Development as Design

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Abstract
My research is concerned with the design of appropriate and accessible information systems serving the needs of poor, indigenous, remote and otherwise marginalized communities in the developing and developed world. My research group and I have recently developed "Avaaj Otalo", a phone-based voice message board allowing small farmers in India to ask and answer agricultural questions. Using any phone, farmers navigate a voice interface to record questions, obtain answers from experts, and to listen to and answer the questions of others. This system has been deployed in Gujarat, India for over eighteen months, consistently receiving hundreds of calls a week. We are currently planning a controlled, randomized evaluation of the impact of the system on agricultural productivity and income, in conjunction with planned implementations in several other states.

Another project, "Local Ground", is investigating the use of paper maps for documenting local geo-spatial knowledge. Previously untrained users annotate paper maps using cheap and accessible tools, such as colored markers and stamps, to provide contextualized knowledge about local events and spaces. This community-generated data is uploaded to our server, where the annotations are automatically extracted using a combination of simple computer vision and crowd-sourcing techniques. Overlaying this data on a Google Maps interface allows it to be compared to data obtained from other, more formal, sources.

Biography
Tapan Parikh is a professor in the I-School, UC Berkeley. He received his M.S. and Ph.D. in Computer Science from the University of Washington, 1999 and 2007. His research interests include Human-Computer Interaction (HCI), Mobile Computing, Information and Communication Technologies for Development (ICTD), Information Systems for Microfinance, Smallholder Agriculture and Global Health.

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