

The Effect of the Internet on Society in Uzbekistan

Carolyn Wei, Beth E. Kolko, Jan Spyridakis
University of Washington

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Multi-Stage Project

- 1998-2000
 - Background research
 - 5-months in Uzbekistan (Fulbright)
 - Short research trips to Turkmenistan and Kazakhstan
- 2001-2002
 - Analysis of 2000 data, further research
- 2002-2003
 - NSF sponsored, 3 trips to region
- 2003-2008



Research Questions

- ❑ Early initiatives
- ❑ Information-seeking patterns: how they affect diffusion and usage
- ❑ Implications for design of technology
- ❑ How Internet is affecting society in Central Asia
- ❑ How studying early stages can inform implementation plans



What's at stake?

- ❑ Cross-domain possibilities
- ❑ Internet as a democratizing force
- ❑ Early adopters vs. general population
- ❑ Overall media transformation (synergies among print, electronic, video)



Culture and Policy

- Culture
 - Information-seeking patterns
 - Trust
 - Confidence
- Policy
 - Uncertainty of Internet and its relevance
 - Lack of public discourse about information technology
 - Inconsistency of regulations



Telecom Policy Confusion

- November 2002: connectivity viable in several Internet access points
- January 2003: series of letters posted to Internet; government scales up censorship of sites
 - By February 2003, connectivity unworkable at public sites
 - Embassies and companies lose access to sites
 - Yahoo, Hotmail, and other sites blocked
- March 2003: much connectivity restored
- October 2003: ??



Growth in Public Access Points

- December 2000: Tashkent had 12 Internet access points
- November 2002: Tashkent had 38+? sites
 - Not all sites licensed, so difficult to account for
 - Not all advertised “Internet Clubs” have Internet access
 - Not all advertised “Internet Clubs” are still in business



Growth in University Access Points

- In 2000, only one university claimed to have Internet access (though it was not available to students)
- In 2002, government claims that all universities have access to Internet
- Confusion as to whether university access means students have access



Findings from Survey of Internet Access Points

- ❑ Internet access points are relatively new: open an average of 1.24 years
- ❑ Dial-up is the most popular connection method: 65% of sites
- ❑ MS Windows is in use at nearly all the sites (Win98 is the most popular version as of 11/02)
- ❑ Managers estimated that 60% of their customers are male and 67% are below the age of 30



Findings about Infrastructure

- ❑ Not all computers at sites are connected to the Internet: about 72% of machines have access
- ❑ Sites have an average of 10 computers
- ❑ Most sites are open 7 days a week—a few are open 24 hours a day
- ❑ Internet access costs an average of 1,068 soum per hour (about 0.87 USD)
- ❑ Using the computer (without Internet) costs 669 soum (about 0.54 USD)



Findings about Censorship

- “Our ISP keeps logs of Internet activity”: 48% agreed, 43% neutral
- “The government monitors Internet activity at this site”: 42% agreed, 32% neutral
- “Customers cannot access some Web sites because of government policies”: 46% agreed, 27% neutral



Exploratory Interviews

- 10 individuals from Tashkent, Bukhara, and a village
 - Information-seeking behavior
 - Relevant information sources
- 19 policymakers in IT arena
 - Past, present, and future of IT industry



Relationship of Research Stages

- November interviews informed content of March survey
- November surveys informed content and sampling of March survey



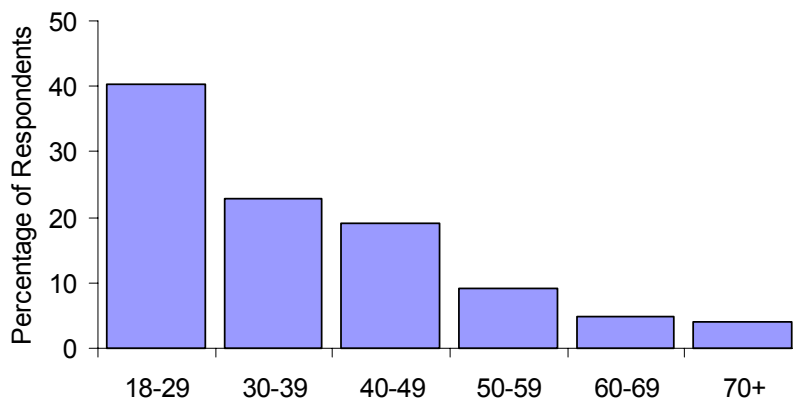
Methodological Considerations

- Cultural issues with survey administration
 - Language barriers
 - Survey design affected by different cultural values and experiences
 - Need for flexibility in sampling in a non-western information infrastructure
- Cultural issues with survey content
 - “Sensitive” questions
 - Frequency ratings
 - Agreement (middle range tendencies)
 - Etc.

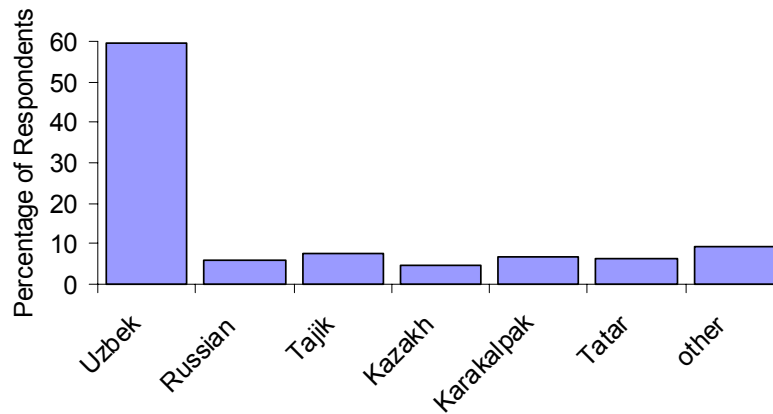
March 2003 Daily Life Survey

- ❑ Sample size: 317 (plus additional sample of 65 at Internet access points)
- ❑ 49.7% male, 50.3% female
- ❑ Respondents from cities and surrounding areas:
 - Samarqand 26.8% Kokand 14.5% Nukus 14.5%
 - Bukhara 13.9% Qarsi 13.2% Tashkent 10.4%
 - Fergana 6.6%
- ❑ 50.8% from urban areas, 49.2% from rural areas

Age of Respondents



Ethnicity



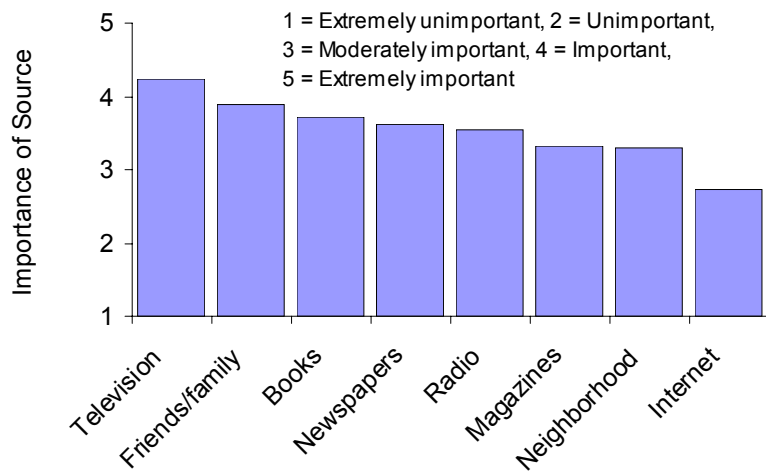
Education

- High school or less 32.1%
 - Maktab/Shkola, Lycee, Gymnasium
- Vocational training 37.9%
 - Technical, Institute
- University 20.5%
 - Bachelor, Master, Doctor
- Other 9.4%

Pre-existing Patterns of Information-Seeking

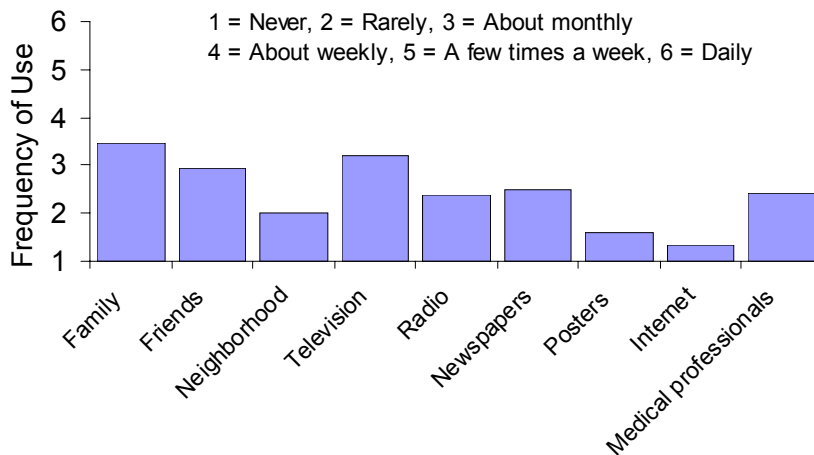
- Importance of information sources
- Frequency of information source use in different domains

Importance of Information Sources

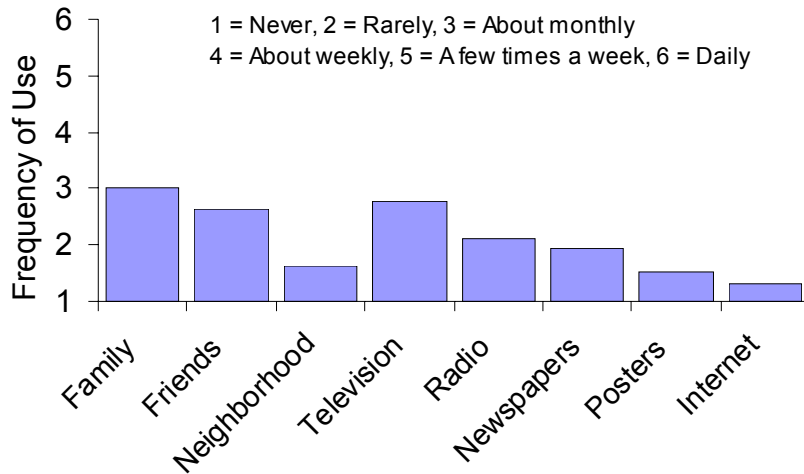


How often do you use the following sources...

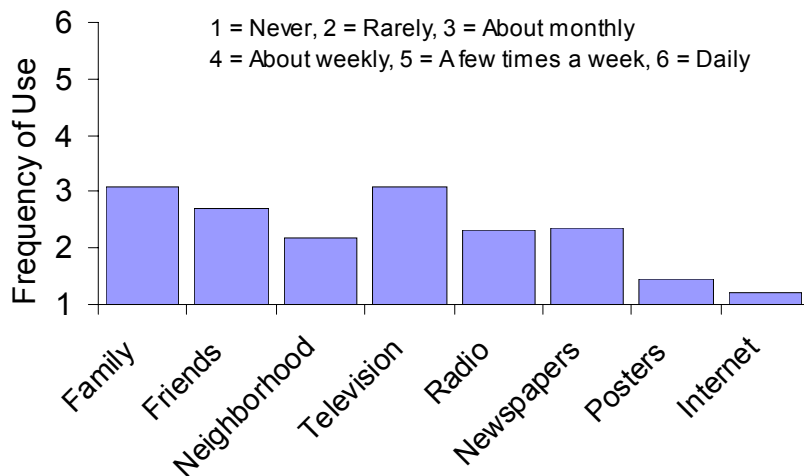
...when you need to find out about a health issue?



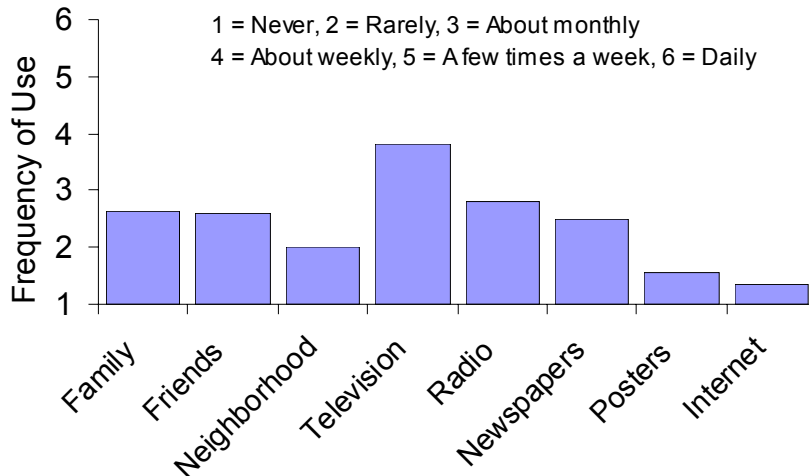
...when you need to find out about something to purchase?



...when you need to find out about a local issue?



...when you need to find out about an elected official?



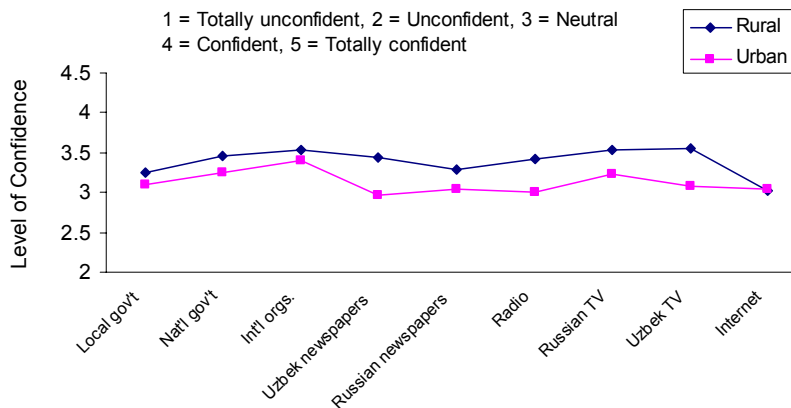
Importance of Information Sources

- Significant results reported at $\alpha \leq 0.05$
- Internet users vs. nonusers: significant difference in ratings of importance for select sources.
 - Internet: users > nonusers
 - neighborhood: nonusers > users
 - friends/family: nonusers > users
- Yet, Internet users used their friends significantly **more frequently** than nonusers for finding out information about something to buy and official services.

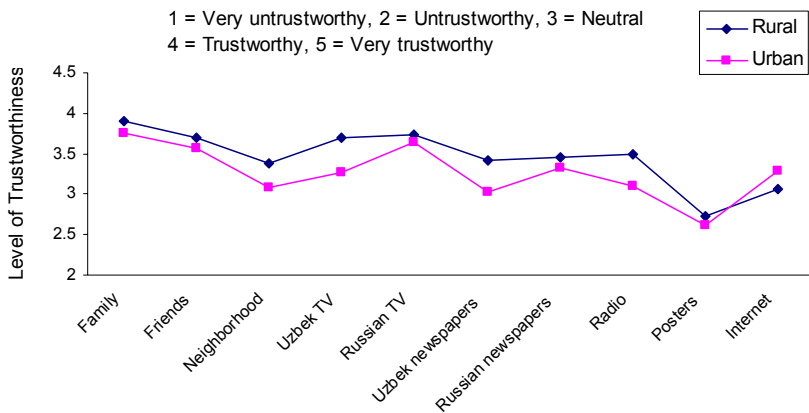
Responses varied by age, rural/urban, and Internet user/non-user

- Age groups
 - 18-59 rated TV as most important information source
 - 60 and over rated friends/family as most important
 - All age groups rated Internet as least important
- Rural and urban respondents
 - Both rated TV as the most important information source
 - Rural respondents rated Internet least important
 - Urban respondents rated neighborhood least important
- Internet users/nonusers
 - Both rated TV as the most important information source
 - Users rated Internet as second most important, neighborhood lowest
 - Nonusers rated Internet lowest

Confidence in Institutions



Trustworthiness of Information Sources



Attitudes of Internet Users/Nonusers

- “The Internet can contribute to the growth of democracy in Uzbekistan.”
 - users > nonusers
- “The Internet is a risk to Uzbekistan's stability.”
 - nonusers > users
- “People cannot access some Web sites because of government censorship.”
 - users > nonusers



Attitudes of Rural/Urban Respondents

- “The Internet is a dangerous thing.”
 - urban > rural
- “The Internet contains a great deal of dangerous material.”
 - Trend to significance with urban > rural
- “There are many Web sites about Uzbekistan.”
 - rural > urban



Recommendations for Design Context

- Advertisements/public service programming
 - Many people had never heard of the Internet
- Different outreach activities for rural vs. urban populations
 - Relevance of material
- Need for consistent telecom policies
 - Users and owners of Internet access points confused by constantly shifting policies
 - Self-censorship policies implemented by commercial access point owners as protective gestures
- Content initiatives geared for trust patterns in place
 - Media education about trustworthiness of Internet resources



Long-Term Questions

- Longitudinal study allows for intervention in policies
- Cross-domain tracks growth in Internet use to see if it mirrors other nations
- Regional study allows comparison of usage patterns with overall climate and policies



Future Stages

- National Science Foundation funded 2003-2008
 - Exploratory components
 - Qualitative, quantitative
 - Ongoing infrastructure/policy investigations
- Variables of future research
 - Breadth and depth of Internet penetration
 - Methods of obtaining information in support of everyday life
 - Nature of Internet use (e.g., communication versus information activities)
 - Trust of online resources
 - Self-censorship of Internet activities



Contact Information

- Beth E. Kolko
bkolko@u.washington.edu
- Jan Spyridakis
jansp@u.washington.edu
- Carolyn Wei
cwei@u.washington.edu
- Project Site:
<http://depts.washington.edu/caict/>