“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
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, Switzerland & 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
KIZUNA: a “newly connected” Cyber World

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

4P

Products/Services

Consumers

Sales/Marketing

Vendors

Money

4P Check

Adjustment

Target

4R

Product Concept Brand Package

Price

Promotion

Place (Logistics)

Relationship

Retrenchment

Relevancy

Rewards

Broadband

Target

See the Light


FTTH Council Asia-Pacific Proprietary
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

**Broadband subscriber by region**

**Market Status**

Source: Ovum-RHK
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)
FTTH Subscribers (APAC)

FTTH subscriber and FTTH percentage in APAC (Y2005)

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

* FTTH includes, FTTB, FTTC and FTTH etc.
Broadband Subscribers – Forecast (12 Regions)

Broadband Subscribers Forecast (APAC, 12 Regions)

Year

2006 2007 2008 2009

Subscribers (000)

FTTH
Cable Modem / etc
DSL

18M 20M 23M 26M
12M 13M 15M 16M
57M 67M 78M 88M

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