Stanford Japan Center-Research

Visions of the Information Society

Fostering Globally Accessible and Affordable ICTs

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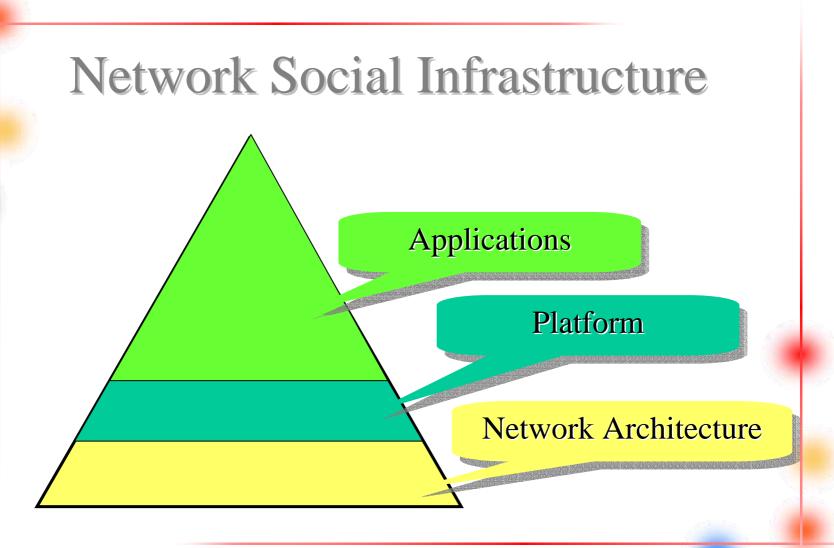


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Global Information Society

Technology

- From ICT Revolution to Ubiquitous Communications
- Transmission Speed from Megabits, Gigabits to Googabits per Second
- A Great Migration toward the Digital Continent





Architecture

Accessibility Choice of technology ✓ Wired ✓ Wireless ✓ Keitai (mobile) Investment

Affordability Governement subsidy **Regulated** tariff Facility-based competition Universal service fund

Platform

Accessibility

- Development
- Standards
- Security, privacy, decency
- Harmonization of tax, settlement, regulation, intellectual property

Affordability
Nexus technology
Nexus institution
"lock-in" effect avoided

Applications

Accessibility Computer literacy Deregulation Cultural impediments Cyber society convention

Affordability

- Competitive industry
- Fair-use copyright

Increasing Accessibility

Evolving Notion of Universal Service

- Physical connectivity
- Active participation

Digital Empowerment

- Transfer of property rights, A revolution
- Economic, political and social inclusion

Increasing AccessibilityCompetition or Regulated Monopoly?

- Facility-based competition
- Auctioning frequency band
- Regulation on access charge
- Viable Infrastructure Development
 - Marginal cost pricing and stranded cost,
 Price cap or structural separation

Increasing Accessibility

Global universal service fund proposed

- Expand the basic concept of universal service fund in US and Japan
- Affordable accessibility
- Platform standards
- Information literacy

Affordability

Choice of Infrastructure

- Wired technology
- Wireless infrastructure
- Pricing Strategy for Fast Penetration
 - Internet subsidy
 - Strategic introduction price, or predatory pricing

Affordability

Government subsidy and WTO principle

- Cost incentive, subsidy on investment and R&D
- Flying geese or leap-frog
- Infants that grow too fast
- Affordability for Whom ?
 - 20% of population; a rule of thumb
 - Make room for those who refuse to ride on

Governance of GIS

Cyber Space Convention

- Platform, copyright, security, tax, global currency, decency, privacy
- Conformity and Diversity
 - Physical and cyber world
 - Diverse paths to future
 - Efficiency, equity and sustainability

Policy Agenda for GIS

Global Universal Service Fund
Geneva Convention for GIS
Cyber Security Council

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For more discussion, please see

Toshihiko Hayashi, "Fostering globally accessible and affordable ICTs", International Telecommunication Union, 2003. Downloadable from the web site http://www.itu.int/osg/spu/visions/global/paper4.html

Thank you.