Community-Led Video Education for Digital Financial Services in India

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Abstract

The 2016 Indian banknote demonetization has offered unprecedented opportunities for the adoption of digital financial services in India. Despite being severely affected by India's demonetization drive, the uptake of financial technologies by people in rural India is far from impressive. We propose to use community-led video education (CVE) model to increase awareness and foster adoption of digital financial services among low-income, low-literate people living in rural and peri-urban regions in India. The CVE model has already shown powerful potential to increase health awareness in 124 villages in rural India where 80 videos have been locally produced and disseminated in over 12,000 facilitated group sessions with pregnant and lactating women. We plan to conduct a pilot deployment in two states in India, where local grassroots organizations will produce short videos featuring community members

discussing digital financial services in a local dialect. The videos will be disseminated in group sessions anchored by an active network of last mile extension agents. The pilot will provide interesting opportunities to compare the effectiveness of the CVE model across different disciplines (health and finance) and geographic regions (Rajasthan and Uttar Pradesh).

Author Keywords

HCI4D; Digital Financial Services; Video; Education; India

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous;

Introduction

In 2014, 47% of India's population did not have a bank account, limiting their prospects to access the benefits offered by financial institutions, such as, saving earnings and taking loans. The *Pradhan Mantri Jan Dhan Yojana* (PMJDY) [11], launched by India's Prime Minister in August 2014, has had a monumental impact in bringing universal access to banking services to low-income Indian citizens. In last 30 months, over 274 million Indians opened a bank account and deposited over USD 10 billion [11], bringing the percentage of households with a bank account to 99% [1]. Though

61% of these new accounts belongs to people living in rural India, only a third in the bottom quintile have financial savings exceeding USD 15 [1]. This clearly accentuates the need to inform the benefits of banking services to people with low socioeconomic status, and motivate them to use these facilities.

The technology landscape in India is undergoing a rapid transformation. India has over 1 billion mobile phone subscriptions [9], the annual smartphone subscription growth is 55%, while Internet user growth is 33% [6]. The high cost of setting up banking institutions in rural areas promises the rise of digital financial services that offer benefits, including physical security of savings, no transportation cost to access banking services, low overhead costs, easier remittances, transparency, and accountability. However, despite its promise, the adoption of digital financial services in rural India has been a distant reality because of cash-based economies in rural areas, misinformation about and lack of trust in banking services, misconstrued perceptions about digital financial services, network effect, low technology penetration, and low literacy, among others.

The 2016 Indian banknote demonetization [10] has offered unprecedented opportunities for the adoption of digital financial services. Post demonetization, the limited availability of cash prompted millions of people to learn and use digital financial services. During the first few months, several such services saw an exceptional user growth – *Paytm* [12] gained 60 million new users in one quarter [5], and *Bharat Interface for Money (BHIM)* application witnessed 15 million downloads in first fifty days. To promote cashless economy, the government also launched several schemes, such as *Lucky Grahak Yojana* and *Digi-Dhan*

Vyapar Yojana [13], to provide incentives to customers and merchants for performing digital transactions. Though rural regions were severely affected by demonetization, the adoption of existing digital financial services and new government initiatives is visible predominantly in urban areas. Since cash availability in Indian markets has considerably improved, the critical question for the government, digital financial service providers, researchers, and policy makers is how to increase awareness and adoption of digital financial services among low-income, low-literate people in rural and peri-urban India.

Community-Led Video Education for Digital Financial Services Awareness

To increase awareness about digital financial services, motivate low-income, low-literate people to adopt these services, and address their security concerns and other misconceptions, we propose to use community-led video education (CVE) model [4] for disseminating information in these rural, disconnected, and socioeconomically disadvantaged communities. We will first explain the CVE model through our prior intervention in health domain.

Projecting Health [14], based on the CVE model, uses community resources for local production and dissemination of hyperlocal videos to provide maternal and newborn health information to low-income, low-literate communities in rural Uttar Pradesh. *Projecting Health* pushes a local approach to video production, where rural community-based organizations produce videos and feature community members discussing health messages in rural areas (see Figure 1). The storyline is contextualized to make it more entertaining and appealing to rural people. *Projecting Health* focuses

Figure 1: Local production of a hyperlocal health video.

Figure 2: Dissemination of a hyperlocal health video in facilitated group session by ASHA.

Figure 3: Peer-to-peer video distribution.

on generating a sense of place with its videos and uses the local dialect popular in the targeted villages. The videos also feature esteemed community members, such as local doctors, village heads, community health workers, endorsing the key health messages. For video dissemination, the project employs *Accredited Social Health Activists* (ASHAs), who use a handheld projector connected to portable speakers, to screen these videos in facilitated group sessions with women and men (see Figure 2). The project also capitalizes mobile shop owners and other community actors to disseminate these videos via peer-to-peer online and offline sharing (see Figure 3) [7]. After completing the initial evaluation phases, the project is now operating successfully in 124 villages of Raebareli and Fatehpur district in Uttar Pradesh, India with 170 mothers' groups. Thus far, innovative, high-quality, locally produced videos have reached an estimated 100,000 people through over 12,000 screenings. More than 80 videos have been created on a wide range of topics, including maternal health, family planning, immunization, sanitation, and community health services.

To increase awareness about and adoption of digital financial services, and dispel misconceptions surrounding its use, we propose to use the CVE model to design hyperlocal videos showcasing local people discussing digital financial solutions in a local dialect in situ; and disseminate these videos widely among people in rural areas through a network of last mile extension agents, such as, *e-Mitra* providers [15], village entrepreneurs, *Mission Poorna Shakti* village coordinators [16], and ASHAs. To examine the effectiveness of the CVE model in digital financial services domain, we are conducting a pilot study in two geographic locations: Raebareli district in

Uttar Pradesh, India, and Pali district in Rajasthan, India. The pilot study has five main components:

1. Conduct formative research to examine the feasibility of digital financial services in rural and peri-urban regions.
2. Identify and train a local grassroots organization that will be responsible for low-level intervention implementation.
3. Local production of videos to increase awareness about cashless economy and existing digital financial services.
4. Dissemination of locally produced videos in rural and peri-urban regions through extension agents.
5. Setting up the Community Advisory Board for quality control and community engagement.

Research Contributions

While the CVE model has demonstrated success in increasing awareness about best health and agriculture practices in India [3,4], it is important to examine its effectiveness for digital financial services domain which is fundamentally different than health and agriculture. For instance, measuring adoption of a behavior change communication campaign is easier in financial domain than in health since the outcomes could easily be quantified in financial sector. Our proposed research is relevant to *HCI Across Borders* community for two reasons. First, we will compare and contrast the design, implementation and outcomes of the CVE model across two different disciplines: digital financial services and health. Second, we will compare and contrast the background information, formative and summative research outcomes, and implementation of the

proposed solution across two geographic locations: Rajasthan and Uttar Pradesh (two states in India).

Our formative research will also generate new knowledge, and contribute to a deeper contextual understanding of the state-of-the-art of cash-based and cashless economies in rural and peri-urban India, digital financial services knowledge gaps, and motivations, perceptions and usability issues that affect the use and non-use of digital financial services. We plan to use qualitative research methods, such as, interviews and focus group discussions, and information systems theories, such as, Technology Acceptance Model [2], and Unified Theory of Acceptance and Use of Technology [8], to conduct the formative research.

Next Steps

We conducted several preliminary field visits to Rajasthan and Uttar Pradesh in winter 2016. We have finalized the methodology, questionnaire, target demographic, and locations for our formative research. We will begin the fieldwork to conduct formative research in March. We plan to optimize several parameters of the design and implementation of the intervention after analysis of the formative research.

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