ARCHIVING INDIA: DEVELOPING SUSTAINABLE LOCAL CONTENT

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When it comes to offering universal access to information in developing countries, efforts and resources have traditionally focused on building the physical and technological infrastructure. After all, it can be a challenge to provide access to information without electricity, Internet connectivity, computers, hardware, and software when most information is created, received, and disseminated electronically or digitally in the first place. But while technology and infrastructure are undoubtedly vital, so is content. Once the systems are in place, what is it that citizens have been offered access *to*?

This paper explores some of the reasons why developing countries may wish to generate, manage and make available locally relevant content to their citizens. Section 1 establishes the definitions of key terms. Section 2 geographically situates the discussion and provides an overview of select local-content generation initiatives already in place in India. Section 3 highlights two case studies. The first, Citizen Archivist Project (CAP), presents innovative approaches to revenue generation and financial sustainability. The second, CGNet Swara, demonstrates an alternative technological approach toward fostering citizen engagement and the longevity of a grassroots project. Section 4 provides a brief summary of key points discussed in the paper.

1.   Establishing a vocabulary

Universal access is a term used to describe or demonstrate objectives and policies that governments (and the international organizations and agencies that support their policies) implement to ensure that all their citizens have access to the benefits of a modern economic life. It refers to the ability of everyone, regardless of region or location, socio-economic status, ethnicity, gender, disability, or any other factor, to access necessities.[64] These necessities can include healthcare, primary education, electricity, energy, water, and sanitation—and in today's information society, it may include access to Information and Communication Technologies (ICTs).

At its core, an information society can be understood as one where it is the possession of information (and not of objects, products, or wealth) that facilitates society's transformation and development.[65] It is a society where "everyone can create, access, utilize, and share information and knowledge, enabling individuals, communities, and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life."[66]

Yet, a large part of the world's population continues to be unable to contribute to or benefit from information available online, a significant reason being language incompatibility. It is difficult to say what percentage of websites across the world are in the English language, but a recent estimation has it at around 43%.[67] This makes English the most well represented language on the World Wide Web. Most of the remaining websites belong to what Keniston and Kumar call "major Northern languages like Japanese, German, French, Spanish, Portuguese, and increasingly Chinese."[68]

While there can be no denying that the World Wide Web has made available valuable knowledge, best practices, innovations, and emerging trends from more developed, Western coun-

64   Information for Development Program and International Telecommunication Union, "Module 4: Universal Access and Service", *ICT Regulation Toolkit*, accessed July 30, 2013, http://www.ictregulationtoolkit.org/en/section.3126. html.

65   Masuda, Yoneji, *The Information Society as Post-Industrial Society,* (The World Future Society, Tokyo, IIS, Washington D. C., 1980).

66   *Building the Information Society: a global challenge in the new Millennium* (World Summit on Information Society, Geneva, December 2003).

67   Internet World Stats, "Top Ten Languages Used in the Web," accessed July 30, 2013, http://www.internetworldstats. com/stats7.htm.

68   Kenneth Keniston and Deepak Kumar, ed., *The Four Digital Divides*, (New Delhi: Sage Publishers, 2003).

tries, such access to what Peter Ballantyne terms as foreign content and foreign perspectives has limitations as well. Ballantyne asserts that easier access to globalized knowledge runs the risk of turning citizens of developing countries into "consumers" of distant and potentially irrelevant information.[69] So much so that citizens of post-colonial societies can often be unaware or unappreciative of the value of their own local knowledge, both in the domestic as well as international scenarios.

Situating his discussion in the African context, Ballantyne points out that local content and knowledge is often undermined in favor of global content—which is evidenced in television programming, advertising, the spread of global brands, the use of foreign languages in schools and universities, and even in the reliance on foreign technical assistance, imported software, and applications.

As a result, the information-sharing process moves from being an exchange to more of a unidirectional flow of opinions, values, knowledge, and perspectives. In Ballantyne's scenario, there is no indigenous reciprocity of information from Africa to the West, or indeed from many or most developing countries to the West. So while developing countries do offer *access* or have committed to offering access, it is inevitably *access to other people's knowledge.*

Locally relevant content, on the other hand, puts the community first. It is "the expression of the locally owned and adapted knowledge of a community—where the community is defined by its location, culture, language, or area of interest."[70]

2.   Local content initiatives in India

With this background, what kinds of local content could be of interest and value to citizens in India? A preliminary survey reveals a few initiatives in local content generation already in place.

The Akshaya E-Center is one such example. It is a community web-portal initiative of the Kerala State Information Technology Mission focused on the creation, sharing and dissemination of locally relevant content in the state's local language. As part of the initiative, grassroots ICT centers have been set up at the *panchayat* or municipal ward level, and a local entrepreneur runs each center. The initial focus of the centers was to provide e-literacy, the goal being that at least one person from each household would be taught basic computer skills.[71] The scope has expanded to offer rural Internet banking, e-agriculture, computer education, and payment of utility bills. In addition to the physical centers, community web-portals have also been established to include information in local languages about the local area, local administrative and government organizations, ecology, education, health, agricultural developments, infrastructure, and local employment.

Another example is Anukuram TV, a community television initiative started in 2006. Its goal is to empower communities to become producers of local content—and not just consumers. Anukuram combines a TV studio set up with a local cable TV network. TV programs are telecast through a cable channel to all the community households (where a television with cable connection exists) for thirty minutes a day for three days a week.[72] It is a way of engaging people with local issues in the languages that they understand, impacting even the illiterate. It also delivers services in e-Learning, e-Governance, e-Medicine, e-Health and e-Education to rural areas.

69   Peter Ballantyne, *Collecting and Propagating Local Development Content: The Case Stories, Research Report No.8*, (IICD in association with the Tanzania Commission for Science and Technology; funded by DFID, 2002), www.iicd. org/files/report8.doc.
70   Peter Ballantyne, *Collecting and Propagating* .
71   M. S. Kiran and Jo Tacchi, "Introduction", *Finding a Voice: Themes and Discussions. Research from the Finding a Voice project,* (The United Nations Educational Scientific & Cultural Organization, New Delhi, India, 2008).
72   Kiran and Tacchi, *Finding a Voice*.

The Gender Resource Center (GRC) is a Government of Delhi initiative monitored by the Department of Social Welfare. Each center is set up by grassroots non-profit organizations targeting women in marginalized groups. The GRC offers these women an organized means of accessing need-based information in a condensed form and in the local language. Through the Media Development Course (MDC) at the centers, the women help create digital stories about local gender-related issues, with a focus on health, legal counseling and aid, non-formal education, and vocational training. The content in turn is disseminated through community screenings of the digital stories and in the community newspaper that they help produce.[73]

Hevalvaani and *Mandakini ki Awaaz Samudayik* are two distinct radio projects that seek to train local volunteers in radio production, helping them build radio studios and develop community listening groups, multimedia centers, and content.[74] *Hevalvaani* has developed two radio programs—*Hamara Gaon* or Our Village and *Yuva Manch* or Youth Forum. Both projects are working to produce radio shows on safe migration and AIDS. Each village that falls under these project sites has a volunteer who is involved in identifying local issues of concern. Community reporters make programs on identified issues and record them on a cassette in the local radio studio. It is distributed to communal receivers in the villages either through a satellite service or carried on foot or by public transport. It is then played on the radio receiver in the village. Listening sessions are followed by discussions where community reporters record feedback or create follow-up programming.

Clearly, this is not a comprehensive list of initiatives in local content generation in India, but it provides a broad idea of the various platforms through which they are taking place— community radio, community television, community media centers, and web portals.

There are several challenges to making such initiatives sustainable. First, how can such projects engage the communities that they seek to increase representation of? What helps make members of these communities feel committed enough to participate and take ownership of the project? Second, what is a viable technological platform, keeping in mind the unique situations in developing countries? Finally, is there a sustainable revenue model to continue projects beyond their pilot phase?

3.   Case studies in sustainability

This section explores two initiatives in local content generation that have come up with creative solutions to address some of these challenges. The first initiative, the Citizen Archivist Project, has two unique revenue generation models that have helped sustain their operations in countries in Africa. The second, CGNet Swara, has seized on a creative technological solution to content creation—one that moves beyond computers and community media centers and instead uses mobile phone technology to connect underrepresented communities with mainstream media.

The Citizen Archivist Project (CAP) by Smallbean Inc.[75], a social enterprise based in Boston, Massachusetts, provides training to participants in basic ICT skills so that they feel confident to conduct audio and video interviews of fellow community members, upload those interviews to the CAP website, and showcase their local culture and tradition both locally and internationally.

Smallbean installs a solar-powered technology lab containing refurbished computers, cameras, audio recorders, and connection to the Internet in each of their project sites. They impart

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73   M. S. Kiran, "Challenging an asymmetric power relation," *Participatory Content Creation for Development: Principles and Practices. Research from the Finding a Voice project,* (The United Nations Educational Scientific & Cultural Organization, New Delhi, India, 2008).

74   Kiran and Tacchi, *Finding a Voice.*

75   Small Bean, "Meet Small Bean," accessed July 23, 2013, http://www.smallbean.org/technology.html.

training in computer and technology skills to a group of volunteers at each site, training them to become citizen archivists. They in turn conduct oral history interviews and document village life. This first batch of students in turn teaches subsequent batches of volunteers, creating a sustainable team of citizen archivists and maintaining a steady flow of local content creation.

To sustain their activities and ensure the longevity of their projects, Smallbean has developed two primary revenue-generation models. The Excess Solar Capacity as A Revenue Generation Option (ESCARGO) project is one.[76] The solar panels fitted on the roofs of the technology labs help generate 1000 watts of energy. Yet, the computer laboratory requires only 300 watts. The excess energy, stored in 12 volt batteries, is offered to members of the community for purchase or rent to light their homes, charge cell phones, or power radios, among other uses.

The other revenue-generating model is Project Repat. Repat (as in repatriate or "to restore or return to the country of origin"[77]) partners with "local artisans and small businesses in Nairobi, Kenya to make unique products out of the millions of t-shirts that American organizations such as Goodwill and Salvation Army unload on the developing world each year."[78] The repatriated shirts are then sold back in the United States. This project has generated enough funds to build a solar-powered computer lab in a Masai village, and for one of their local field partners to fund scholarships for at-risk girls in Tanzania.

CGNet Swara is an experiment in citizen journalism in rural India. It developed from an acknowledgement of the disenfranchised indigenous tribal communities of India (estimated to be a hundred million strong) whose voices are not typically represented in the national media. These communities speak different languages from the ones used by the mainstream press, are primarily illiterate, and live in remote, inaccessible villages without electricity.[79] CGNet Swara is a project designed using mobile phone technology to provide this demographic with a voice.

Users call in on a central number and press 1 if they wish to record a story or 2 to listen to any or all of the last three stories published. Moderators verify and edit the stories before making them accessible. Moderators use a Google SMS channel (a free SMS group service in India) to send out a text message after a news report is published.[80] The message includes the phone number recipients can call to hear the report. Select stories are sent out to the CGNet mailing list. Published stories are accessible both via the phone as well as on the CGNet website, where there is also a transcript available.

Originally, CGNet started as an email discussion group on the Internet. As a result, its members represented only those areas that had Internet access. On the other hand, mobile phones, with a 74% market penetration rate in India, offered a wider user base.[81] In 2012, the Telecom Regulatory Authority of India (TRAI) estimated that the total number of mobile phone users in the country was around 884.37 million.[82] Out of this population, 303.04 million subscribers belong to rural areas. The mobile phone model is also cheaper and accessible—the basic infrastructure is already in place in India, and people need not be literate in order to participate.

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76 Small Bean, "Small Bean Citizen Archivist Project," accessed July 23, 2013, http://www.smallbean.org/cap.html.
77 Merriam-Webster dictionary, "Repatriate," accessed July 31, 2013, http://www.merriam-webster.com/dictionary/repatriate.
78 Small Bean, "Project Repat," accessed July 23, 2013, http://www.smallbean.org/project-repat.html.
79 CGNet Swara, "About CGNet Swara," accessed July 23, 2013, http://cgnetswara.org/about.html.
80 Preeti Mudliar, Jonathan Donnar, and William Thies, *Emergent Practices around CGNet Swara, A Voice Forum for Citizen Journalism in Rural India,* Author-Prepared Pre-Publication Version, ACM, 2012, research.microsoft.com/pubs/156562/ictd12-swara.pdf.
81 Tim Hume, "Phone journalism gives a voice to rural Indian poor," CNN Tech, 2012, accessed July 23, 2013, http://www.cnn.com/2012/02/22/tech/mobile/india-mobile-citizen-journalism.
82 Vicky Kung, "Rise of 'nomophobia': More people fear loss of mobile contact," CNN Tech, 2012, accessed July 23, 2013, http://www.cnn.com/2012/03/06/tech/mobile/nomophobia-mobile-addiction.

Currently CGNet's primary source of funding is through the Knight International Journalism Fellowship Program, managed by the International Center for Journalists. While generous, it is not indefinite and it is forcing CGNet to think of a long-term strategy.

4. Conclusion

According to the 2011 Census of India the number of English-language speakers in India is somewhere between 2% and 11% of the entire population, depending on the level of fluency. Yet, as highlighted earlier, the majority of websites in the world continue to be in English. In order for India to participate in the information-exchange process, it needs to focus on generating sustainable local content keeping in mind the unique information needs of its citizens.

Thus far, efforts in local content generation have been focused primarily on civic issues such as education, health, governance, gender issues, and current affairs. These are important and crucial to social development. But another area that could benefit from attention is the documentation of India's rich, complex, and diverse cultural heritage—the cultural heritage of a country that is in flux. Contemporary India is simultaneously rural and urban, modern and traditional, insular and exposed, depending on the geographic region. The digital content-generation models examined have been successful in engaging their communities within their limited contexts. They could be adapted on a larger scale for future local content generation projects in different areas in India.

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