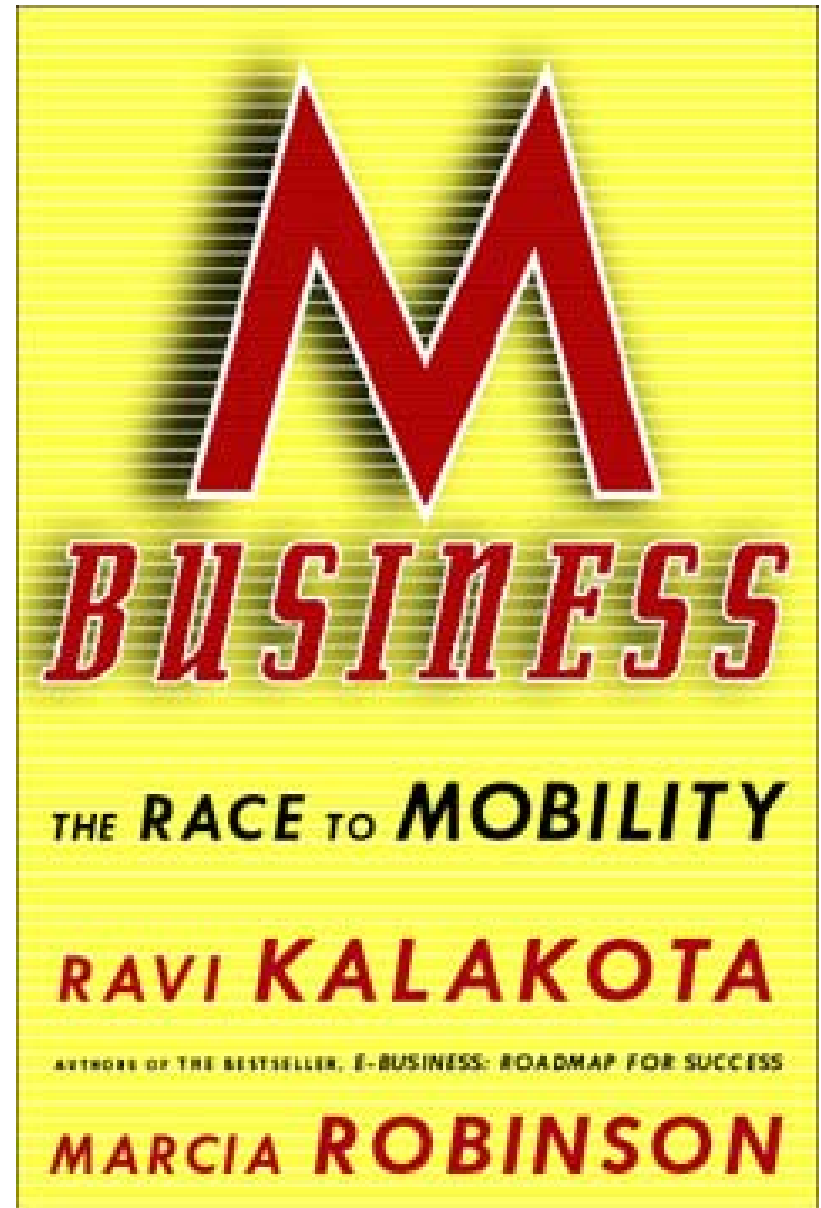


Chapter One

Structural Migration: From E-Business to M-Business

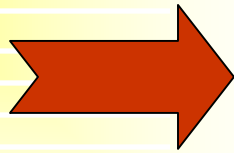


M Mobile Computing – Buzzwords

Pocket PC RFID ARM
StrongARM Mobile Application Servers
Multi-Channel Field Service i-Mode
HomeRF SMS Portals M-Commerce
802.11b WAP GPRS
J2ME Bluetooth EDGE
.NET Compact 3G UMTS

The goal of this course: Organize the chaos and develop an understanding of how to create business value using mobile innovations

M Table of Contents



Structural Migration is Taking Place

The Mobile Vision

Defining M-Business

The Mobile Ecosystem

**What does this mean for managers
– Looking Deep**

Key Take-Aways

M Leading Firms Are Repositioning ...

Microsoft

- From PC to multi-platform infrastructure services provider

Intel

- From microprocessor to mobile networking and communications products manufacturer

Nokia

- From cell-phone manufacturer to mobile economy player

DoCoMo

- From Japan into U.S. and Europe

Sony

- From electronics maker to on-the-go, in-hand entertainment player

AOL Time Warner

- From PC to “anywhere, anytime” content and services provider

M ... And Creating Shared Vision

Structural migration from tethered PC-centric to mobile person-centric models

- Within the next decade, mobile devices will become commonplace, as broadband access and new wireless networks become increasingly available
- Lethal combination of computing and wireless will get embedded into everything from cars to toys
- Mobility will change customer interaction in unforeseen ways

M **What It Means for Business**

- **Customer relationships characterized by a tethered, desktop-confined way of thinking today**
- **Center of gravity shifting from tethered to untethered models**
- **Customer priorities tend to shift in response to new technologies**
- **Business models must morph for competitive advantage**
- **New priorities result in newer business opportunities and market structures**
- **Changing priorities weaken existing industry structures**

M Structural Migration: Are You Ready?

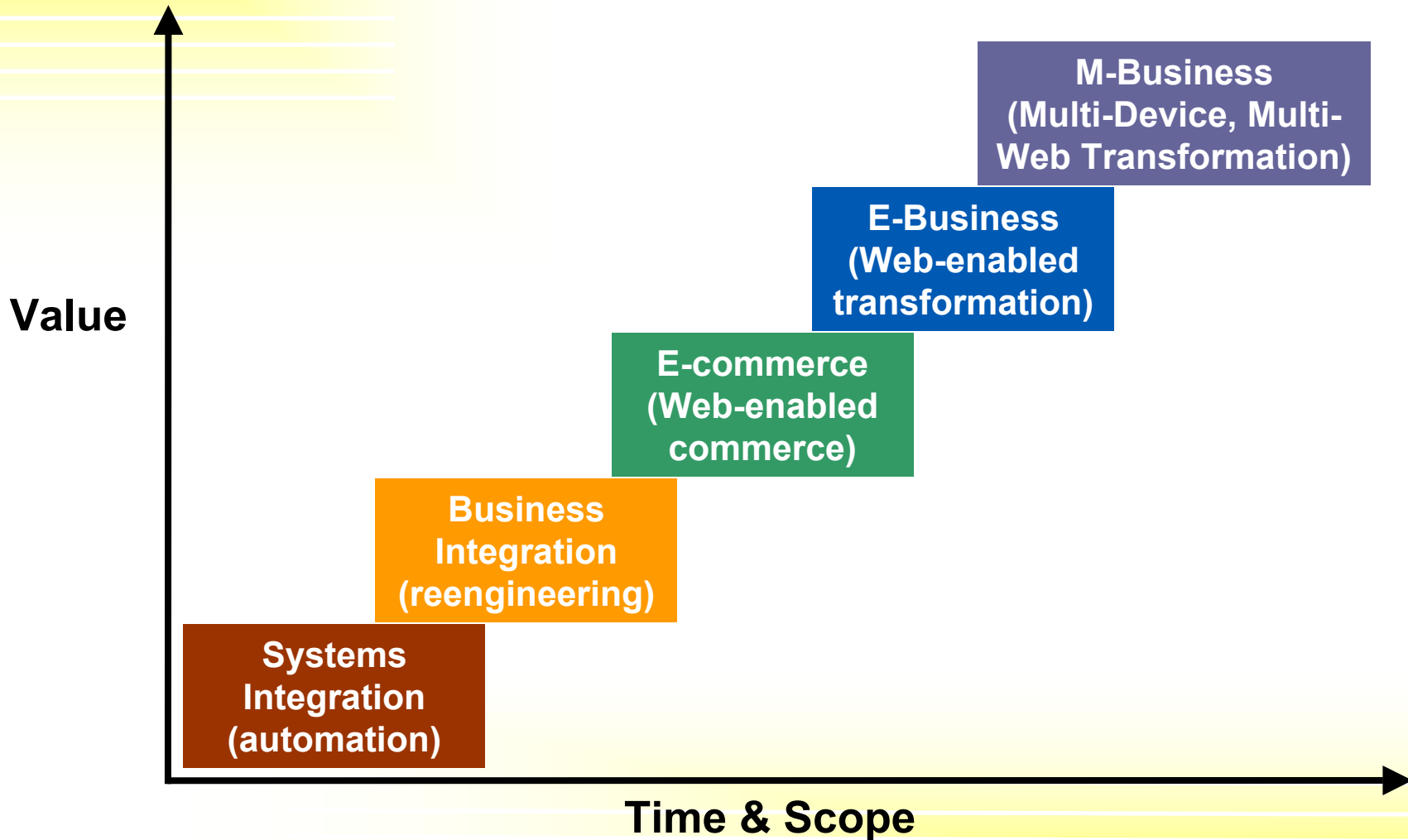
Emergence of the Mobile Internet

- A global mega trend
- A new phase in enabling the knowledge worker
- Ushering a new creative cycle

Five Healthy Signs:

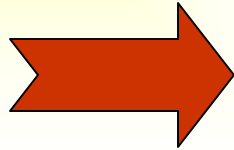
- Advances in infrastructure
- Advances in software
- Abundant capital
- More interested customer
- Burgeoning demands of real-time business

M Structural Migration: Are You Ready?



M Table of Contents

Structural Migration is Taking Place



The Mobile Vision

Defining M-Business

The Mobile Ecosystem

**What does this mean for managers
– Looking Deep**

Key Take-Aways

M **M-Business: Vision Becomes Reality**

The most significant economic consequence of the m-business evolution is the increase in real-time interaction between companies and their customers, employees, and suppliers.

Mobilize Assets – Return on Investment

- Massive investment in improved processes and data
- Exploit existing assets, extend the reach to new users
- Make assets more accessible

Make it easier for existing users – Ease of Access

- Cross applications
- Easy to use
- Value-added
- On the browser

M **M-Business: Vision Becomes Reality**

How must Management react?

- Assess how this person-centric mega-trend will alter existing business models
- Develop proactive scenarios for deriving benefit from information access innovation

M **M-Business: Vision Becomes Reality**

Leadership at major firms is aware of the gravity of this shift and they're making efforts to transform their firms' business designs and competencies.

Microsoft's .NET Strategy

- Championing the extension of its desktop and server operating systems into the new generation of mobile devices and services
- The PC that once defined Microsoft is now an aging starlet
- Mobility is the young ingénue with promising future

M **M-Business: Vision Becomes Reality**

Companies like Microsoft anticipate mobile computing to enjoy strong growth

- Allows control of communication through multiple devices, applications and tools from which to select
- Permits control of time and frequency at which to obtain information
- Mobile computing is the first wave of applications to take advantage of ubiquitous computing trend
- Internet already ubiquitous, with mobile phone users accessing it during downtime – sitting on the bus or coffee break



M-Business: Vision Becomes Reality (cont.)

- Computing is so pervasive that the computer is receding into the background
- Mobile computing is the first wave of applications to take advantage of ubiquitous computing trend
- Internet already ubiquitous, with mobile phone users accessing it during downtime – sitting on the bus or coffee break
- Computing is so pervasive that the computer is receding into the background

M The Rise of the Mobile Economy

The Mobile Economy inevitable and imminent

- Convergence of Internet, e-business, and wireless – Evernet, Supranet, X Internet, Hypernet

Nature of customer interaction and speed of business bound to change in the next decade

- Need for delivering existing and next-generation services and appliances with greater speed

M The Rise of the Mobile Economy

New value chain emerging

- Focus on blending mobile devices, wireless access and content

Early phases likely chaotic

- Innovation adoption is not linear
- Initially a shock
- Followed by brief period of disruption in social and business processes
- Finally steady and gradual diffusion of changes throughout the firm



Mobile Economy Myths versus Realities

The Myths ...

Not yet on CEO agenda

Technology is unproven – current bandwidth cannot support business applications

Wireless deployment and operating costs are too high

... and Realities

Companies increasingly realizing benefits of wireless

- **Wireless IT spending to increase 94% in 2003/04**
- **51% of firms increasing wireless budgets**

Highest demand applications can be reliably fulfilled today with relatively low bandwidth

- **Wireless e-business grew by 50% in 2002, fueled by development of B2E applications**

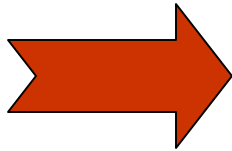
Cheap, ubiquitous devices and public carrier networks are driving costs down

- **91% decline in costs over 10 years**
- **Hardware costs dropping by >25% per year**

M Table of Contents

Structural Migration is Taking Place

The Mobile Vision



Defining M-Business

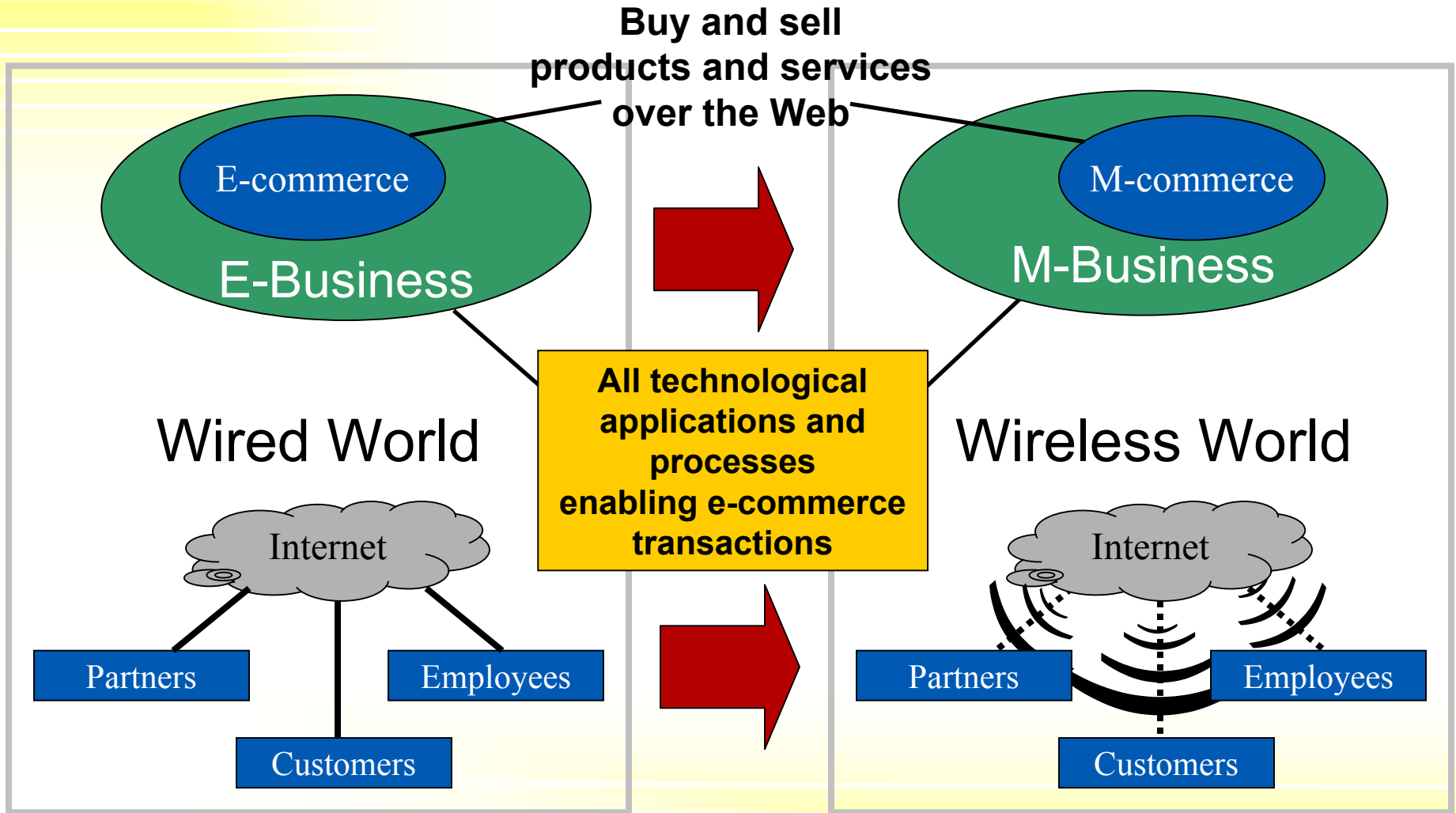
The Mobile Ecosystem

**What does this mean for managers
– Looking Deep**

Key Take-Aways

M

Internet+Wireless+E-Business = M-Business



M The Meaning of Mobile

Mobile but Offline

- Use a mobile device to run self-contained programs while not connected to the Internet
- “Sync” with a PC to download software, email, and other content onto PDA for portable use or offline reference
- Data collected on road synchronized with PC once back in the office or uploaded when live Internet connection established

M The Meaning of Mobile

Mobile but Online

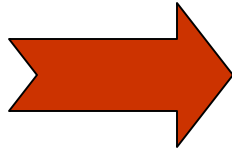
- Commonly called wireless
- Experience based on real-time Internet connection (Satellite, cellular, or radio transmitter)
- Online device “always on” in presence of any wireless data network
- Seamless connection to the Internet for exchanging email, instant messages, and retrieving Web content

M Table of Contents

Structural Migration is Taking Place

The Mobile Vision

Defining M-Business

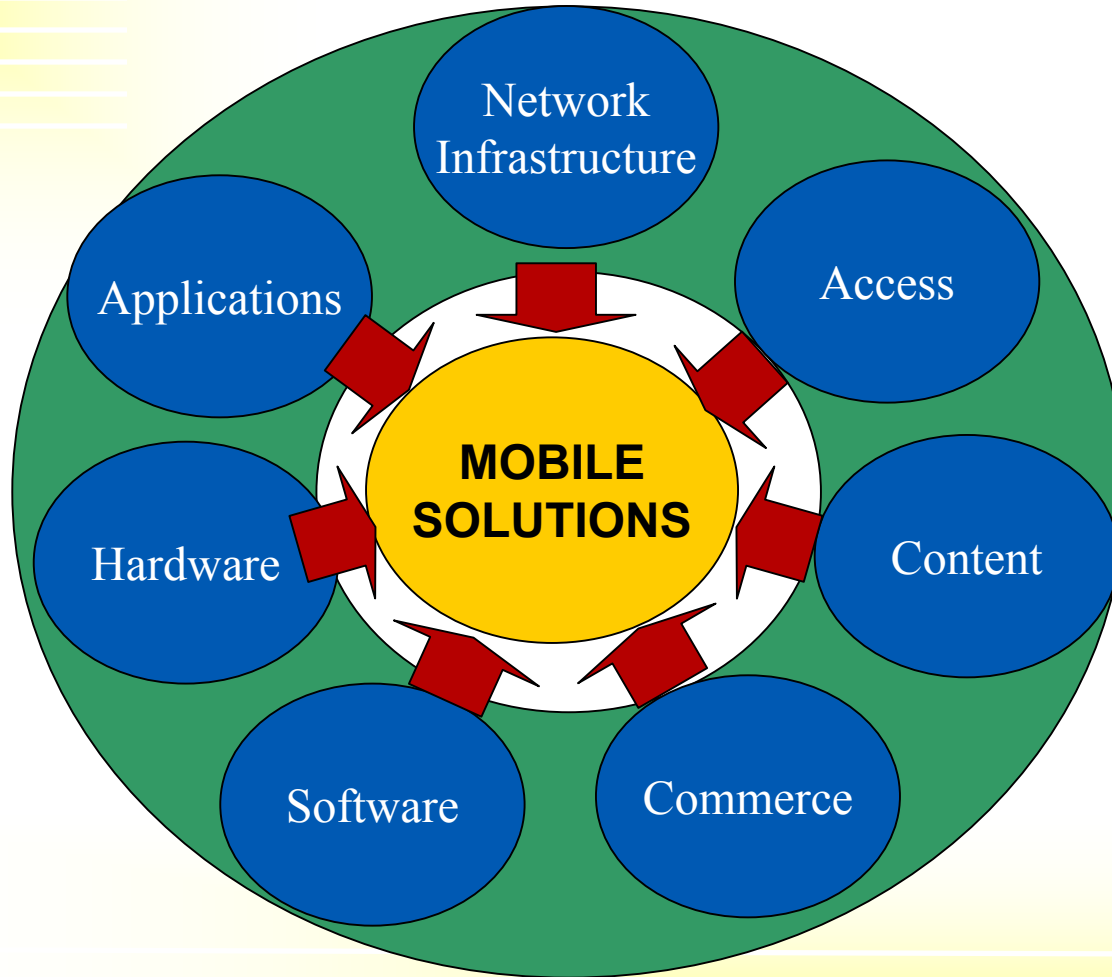


The Mobile Ecosystem

**What does this mean for managers
– Looking Deep**

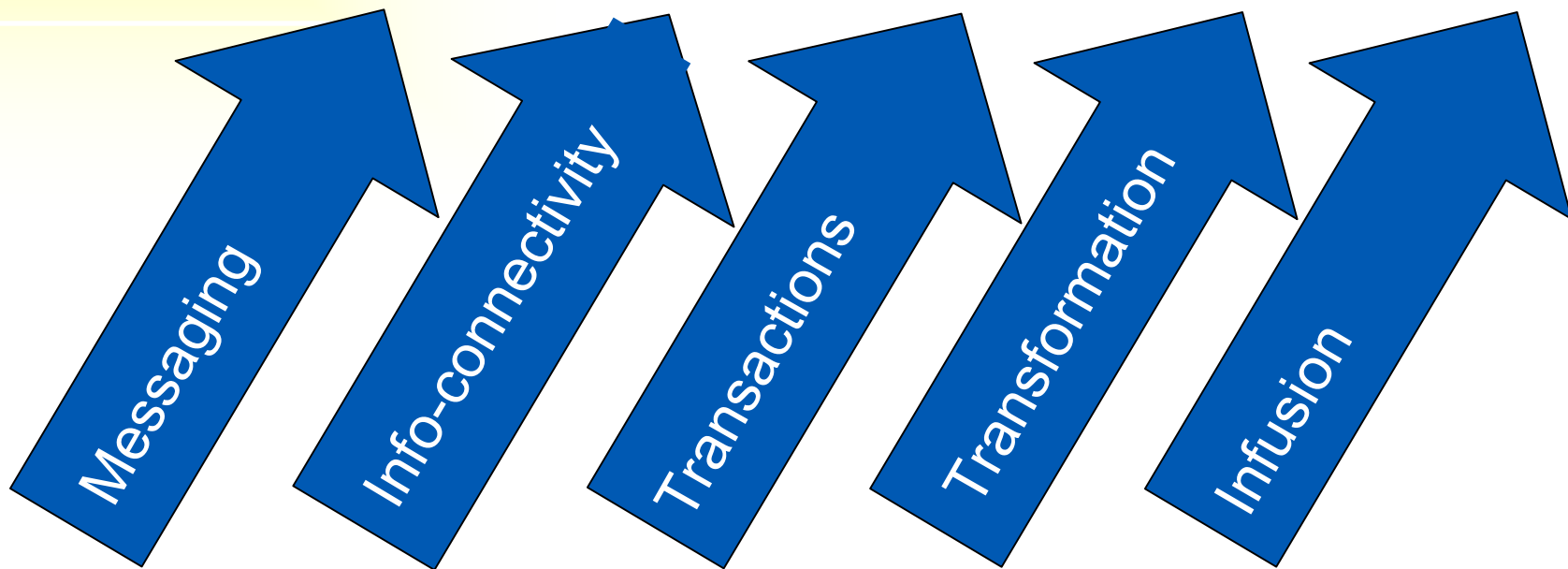
Key Take-Aways

M Unfolding the Mobile Ecosystem





How Will the Mobile Solutions Evolve?



Current State: Messaging solutions are being adopted

M Business Applications, Not Technology

**Customers do not buy operating systems,
processors, or architectures**

**Customers buy applications, performance,
and useful solutions**



M Business Applications, Not Technology

Sales Rep

- Receives large order
- Uses pocket PC to confirm availability of additional inventory and timing for delivery to capture order

Online Brokerage Service

- Notified customers of investment opportunity in an IPO
- Receives and executes a buy order sent from a customer's Web enabled phone while commuting

On-the-Go Executive

- Monitors email via cell-phone
- Cell phone polls email account
- Accesses new email via toll-free number
- Email is read to executive by a text-to-speech utility



Development of the Mobile Internet infrastructure is in its infancy

- At the same level of development as railroad system in America in 1860s or the wired Internet in 1990s

***Just like the Internet infrastructure build-out, the mobile infrastructure build-out will be gradual**



Mobile Infrastructure: The Access Race is On

Different players

- Mobile Data Networks
 - How to increase coverage?
 - How to increase bandwidth?
- Mobile Internet Infrastructure
 - How to create new technology enabling convergence of telecom and IP networks?
 - What transmission protocols and content languages are required?
- Mobile ISPs
 - How to provide mobile Internet connectivity to masses?



Mobile Devices: The Race for Radical New Products is On

- **The PC industry is at a crossroads**
- **Internet evolution from time-share to the embedded model**
- **Shift away from a PC-centric dependence towards a next-generation multi-device accessibility**



Mobile Devices: The Race for Radical New Products is On

Internet will be embedded in an endless variety of applications

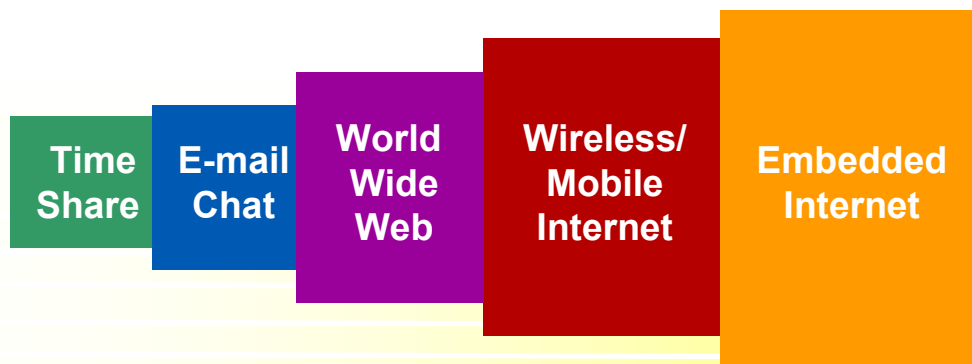
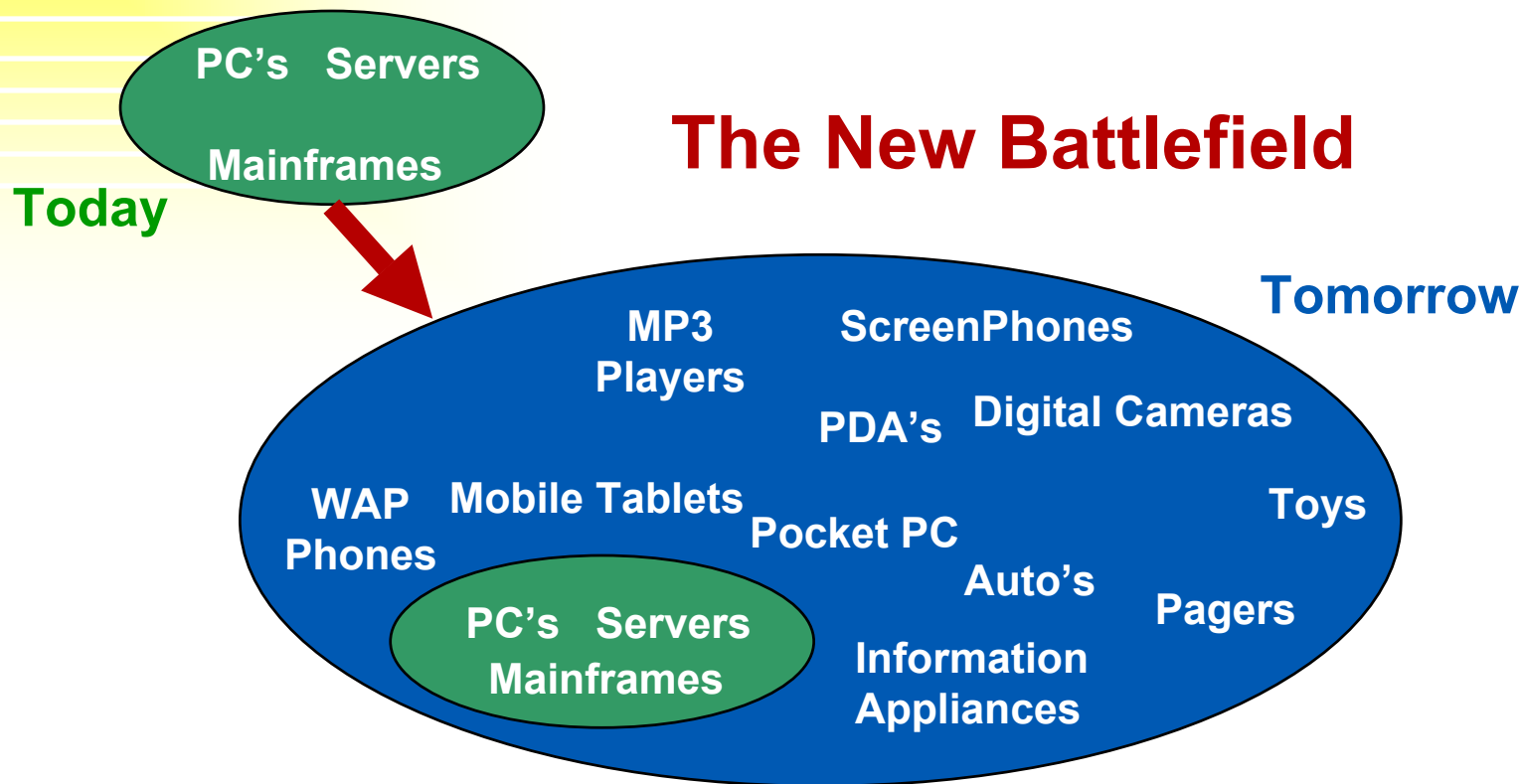
Embedded Internet appliances will appear in the familiar form of washing machine, television, and remote control

Most successful devices will be easy-to-use, task-oriented devices

- Leverage benefits of Internet access to enhance their core functionalities

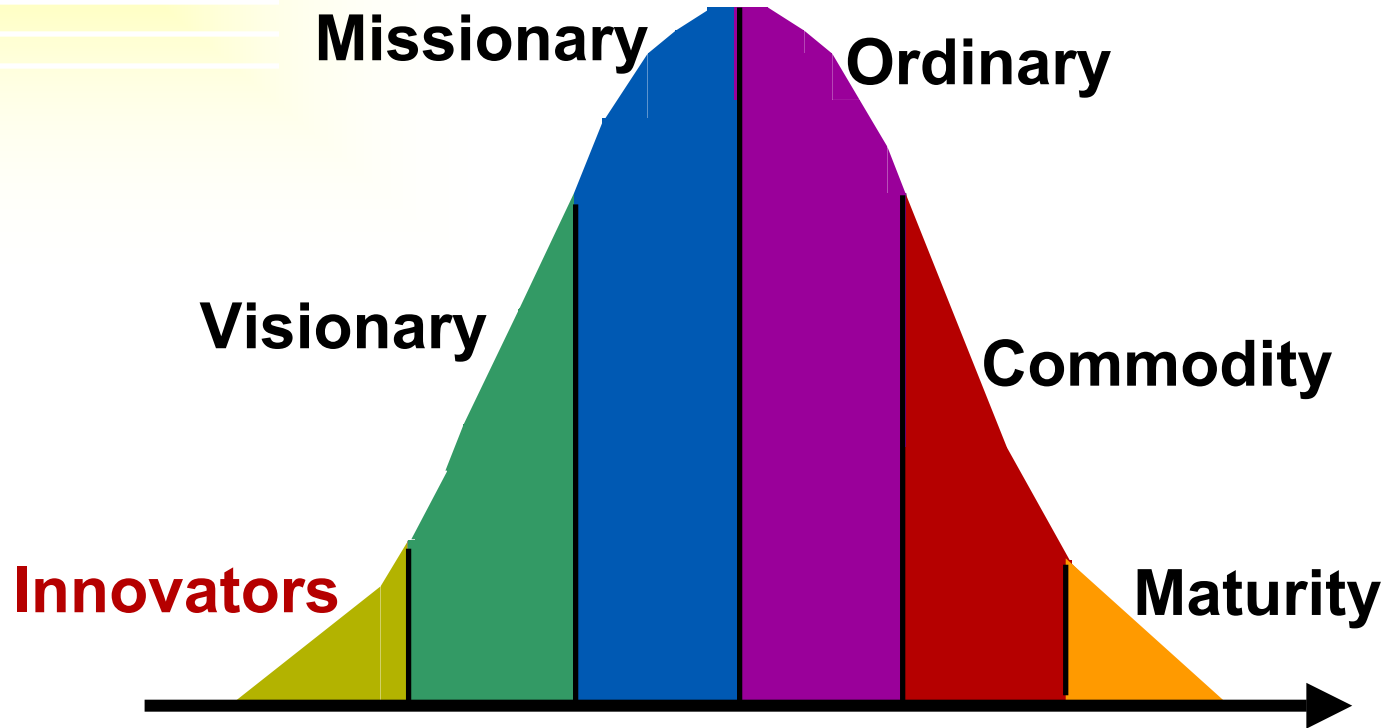
M

The Race for Radical New Products is On



M

M-Business: What Stage Are We In?



Mobile applications are in the innovator stage

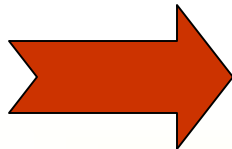
M Table of Contents

Structural Migration is Taking Place

The Mobile Vision

Defining M-Business

The Mobile Ecosystem



**What does this mean for managers
– Looking Deep**

Key Take-Aways



Mobile Business: The Quest for Value

**Marriage of mobile access with computing
creates tremendous commercial
opportunity and complexity**

**Entrepreneurs, managers, and investors
must act fast to address complexities of
real-time business**

M Mobile Business: The Quest for Value

Assess where value is created and captured most

- Entrepreneur - during innovation phase
- Manager - during infusion phase
- Investors - both phases

Next generation of successful business leaders will embrace the entire mobile concept, not specific products or services as a starting point

Questions:

Will m-business impact core business principles?

What are the pitfalls to avoid in the transformation to m-business?

M Learning from the Fruit Flies

Implications of mobility on business is not easy to evaluate – much can be learned from rapid-growth industries like the PC and e-commerce

***Just like a geneticist would study fruit flies to learn if genetic mutations would result in evolution**



Past as Prologue: Learning from the E-Commerce Fruit Flies

Speed kills

- Fast-growth mania and planning for next round of financing, a recipe for disaster

Fashion and glamour don't make a business

- Creating sustainable business takes lot more than funding

Diffusion of innovation takes time

- Change takes time and patience



A CALL TO ACTION ...

Mobilizing the Enterprise

1. **Understand the Structural Migration**: Think about the business issues and industry economics first
2. **Create Mobile Vision**: Leverage mobile technology as an enabler to create competitive advantage
3. **Define Mobile for your Business**: What is mobile and how does it relate to my other E-business investments?
4. **Understand the Mobile Ecosystem**: Pursue new business models and partnerships to maximize profitability from wireless solutions
5. **Think about the Managerial Issues**: Develop a real understanding of end user needs and what level of change will be required

M Table of Contents

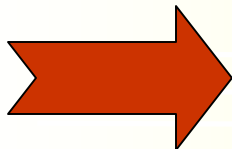
Structural Migration is Taking Place

The Mobile Vision

Defining M-Business

The Mobile Ecosystem

**What does this mean for managers
– Looking Deep**



Key Take-Aways



Setting the Stage for Mobile Apps

Book's objective – clarity into following:

- What are the business mega-trends driving mobile application investments?
- What does the mobile application landscape look like?
- What specific near-term and long-term enterprise processes can be improved by mobile solutions
- What is the link between “M-Business” and “E-Business”? How should this integration link be constructed?



Setting the Stage for Mobile Apps

Book's contribution – synthesis of different perspectives:

- Media and Analyst Lens: Most “killer” mobile applications being talked about in analyst reports are messaging, portals, games, or streaming media
- Venture Capital and Startup Lens: First generation mobile startups and ventures took a “build it and customers will come” attitude with very little foundation in real customer/business needs
- Strategic Planning and Managerial Lens: Companies have spent millions on ERP, CRM, SCM, business intelligence apps; C-level execs are looking for new ways to leverage these investments.

E-Business Strategies, Inc.

www.ebstrategy.com

contact@ebstrategy.com

678-339-1236 x201

Fax - 678-339-9793

