

# Community-centred design for development

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## ABSTRACT

User-centered design is now a taken-for-granted approach in the Western world for the development of computing technology with reference to its human users. At the workshop I want to show how this approach broke down in the context of developing shared community technology for a village in rural India. The politics of community groups and their NGO partners result in conflicting user requirements and behaviours which cannot be resolved at an individual level. A more community-centred design approach is needed, whose properties I will begin to outline for discussion.

## Keywords

User-centred design, development, community-centred design, participative design, shared technology, ICT

## 1. INTRODUCTION

At the previous two CHI workshops on International Development, we have shared the progress of the **StoryBank** project which aimed to support audiovisual story sharing in the Indian village of Budikote [1, 2, 3]. The project is now finished and I would therefore like to share some of the methodological lessons of the project regarding how to apply HCI to international development contexts of this kind.

I focus on one particular challenge which arises in the course of developing non-personal technology for community use. This immediately raises issues for the selection of community representatives in any user research, and the level of participation that should be supported with each group. As the research progresses it often becomes apparent that different groups want different things from the technology and have inconsistent views of its purpose and development. These challenges are not addressed by a user-centred design methodology which is more appropriate to the development of personal technology. Instead they have more in common with the creation of groupware applications and technology where the benefits of the system may differ across individuals and groups.

## 2. AN EXAMPLE OF INCONSISTENCY

A concrete example of this from the StoryBank experience was in the use of the trial system for making stories of particular kinds. There was a split between serious 'development' stories made about health, farming, educational and legal subjects and more

cultural content about local news, events and beliefs. Figures 1 and 2 show the contrast between each type of content in two stories about a local shoe shop and a local myth. The villagers appeared to want an equal mix of these two types of content as reflected in the trial. But one of the NGOs in the village felt the system should be used predominantly for communicating development information, and that this should be a managed process with less open authorship and greater quality control. These perspectives potentially affect the way future systems could be designed and especially deployed and managed in such communities.



**Figure 1. Development story describing a local shoe shop and its wares. The spoken Kannada voiceover has been transcribed into English sub-titles.**



Figure 2. Cultural story re-telling a myth with a moral lesson

### 3. COMMUNITY-CENTRED DESIGN

Over the course of the StoryBank project we came to develop a more community-centered approach to system development which tried to collect and accommodate multiple

user inputs. We see this as something independent of the level of participation per se and therefore not reducible to participative design as such. Different levels of participation and involvement of the community are possible for any form of what we call '*community-centered design*'. This might be defined as: a design philosophy and process in which the *differing* needs, wants, and limitations of community members are given extensive attention at each stage of the design process. Solutions emerging from this approach should therefore be tailored to the social, infrastructural and political context of use and optimised for the benefit of the community.

Specific techniques for doing community centred design might be discussed at the workshop, together with its relationship to user-centred design, participatory design and groupware development. These ideas are offered as speculations for further refinement and discussion in the context of other projects and experiences in the field.

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