

2004 USC Marshall School of Business ABAC Team

Developing the E-Commerce Environment

Marshall MBA Students



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Business Perspective on Current State of E-commerce

ABAC has requested Marshall to evaluate the state of e-commerce in a select number of APEC economies.

Developed Economies

Japan
United States



Developing Economies

China
Mexico

Areas of Focus

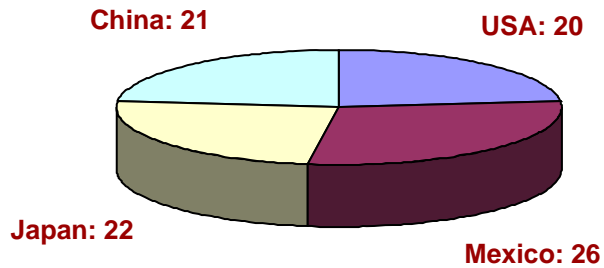
- Factors that promote e-commerce development
- Barriers to e-commerce development
- The role of international investment and trade



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Research Methodology

89 interviews with CEOs, managers, lawyers, academics, consultants, and entrepreneurs



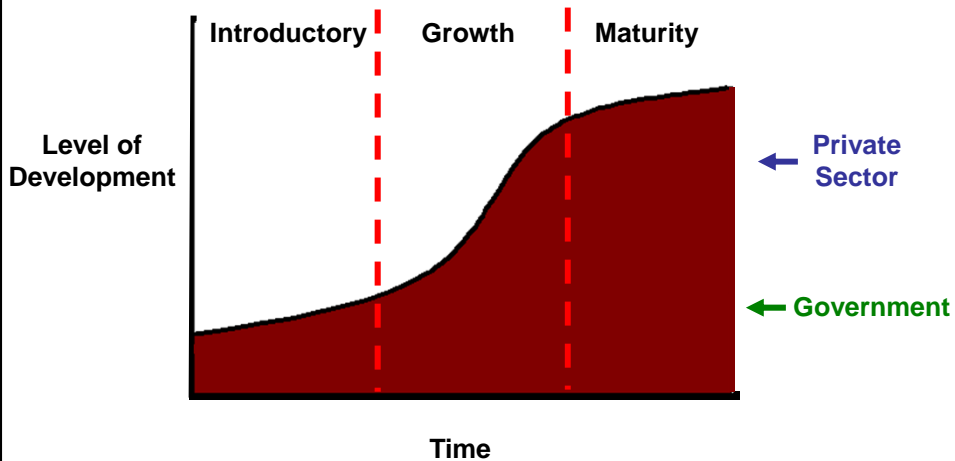
Fields of Expertise

- Technology Start-ups
- Intellectual Property
- Online Content
- Entertainment
- Software
- Computer Hardware
- Network Backbone
- Manufacturing



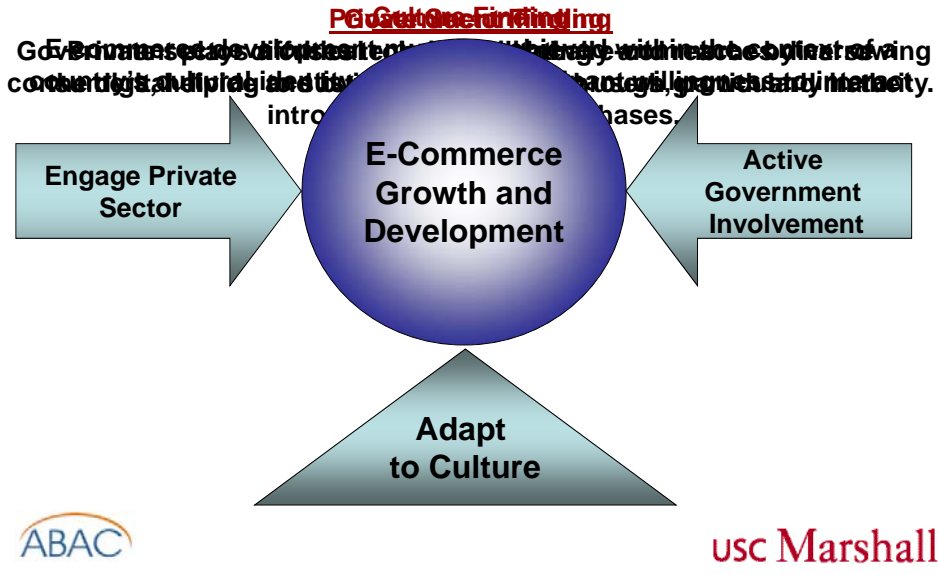
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Phases of E-Commerce Development



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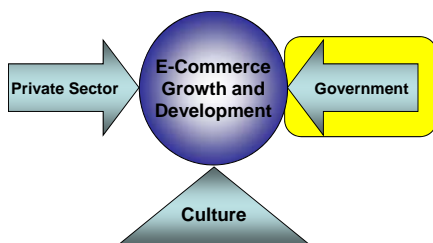
Key Factors for E-Commerce



The Role of Government

Government Finding

Government plays a critical role in facilitating e-commerce by narrowing the digital divide and building trust among users, particularly in the introduction and growth phases.



Narrowing the digital divide

- Government funded initiatives
- Effective regulation
- Cultivating human capital

Building trust among users

- Online government services
- Comprehensive legal framework

Government funded initiatives increase Internet use by delivering infrastructure to the masses.

e-Mexico

Goal: Bring the Internet to 95% of the population by 2006

Status: Number of Internet users has doubled since 2001

Success Factors:

- Sponsored rollout of infrastructure
- Partnered with private industry



<Government : Narrowing the Digital Divide>

e-Japan

Goal: "Become the world's most advanced IT nation"

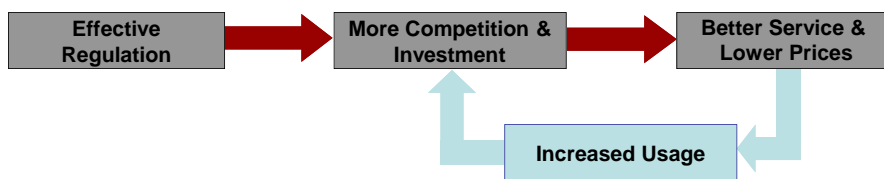
Status: Highest broadband and wireless data usage; leader in m-commerce

Success Factors:

- Subsidized FTTH for low investment zones
- Targeted efforts to reach all demographics

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Effective regulation can increase competition and drive usage by creating an attractive environment for users.



Japan

- NTT is forced to open its network
- Ownership restrictions lifted



- Spurs ADSL competition
- Global ISPs enter the market



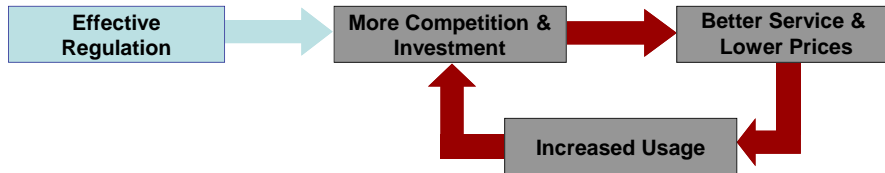
- Prices fall
- Greater bandwidth
- Advanced services available



<Government : Narrowing the Digital Divide>

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Effective regulation can increase competition and drive usage by creating an attractive environment for users.



Japan

- Prices fall
- Greater bandwidth
- Advanced service available
- 79%: 2nd highest reach
- 30%: Highest penetration rate
- Next generation network build out
- Increased content development



<Government : Narrowing the Digital Divide>

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Government must provide a sufficient IT workforce to support growth through domestic or foreign sources.

“Our companies have a great need for educated IT resources but there aren’t enough qualified workers.”

Business Development Manager, network equipment provider in Japan

Local Labor Sources

Proper education must be provided.

- Sufficient quantity of schools and programs
- Schools cover necessary material and knowledge
- Cultural acceptance of IT careers

Foreign Labor Sources

Foreign labor policies must be flexible.

- Visa programs for IT workers
- Streamlined process to bring in or outsource foreign labor
- Government assistance in helping local companies find foreign expertise when needed



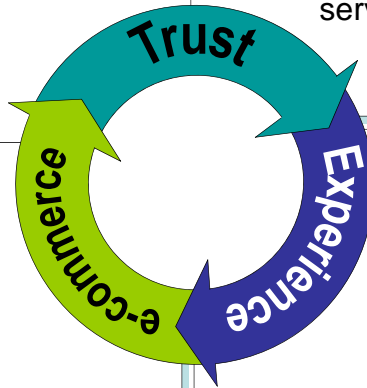
<Government : Narrowing the Digital Divide>

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By offering government services online, countries are able to build trust of the Internet with their citizens.



México



Online government services attract users to the Internet

Internet becomes a trusted medium for personal and business transactions

Successful transactions help citizens gain comfort and experience



<Government : Building Trust and Awareness>

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A comprehensive legal framework protects consumers and businesses which encourages online transactions.

Consumer

- Internet Privacy Protection
- Sales Fraud Protection

Major privacy concerns

- 70% of users won't register demographic information online
- 42% enter false information instead

Source: GVU's Tenth WWW User Survey



Major piracy concerns

- Insufficient protection of intellectual property will discourage investment and technology transfer
- Enforcement is an issue

Business

- Intellectual Property
- Sales Fraud Protection



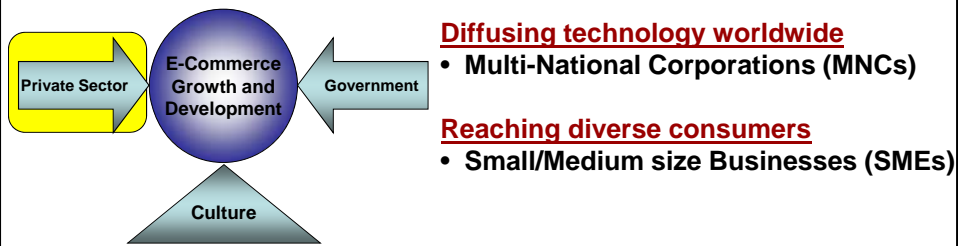
<Government : Building Trust and Awareness>

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The Role of the Private Sector

Private Sector Finding

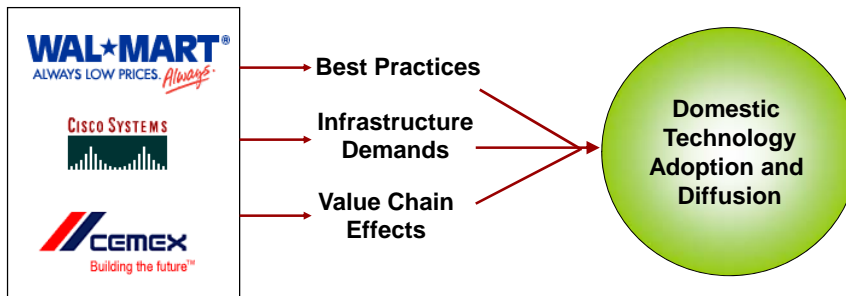
Private sector diffuses technology globally and reaches diverse consumers, helping to sustain e-commerce through growth and maturity.



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By sharing technology through global expansion, MNCs increase online participation.

“The push for new technology comes from big companies.”
former CEO of high-tech start-up in Mexico

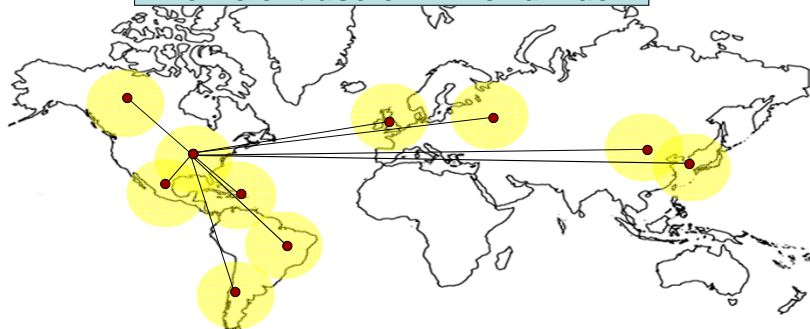


<Private Sector : Diffusing Technology Worldwide>

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Wal-Mart: Diffusing Technology Globally

Competitive advantage through efficient use of IT worldwide



Integrated Supply Chain – Satellite System – Standardized Supplier IT Platform
Electronic Data Interchange – Online Store



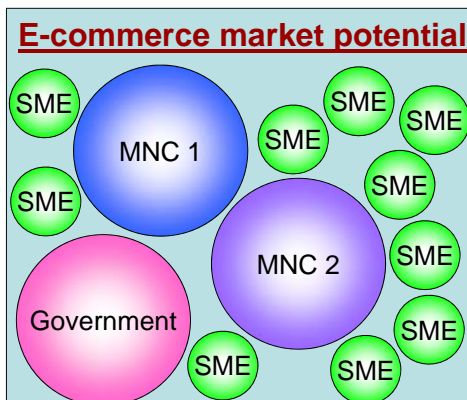
<Private Sector : Diffusing Technology Worldwide>

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SMEs extend e-commerce by expanding into new markets currently untapped by MNCs.

•SMEs grow by gaining competitive advantages

•As SMEs grow, the number of niche markets that were previously unserved decreases



<Private Sector : Reaching Diverse Consumers>

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Netflix: Unique On-Line Business Models Reach Niche Markets

NETFLIX



- Founded in 1998; IPO in 2002
- New business model:
“Unlimited DVD rentals for a flat monthly fee.”
- Over 2.2M subscribers: **+72%**
- Revenues of over \$500M: **+96%**
- All customer interaction takes place online
- Broadband video-on-demand service (est. 2005)



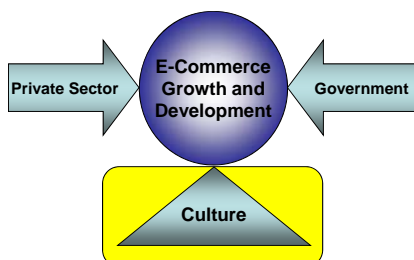
<Private Sector : Reaching Diverse Consumers>

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The Role of Culture

Culture Finding

E-commerce development must be achieved within the context of a country's cultural identity to ensure participant willingness to interact online.



Incorporating Culture

- Adapting processes
- Adopting technology



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A country's e-commerce activities must be aligned with existing consumer behaviors and infrastructure.

Adapting processes

Consumers have existing purchase behaviors

- Credit cards vs. cash
- Preference for in-person transactions

Adopting technologies

Existing infrastructure influences technology migration

- Fixed line vs. wireless
- Costs of existing infrastructure

Both Supported by Existing Culture



<Culture : Incorporating Culture>

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Settlement in Japan: Adapting Process to Existing Behaviors



Consumer Behavior

- Low credit card usage during introductory stages of e-commerce
- History of paying bills at convenience stores such as 7-11

Resulting action

Even as credit card usage increases, e-commerce companies ship consumer orders to local 7-11 where fulfillment takes place



<Culture : Adapting Processes>

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Technology Adoption in China: Taking Advantage of Existing Infrastructure



Existing Infrastructure

- Low credit card penetration
- Low fixed-line penetration

Resulting action

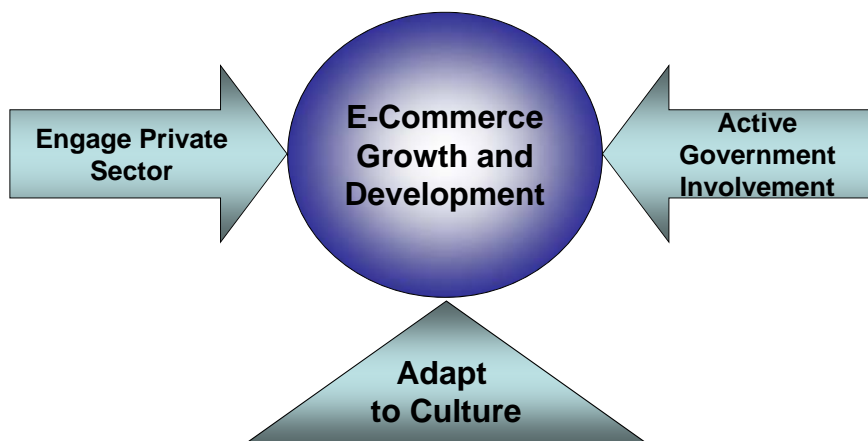
Mobile phone subscriber growth surpasses PC growth. E-commerce switches to M-commerce, where orders and fulfillment are handled via SMS services.



<Culture : Adopting Technologies>

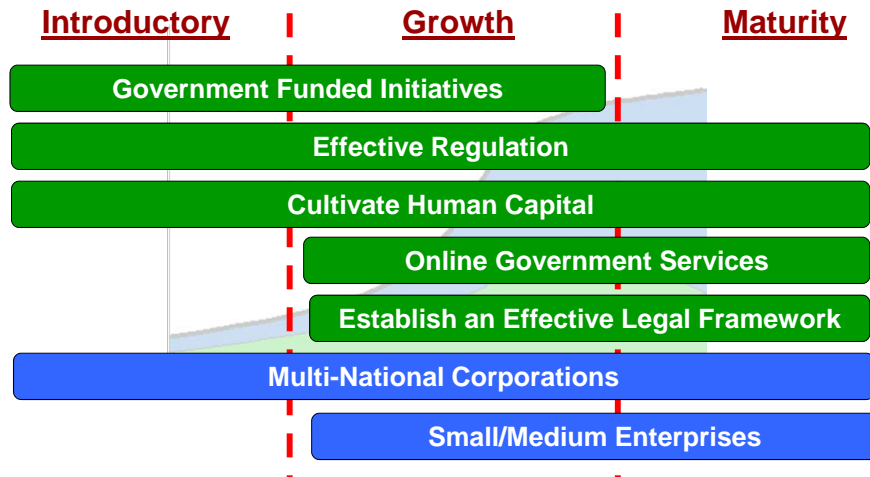
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Key factors for e-commerce



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Roles for Growing E-Commerce

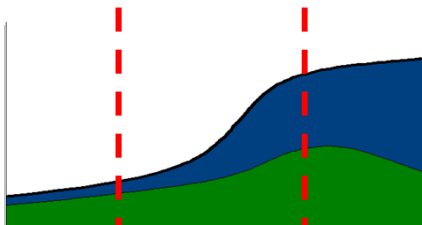


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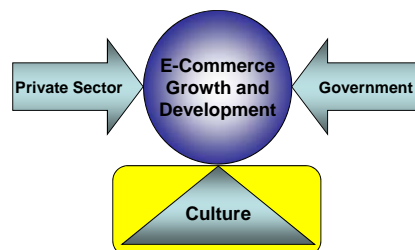
Key Considerations

There is no one “right” solution for e-commerce.

Developmental Phases



Cultural Factors



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Thank You!



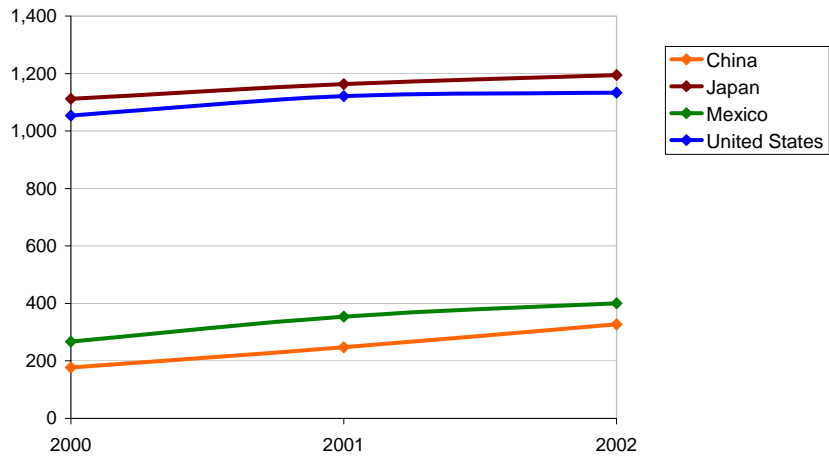
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Exhibits



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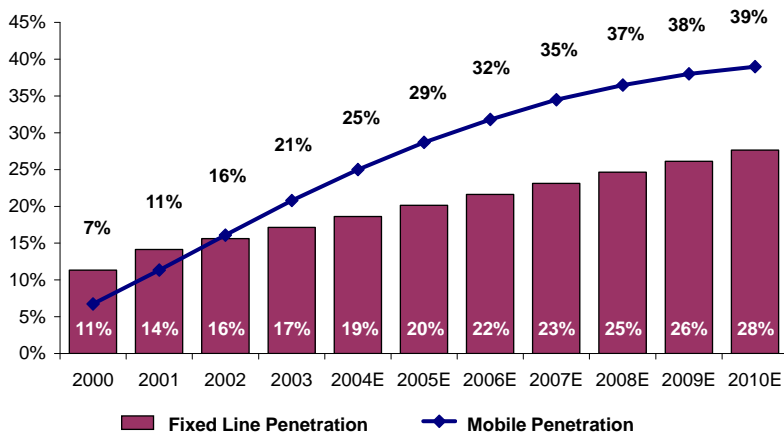
Exhibit 1: Fixed and Mobile Subscribers (per 1,000 people)



Source: World Bank

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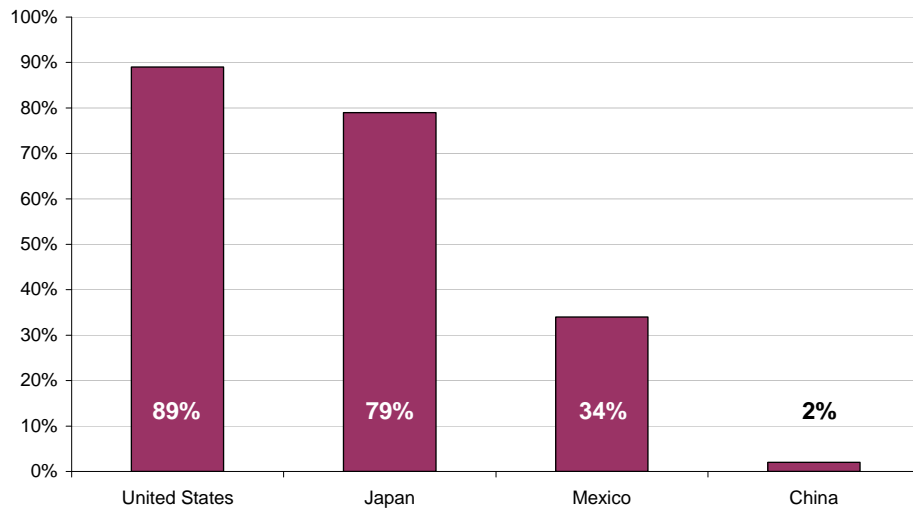
Exhibit 2: Telecom Penetration in China



Source: Morgan Stanley Research

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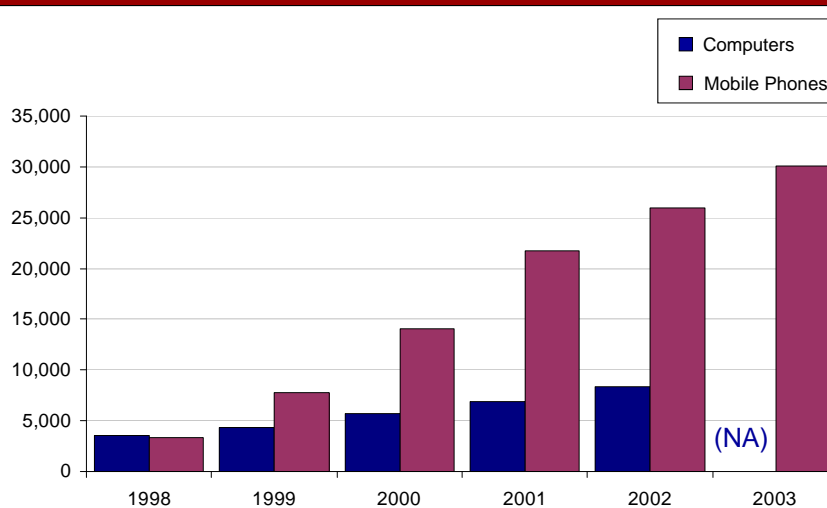
Exhibit 3: Broadband Reach (% of households)



Source: European Telecom Newsletter, June 2003

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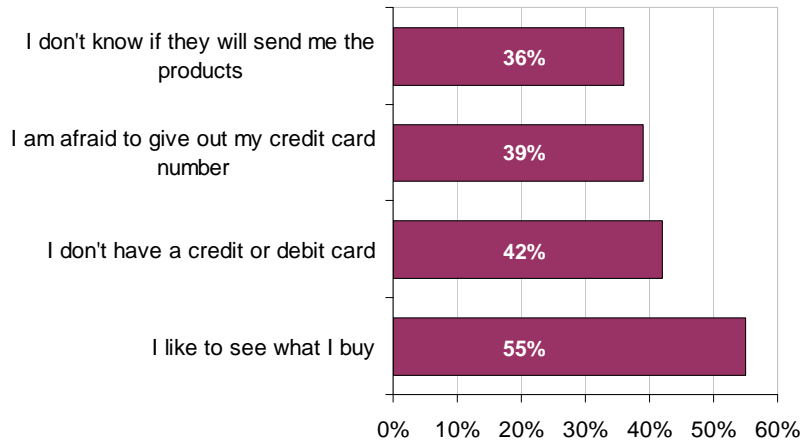
Exhibit 4: Number of Computers & Mobile Phones in Mexico (in '000s)



Source: COFETEL. Dirección General de Tarifas e Integración Estadística / ITU

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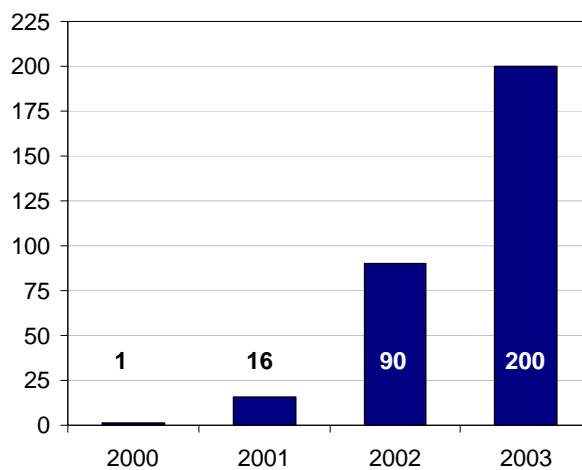
Exhibit 5: Why Users Don't Purchase Online - Mexico



Source: Mexican Internet Association, 2004

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Exhibit 6: Number of SMS Messages in China (billions of messages)



Source: Morgan Stanley Research

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Exhibit 7: Internet Portal Revenue Breakdown – China

2003

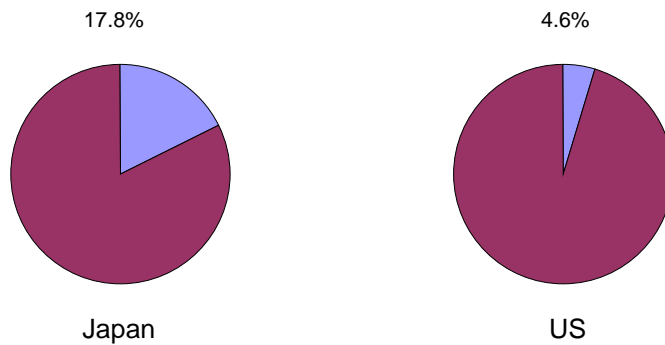
Company	Advertsing	Gaming	Messaging
Sina	34%	6%	60%
Sohu	39%	4%	58%
NetEast	16%	44%	40%
Tom	3%	15%	82%



Source: Morgan Stanley Research

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Exhibit 8: Cash as Percentage of Private Consumption Expenditure, 1998



Source: Bank of Japan

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