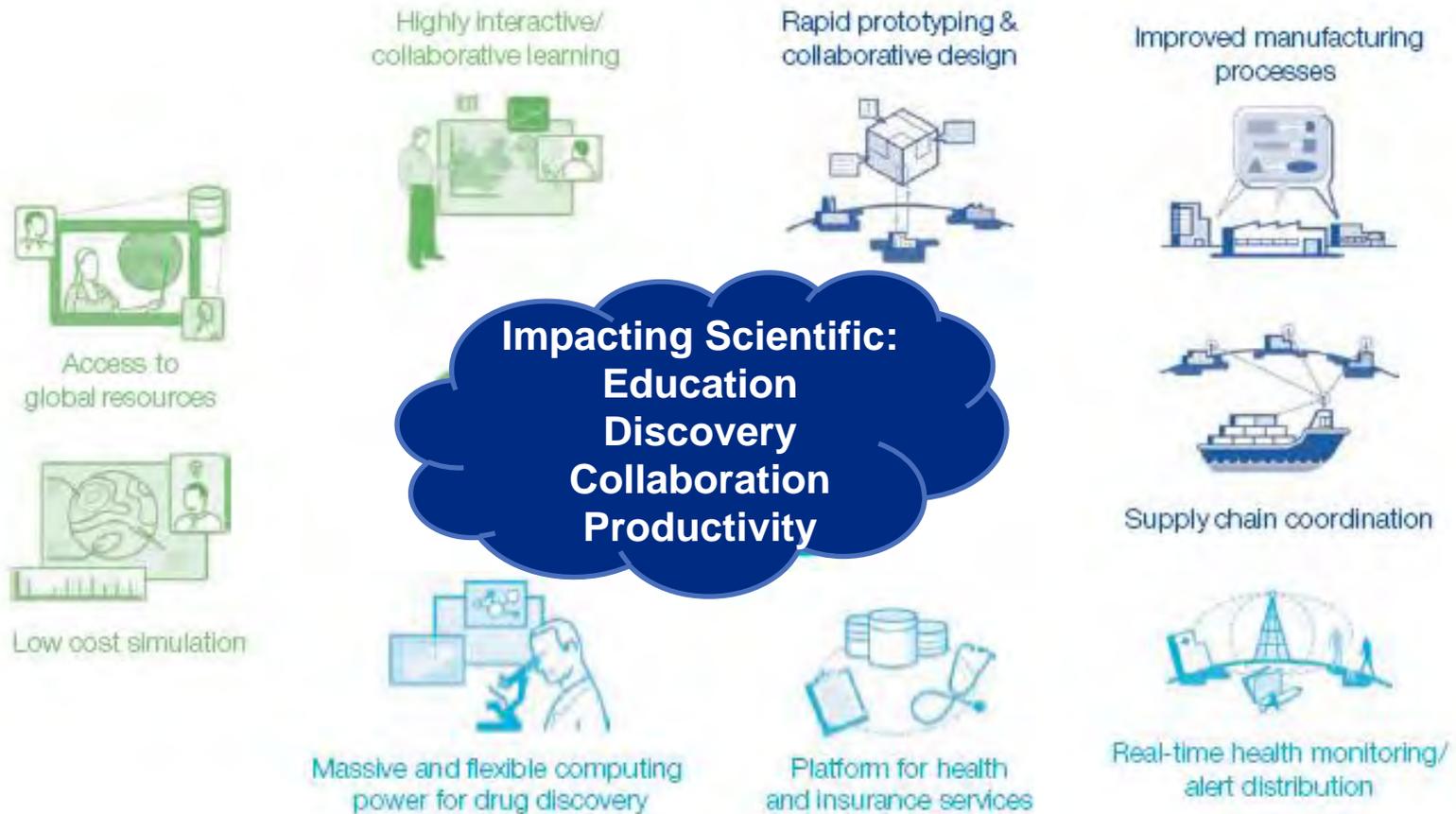
## The Future Vision for Science and Technology



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# Mobile Future Vision - Science and Technology



# Post Personal Computer ERA

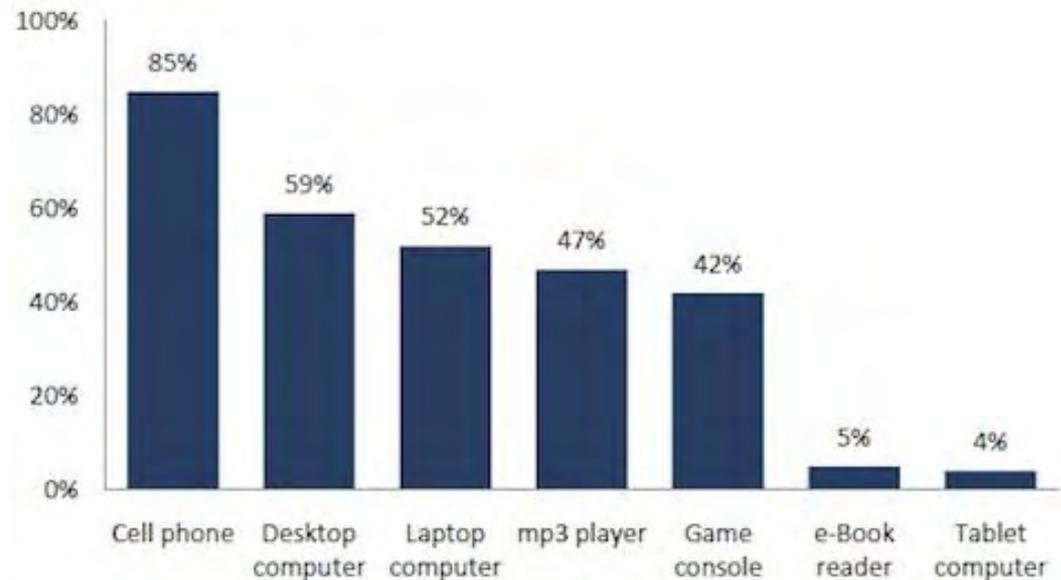


# Ubiquitous Deployment

**85 percent of Americans over the age of 18 own a mobile phone, and that a staggering 96 percent of Americans aged 18 to 29 “own a cell phone of some kind.”**

## Gadget Ownership, 2010

*% of American adults who own each device*



Source: Pew Research Center's Internet & American Life Project, August 9-September 13, 2010 Tracking Survey. N=3,001 adults 18 and older, including 1,000 reached via cell phone. Interviews were conducted in English (n=2,804) and Spanish (n=197).

# Confluence of Innovation



App Store

# Evolving Mobile Technologies

**Ten mobile technologies will evolve and impact mobile strategies and policies:**

- 1. Bluetooth**
- 2. Mobile Web**
- 3. Mobile widgets**
- 4. Platform-independent mobile AD**
- 5. App stores**
- 6. Enhanced location awareness**
- 7. Cellular broadband**
- 8. Touch screens**
- 9. Augmented Reality**
- 10. Device-independent security.**



# Key Issues Impacting Adoption

**Policies, processes, skills, financial analysis and management techniques necessary to justify mobile applications**

**Technologies, development platforms and architectures that enable and support mobile applications evolution.**

**The vendor landscape for sourcing, securing or building mobile applications and systems**



# Risk

**54% of respondents agree that mobile platforms are extremely risky**

**42% of respondents agree that Cloud computing is extremely risky**



***Source: 2010 IBM Global IT Risk Study – 550 senior It execs including 110 CIO's representing finance, healthcare, biotech, government and manufacturing, enterprises with revenue >\$500M annually***

# Mobile Computing Case Study



# Mobile Science 2010

## News



SciMobile

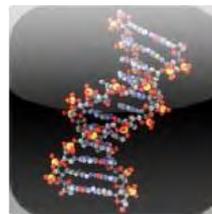
## Education



SciHouse



SciGlossary



Molecules



Exoplanet

## Productivity



Papers

## Reference



Promega

## Medical



iCut DNA

**70+ Mobile Computing Science apps**  
[www.melvingreer.com](http://www.melvingreer.com), **Blog**

# Vision for Mobile Science and Technology

## Future vision mobile technologies:

- **Context Aware**
- **Biosensing**
- **Nanotechnology enabled**
- **Morphing of physical properties**
- **Solar Powered**
- **Super hydrophobic**
- **Stretchable**
- **Steel Strength composite mesh**
- **Transparent Electronics**
- **Haptic Surface with 3D forms**
- **Surface form is context dependant**
- **Mobile Web**



# Mobile Science 2025



**ecology / conservation**



**space science**



**advanced game theory**



**ocean science / climate**



**biologically inspired engineering**



**genomics / biotech**

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