

Telecommunication Environment Survey for the Developing Countries

A Korean Internet Volunteers (KIV) Program

KOREA AGENCY FOR DIGITAL OPPORTUNITY & PROMOTION

2004.09



한국정보문화진흥원

- 1 Survey Overview
- 2 Questionnaire Structure
- 3 Analysis 1. Organization- specific Topics
- 4 Analysis 2. Country- specific Topics
- 5 Findings
- 6 Conclusion

Survey Overview

1. Background

- o Korean Internet Volunteer team dispatched to each developing country can also perform information and telecommunication- related survey as a part of overall research for the developing countries

2. Purpose

- o To survey the status of information/telecommunication environment in developing countries to present it in the international symposium and utilize it for a research purpose

3. Survey Overview

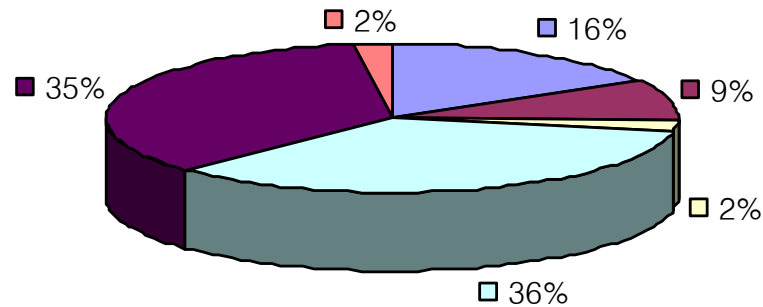
- o Subject
 - Telecommunication environment of institutes and regions where the volunteers are working
- o Method
 - Interview
- o Duration : July - August 2004
- o Surveyor
 - Korean Internet Volunteers
- o Survey Target
 - 43 institutes from 23 countries

Survey Overview – Cont.

Region	Surveyed Countries	No of countries	No of organization
West Asia	Nepal, Bangladesh, India	3	5
South Asia	East-Timor, Laos, Vietnam, Indonesia, Cambodia, Philippines	6	11
Asia	Mongolia, China	2	6
CIS	Russia, Uzbekistan, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan	6	11
Europe	Bulgaria	1	4
Latin	Peru	1	1
Africa	Algeria, Egypt, Zimbabwe, Kenya	4	5
Total		23	43

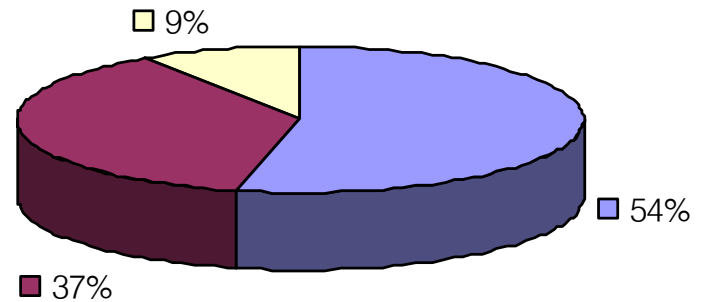
Analysis 1. Organization- specific Topics

Type of organization



- | | |
|-----------------------|-----------------------|
| Public Facility | NGO |
| Elementary School | Middle or High School |
| College or University | Others |

Type of area

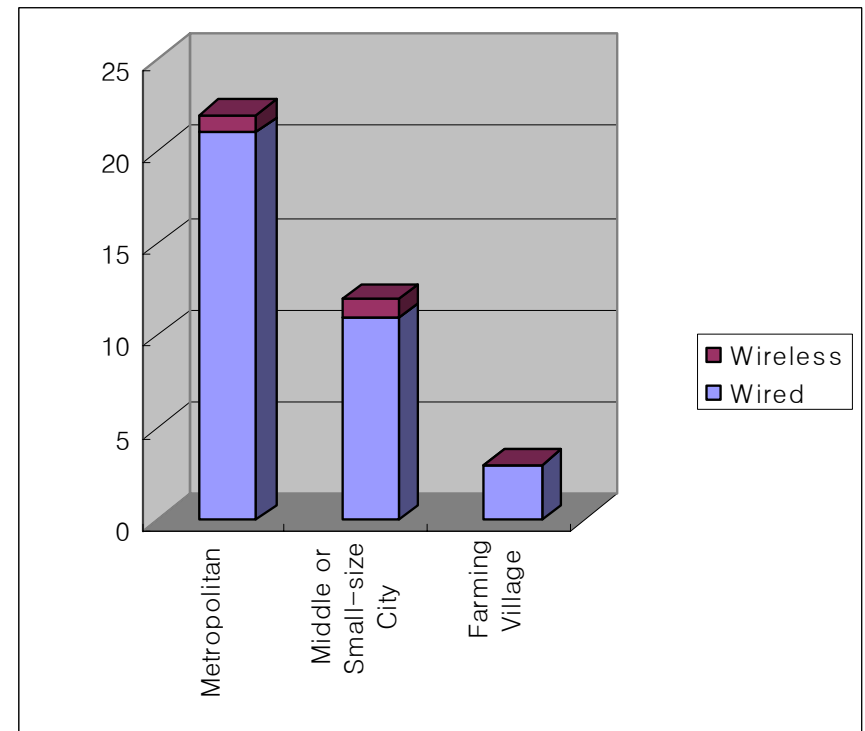
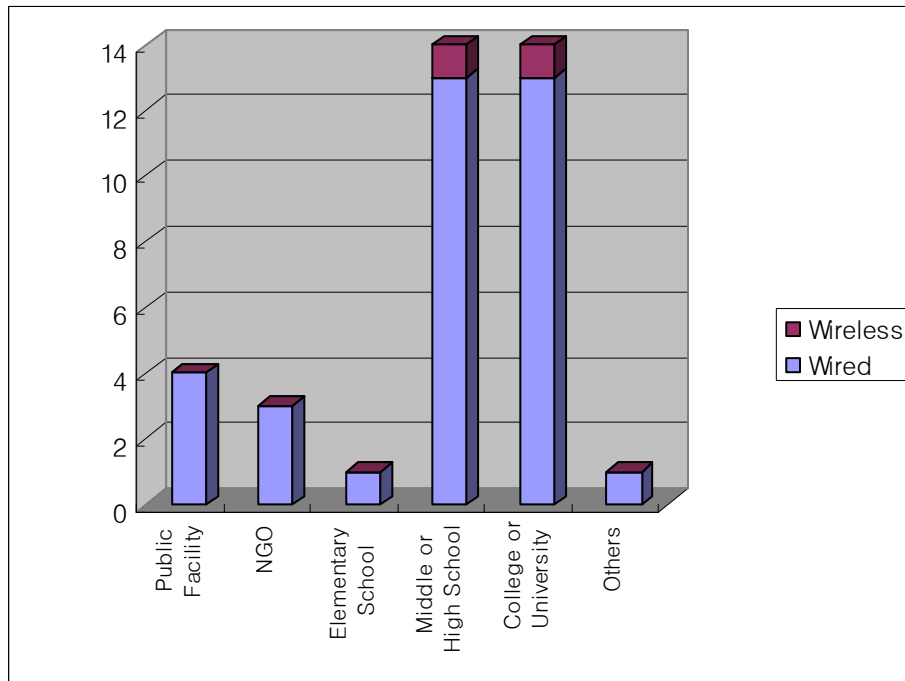


- | |
|---------------------------|
| Metropolitan |
| Middle or Small-size City |
| Farming Village |

Analysis 1. Organization- specific Topics

Wired/Wireless network

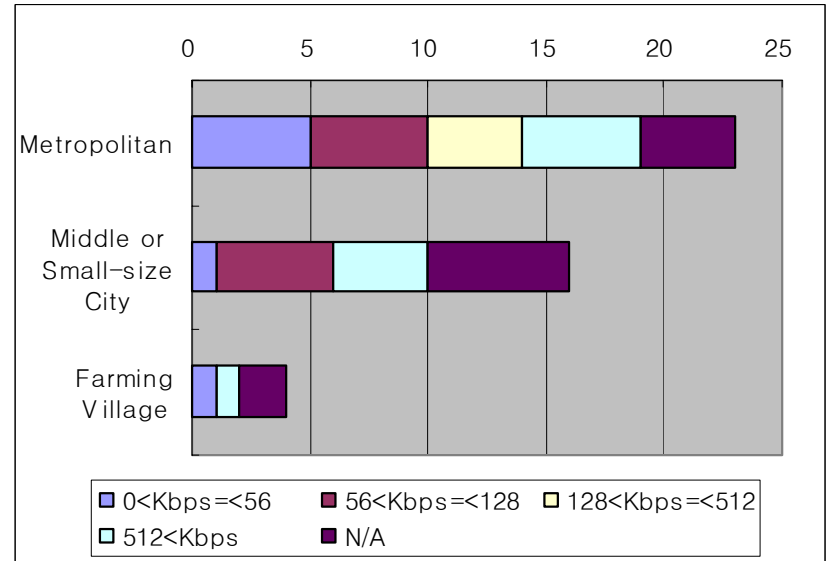
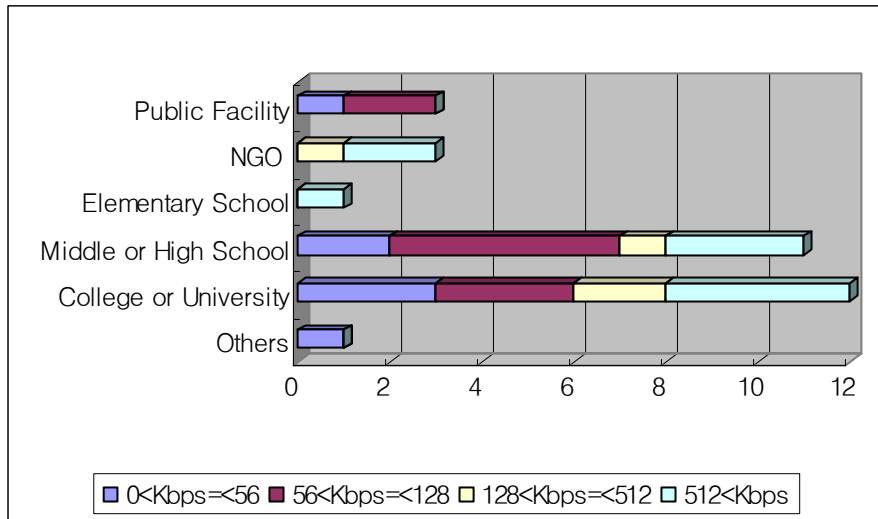
	Wired	Wireless	Total
Number	35 (95%)	2 (5%)	37 (100%)



Analysis 1. Organization- specific Topics

Internet bandwidth in working organization

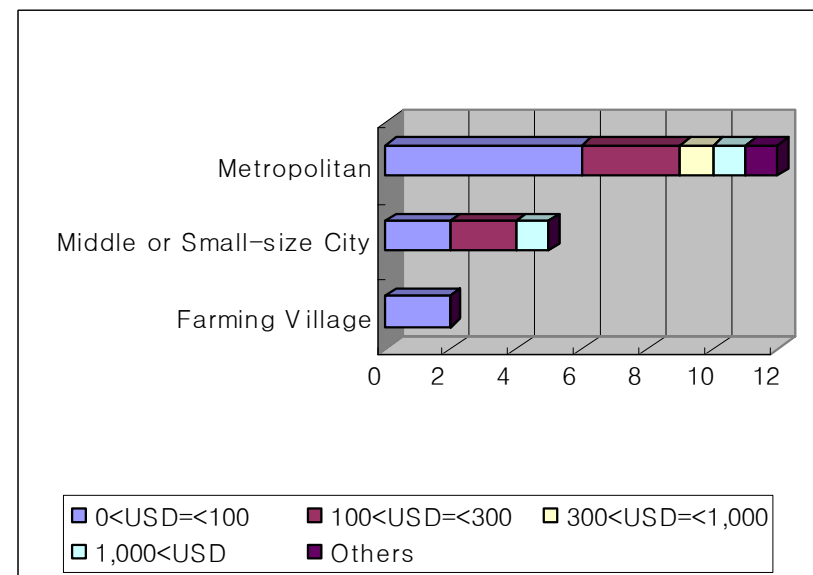
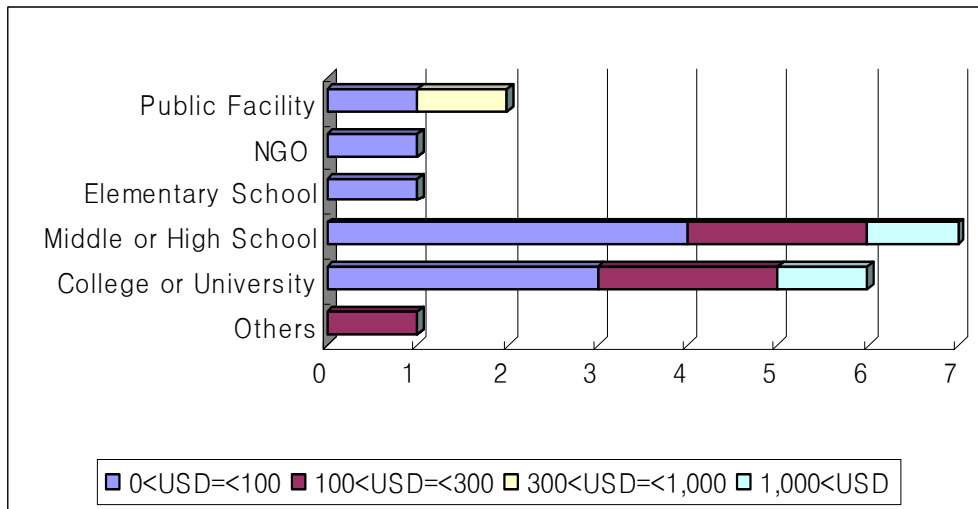
Speed	0<Kbps= <56	56<Kbps =<128	128<Kbp s=<512	512<Kbp s	Total
Number	7 (23%)	10 (32%)	4 (13%)	10 (32%)	31 (100%)



Analysis 1. Organization- specific Topics

Monthly subscription payment in working organization

	0<USD=<100	100<USD=<300	300<USD=<1,000	1,000<USD	Others	Total
Number	10 (53%)	5 (26%)	1 (5%)	2 (11%)	1 (5%)	19 (100%)

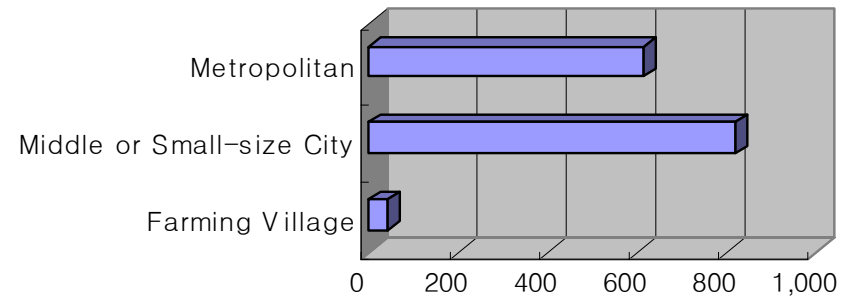
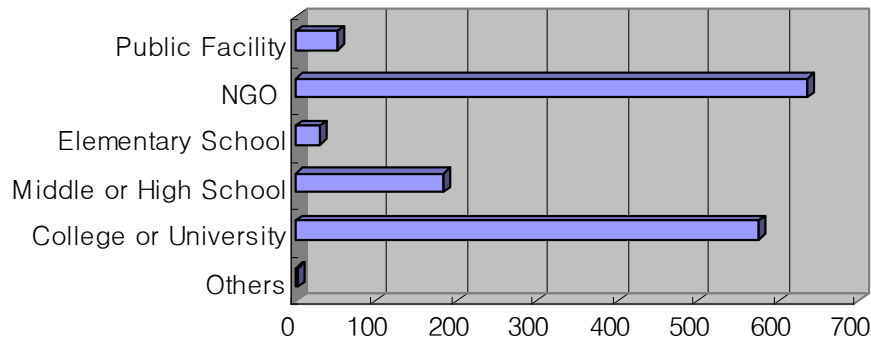


Analysis 1. Organization- specific Topics

Number of Internet connecting terminals in working organization

By Organization	No of terminals
Public Facility	52
NGO	636
Elementary School	30
Middle or High School	184
College or University	577
Others	3

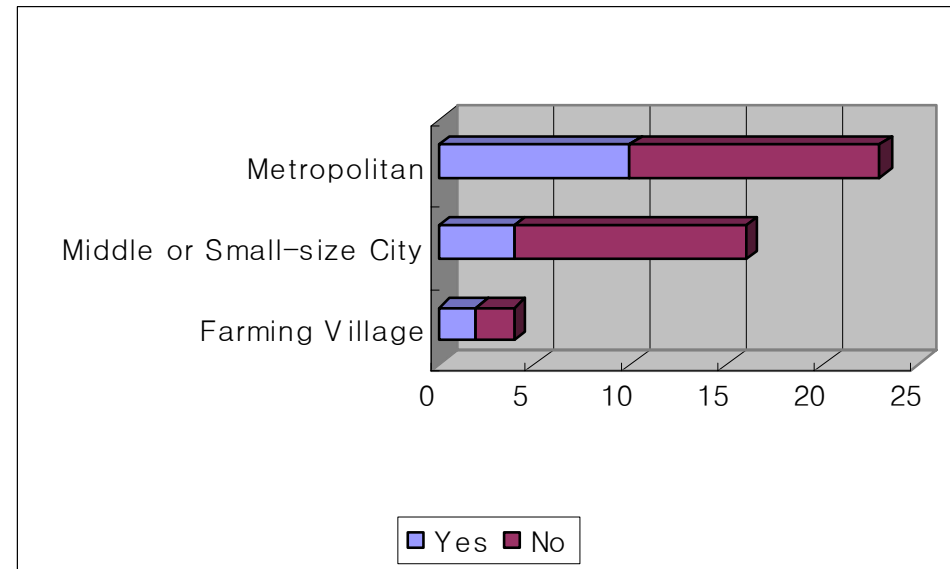
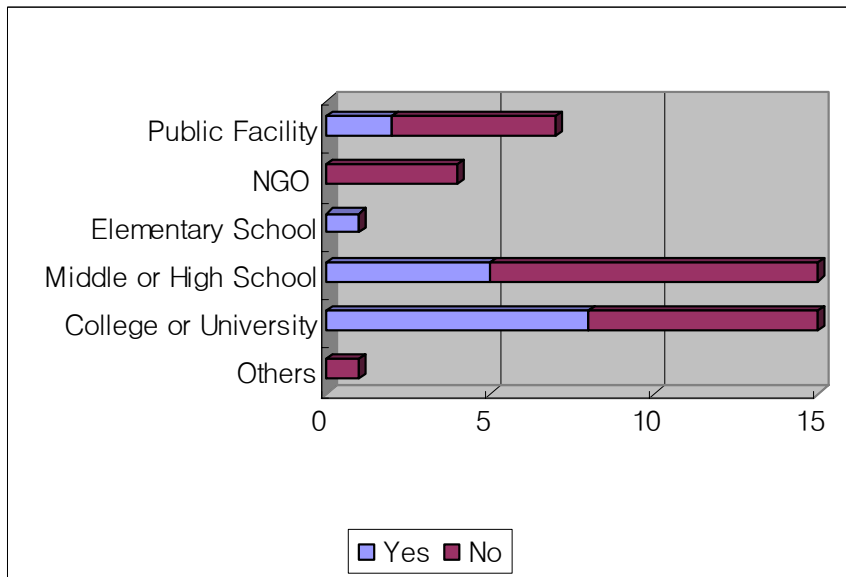
By Type of area	No of terminals
Metropolitan	617
Middle or Small-size City	822
Farming Village	43



Analysis 1. Organization- specific Topics

Internet Host in working organization?

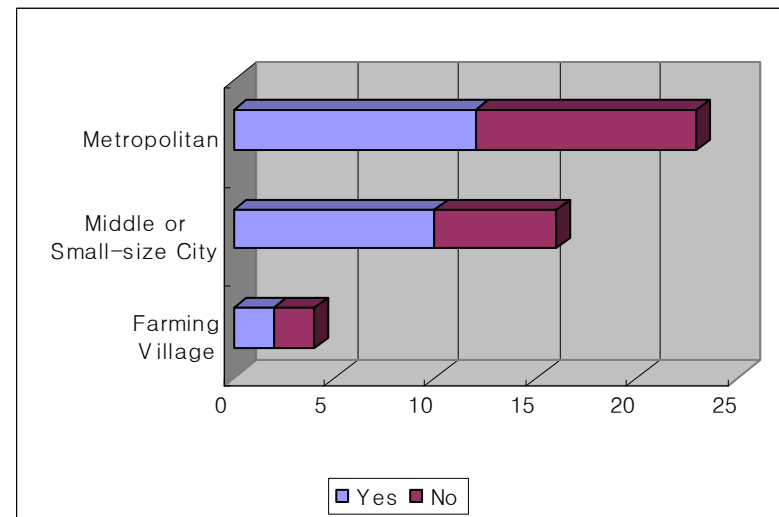
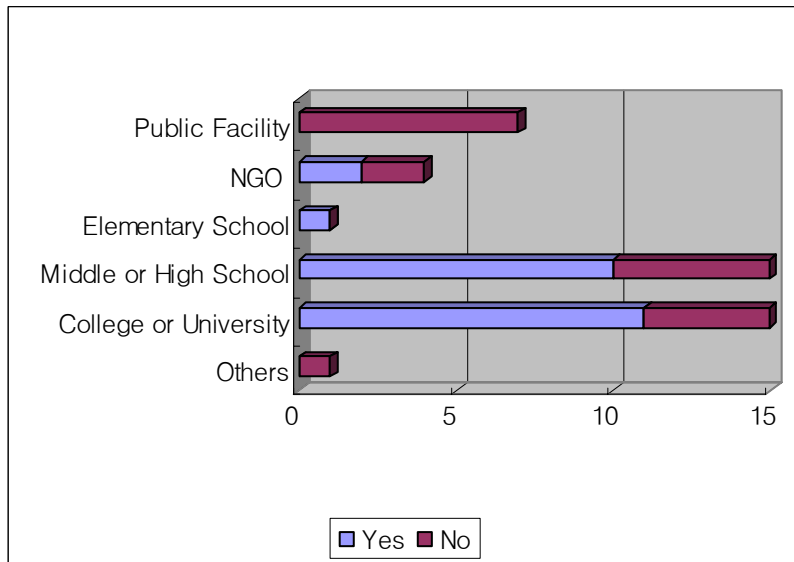
Internet Host	Yes	No	Total
Number	16 (37%)	27 (63%)	43 (100%)



Analysis 1. Organization- specific Topics

Internet homepage in working organization?

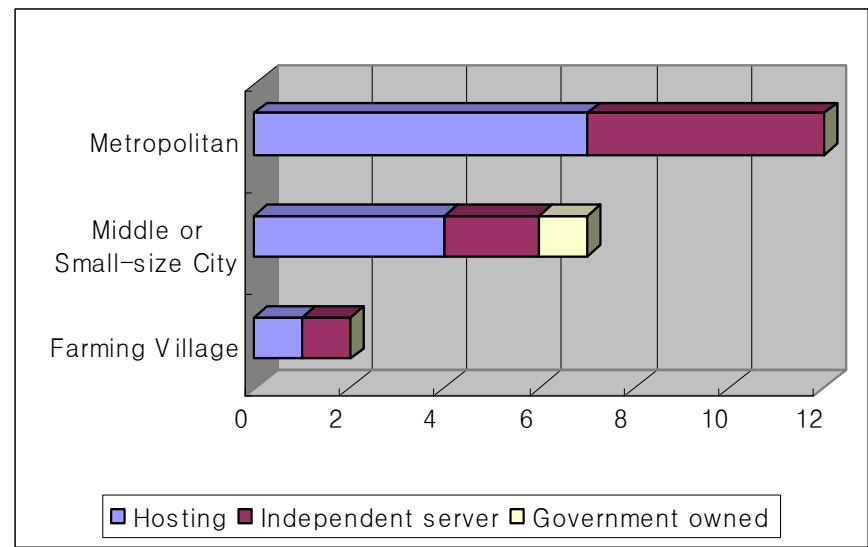
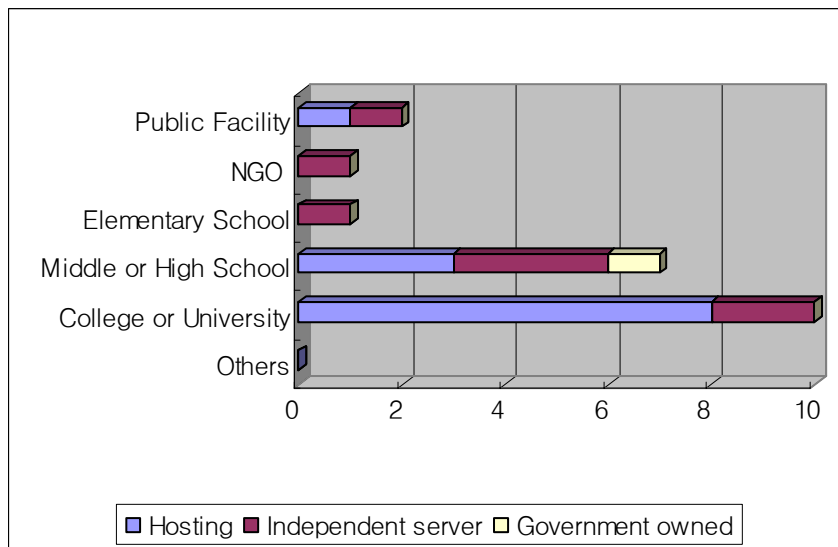
Internet homepage	Yes	NO	Total
Number	24 (56%)	19 (44%)	43 (100%)



Analysis 1. Organization- specific Topics

Type of Internet server in working organization

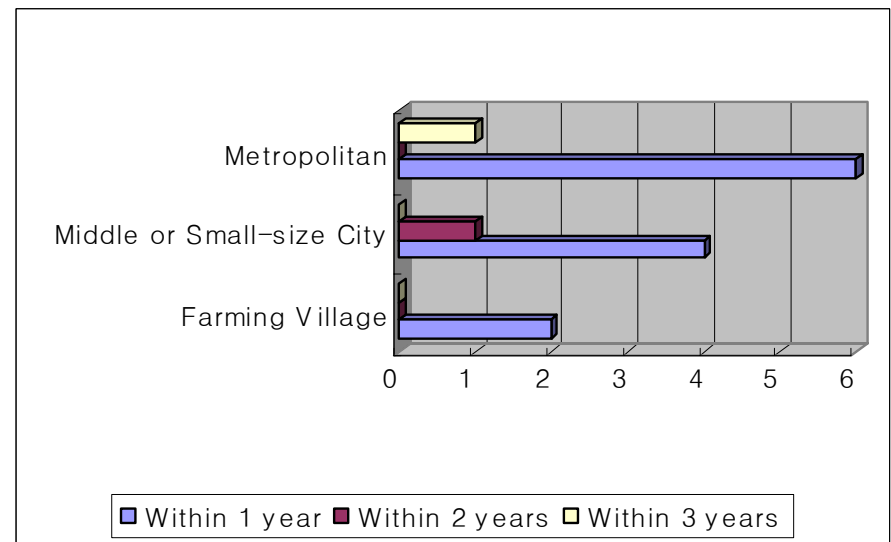
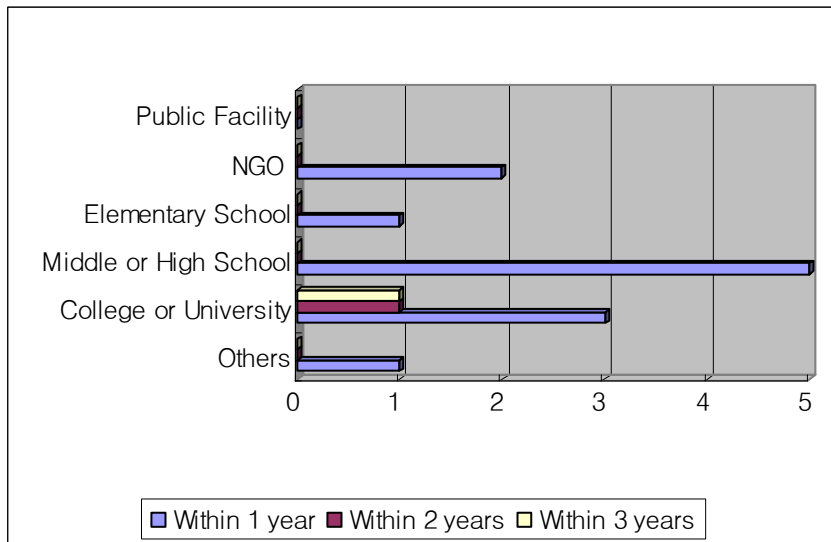
Internet server type	Hosting	Independent Server	Government Owned	Total
Number	12 (57%)	8 (38%)	1 (5%)	21 (100%)



Analysis 1. Organization- specific Topics

Plan for upgrading network environment

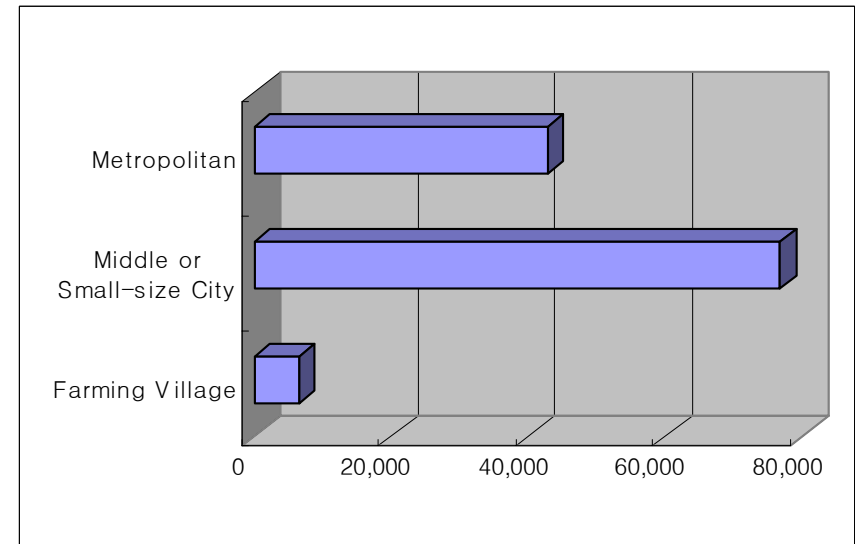
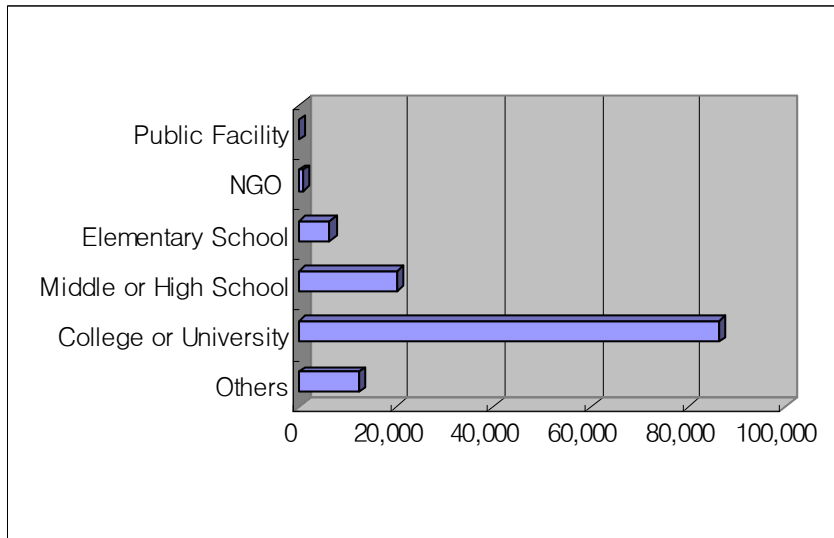
Plan for upgrade	Within 1 year	Within 2 years	Within 3 years	Total
Number	12 (86%)	1 (7%)	1 (7%)	14 (100%)



Analysis 1. Organization- specific Topics

Amount of budget for upgrading network environment

By Organization	Amount of budget(\$)
Public Facility	0
NGO	1,000
Elementary School	6,522
Middle or High School	20,128
College or University	86,320
Others	12,500
By Type of area	Budget
Metropolitan	43,000
Middle or Small-size City	76,948
Farming Village	6,522



Analysis 1. Organization- specific Topics

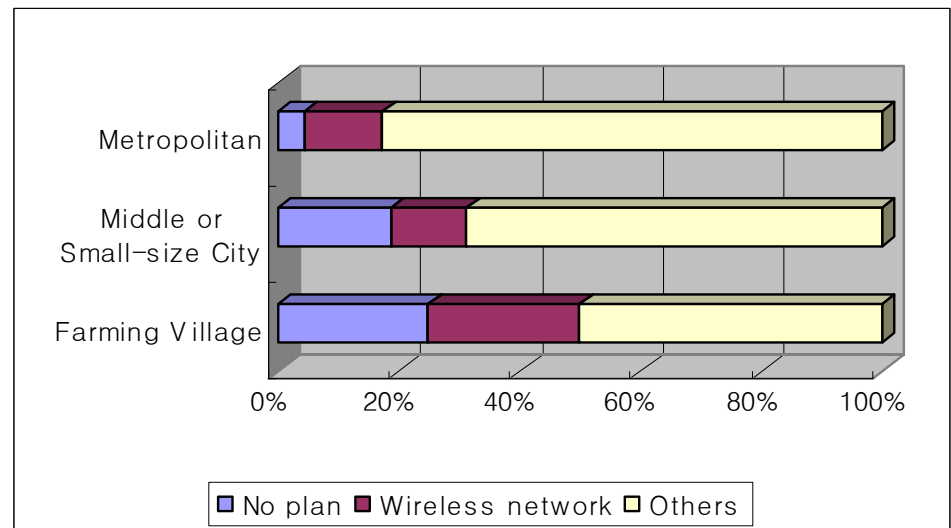
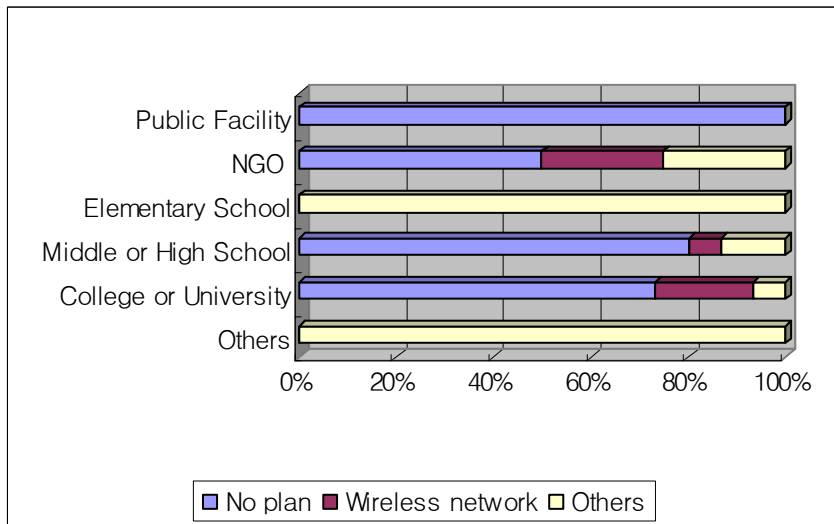
Type of technology for upgrading network environment

By organization

Upgrade	No plan	Wireless	Others	Total
Number	32 (74%)	5 (12%)	6 (14%)	43 (100%)

By type of area

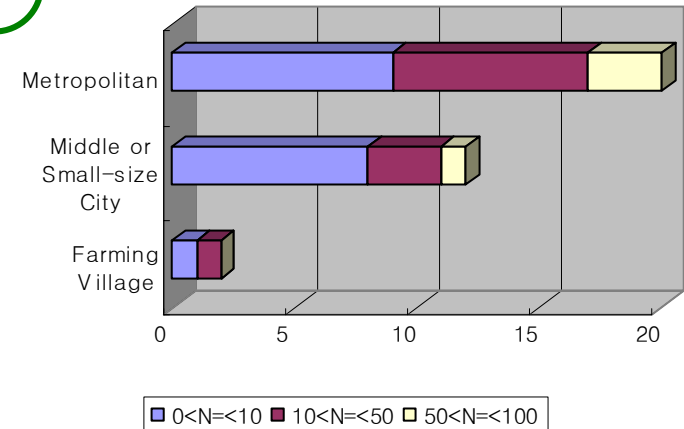
Upgrade	No plan	Wireless	Others	Total
Number	5 (12%)	6 (14%)	32 (74%)	43 (100%)



Analysis 1. Organization- specific Topics

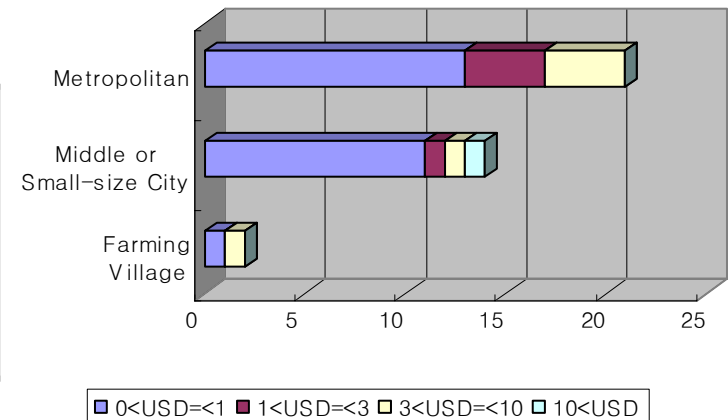
Number of cyber- cafes in your area

	0<N=<10	10<N=<50	50<N=<100	Total
Number	18 (53%)	12 (35%)	4 (12%)	34 (100%)



Cyber- cafe price per hour

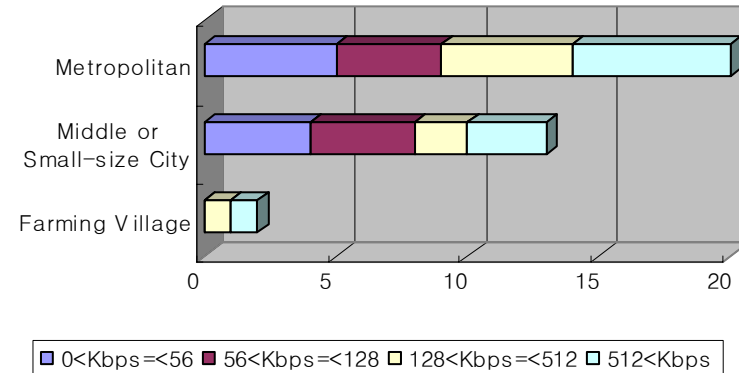
Price	0<USD=<1	1<USD=<3	3<USD=<10	10<USD	Total
Number	25 (68%)	5 (13%)	6 (16%)	1 (3%)	37 (100%)



Analysis 1. Organization- specific Topics

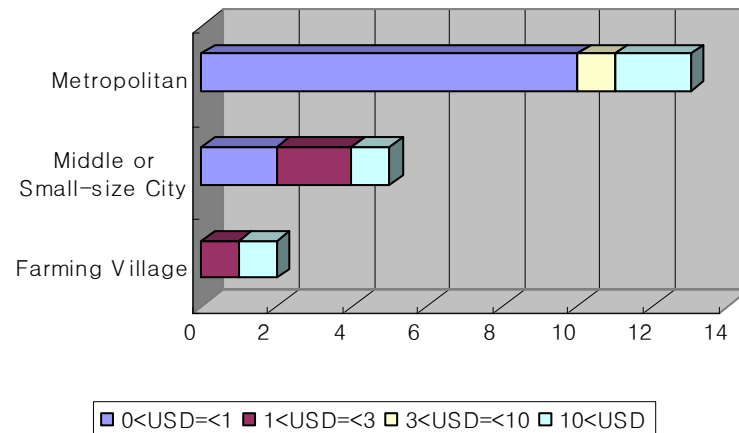
Internet bandwidth at cyber- café

Bandwidth	0<Kbps=<56	56<Kbps=<128	128<Kbps=<512	512<Kbps	Total
Number	9 (26%)	8 (23%)	8 (23%)	10 (28%)	35 (100%)



Internet connection fee per hour at cyber- café

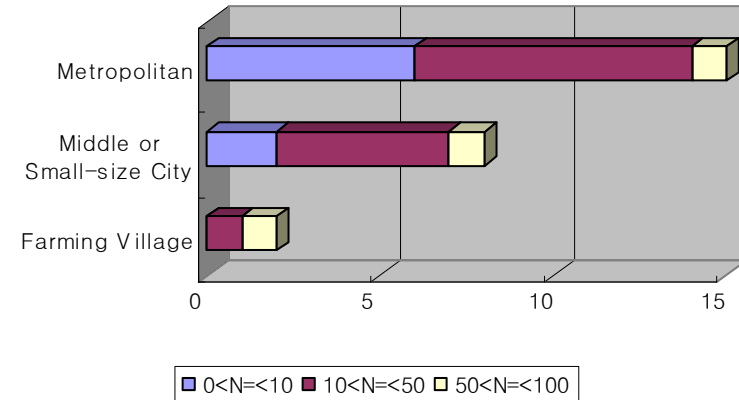
Fee	0<USD=<1	1<USD=<3	3<USD=<10	10<USD	Total
Number	12 (60%)	3 (15%)	1 (5%)	4 (20%)	20 (100%)



Analysis 1. Organization- specific Topics

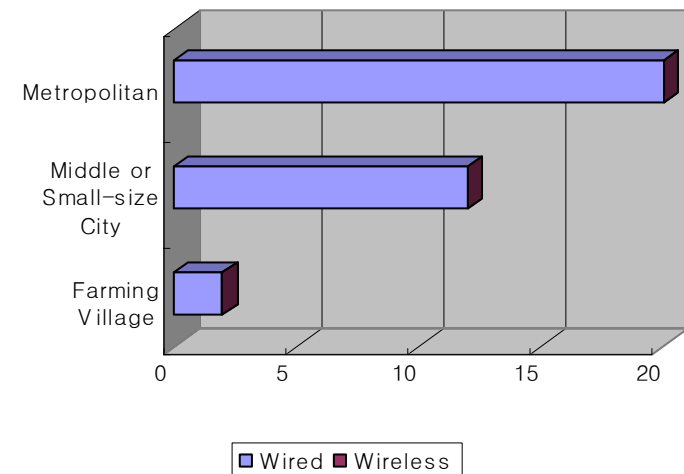
No. of terminals with Internet connection at cyber-café

Terminal	0<N=<10	10<N=<50	50<N=<100	0	Total
Number	8 (19%)	14 (32%)	3 (7%)	18 (42%)	43 (100%)



Wired/Wireless of Cyber cafés

Type	Wired	Wireless	Total
Number	35 (100%)	0 (0%)	35 (100%)



Analysis 2. Country- specific Topics

Status of Community Access Center (free or low price)

Nation	Number of access center	Internet Bandwidth	Users of access center	Internet connection terminal
East- Timor	4	128 kbps	100 users Per day	2
Mongolia	1	2,000 kbps		20
Bulgaria	10	1,000 kbps		6
Cambodia	1	2,000 kbps		20
Peru	3	600 kbps		15

•Only 5 countries (out of total 23 countries) have information access centers operated free of charge or at low price.

Status of Mobile Phone

- Type of mobile phone technology

Tecnnology	CDMA only	GSM only	Both
case	0	20	7

- Price of mobile phone [US dollar]

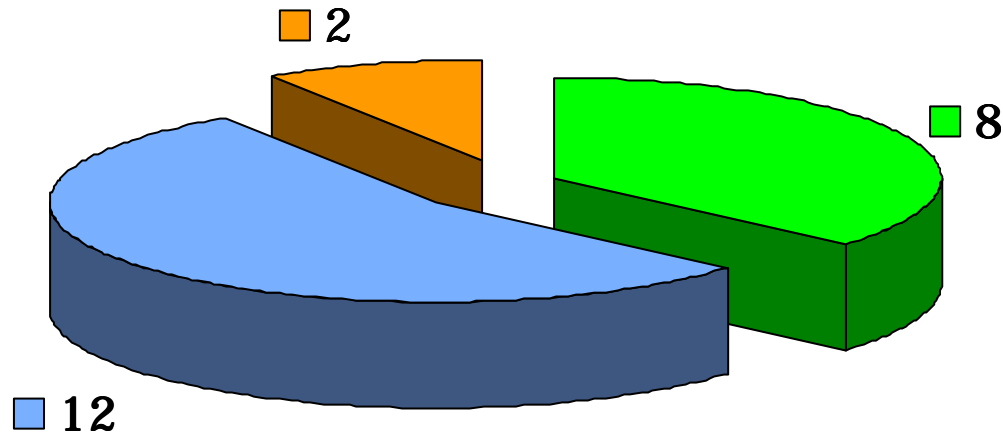
Price	0 ~ 100	100 ~ 300	300 ~ 1,100	1,100 ~
case	7	11	6	1

- Fee of sending SMS [US dollar]

Price	0 ~ 0.1	0.1 ~ 0.3	0.3 ~ 10
case	6	6	2

Desktop PC price

Price of standard Desktop PC



■ 0~500 dollar ■ 200~1,000 dollar ■ 1,000 dollar ~

Internet contents and service (1)

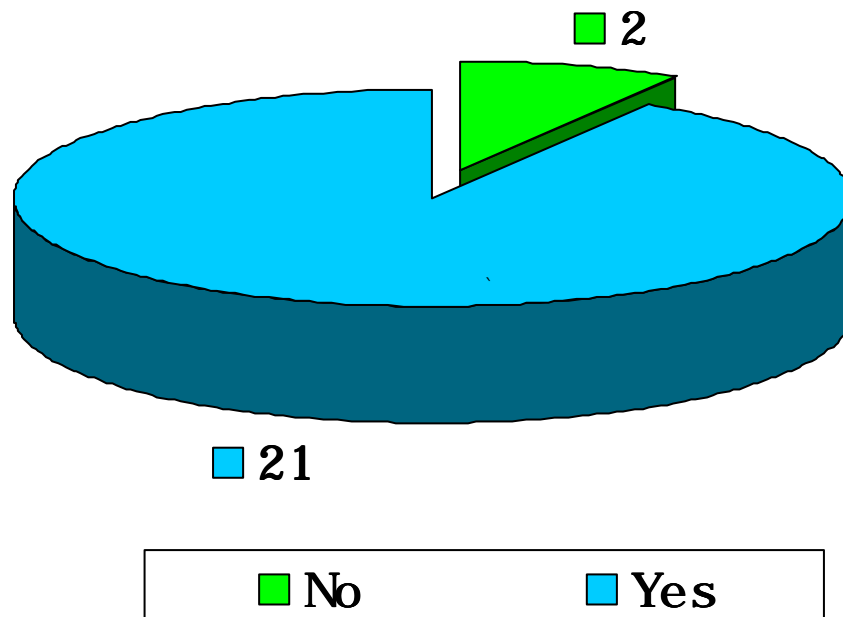
< Main languages of the web- site by countries >

	case(single choice)
English	14
Russian	6
Arabic	1
Uzbek	0
Mongolian	2
French	0
Chinese	1
Lao	1
Bulgarian	1
Kazacs	0
Total	28

- English is selected most
- CIS countries use only Russian
- 4 countries use their own language

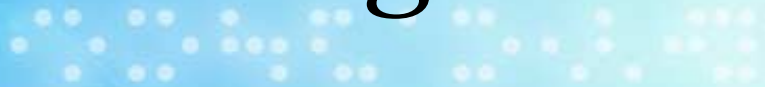
Internet contents and service (2)

Can read newspaper through internet



KOREA AGENCY FOR DIGITAL ADAPTATION & PROMOTION

Findings



한국정보문화진흥원

□ 43 Institutes from 23 Countries

- ✓ 95% : Wired
- ✓ Internet bandwidth : 55%, less than 128 Kbps
- ✓ 37 % owns Internet Host
- ✓ 44% do not have Internet homepage
- ✓ 32% do not have plan to upgrade network environment

❑ Status of Cyber-Café

- ✓ Less than 10 cyber-café 53%
- ✓ 32%, more than 1 dollar per hour
- ✓ Internet bandwidth, 49%, lower than 128 Kbps
- ✓ 100% wired connection

❑ Status of Community Cyber-Café

- ✓ 5 out of 23 countries operate Community Access Center

□ Status of Mobile phone

- ✓ 74%, GSM only, 26%, both GSM and CDMA
- ✓ Average price of mobile phone : 480 US Dollar
- ✓ Average fee for sending SMS : .21 US Dollar

□ Desktop PC price

- ✓ Average : 625 US Dollar

❑ Internet Contents and Service

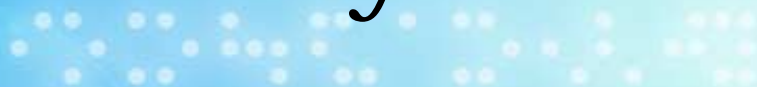
- ✓ English is most popular language,
- ✓ In only 4 countries(Uzbekistan, Mongolia, China, Laos, Bulgaria), local language is a main language in the web
- ✓ In 2 countries, can not read newspaper through the Internet(?)

❑ Desktop PC price

- ✓ Average :

Thank you

KOREA AGENCY FOR INTERNATIONAL TRADE PROMOTION



한국정보문화진흥원