Changing Perceptions of Citizens of India and Pakistan

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Abstract

Several wars, military stand-offs, and events of border skirmishes has resulted in vindictive and rancorous relationship between India and Pakistan. We propose to use a voice-based social media platform, *Ummeed*, to facilitate an inclusive and constructive dialogue between citizens of India and Pakistan, and measure the changes in perception brought by the dialogue.

Author Keywords

India, Pakistan, IVR, Voice forum, Peace, Perception.

ACM Classification Keywords

H.5.2 Information Interfaces and Presentation (e.g., HCI);

Introduction

India and Pakistan, two neighboring countries in South Asia, have had a strained dysfunctional relationship since their partition in 1947. The countries have experienced four standing armed conflicts, countless events of cross-border violence and various internal communal riots that have resulted in a loss of more than a million lives. The six-decade long conflict has brewed an acrimonious environment of mistrust and hopelessness for people across the border.

Communication is an effective tool to mitigate conflicts, change perceptions, build peace and seek resolution among entities in dispute. Although an affordable communication platform could be used to establish a dialogue between citizens of the two countries, there are several constraints that impede large scale adoption of any existing communication platform. The majority of the population in India and Pakistan has experienced limited adoption of technology because of various socio-economic factors, including cost, language, literacy, and the availability of power. Less than 20% of the population has access to the Internet. More than 70% of the population in both countries earn less than

$2 a day. The illiteracy rates are high with around 40% of citizens of Pakistan and 26% in India being illiterate. These constraints imply that the existing communication channels like international telephone calls are either too expensive or the digital communication technologies like Facebook and Twitter are beyond the reach of majority of the population.

The objectives of this research are two-fold:

- To facilitate an inclusive, constructive and cost-effective dialogue between citizens of India and Pakistan, and
- To quantify the impact of communication upon mutual perception of the citizens of two warring nations and to come up with ways to influence and transform their opinion about each other.

Mobile phone penetration in India and Pakistan is more than 75%. The majority of the population in both countries uses a basic phone or a feature phone primarily for making voice calls. In recent years, researchers and practitioners have piloted voice forums as an inclusive means of accessing, reporting, and sharing information among people in resource-constrained settings. Using Interactive Voice Response (IVR) technology, a voice forum allows users to record and listen to messages in their local language via ordinary calls on low-end mobile phones. In recent years, voice forums have spanned diverse domains, including citizen news journalism [2], agricultural discussion forums[3], community dialogue [6], access to health information [5], outreach to sex workers [1], rural employment exchange [7], and the use of viral entertainment to spread development services [4].

We propose to deploy a voice-based social media system, *Ummeed*, for facilitating asynchronous dialogue between citizens of India and Pakistan. We now describe the design of *Ummeed* in detail.

Ummeed: Voice-Based Social Media Platform
Design
The design of *Ummeed* is inspired from *Sangeet Swara* [6] and Polly [4]. Sangeet Swara is a voice-based social media platform where users call a toll-free number to record, listen, share and vote for voice messages. The content available on the system is moderated by the users themselves as their votes influence the playback order of messages. In an eleven week deployment, Sangeet Swara received more than 5,000 messages from 1,500 users who listened to these messages more than 200,000 times and casted 140,000 votes. *Polly*, a voice-based viral entertainment platform over simple cell phones, acts as a viral conduit for disseminating telephone and speech based development-related information to the masses and to implicitly train the general population in the use of such services. In 2012 the use of Polly spread virally in Pakistan from five initial users to 165,000 users who participated in 636,000 calls, over a year. Both *Sangeet Swara* and *Polly* saw broad and impassioned usage by low-income people. The experiences from *Sangeet Swara* and *Polly* motivated us to focus on a social media platform centered on entertainment for engaging people more deeply with each other and to keep the system less controversial.

We propose to deploy a voice forum similar to *Sangeet Swara* in India and Pakistan and brand it as *Ummeed* (which means *hope* in Urdu and Hindi). The users in both countries will call a local telephone number to

access the services, including recording voice messages, listening to messages recorded by others, casting votes, and sending and listening to personal voice messages. The content generated by citizens of one country will be completely encapsulated from the other with two exceptions:

1. **Top content sourcing**: Because the two systems are very similar and targeting a similar demographic, we will source the content from one platform to the other. For example, one of the posts (may be the top voted one) from India will be added in the playback list of Pakistan. When a user in Pakistan listens to the post and casts his vote, he will be informed that the post is recorded by someone from India. The system then will prompt the user for follow-up actions (e.g. "Do you want to change your vote?", "Do you want to send a message to the person who recorded the post?"). The recorded message will be available for listening only to the intended user. We will track the comments and votes from people of one country on posts from the other country.

2. **Content sourcing through explicit permission:** When users from one country record new posts, they will be given the option to make these posts available to users in the other country (e.g. "Would you like your post to be available to users in India?"). We will track users' initial and subsequent responses to this as they listen to posts and comments given on posts from the other country.

Initially, we will record and seed the content ourselves. Later, we will manually select content that will be shared across systems. Our eventual goal is to design an algorithm that automatically selects good content and sends it to us for approval. Upon approval, it will automatically become available in the other system. During the moderation phase, we will ensure that the content is neither political nor religious.

Methodology
We will analyze users' actions to measure any changes in perception. In addition, we will also conduct a baseline survey, an endline survey, and interviews of selected users of both the platforms.

Next Steps
We are currently designing *Ummeed* and looking for a partner organization in India that is willing to host the Indian-side servers and telephone lines.

Expected Contributions
This will be the first inclusive initiative to connect citizens of India and Pakistan where people will be listening to and voting on the content generated by people across the border. We expect broad participation from low-income, low-literate people and people with constrained access to the Internet. We further expect that Internet savvy users will also access and share content on Facebook and Twitter.

Another contribution of this work would be the design and testing of a framework to identify indicators for quantifying user perceptions and to attempt to influence these perceptions (in a measurable way) via voice-based social networking services.

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