

The Market, Technology, and Investing

October, 2008

SILVERLAKE

The Very Big Picture

Fundamentals

- Slowing worldwide growth 4+% → ~0%
 - U.S. economy already in recession
 - European economy sputtering
 - Financial services sector blighted
- Broad based consolidation continuing across most tech sectors
- Commoditization, disintermediation and price pressure are undermining traditional business models in:
 - Hardware (Outsourcing)
 - Software (SaaS, PaaS)
 - Services (Specialization)

Financials

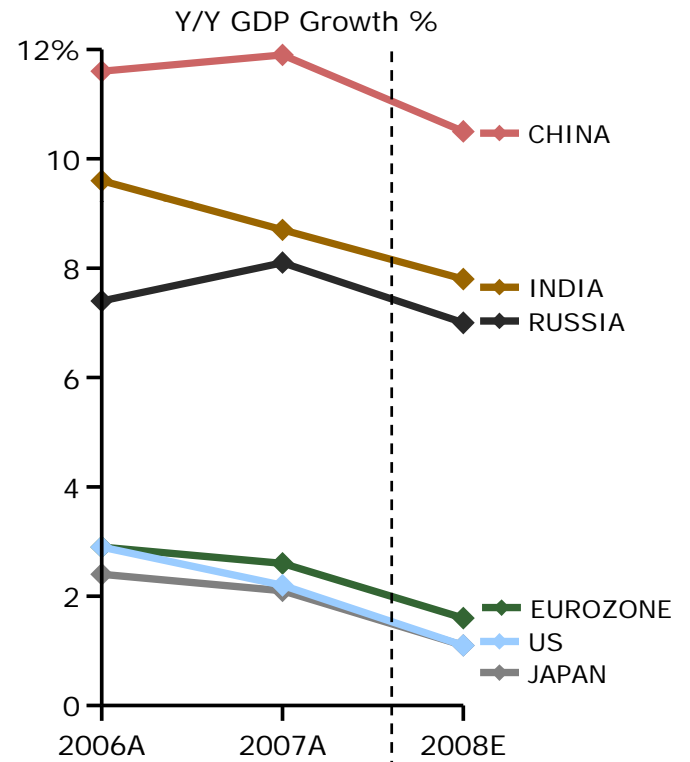
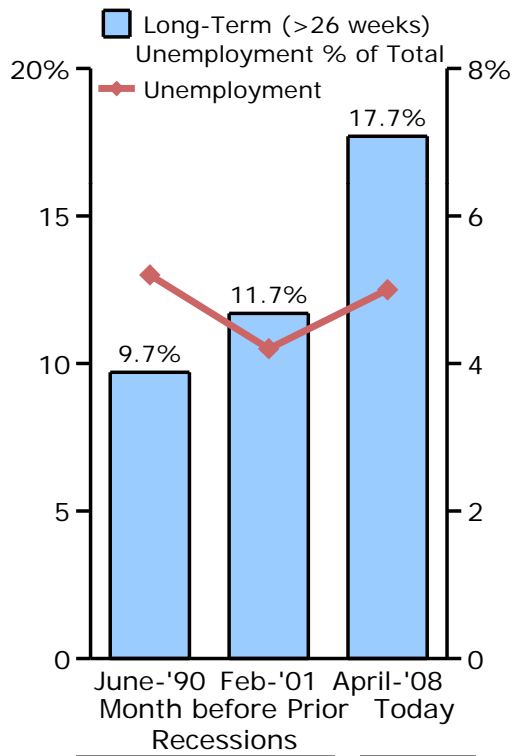
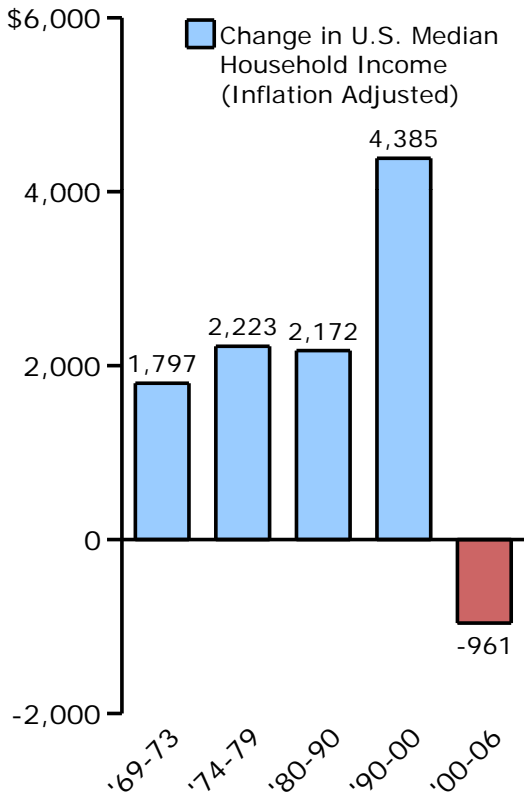
- Liquidity crisis ongoing; credit remains extremely tight
- LBO price floor for public companies effectively removed
- Volatile trading for public entities
- Strategic dialogue increasing
- Industry multiples down significantly from '07 peaks
 - Software (down 42%)
 - Services (down 35%)
 - Networking (down 60%)
 - Semiconductors (down 48%)

Outlook is Weak

The U.S. Consumer is getting hit from all sides...

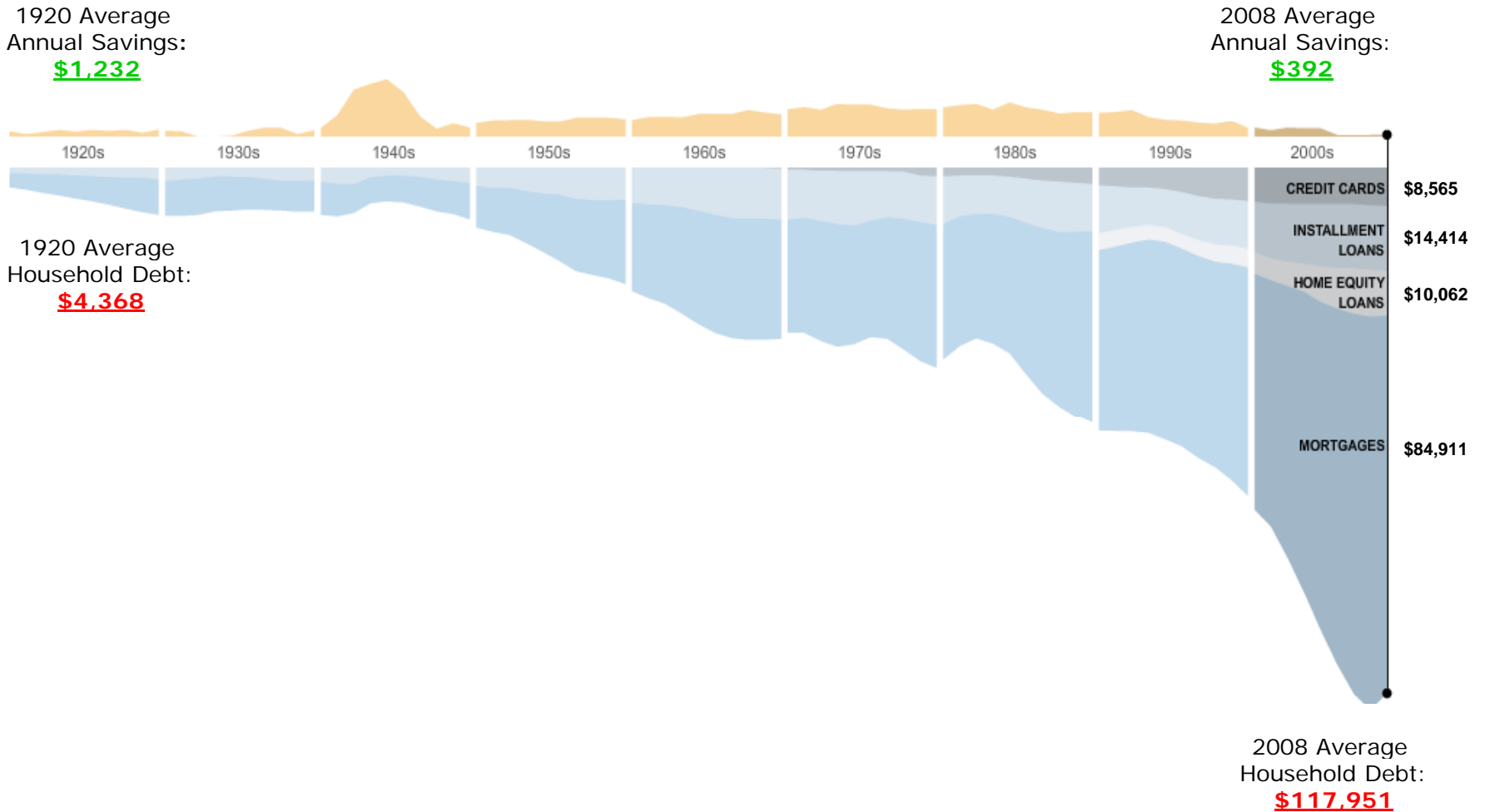
...current unemployment is structurally weak...

...both working to drag down U.S. and Global GDP.



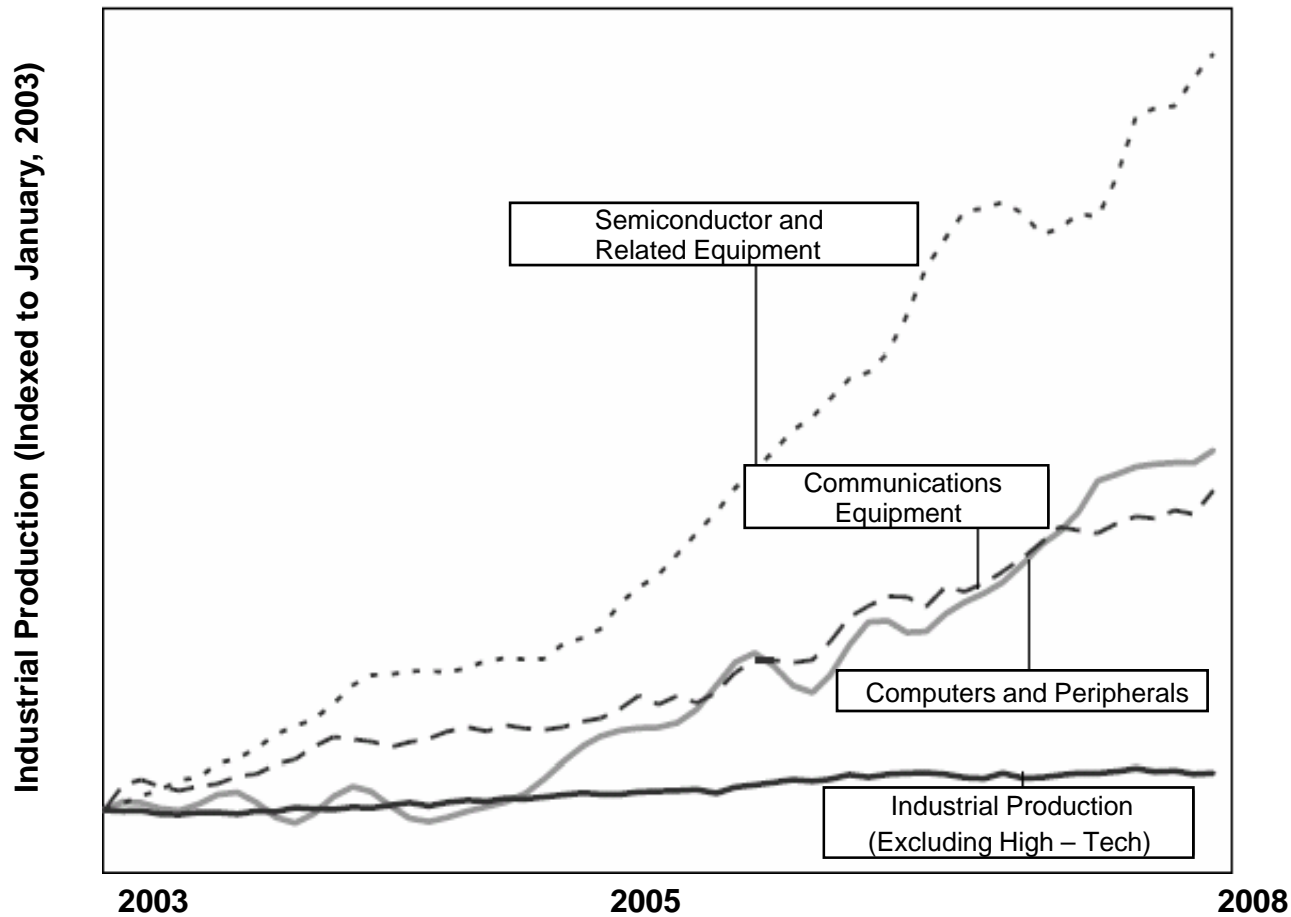
US Consumer Spending Unlikely to be a Growth Engine

Since 1920, US household debt has increased dramatically



The Technology Economy

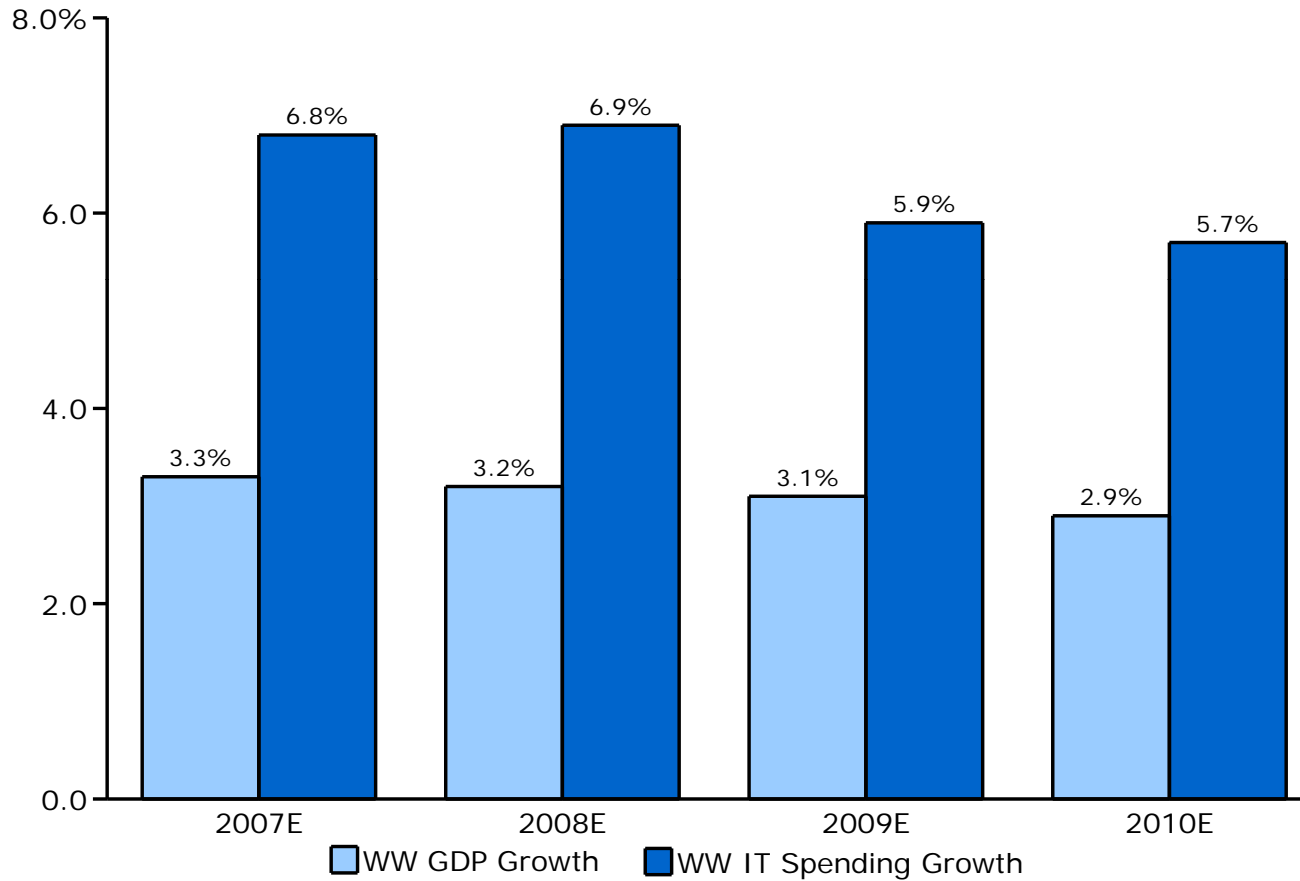
Technology spending has outpaced the rest of the economy



- LTM Total Industrial Production growth: **-1.5%**
- LTM Industrial Production growth, excluding Technology^(a): **-3.5%**

The Technology Economy

Technology growth expected to continue



Technology Phases

**The Internet has already helped drive efficiencies in the economy;
New technologies are poised to deliver additional gains**

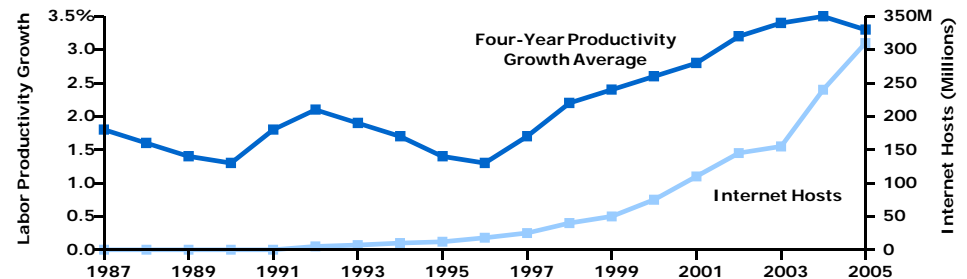
Phase I: Personal Computers and Software

PC and software growth represented the first phase of the new tech economy



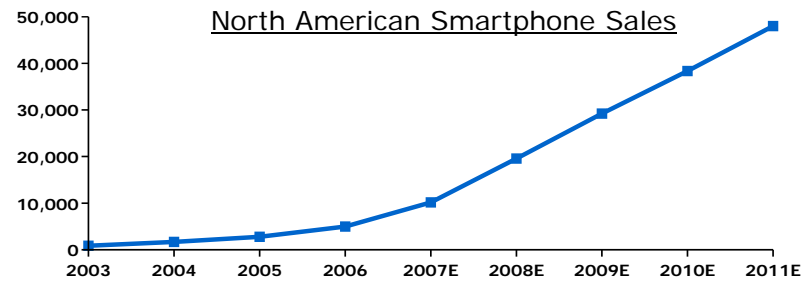
Phase II: The Emergence of the Internet

Most recently, significant value has been extracted from the proliferation of the internet



Phase III: Mobility and Broadband

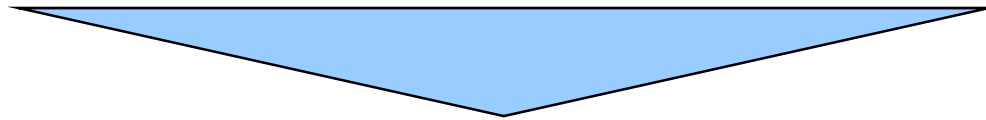
Mobility and broadband will deliver the next wave of IT-induced productivity growth



Major Industry Trends – Software

We've reached the end of modern software history

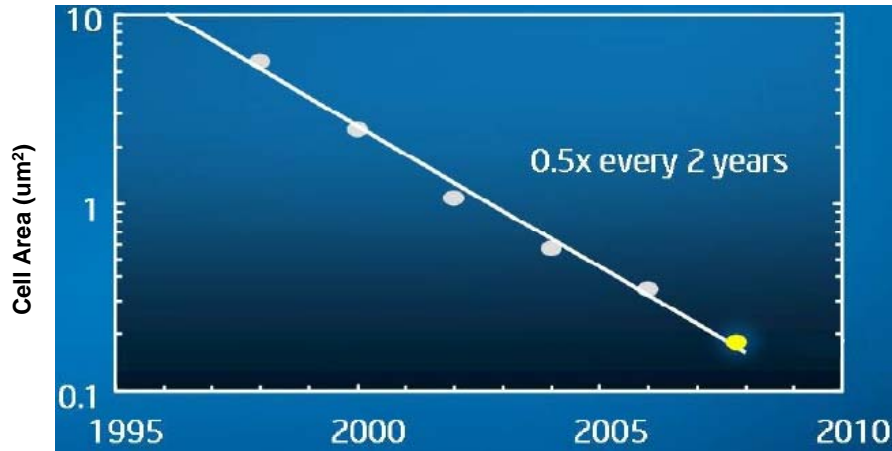
- Traditional Desktop software development is reaching the end of its life...the center of development has shifted to web-based paradigms
- “Open Source” may increasingly become the model for many companies delivering traditional software development environments and infrastructure components
- SaaS, and now PaaS offerings, will accelerate price deflation



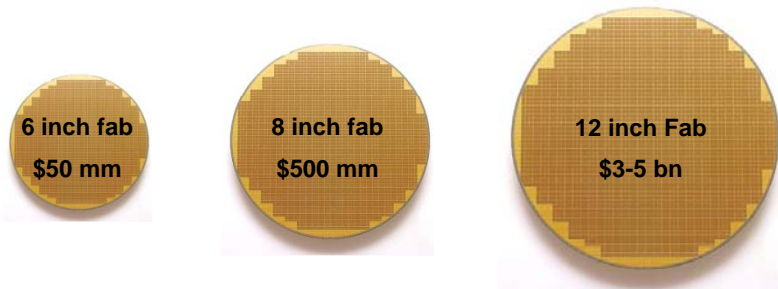
The future will not look like the past

Major Industry Trends – Hardware

Asian supply chains rule



- Moore's law remains unbroken but more expensive than ever
- Return of vertical integration for hardware market leaders (HP, IBM, Samsung)

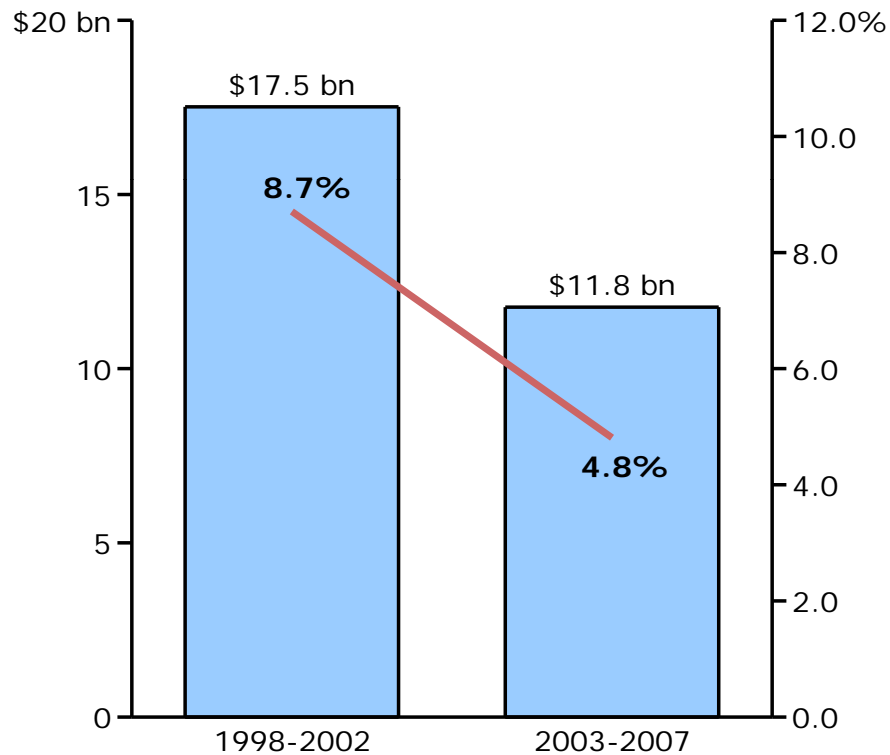


- Rise of NAND flash
- Emergence of national champions

Major Industry Trends – Services

IT systems don't install or maintain themselves

Industry EBIT and EBIT Margin Since 1998
(US Only)



- Largest single sector, over \$540 bn in revenues
- Experiencing uneven commoditization
- Standardized work continues moving to low-cost geographies
- Acceleration of M&A activity now inevitable

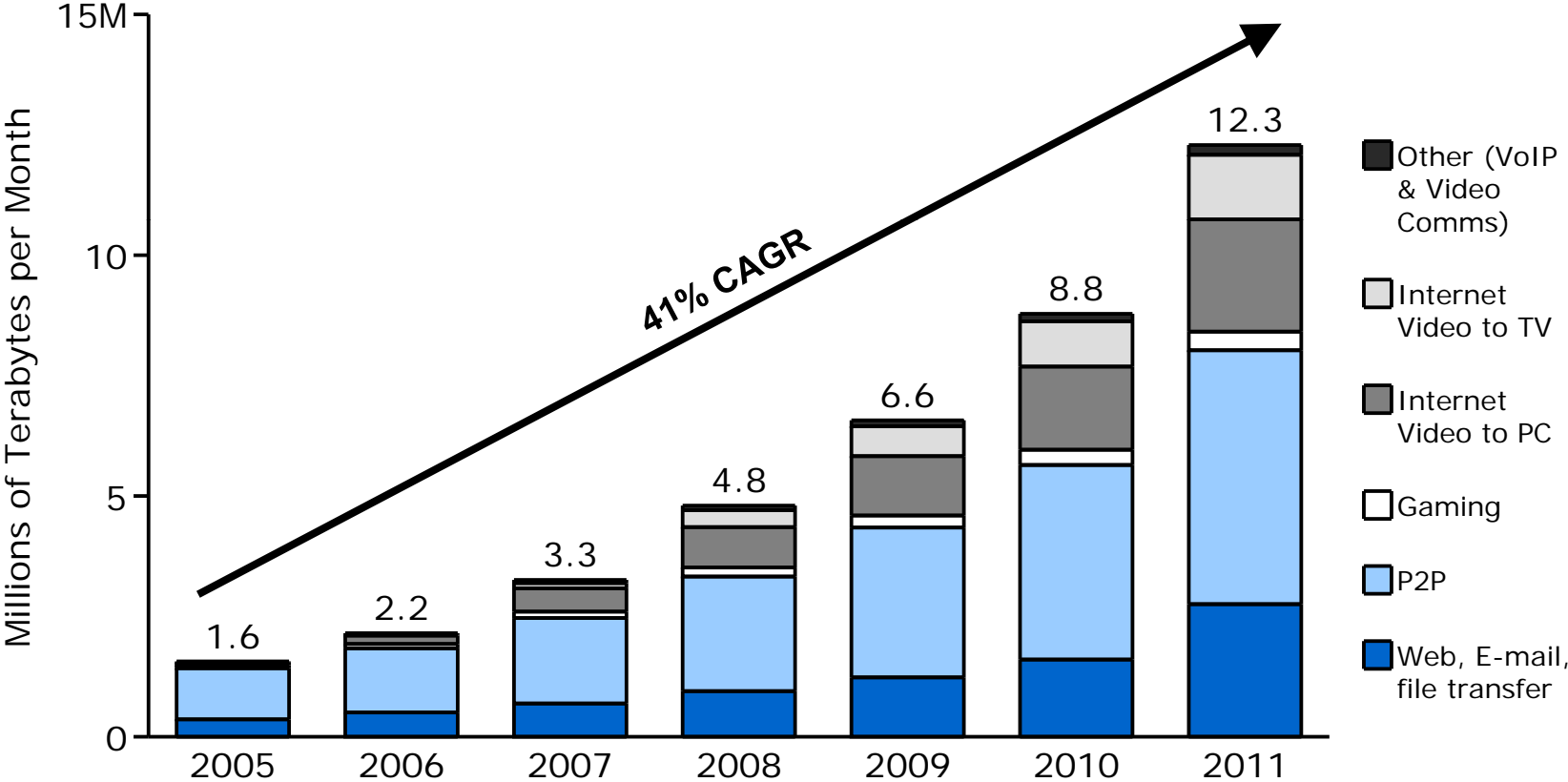
Major Industry Trends – Networking / Communications

Bandwidth boom driving the need for improved wireline infrastructure and next-gen wireless networks

- Consumers are causing exponential growth in Internet traffic, driven by many new applications with more video content
- Business video use lags as bandwidth tariffing/pricing models differ from consumer; business use is expected to explode in the next 3 years
- Watch for dramatic increases in wireline and next-gen wireless network infrastructure spending as traditional carrier business models come under attack
- Scale vendors will benefit disproportionately from this new infrastructure investment
- Convergence at the enterprise is creating a new \$44 bn market for “Unified Communications” (including HD collaboration) and setting the stage for a competition between equipment providers, software incumbents, apps vendors and services providers

Consumer Internet Traffic

Internet traffic and bandwidth requirements are exploding – the Internet is expected to quadruple in size in the next four years, primarily driven by video



Question?

Over the last 15 years which technology resource has improved most in terms of price/performance?

Technology	1991	2006	Ratio
MPU (Moore's Law)	\$500 bought a 50-megahertz Intel 486 processor	\$500 bought a 3-gigahertz processor	60X
Storage	\$500 bought a 100-megabyte drive	\$500 bought a 750-gigabyte drive	7,500X
LAN Bandwidth	1Mbps	10 Gigabit per second	10,000X
WAN Bandwidth	45Mbps	1 Terabit per second	20,000X

A Thought to End With...

In every era, the winning companies are those that waste what is abundant – as signaled by sharply declining prices – in order to save what is scarce

- US auto companies profited through the 50s and 60s on the backs of abundant (and cheap) gasoline and road building
- Microsoft exploited the economics of the PC revolution as no other – engineering more and more functionality onto an ever improving price performance curve for processors and local storage
- Google, in turn, has been extravagant about using data storage and backbone bandwidth. Conversely, it has been economical with today's most precious resource, users' time & patience
- AVI-SPL...