

# Singapore - Wired with Wireless

Presented By  
Khoong Hock Yun  
Assistant Chief Executive, IDA

# Asia is . . .

Home to 2.8 billion people

- ❖ Strategis Group predicted Asia to emerge as one of the world leaders in the adoption of 3G wireless technology
- ❖ Mobile phone industry watchers forecast that Asia will lead in 3G mobile phone subscription by 2003
- ❖ Asia Pacific mobile subscriber forecast is 342 mil by 2004, 27% CAGR. (Source: IDC, 2000)
- ❖ Asia will have most no. of mobile-commerce users after Europe by 2005 (Source : Ovum)
- ❖ Asia-Pacific mobile services revenue to increase from US\$73 billion in 1999 to US\$138 billion by 2004. (Source: Gartner)

# Are we far from the projections?



**Prototype**  
(Nokia Prototype)



**In the Market**  
(SH 82 Li Sharp Docimo I-Mode enabled phone)

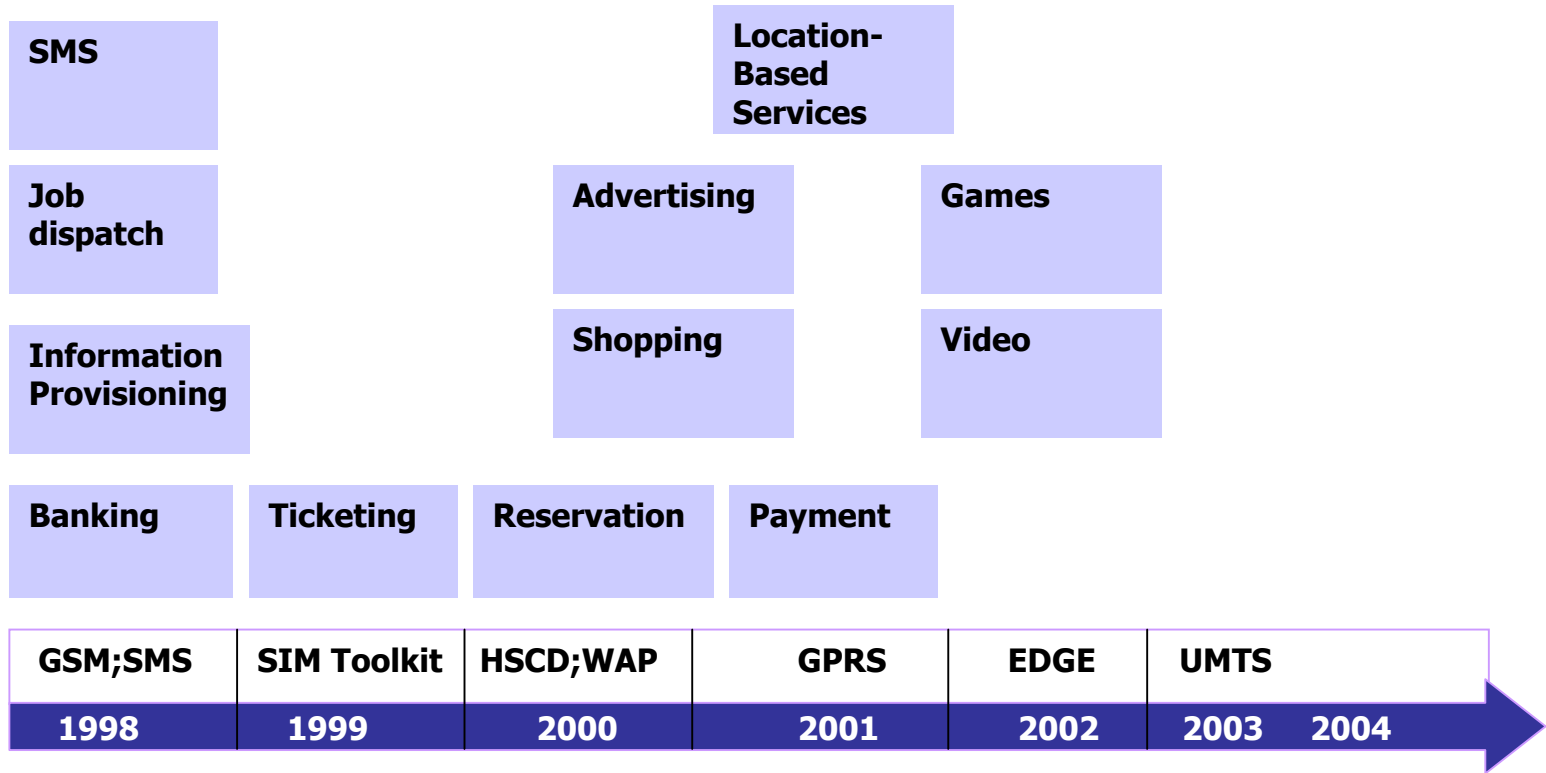
(source:<http://www.japon.net/imode/imodehard2.shtml> )

# What is the government doing to help?



*Wired With Wireless*

# A View of M-Commerce Growth



(Simplified from "Mobile Commerce Report", Durlacher)

**→ How does Asia/Singapore compare?**

# M-Commerce in Asia



- **Key Markets**

China, Hong Kong, Japan, Malaysia, Philippines, Singapore, South Korea, Thailand

(source Business 2.0, March 2001)

- **Number of M-Commerce Users Today (est.)**

9.1 million

- **M-Commerce Revenues Today (est.)**

US\$1.55 billion

(Estimates from Business 2.0, March 2001)

# In Japan



- **I-Mode**

- 20 million subscribers (March 2001) of which
    - 7.1 million M-Commerce users

- **Expected High Growth in M-Commerce**

- Low Internet Usage (Mobile as alternative)
  - Always-on I-mode packet network
  - Fees added to phone bills (Simplify orders)

- **Outlook**

- Richer video, media services
  - Location Based Services



(sources: Business 2.0, March 2001; NttDocomo.com)

# In South Korea



- **Mobile Penetration**

  - 22 million (50% of population)

- **Expected Growth**

  - Government, manufacturers and cellular operators push for mobile commerce

- **Outlook**

  - Richer video, media services
  - Location Based Services



(sources: Ministry of Information and Communication, Korea ([mic.go.kr](http://mic.go.kr)), SKTelecom.com, Business 2.0)





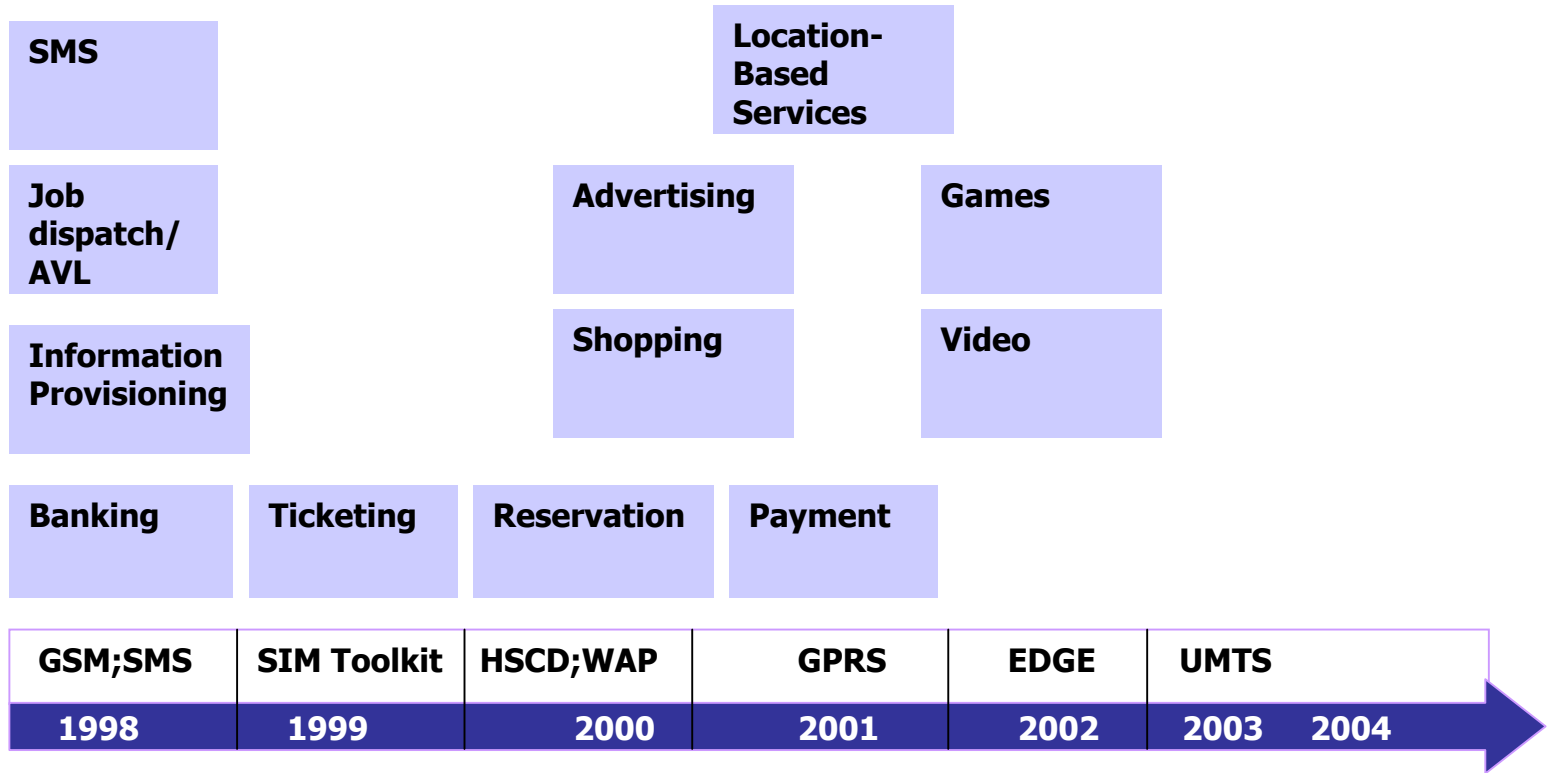
- **Mobile Penetration**

2.5 million (63.1% of population)

- **Expected Growth in M-Commerce**

- IT-Savvy Population
- Government, Industry push for mobile commerce
- Ready Infrastructure (Telco, map data etc)

# Availability of Services in Singapore



(Simplified from "Mobile Commerce Report", Durlacher)

# Availability of Services in Singapore

**SMS**



**Job  
dispatch/  
AVL**



**Information  
Provisioning**



**Banking**



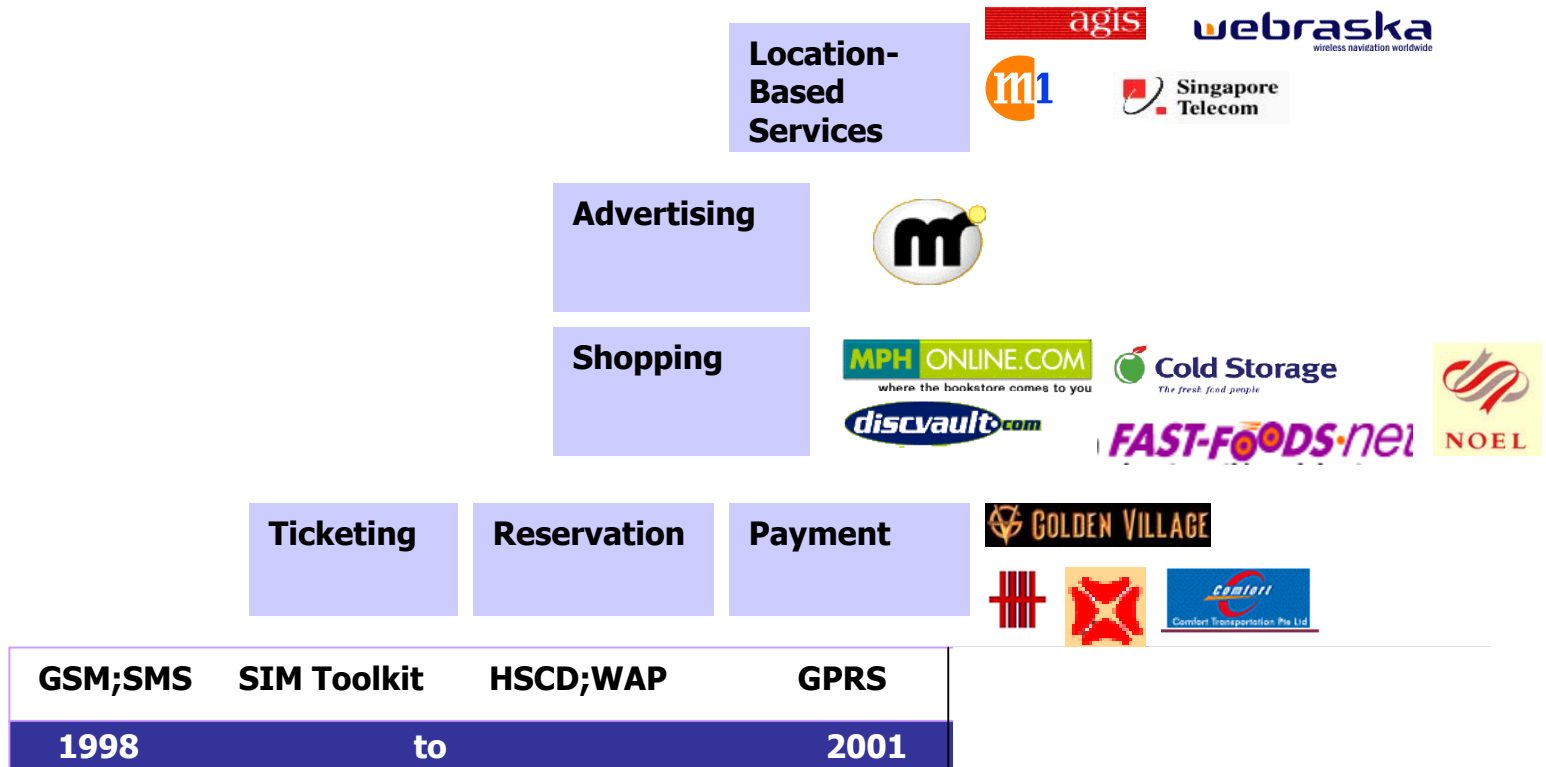
**GSM;SMS    SIM Toolkit    HSCD;WAP**

**1998                    to                    2000**

(Simplified from "Mobile Commerce Report", Durlacher)

# Availability of Services in Singapore

Catalyst for Change



(Simplified from "Mobile Commerce Report", Durlacher)



- **Mobile Penetration**

2.5 million (63.1% of population)

- **Expected Growth in M-Commerce**

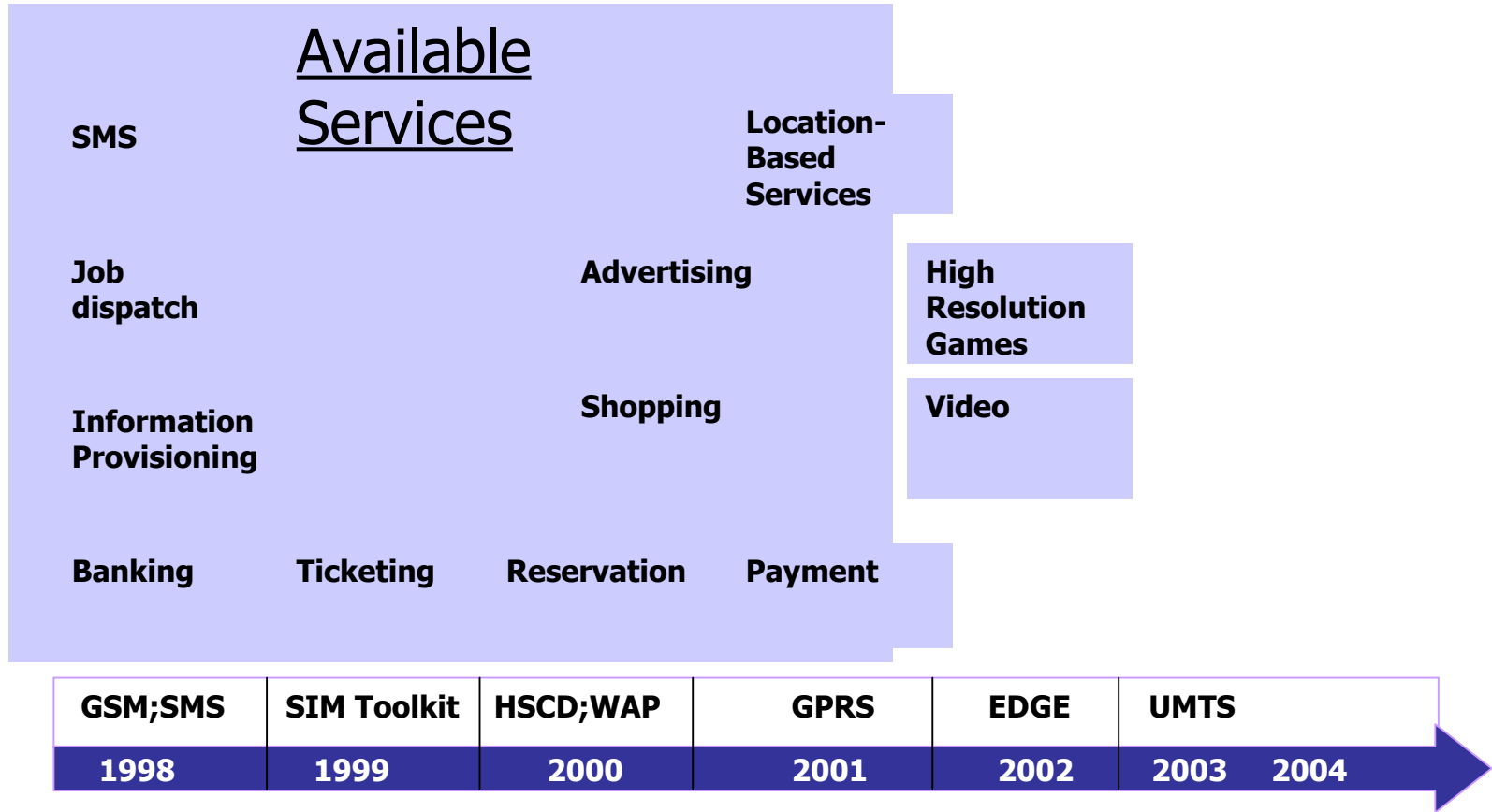
- IT-Savvy Population
- Government, Industry push for mobile commerce
- Ready Infrastructure (Telco, map data etc)

- **Outlook**

- Richer video, media services
- Location Based Services
- Mobile-Payment Services

(source: <http://www.ida.gov.sg>)

# Availability of Services (Japan, Korea, Singapore)



**→ Asia is in the game!**

# What is the government doing to help?



*Wired With Wireless*

# Developing Singapore's Wireless Industry

## Objectives

- Proliferation of technological innovations
  - Build Singapore's M-Commerce Ecosystem
  - Showcase projects
  - Test-bed new services/products
- Exports and technology transfer of new wireless products/services
- Develop leading edge talent & mass adoption of wireless lifestyle

*Wired With Wireless*



# Build Singapore's M-Commerce Ecosystem



Catalyst for Change

# Showcase Projects



## eCelebrations Singapore 2001 (March - April)

- Wireless Pavilion to showcase projects
- Over 65,000 turnout in first 5 days



## Ericsson Cyberlab

- One of four in the world.
- World-wide responsibility for creation of new terminals concept.



## HP Mobile E-Services Bazaar

- Main Hub for Asia Pacific
- Incubator and test-bed to over **62 local developers**

# Export and Technology Transfer



**Removal of withholding tax for certain classes of software purchased overseas (including wireless)**

- **As of Feb 2001, Singapore-based wireless companies need not pay w/i tax for software bundled with hardware (eg gateway, SMSC on servers)**

**PKI Singapore Forum**

**PKI Singapore Forum (Launched 2001)**

- **Forum to educate public on PKI and harmonize cross-border standards**
- **Comprises mobile operators, mobile security vendors, banks**

# Developing Singapore's Wireless Industry

## Objectives

- Proliferation of technological innovations
  - Build Singapore's M-Commerce Ecosystem
  - Showcase projects
  - Test-bed new services/products
- Exports and technology transfer of new wireless products/services
- Develop leading edge talent & mass adoption of wireless lifestyle

→ Leverage on existing programmes; New Programmes to be announced Q2 2001



**Thank You**

**[wireless@ida.gov.sg](mailto:wireless@ida.gov.sg)**



# Capabilities

**Maptuit**



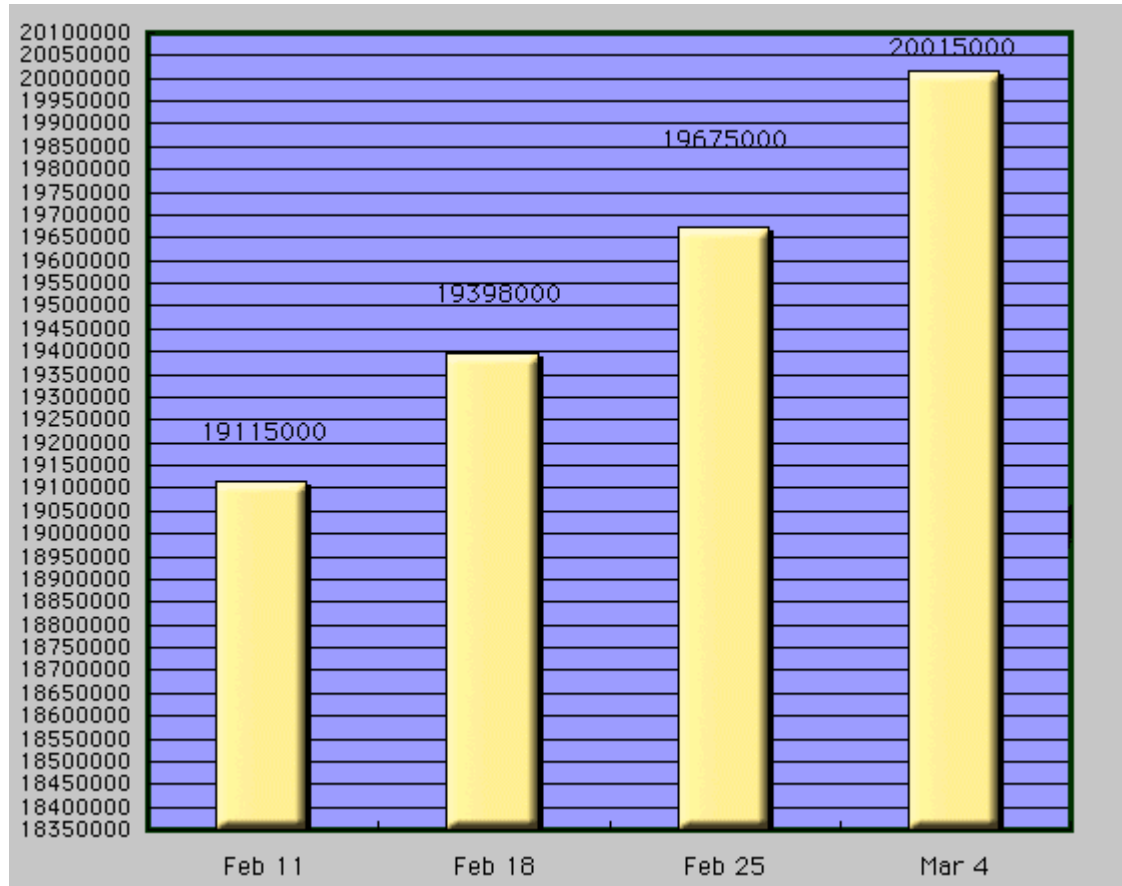
Information

Land Transport Authority

**Wireless  
Infrastructure**

**Wireline  
Infrastructure**

# 20 million I-Mode Subscribers..





# Three Focus Sectors

