

“See The Light” is FTTH market in Asia-Pacific

< What you learn from AP and what you expect from it. >

Shoichi Hanatani

President

FTTH Council Asia-Pacific

(Sr. Director, Hitachi Communication Technologies)

shoichi.hanatani.he@hitachi.com

Outline

- What is FTTH Council Asia-Pacific
- Kizuna : What FTTH brings
- “See The Light “ : Asia-Pacific
- Market Study & global FTTH definitions

Our Role and Overview

International Industry Association :

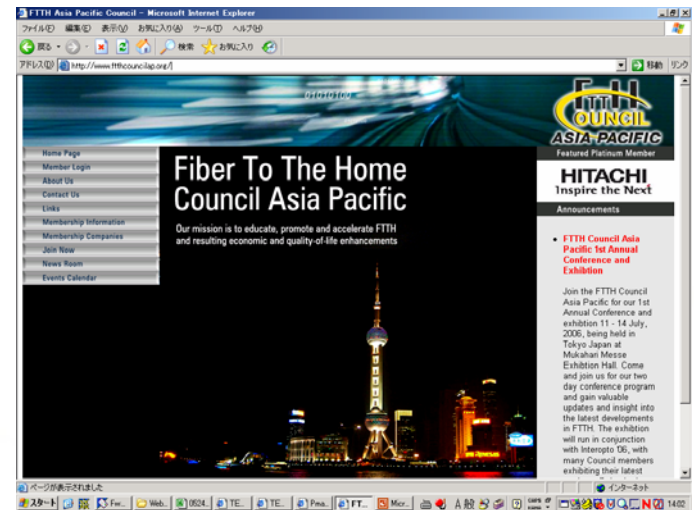
Non-Profit Organization Registered to Singapore, March 2005
Voluntary Board of Directors

Mission :

To educate, promote and accelerate FTTH and the resulting quality-of-life enhancements.

Objectives :

- Supply a consistent and accurate view of FTTH
- Promote FTTH market development
- Be recognized by the industry as the FTTH resource



<http://www.ftthcouncilap.org>

Our Intercontinental SYSTER Organizations

Since 2001
FTTH council | fiber to the home
135+ Members

Since 2004
FTTH COUNCIL
 Europe
60+ Members

Since 2005
FTTH COUNCIL
 ASIA PACIFIC
40+ Members

Europe at the Speed of Light

See the Light

See the Light



Differences among THREE bodies

- FTTH Council North-America : 135 members
 - 2/3rd : equipment vendors
 - 1/3rd : service providers
 - Region coverage : U.S.A. Canada & Mexico

- FTTH Council Europe : ~ 60 members
 - No member from service provides
 - Region coverage : 25 EU-Members, Swizerland & Norway

- FTTH Council Asia-Pacific : > 40 members
 - 2 members from service provides
 - Region coverage : equal to “World Cup” AP region

Need to respect “Culture” & “History”

Outline

- What is FTTH Council Asia-Pacific
- **Kizuna : What FTTH brings**
- “See The Light “ : Asia-Pacific
- Market Study & global FTTH definitions

絆 : KIZUNA a “newly connected” Cyber World

絆 : More than partnership, more than friendship and more than family-ship

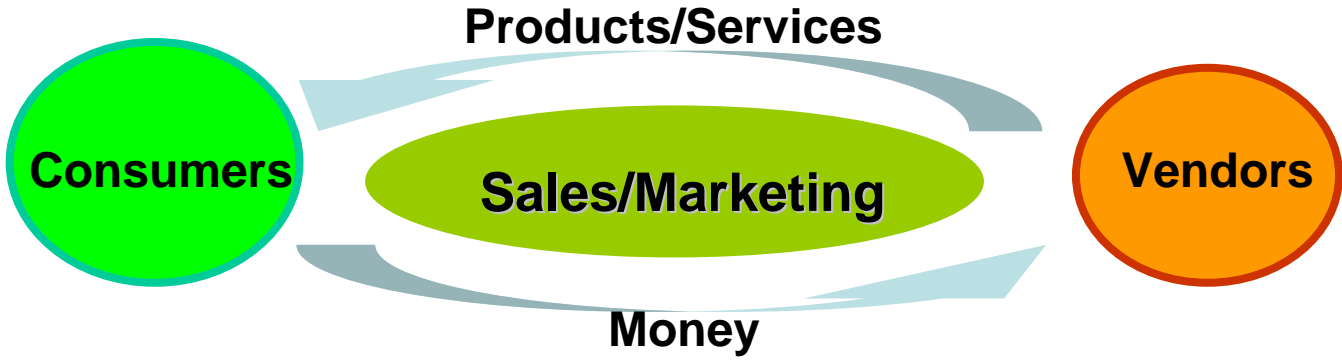
IP-based Broadband Access brings a Cyber World

FTTH : Virtual (cyber) transportation

and complementary with physical transportation



Business Model Change from 4P to 4R



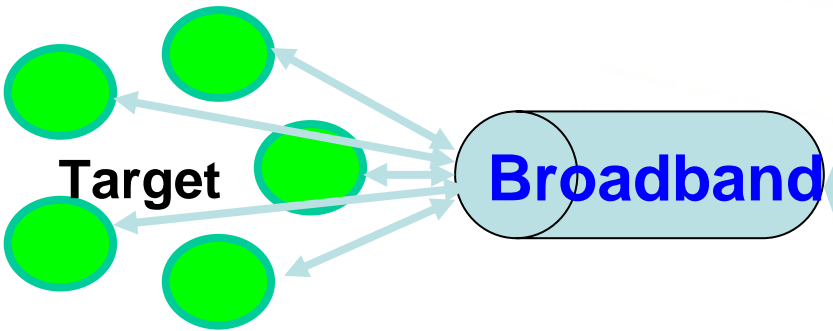
Target

4P Check

Adjustment

Product	Concept Brand Package
Price	
Promotion	
Place (Logistics)	

4P



Relationship
Retrenchment
Relevancy
Rewards

4R

FTTH C-AP support another “KIZUNA”

- **Network Operators need a set of “solution” to migrate to fully IP-based broadband access networks.**
- **FTTH C-AP is a physical space (Kizuna) where everyone gets together to share, learn and discuss.**



www.ftthcouncilap.org

Outline

- What is FTTH Council Asia-Pacific
- Kizuna : What FTTH brings
- **“See The Light “ : Asia-Pacific**
- Market Study & global FTTH definitions

“See The Light”

“See The Light” : Asia-Pacific is unique and dynamic

- **Market Leaders : “lighthouses on the coast”**

- Japan
 - More than 6M FTTH subscribers
- Korea
 - Extremely high broadband penetration and FTTB
- Hong Kong

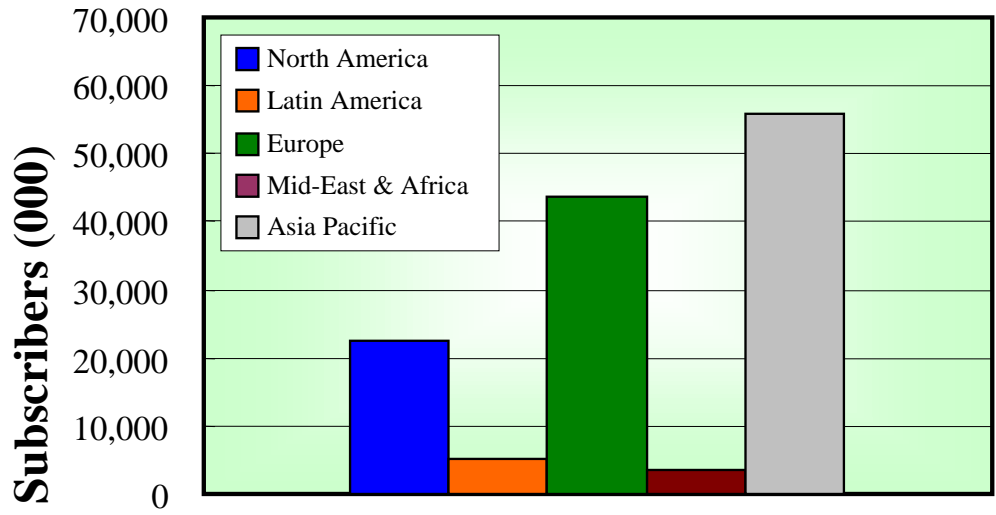


- **Potential and Rising Market : “bright future”**

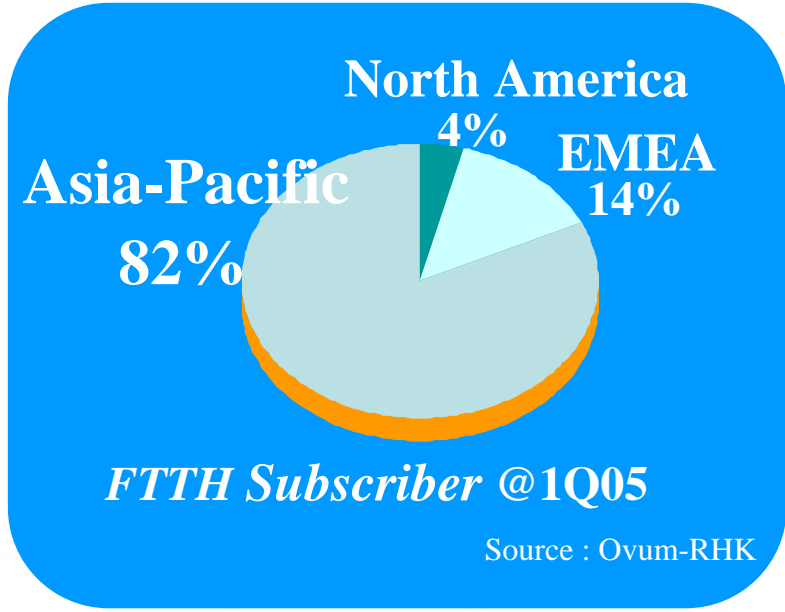
- China
- India
- South-East Asian Countries



AP is a BB & FTTH market leader

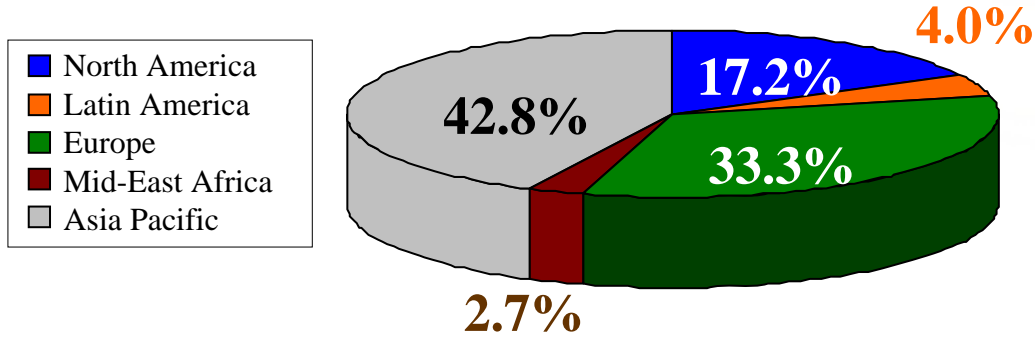


Y2005
Broadband subscriber by region



Source : Ovum-RHK

Market Status



Source: Ovum-RHK

See the Light

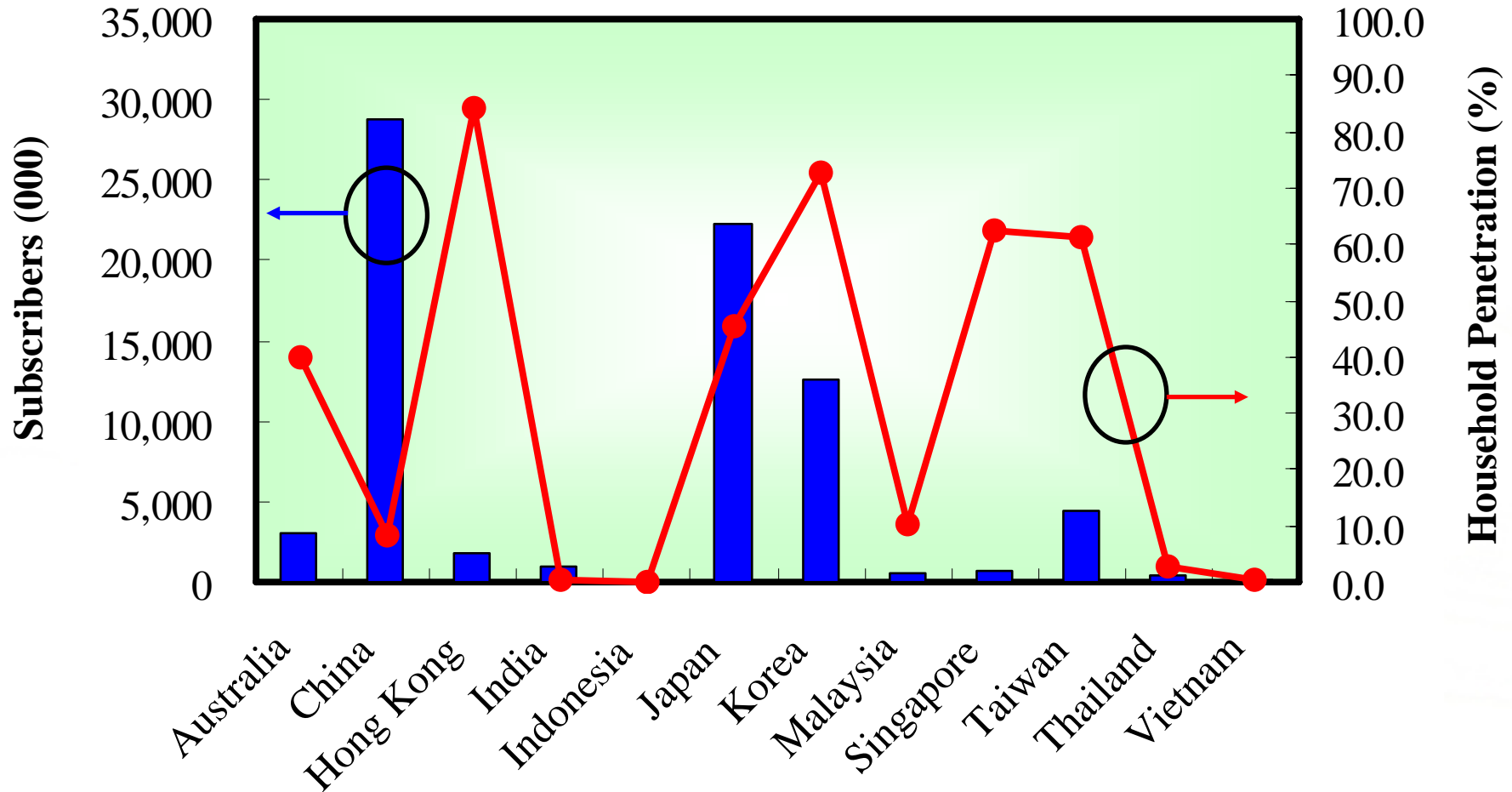


Outline

- What is FTTH Council Asia-Pacific
- Kizuna : What FTTH brings
- “See The Light “ : Asia-Pacific
- **Market Study & global FTTH definitions**

Broadband Household Penetration Rate (APAC)

Broadband subscriber and household penetration rate in APAC (Y2005)



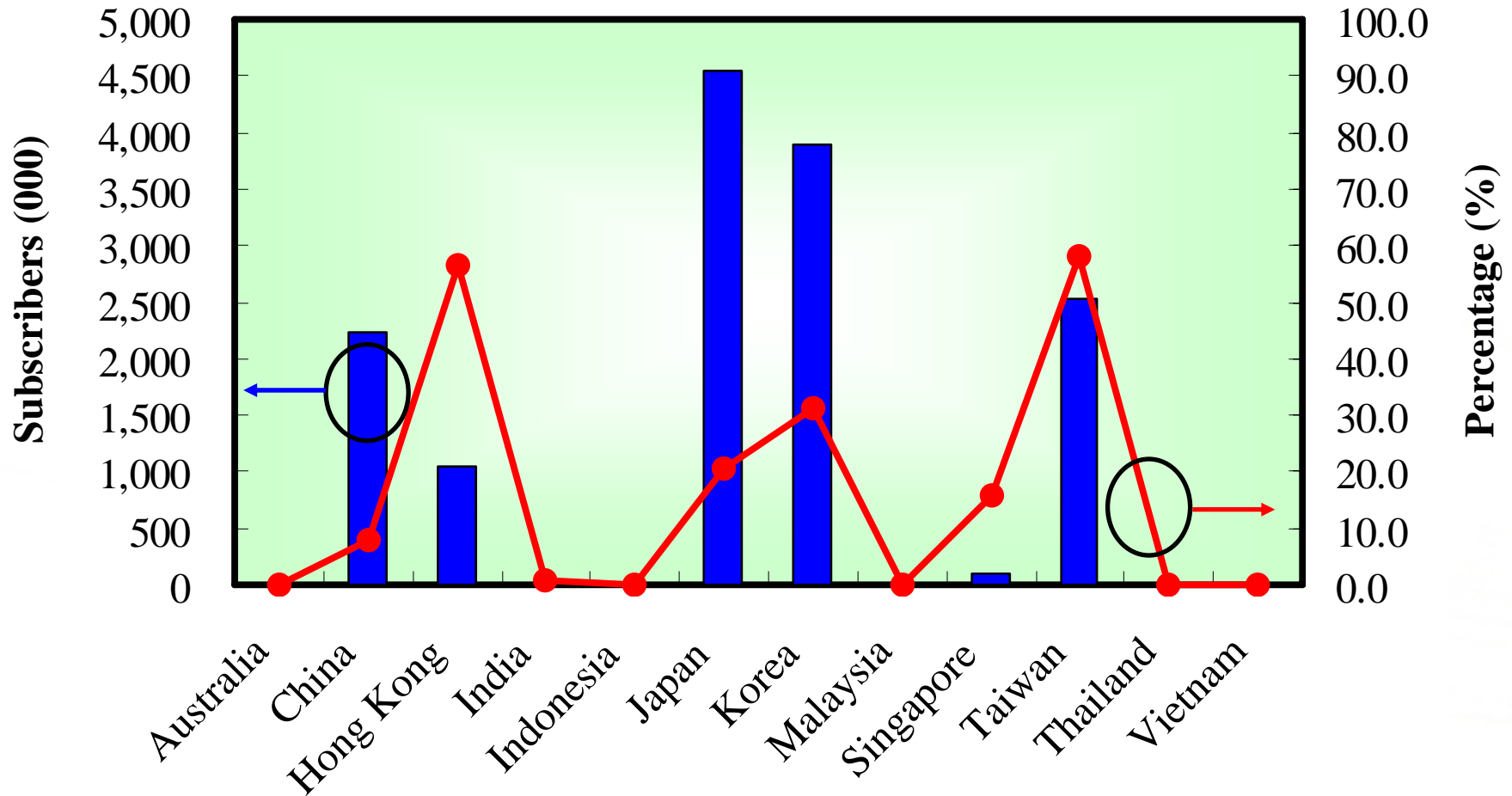
Source: Ovum-RHK / FTTH Council Asia-Pacific (Joint work)

See the Light



FTTH Subscribers (APAC)

FTTH subscriber and FTTH percentage in APAC (Y2005)



* FTTH includes, FTTB, FTTC and FTTH etc.

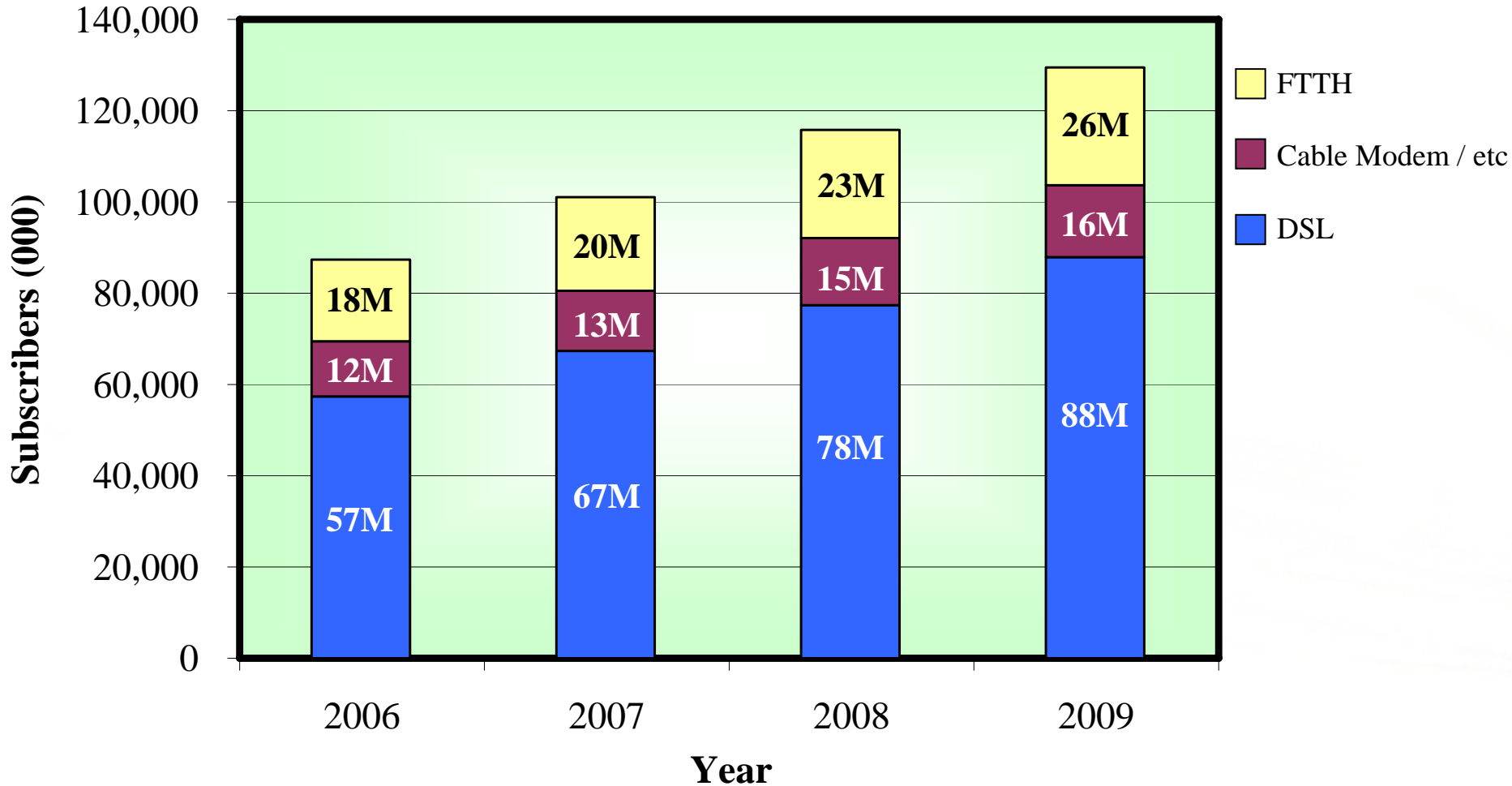
Source: Ovum-RHK / FTTH Council Asia-Pacific (Joint work)

See the Light



Broadband Subscribers – Forecast (12 Regions)

Broadband Subscribers Forecast (APAC, 12 Regions)



Source: Ovum-RHK / FTTH Council Asia-Pacific (Joint work)

See the Light



FTTH Driving Factors

- **Government Policies and Influence**

China : 5-year plan

Korea : IT839 and Emblem

Taiwan : High-Tech Service Island

Japan : Unbundling



- **Competition**

Multiple FTTH service providers in Japan

- **New Services**

Video/Image-based BW eaters

Personalization

- **Housing and Population Density**

Apartment houses and Condominium

Smaller Houses

MDU in China : > 85 %

Back to Tokyo downtown phenomena

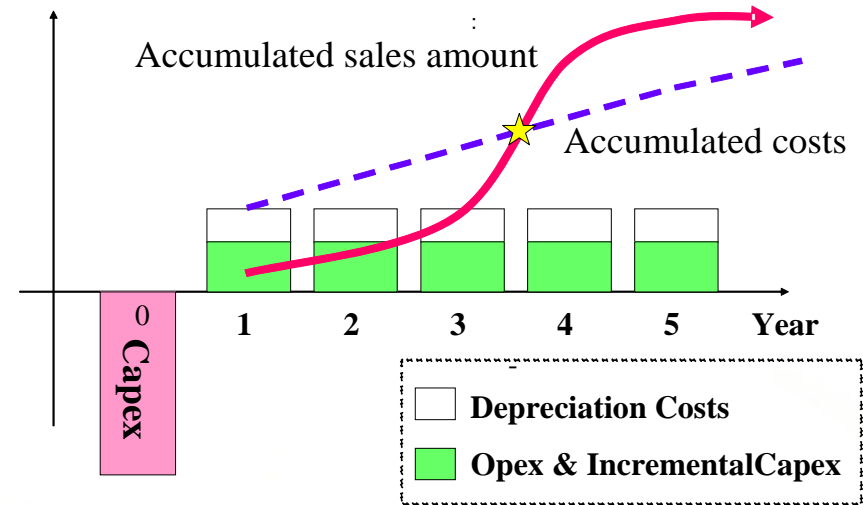
- **Access Loop Network**

Asia loop length average is 2-2.5 km, vs. 3.5 to 4 km in U.S.

- **Cultural Issues**

Speed is a key in Korea

Status Symbol in Japan



Cash-flow economy impact on long-term investment

Analysis on FTTH Market in Japan

- **Government Policies and Initiative**
 - e-Japan & u-Japan
 - Unbundling but one-bill payment
- **Highly competitive marketplace**
 - “leapfrog” competing technology for high-speed internet access
 - NTT market share in metropolitan areas is about 50 %
- **Ethernet-only services over B&GE-PON up to 100 Mb/s**
 - High-speed internet access focus at the beginning
 - Now VoIP service is available
- **Non-hardened units deployed inside the home**
 - For residential house and condominium
 - Simple systems based on engineering prices
- **High speed access is a “*status symbol*”**

Summary

- FTTH Council Asia-Pacific is FTTH industry association based on NPO
- FTTH is virtual transportation to bring Kizuna (cyber-world) respect to culture & history needed
- Asia-Pacific is “See The Light”
- Not only industry promotion but also governmental one is necessary