Diffusing Broadband

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@ Rabat 2015

Agenda

- Introduction (Definition)
- Why to diffuse broadband
- Broadband Eco-system
- The 4 main questions.
- Broadband demand Gap
- Role of polices and regulations
- Supply:
- Demand
  - Relevance & Awareness
  - Accessibility
  - Affordability
- OTT & broad band
- Sources

Broad band

- International Telecommunication Union Standardization Sector defines *broadband* as a "transmission capacity that is faster than primary rate ISDN [Integrated Services Digital Network] at 1.5 or 2.0 [megabits per second]" (ITU 2004, 55).
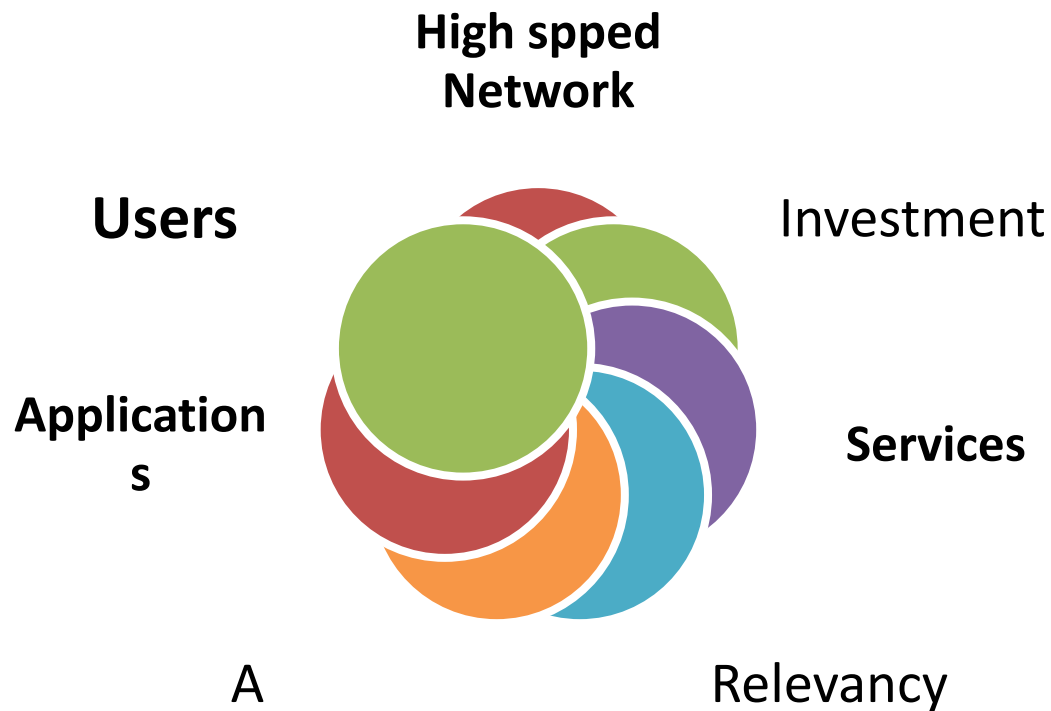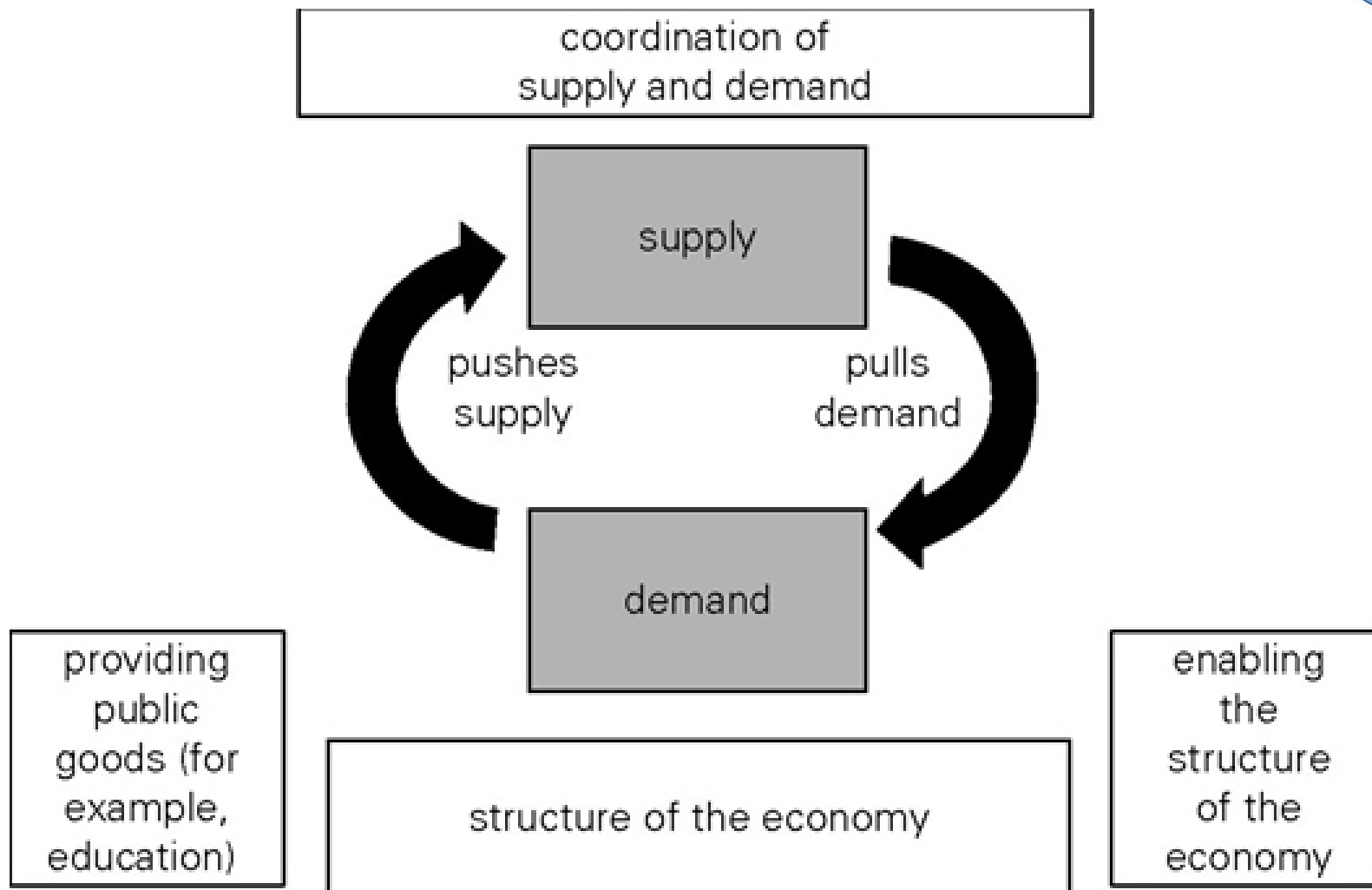
Broadband Diffusion

- Broadband is a tool for development
  - Enhance the country use of ICT
  - Increase the transparency
  - Business efficiency
  - Enhance the Digital literacy

Broadband Eco-system

- broadband is a full eco-system , composed of many Interconnected and dependent factors.
- Network
- Investment
- Services
- Relevancy
- Accessibility
- Affordability
- Application
- Users
- lieracy

High spped Network

Users

Investment

Application s

Services

A

Relevancy

coordination of supply and demand

supply

pushes supply

pulls demand

demand

providing public goods (for example, education)

structure of the economy

enabling the structure of the economy

The 4 Q's

- Is the broadband service available every where?

- Is the the service accessible for every body ?

- Is it affordable ?

- Are the people find it relevant ?

Broadband demand Gap

- Reasons for gap ?

- Measuring the gap:
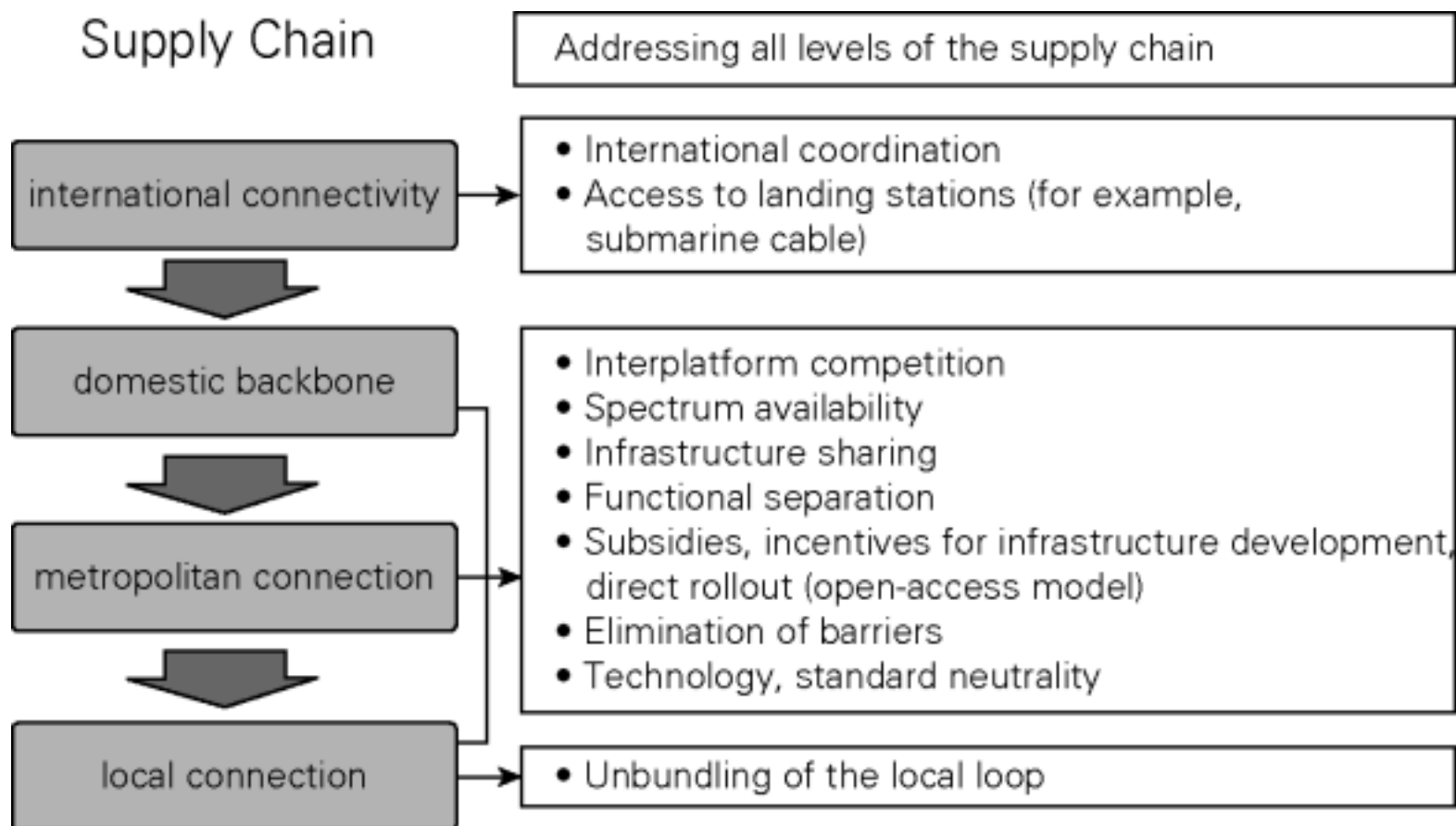 - The demand Gap = the Population coverage - penetration

Key roles of polices and regulations

- Maximizing competition, including removing entry barriers and improving the incentives and climate for private investment.
- Specific public programs with funding interventions only to promote the growth of certain underdeveloped markets.
- Government funding or policy should not compete with private sector investment.
- Subsidized networks should be open access (that is, they should offer capacity or access to all market participants in a nondiscriminatory way).
- Government should eliminate barriers to content creation and refrain from blocking access to content, including social networking sites, or restricting local content creation.
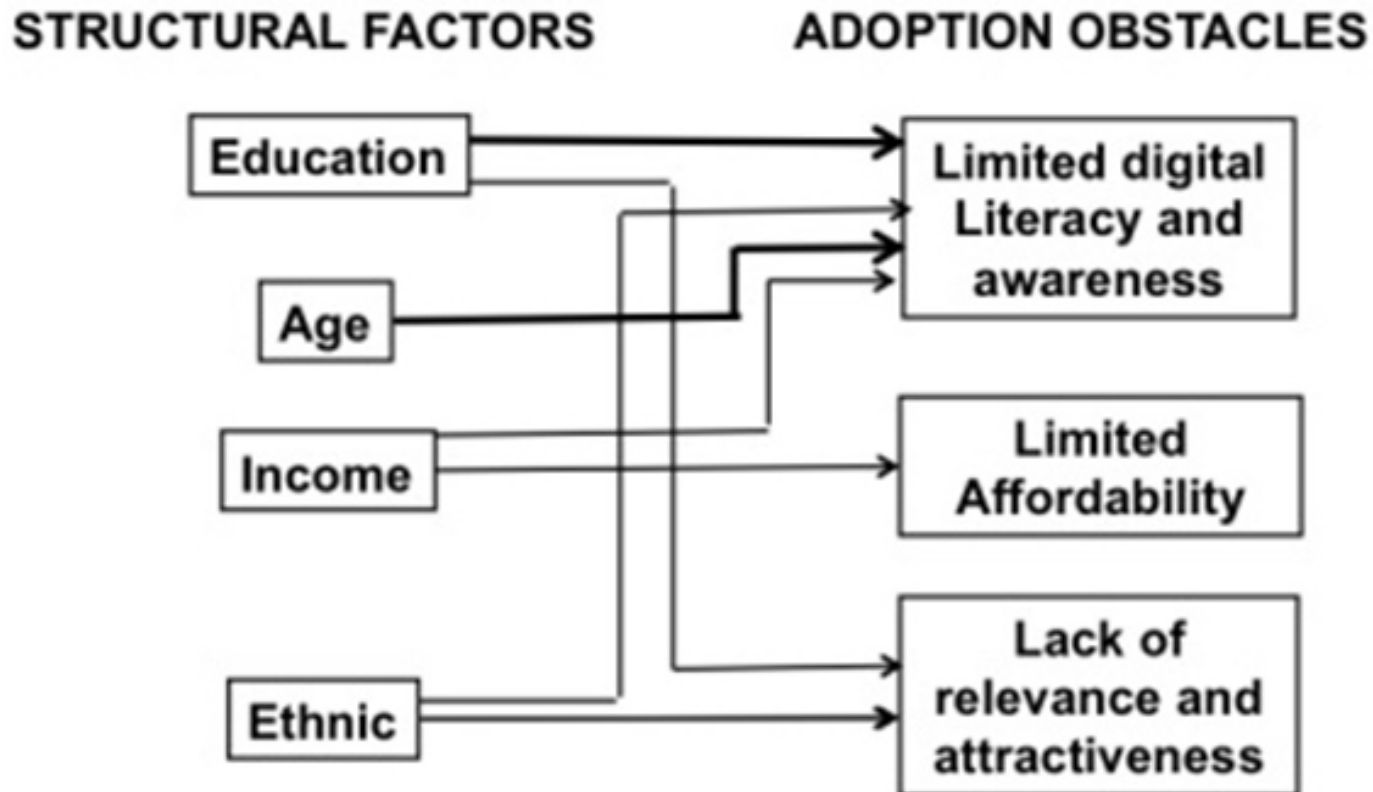
Broadband Supply

Supply Chain

Addressing all levels of the supply chain

international connectivity

- International coordination
- Access to landing stations (for example, submarine cable)

domestic backbone

metropolitan connection

- Interplatform competition
- Spectrum availability
- Infrastructure sharing
- Functional separation
- Subsidies, incentives for infrastructure development, direct rollout (open-access model)
- Elimination of barriers
- Technology, standard neutrality

local connection

- Unbundling of the local loop

Broadband Demand

- Accessibility &Affordability
- Relevance, Awareness and digital literacy

STRUCTURAL FACTORS   ADOPTION OBSTACLES

| Education | → | Limited digital Literacy and awareness |
| Age |
| Income | → | Limited Affordability |
| Ethnic | → | Lack of relevance and attractiveness |

Demand - Awareness
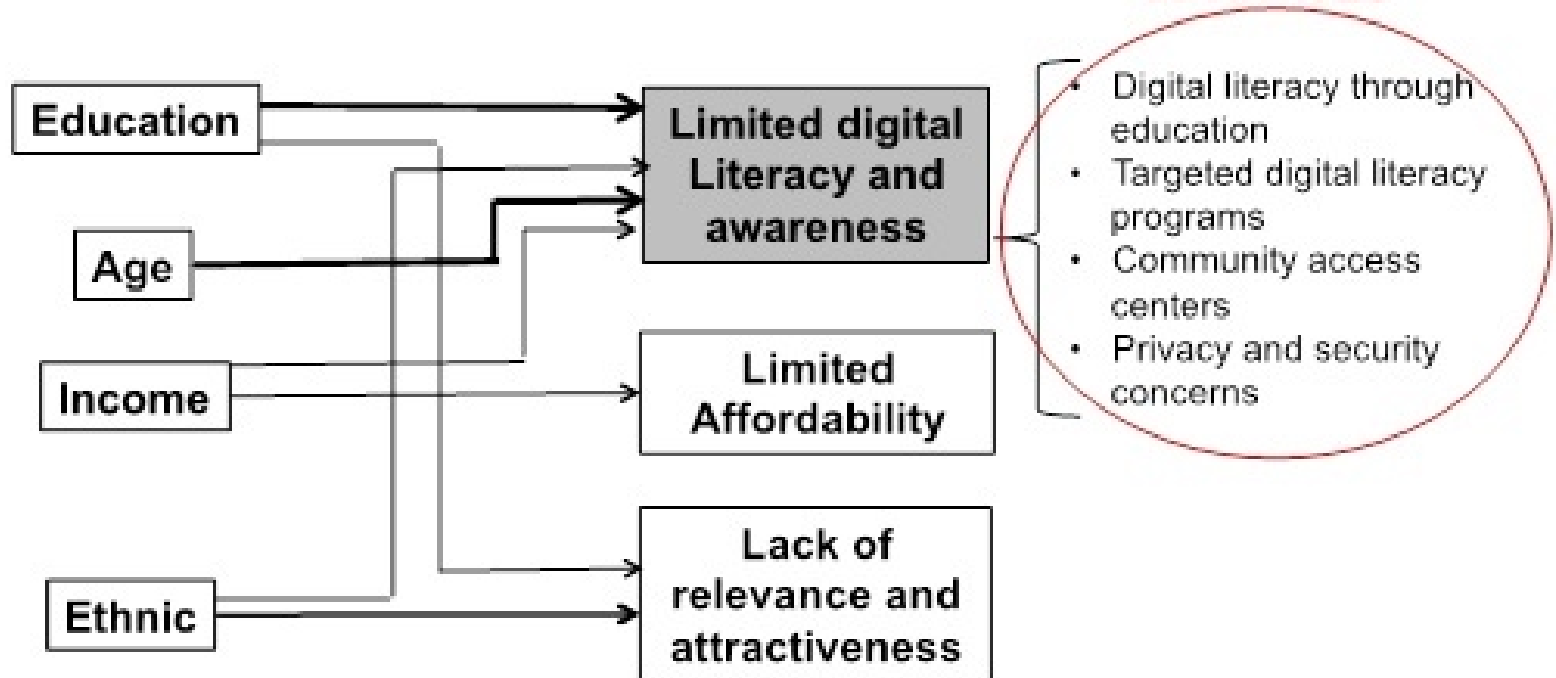
Demand -Affordability
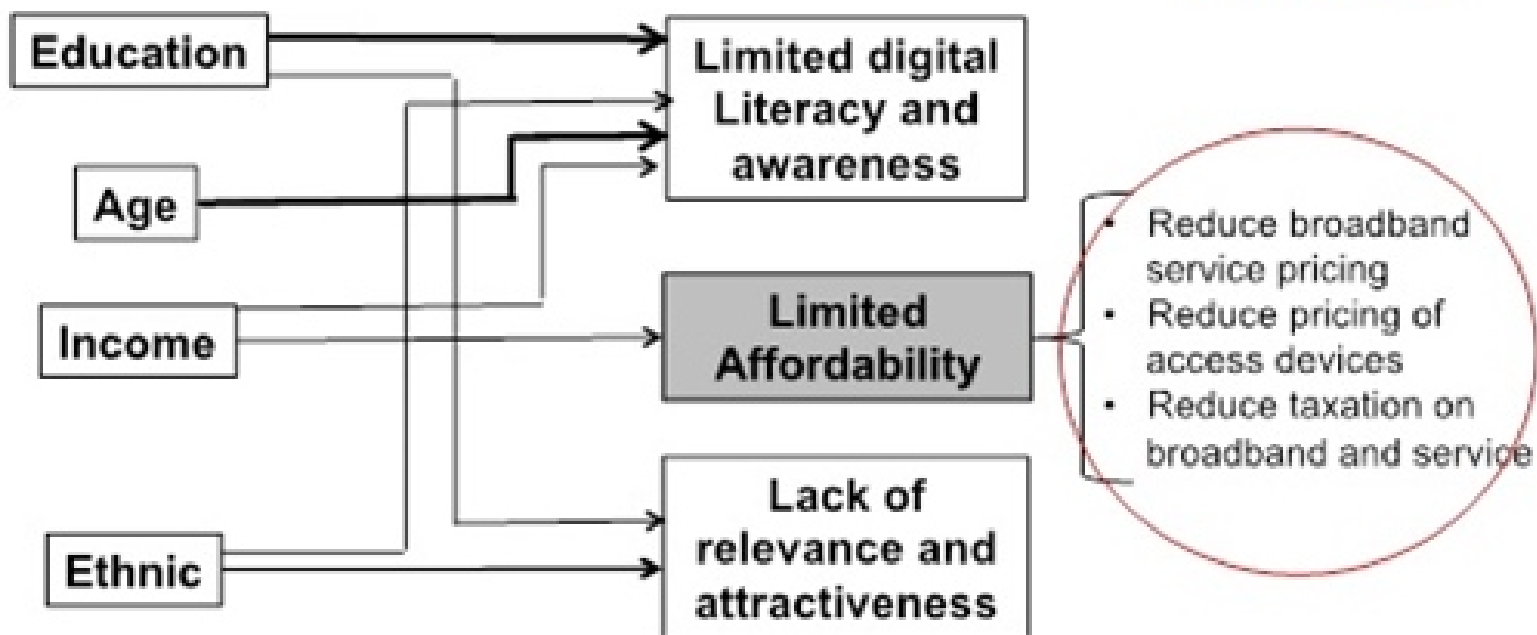
Demand -Developing applications

STRUCTURAL FACTORS   ADOPTION OBSTACLES   RELEVANCE INITIATIVES

- Education
- Age
- Income
- Ethnic

- Limited digital Literacy and awareness
- Limited Affordability
- Lack of relevance and attractiveness

- Introduce applications with high network effects
- Launch services with high social and welfare impact
- Deliver locally-relevant applications and content
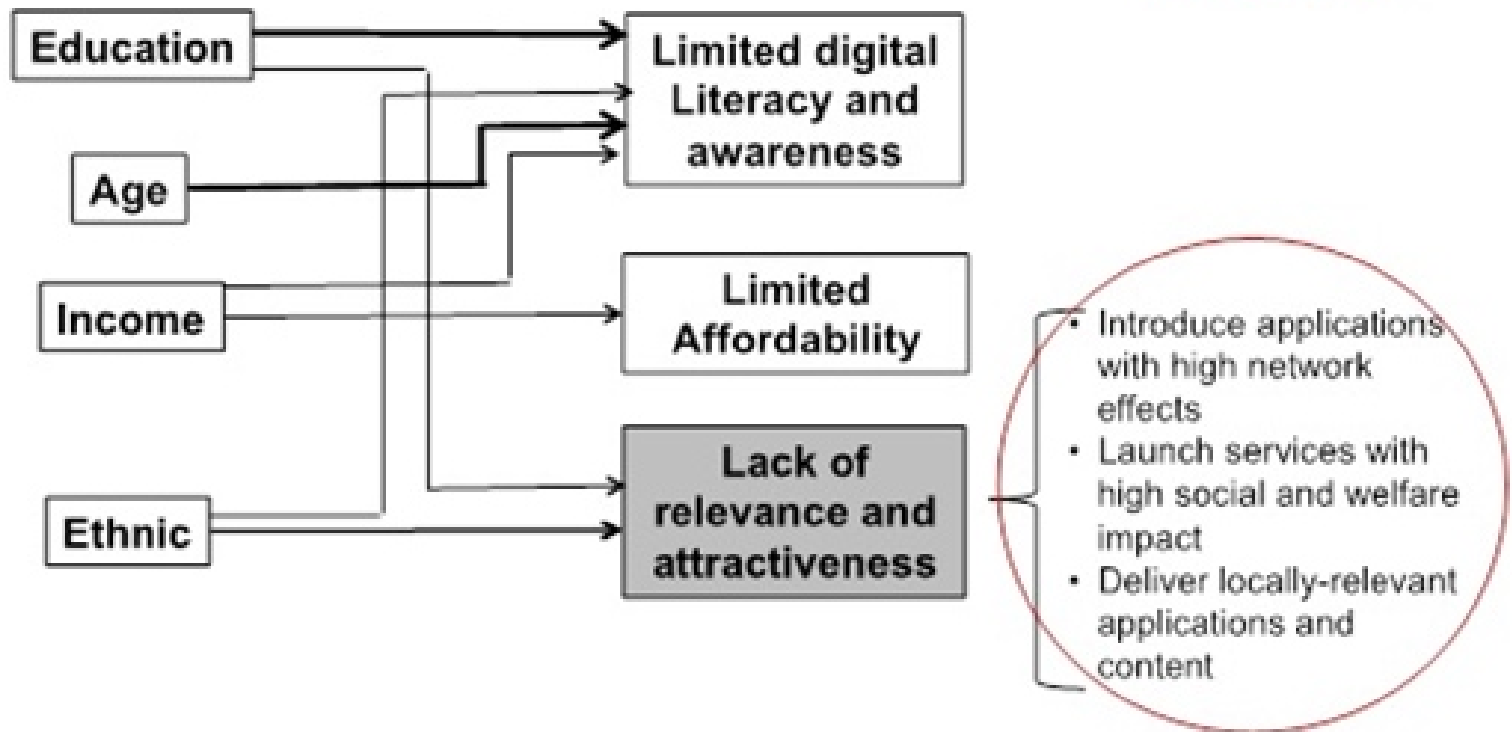
Demand -Integrated E -Services

- E-government
- Online payments & banking ,
- Online business services (shopping , merchandising,
- Social Media
- Other services

National Broadband diffusion programs

- Assure the program as Government mandate.
- Define the stake holders
- Creating the national broadband assembly.
  - Create the vision
  - Define the measures and it's targets.
  - Get the stakeholders involved
  - Create the program steering team.
  - Draw the detailed broadband roadmap
  - Assure awareness and demand stimulation programs as part of the plan.

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Thanks