Studying Internet Adoption in Non-Western Societies: A Case Study of Uzbekistan

Jan H. Spyridakis Carolyn Wei Beth Kolko jansp@u.washington.edu cwei@u.washington.edu bkolko@u.washington.edu

> Department of Technical Communication, University of Washington Box 352195 Seattle, WA 98195-2195, USA

The lives of people around the world are being affected by ready access to information and communication technologies, affecting how people work, live, learn, and shop. Yet the influences of these technologies are spreading at different paces and with different results. One aspect that must be examined when considering the differences in Internet diffusion patterns and rates concerns the cultural base of both users and nonusers of the Internet. The addition of a cultural component to the study of Internet adoption should enrich society's understanding and hence its ability to introduce the Internet in culturally diverse areas. This proposed paper reports on a study conducted in Uzbekistan in 2002 and 2003 that assessed the information-seeking behavior of members of a non-western culture that has traditionally relied on social networks for obtaining information—a behavioral characteristic that affects their usage of the Internet. This study was supported by the National Science Foundation.

The research consisted of a four-step study that assessed the influence of culture and policy on Internet adoption in Uzbekistan. The first three steps included two surveys and interviews administered to a variety of players from managers of IT access points, to policy makers, to the general population. The fourth step consisted of a survey of users and nonusers of the Internet.

While the Internet has experienced dramatic increases in usage, the complete potential of the medium will not be reached until we completely understand barriers to effective use. Research has demonstrated that different factors affect gaps in Internet use and that an understanding of local conditions, including the specifics of how people gain access, is crucial for the success of the Internet. Researchers investigating these issues have relied on various methodologies that have been field-tested around the world; however, such methodologies are not always culturally specific. One common methodology, for example, stems from e-readiness reports that assess factors such as IT infrastructure and economics to determine the extent to which a country or region is wired. Such e-readiness assessments often rely on quantitative methods and pre-existing statistics such as government-reported GDP, number of telephone lines, and literacy rates. Incomplete data for dozens of countries make it difficult to understand diffusion in countries with under-documented infrastructures. At the same time, such approaches often miss factors that are crucial determinants of local conditions because what constitutes a significant factor in adoption or usage varies based on culture and locale.

Central Asia has numerous characteristics that make it a valuable site for researching patterns of Internet use. Central Asia has remained largely isolated from the West and has been culturally influenced by Russia, the East, and the Middle East. Further, IT presence now has a critical mass because of investment in Central Asia related to natural resources and the strategic importance of the region. The disjuncture between cultural isolation and rapid growth of IT may result in resistance to the Western metaphors that drive IT and thus make it easier to identify culturally specific IT components that do not meaningfully cross cultural lines. In addition, the region still has a significant number of novice users whose attitudes and

usage patterns in the early stages can clearly reveal how new users approach information and communication technologies.

To conduct the study in Uzbekistan, it was critical to understand the local culture so as to develop a culturally meaningful agenda and accommodate political sensitivities. To successfully administer the study in a post-Soviet society, we leveraged the social networks of local research assistants, carefully constructed survey and interview instruments, and developed innovative sampling methods. Our goal was to gather quantitative and qualitative data that were complementary and would lead to internally and externally valid results.

The survey and interview instruments were informed by existing IT studies and were professionally translated into the local languages. The first two surveys were administered to managers at Internet access points and to IT professionals. The surveys assessed current policy and infrastructure issues, specifically examining the level of technology at public Internet access points, the impressions of their operators about their customers and their use of computers, and attitudes towards IT and its possible benefits to Uzbekistan. The third step consisted of interviews with policy makers and representatives of the general public and sought to assess Internet development policies, the involvement of particular agencies in the field, and information-seeking behaviors. The results of these initial steps led to the design of the final survey of users and nonusers of the Internet, asking about technology infrastructure in the home, information-seeking behavior, trust in media sources, and computer use.

This proposed paper and presentation will further describe the research base that led to the study, the methods, and the study results. The addition of a cultural component to technology studies enriches our ability to understand how IT design is culturally based and concurrently improves the capability to introduce the Internet in non-western areas of the world.