The Effect of the Internet on Society in Uzbekistan

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

Association of Internet Researchers 4th Annual Conference
Toronto, ON
October 17, 2003

Supported by National Science Foundation #0219350

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:
  - Samarkand 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

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>40</td>
</tr>
<tr>
<td>30-39</td>
<td>20</td>
</tr>
<tr>
<td>40-49</td>
<td>15</td>
</tr>
<tr>
<td>50-59</td>
<td>10</td>
</tr>
<tr>
<td>60-69</td>
<td>5</td>
</tr>
<tr>
<td>70+</td>
<td>3</td>
</tr>
</tbody>
</table>
Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uzbek</td>
<td>30%</td>
</tr>
<tr>
<td>Russian</td>
<td>20%</td>
</tr>
<tr>
<td>Tajik</td>
<td>10%</td>
</tr>
<tr>
<td>Kazakh</td>
<td>5%</td>
</tr>
<tr>
<td>Karakalpak</td>
<td>3%</td>
</tr>
<tr>
<td>Tatar</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
</tbody>
</table>

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

1 = Extremely unimportant, 2 = Unimportant, 3 = Moderately important, 4 = Important, 5 = Extremely important
How often do you use the following sources…

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

1 = Never, 2 = Rarely, 3 = About monthly
4 = About weekly, 5 = A few times a week, 6 = Daily
…when you need to find out about something to purchase?

Frequency of Use

1 = Never, 2 = Rarely, 3 = About monthly
4 = About weekly, 5 = A few times a week, 6 = Daily

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

Frequency of Use

1 = Never, 2 = Rarely, 3 = About monthly
4 = About weekly, 5 = A few times a week, 6 = Daily
...when you need to find out about an elected official?

![Frequency of Use Chart]

1 = Never, 2 = Rarely, 3 = About monthly
4 = About weekly, 5 = A few times a week, 6 = Daily

---

Importance of Information Sources

- Significant results reported at alpha ≤ 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

1 = Totally unconfident, 2 = Unconfident, 3 = Neutral
4 = Confident, 5 = Totally confident

- Local govt
- Nat'l govt
- Int'l orgs.
- Uzbek newspapers
- Russian newspapers
- Radio
- Russian TV
- Uzbek TV
- Internet
Trustworthiness of Information Sources

1 = Very untrustworthy, 2 = Untrustworthy, 3 = Neutral
4 = Trustworthy, 5 = Very trustworthy

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/