Development Informatics

Working Paper Series

The Development Informatics working paper series discusses the broad issues surrounding information, knowledge, information systems, and information and communication technologies in the process of socio-economic development

Paper No. 31

Deconstructing Community Participation in Telecentre Projects

SAVITA BAILUR

2008

ISBN: 978-1-904143-99-4

Published by: ***Development Informatics Group***
Institute for Development Policy and Management
University of Manchester, Arthur Lewis Building, Manchester, M13 9PL, UK
Tel: +44-161-275-2800/2804 Email: idpm@manchester.ac.uk
Web: http://www.sed.manchester.ac.uk/idpm/dig

View/Download from:
http://www.sed.manchester.ac.uk/idpm/research/publications/wp/di/index.htm

Educators' Guide from:
http://www.sed.manchester.ac.uk/idpm/research/publications/wp/di/educdi.htm

Table of Contents

Deconstructing Community Participation in Telecentre Projects

Savita Bailur
Associate, Development Informatics Group
IDPM, University of Manchester
savitabailur@hotmail.com

2008

Abstract

This paper critiques the assumed link that telecentre literature makes between community participation and telecentre success. Several authors (Colle, 2005; Colle and Roman, 2001; Kanungo, 2003, 2004; Whyte, 1999, 2000) call for community participation in telecentre projects, stating that this will make the telecentre more sustainable, but with no further detail on what is meant by the terms "community" or "participation". The emphasis on participation is traced back to stakeholder involvement as a measure of a successful project in the fields of both information systems and international development.

However, critics in both fields also emphasize that there is no simple causality between participation and success. This paper finds that a) the notion of a "community" in telecentre literature is problematic, b) stakeholder analysis may be suggested as a part of an interpretive evaluation but is difficult to enact, and c) if these stakeholders are identified, there is no hard evidence that their participation will lead to greater telecentre success. The paper therefore calls for more research on the notion of community participation and telecentres, and asks that telecentre policy-makers and implementers treat this causality in more complex terms than at present.

Introduction

Telecentres have been advocated as a means of providing both information and communication facilities in "underdeveloped" areas. It is argued that they will have greater impact if there is participation from the local community in their design, implementation, management and evaluation (Caspary and O'Connor, 2003; Colle, 2005; Gómez et al, 1999; Roman and Colle, 2002; Proenza, 2001; Whyte, 2000). However, there is scant research to date on whether there is any causality between the two factors – Are telecentres more successful if the community participates? What is meant by the terms "community" and "participation"? What about the impact of this participation – what does participation cost a "community" and how are community relationships re-written and negotiated following participation?

This paper seeks to deconstruct the assumed causality drawing on both information systems and international development literature. First, Section A provides a brief review of the three broad perspectives on the impact of telecentres. Section B analyzes the notion of "community". Section C illustrates how stakeholder involvement has emerged in evaluation studies from measurement, description, and finally negotiation as a valid method of evaluation. However, as Sections D and E discuss, identifying stakeholders and inviting participation is not as easy in practice as in theory. Section F therefore applies these critiques to the causality used in telecentre literature.

A. The Impact of Telecentres

Telecentres are defined as "a diverse range of facilities providing access to information and communication technologies … offering phone, Internet and community services" (Shakeel et al, 2001, p.1) or "places that offer the public connectivity with computers and networks" (Roman and Colle, 2002, p.2). They are based on the (somewhat contentious) assumption that *connectivity* (a technical construct) and direct *access* (a social rather than technical phenomenon) to information will lead to empowerment (Roman and Colle, 2002). Telecentres differ from cybercafés in that they have a developmental focus (Harris et al, 2003) – although problematically the notion of what constitutes development is not discussed in detail in telecentre literature.

While initial telecentre projects were almost entirely donor-managed (Whyte, 1999) and were critiqued for a lack of financial and social sustainability, more recently, a number of other telecentre governance models have emerged, including donor—NGO models (e.g. Our Voices in India) and government—private sector models (e.g. Gyandoot in India). Examples of telecentres include:

- the MS Swaminathan Pondicherry Information Villages in India which provide agricultural and transportation information, as well as information on the availability of vaccines and medicines in the nearest health centres, and information on the issue of loans or entitlements (Kanungo, 2003, 2004; Thamizoli and Balasubramanian, 2001);
- the IIT Chennai (India) SARI initiative which provides support to farmers (Blattman et al, 2003);

- the Latin American network somos@telecentros (Hunt, 2001); and
- the Samaikya agritech centres in Andhra Pradesh, India – field centres linked to the head office in Hyderabad, disseminating technical assistance, information on machinery hire and spare tools for farmers (Harris et al, 2003).

There appear to be three main perspectives on the impact of telecentres – a utopian, dystopian, and an intermediary perspective. The utopian perspective appears to reflect the modernization view of development (Rostow, 1960) with a positivist view of technology. It emphasizes (but does not always explain) the role of telecentres in development. Roman and Colle (2002, p.1) open an article with "until a brilliant sunny day when the Internet reached his Ashaninka Indian village in central Peru, tribal leader Oswaldo Rosas could think of few benefits modern life had brought to his people". A utopian perspective argues that telecentres represent "a new symbol of hope for community development" with the ability to bring about "a new social order, one that is surely more prosperous and just" (Hunt, 2001, p.1). Hunt continues "several telecentre operators and managers express fascination with the power and potential of information and communication technology to bring about significant positive change in their own communities. Telecentres represent hope, and understandably so, for people who face increasingly desperate circumstances in their daily lives" (Hunt, 2001, p.4).

Others argue for a "missionary zeal of [telecentre] individuals who can translate and demonstrate the relevance and application of these kinds of concepts" (Roman and Colle, 2002, p.6) and recount anecdotes such as a woman who has her cataract removed in India or a farmer in China who improved his sales, both through information they found online at a telecentre although without further details on how this information is found (Roman and Colle, 2002). Most evidence is as yet anecdotal, such as Kanungo (2004) on the MSSRF Information Villages project, who recounts several cases, for example, 48 women who insured themselves against accidental loss of life or limb; Sundari, a woman labourer who was able to find out a better price for grain than the one her land proprietor fixed; and farmers in one of the villages who were able to assess why their sugarcane fields were destroyed by disease – all through information accessed through the centres.

On the other hand, there is a more critical body of literature regarding telecentres. As early as 1995, Qvortrup (cited in Tschang et al, 2002) comments that at least 70% of the first wave of telecentres in Australia disappeared after two years. Robinson (1998) writes that after two years, only five of the twenty-three original telecentres established by the Ministry of Environment in rural Mexico were functional. Wade (2002) argues that providing IT connectivity and access for development is like saying "cheap books can cure illiteracy" (p.443). He argues that the focus on IT is no different from the argument implying causality between telephones and development, where the "criteria of inference are so elastic that correlations become causations. Area A is rich, integrated into market relationships, and has a lot of telephones; Area B is poorer, less integrated into market relationships, and has fewer telephones – therefore a telephone rollout will make B richer and more integrated" (Wade, 2002, p.450). This dystopian view appears to take on the neo-dependency view of development (Escobar, 1995; Ferguson, 1994) that the notion of connectivity and access leading to "development" is one manipulated by corporate giants and

development agencies to maintain the dependency of developing countries on the West (Schech, 2002; Wade, 2002).

This dystopian perspective is supported by the serious questions of financial, social and political telecentre sustainability (Hudson, 2001, Tschang et al, 2002; Whyte, 1999). Financial sustainability is seen to occur when a project "achieves revenue equal to or greater than the expenditure and economic return of a project" (Tschang et al, 2002, p.130). Social sustainability is seen as the positive impact of the telecentres on the social and economic development of the local community (Tschang et al, 2002; Whyte, 1999; Whyte, 2000). Political sustainability is that of policy-making and the regulatory environment.

In addition, Roman and Colle (2002) suggest ten prerequisites for telecentre sustainability: recognition of national commitment, partnerships between stakeholders, local champions, community volunteers, networks of telecentres, awareness raising, research, long term business plans, a focus on information rather than technology, and community participation. The call for community participation therefore derives from this very concern that telecentres have not yet proved to be sustainable, given the large expense of technology and training, but also because their potential seems remote from a population where basic needs are still to be addressed.

A third body of literature acknowledges that while access to ICTs might not directly lead equitably to development, they may be necessary in order to be part of global economic activity (Avgerou, 1998) or as a strategic national infrastructure (Madon, 2000). Madon (2005) finds that people use the Akshaya centres in Kerala "mainly for communication which is not mission critical to livelihoods" (p.412). Ulrich (2004) finds that telecentres in rural China do not fill a fundamental information void, but enhance the livelihoods of those who are already educated and relatively wealthy. This third perspective acknowledges that telecentres might not provide equal benefits to all parts of a population but they might bring about an improved standard of living – for example, by making the process of obtaining land records more efficient, or providing relevant agricultural information. It could be said that this third perspective reflects Sen's capability approach in development, where development follows neither a modernization nor a neo-Marxist model, but is instead about an individual's capability rather than wealth (Sen, 1999; Madon, 2004).

The call for community participation occurs consistently within all three of the above perspectives (e.g. Caspary and O'Connor, 2003; Colle, 2005; Gómez et al, 1999; Proenza, 2001; Roman and Colle, 2002; Whyte, 2000):

- Roman and Colle (2002) call for a "conscientious attention to participation" (p.12) because it "conveys a sense of community ownership; it provides indigenous wisdom; it helps reflect community values and needs; it provides important resources, such as volunteers or technical expertise, at a favourable cost" (p.13) (here one might ask – a favourable cost to whom?).
- Kanungo (2004) states that collective ownership of a telecentre initiative is necessary because it implies access to everyone regardless of social status. He writes of the MSSRF Information Villages project that project staff lived in the setting in order to understand the issues. "Such actions perform the function of keeping the village folk engaged, keeping stakeholders engaged, continually

sounding out different individuals so as to regenerate the idea and continually seek affirmation amongst the participants" (Kanungo, 2004, p.417-8).

- Gómez et al (1999) call for research on "community involvement, participation and use" (p.8).
- Whyte (2000) emphasizes the need for community participation in evaluation.

Yet the literature does not delve deeper into what participation constitutes or whether it truly has an impact on the success of a project. There is a need to examine this taken-for-granted causality – that a) there is a notion such as a community, b) that this community shows a willingness to "participate" (a word which in itself needs to be defined) in a telecentre, and that c) this "participation" will lead to greater success. In order to deconstruct this myth, we first critically assess the notion of community.

B. The Problematic Notion of Community

As we have seen above, telecentre literature calls for "community ownership" or "community participation". It appears this is no different from the field of development, which as, Cleaver argues "excel[s] in perpetuating the myth that communities are capable of anything, that all that is required is sufficient mobilization (through institutions) and the latent capacities of the community will be unleashed in the interests of development (2001, p.46).

The difficulty here is that community is seen as a "warmly persuasive" notion (Williams, 1976, p.76) with no clear definition. As (another) Williams argues "there is a tendency to treat community as singular and unproblematic … the 'village' is a classic case … seen as a spatially bounded community, the membership of which is clear and uncontested" (Williams, 2004, p.561).

Instead, in practice, each individual in a community has his/her own needs which may well conflict with others. Telecentre designers and managers run the risk of idealising the notion of "community", which in fact consists of a number of individuals, who may or may not decide to participate in the initiative. Hence, statements such as Kanungo's (2004) that collective ownership of a telecentre is necessary are problematic, as this draws a veil over complex existing societal structures.

C. What is a Successful Information System?

Telecentres are information systems (IS), and understanding whether or not an information system is successful involves evaluation. The following review draws on Smithson and Hirschheim (1998)'s distinction of IS evaluation into efficiency, effectiveness and understanding, and Guba and Lincoln's (1989) distinction of measurement, description, judgement and negotiation.

C1. Measurement/Efficiency

Guba and Lincoln (1989) see measurement as one of the earliest types of evaluation. Reviewing education literature, they draw upon Stake (1975, 1983), one of the first researchers to use the term preordinate evaluation – "objective" tests and reports set against the original goals of a project (*ex-ante* assessment). Such evaluation is reflected in examinations which occur worldwide – through school, university, as well as professional exams. In information systems, it is argued that most IS projects are not evaluated at all, or inadequately evaluated (Powell, 1992; Smithson and Hirschheim, 1998; Walsham, 1993). Where they *are* evaluated, evaluation tends to focus on a quantitative analysis of the technical and economic aspects of a system, such as its performance, reliability, robustness, security and cost-benefit (Hirschheim and Smithson 1988; Klecun and Cornford, 2005; Walsham, 1993).

Methods of measuring IS efficiency include calculating a return on investment (ROI), net present value, discounted cash flow (DCF), and/or earned value analysis. In Smithson and Hirschheim's (1998) analysis of Alpha, an outsourcing company, the Service Level Agreement uses indicators such as up-time versus down-time, the number of security breaches, productivity metrics before and after outsourcing. However, the main challenge of using measurement for evaluation is that while costs might be relatively easy to quantify, benefits tend to be intangible and harder to assess (Symons and Walsham, 1988; Walsham, 1993) – a challenge that is reflected in the evaluation of telecentres. Secondly, there is likelihood that when such evaluation is carried out, it may be more of a "tactic of legitimization" or ritualistic rather than producing any real knowledge or learning (Introna, 1997; Jones and Hughes, 2001; Symons and Walsham, 1988;Walsham, 1993).

C2. Description/Judgement/Effectiveness

Given the difficulty of measuring "the success" of an information system, a host of technology acceptance models emerged from the 1980s onwards, including Davis' TAM (1989); DeLone and McLean's models of information systems success (1992, 2003) and the Balanced Scorecard (Kaplan and Norton, 1992). Although there is a degree of measurement here too, the focus is on effectiveness, rather than efficiency – i.e. user satisfaction, motivation, and ultimately use of the information system (Smithson and Hirschheim, 1998).

However, effectiveness is still not regarded as valid way of evaluating IS success. Currie's (1989) work on the implementation of computer-aided design in twenty

British companies finds that the engineering project managers involved in conducting the *ex-ante* evaluation had privately decided which IS would be most effective, but used methods such as ROI and DCF to convince their management. According to Currie "a more qualitative and holistic approach (to investment appraisal for new technology) … was unacceptable" for the management and therefore the engineers (cited in Walsham, 1993, p.172).

C3. Negotiation/Understanding

The third perspective on evaluation is one that is most linked to our debate on participation. This interpretivist (or what Guba and Lincoln (1989) call constructivist) approach entails understanding and taking seriously the perspectives of different stakeholders, their concerns, issues and values (Klecun and Cornford, 2005[1]; Smithson and Hirschheim, 1998; Symons, 1991; Walsham, 1993). Understanding is needed in order to ensure user satisfaction, motivation and commitment.

Introna and Whittaker (2002) analyze this process as a construction and deconstruction of different stakeholders' views. Instead of the dualisms of subject/object, cognition/action, they argue for construction and deconstruction of evaluation (of course it could be argued this is a dualism in itself). Construction here involves improvisation such as Ciborra's "bricolage" (Ciborra, 1993) by the multiple stakeholders involved in a project evaluation. Deconstruction involves asking questions such as who will benefit from the current evaluation, and why or why not, and whether there are alternative interpretations.

If we return to Smithson and Hirschheim's (1998) analysis of Alpha through a negotiation/understanding perspective, this involves indicators such as the number of times disagreements are sent up the management hierarchy (i.e. cannot be resolved at contract manager/account manager level) or the number of times the outsourcing contract is consulted. In telecentre literature too, there is a call for evaluation to be participatory, transparent and multi-stakeholder based (Reilly and Gomez, 2001; Whyte, 2000).

A negotiation perspective encounters two inter-linked challenges. Firstly, there is a danger that consensus will never be reached and therefore no decision will be taken, if stakeholders' views differ greatly. As Introna and Whittaker (2002) argue, there is a "fundamental undecidability inherent in every evaluation" (p.172). Yet, in order for a decision to be made, Walsham (1993, p.180) points out the powerful role of the IS evaluator as an "enactor of meaning and moral agent"– a role that has been insufficiently analyzed in IS literature, according to him. Despite this tension, an interpretivist approach to evaluation argues that at least it would include stakeholder analysis, where stakeholders' needs were identified and addressed, ideally in an open environment, with a clarity of purpose and trust. We now analyze the literature on stakeholder analysis in order to see if and how this is possible.

[1] Although Klecun and Cornford (2005) state this is a critical, rather than interpretivist perspective, the multi-stakeholder approach borrows much from interpretivism, the major difference being the critical approach's emphasis on history and status quo.

D. Stakeholder Analysis

Stakeholder analysis has its origins in management literature. Freeman (1984) originally defined a stakeholder as "any group or individual that can affect, or is affected by, the achievement of a corporation's purpose." (1984; p.vi) – which for him, included employees, customers, suppliers, banks, environmentalists and government, i.e. more than just stockholders.

The first stage of stakeholder analysis identifies the stakeholders – a process that should ideally be repeated, because iteration brings up previously unnoticed stakeholders and pre-empts possible obstacles (Freeman, 1984). For example, Pouloudi and Whitley (1997)'s stakeholder analysis of NHSNet found previously unforeseen groups identified with each iteration.

Stakeholder analysis makes sense in theory, but is fraught with practical challenges. Firstly, as it is impossible to keep all stakeholders satisfied all the time (Jawahar and McLaughlin, 2001; Treviño and Weaver, 1999), it is vital to be able to ascertain which groups are important and which are not. But making this distinction is difficult – Freeman (1984) distinguished between internal and external stakeholders, but the internal groups were not always the most important. Clarkson (1995) makes a distinction between primary and secondary stakeholders – primary stakeholders are those "without whose continuing participation the corporation cannot survive as a going concern" (1995, p.106). Secondary stakeholder groups, on the other hand, are those who have the "capacity to mobilize public opinion in favor of, or in opposition to, a corporation's performance" (Clarkson, 1995, p.107). But a secondary stakeholder group may well prove as damaging to an organization as a primary group – how does one therefore make the distinction between primary and secondary?

Secondly, stakeholder analysis can easily lead to "paralysis by analysis" (Freeman, 1984; Pouloudi and Whitley, 1997). While an iterative process of stakeholder identification is valuable, revealing more and more stakeholders, conflicting accounts are likely to arise, as the list grows longer, making managerial action difficult (Pouloudi and Whitley, 1997). Dunn (1996) comments that an industrial firm based in a city of 50,000 people could very well have 50,000 potential stakeholders, including suppliers, customers, owners and employees, as well as environmentalists and public interest groups. A separate challenge is that stakeholders who were not previously accounted for, may become important – what Freeman (1984) calls the "snail darter fallacy" (in 1977, a dam construction project was delayed in Tennessee because the snail darter – an allegedly endangered fish – was found in the area to be dammed. It was only in 1984 that other habitats of the fish were found and the project could go ahead). The snail darter incident illustrates that resistance to initiatives can come from the most unpredictable sources.

Finally, the subjective nature of stakeholder analysis makes it hard to be truthful about stakeholders, if that truth challenges whoever is conducting the analysis. Take for example, a UK Overseas Development Administration (now Department for International Development) note on stakeholder analysis from 1995. Initially, the ODA defines itself as a secondary stakeholder, but continues "key stakeholders are those who can significantly influence the project, or are most important *if ODA's*

objectives are to be met." (my italics). This implies that the ODA is in fact, a primary stakeholder. It goes on to state that the ODA is unlikely to come into contact with primary stakeholders and that primary stakeholders may lack the political power, institutional means, time or money to participate (in which case, are they *really* primary?). Instead, it states that "aid recipients, such as line ministries are the true clients of the ODA, and as many well-run businesses, we seek to stick close to the client." Such a note illustrates the difficulty of being transparent in a stakeholder analysis.

E. Participation

Participation can be seen as the second half of stakeholder analysis. Once stakeholders are identified, strategies are needed to address and manage their needs. In information systems, user participation is seen to lead to greater acceptance of the system because of "psychological buy-in" (Barki and Hartwick, 1989; Hartwick and Barki, 1994). It is also implied that user participation will lead to better system quality, to the extent that an ISO standard (ISO 13407) has been developed emphasizing the role of the user as designer (Usability Net, 2006). Thirdly, it is argued that user participation will create better relationships between designers and users (Kawalek and Wood-Harper, 2002).

However, Markus (2004) deconstructs each of these assumptions – there is no hard evidence that users will "buy-in" to the system (and indeed, what about those who don't – why is there is so little research on non-participants and *their* impact?), or whether participation will improve system quality or impact. Ultimately, what is important is whether participants' voices are heard and incorporated, and whether those who make decisions are accountable to the participants or not.

In development, the call for participation emerged as a reaction to the failure of top-down development projects by the 1980s (Brett, 2003). The World Bank defines participation as "a process by which people, especially disadvantaged people, influence decisions that affect them" (World Bank, 1992, p.177). It states "as participation increases, vital information not in the public domain becomes available and the voices of interested parties can help make governments more accountable; both in turn enhance performance" (World Bank, 1994, p.3). However, there is little clarification on who the "disadvantaged people" are and, perhaps more strikingly, an assumption that participation can lead to accountability and better performance.

How, then, do disadvantaged people participate? There is recognition of a sliding scale from weak to strong participation (Brett, 2003; Michener, 1998). Weak participation is where "intended beneficiaries [*are*] consulted during the project design so as to take into account their felt needs, aspirations and capabilities" (IFAD, cited in World Bank, 1992, p.37) but there is no guarantee that these needs will be addressed (Brett, 2003).

On the other hand, strong participation, most famously represented by Chambers (1983, 1994, 1997) particularly in his creation of the process of Participatory Rural

Appraisal[2], calls for a partnership, or ceding control to the beneficiaries. Strong participation is "an educational and empowering process in which people, in partnership with each other and those able to assist them, identify problems and needs, mobilize resources, and assume responsibility themselves to plan, manage, control and assess the individual and collective actions that they themselves decide upon" (Burkie, 1993, p.205). Table 1 illustrates a framework used by Gavin and Pinder (1998) and Gosling and Edwards (2003) on possible levels of participation through a development project:

Table 1: Weak and Strong Participation

	Weak participation ----------> Strong participation			
Project Stages	*Inform*	*Consult*	*Partner*	*Control*
Identification/Analysis				
Planning				
Cost Benefit Analysis /Resource Allocation				
Implementation				
Monitoring/Evaluation				

Source: Gavin and Pinder (1998) and Gosling and Edwards (2003)

Both strong and weak approaches to participation face challenges. A weak approach – where stakeholder analysis is minimal or merely superficial – may be ritualistic or unproductive. Strong participation may be unrealistic, too expensive and politically difficult for development agencies to conduct, and most of all, too demanding of beneficiaries (Brett, 2003; Esman and Uphoff, 1982). Brett writes "I am highly educated, and can access immense amounts of information, but I rely on professionals to service almost all of my needs. Why should poor people with fewer skills and less information be expected to organize their own services?" (2003, p.25). Indeed, he argues that strong participation is simply impossible in large projects, a view reflected in the IS field by Roberts et al (2003), who give an example of an enterprise resource planning installation in Motorola. Although the final configuration team has 200 members, this is a fraction of the "5,700 people in 11 functional organizations, eight countries, and 21 sites" (p.61).

Finally, what evidence is there that strong participation makes a development project more relevant to the community? Cleaver (2001) argues there is little evidence that participation leads to a more successful development project. A World Bank study (1994) initially claims participation is useful because despite high costs, it "tend[s] to pay off in terms of increased efficiency and sustainability and in saving time in subsequent phases" (cited in OECD, 1997, p.90). However the actual study itself is based on expectations of World Bank staff on 21 projects and *their* costs rather than programme results or interviews with beneficiaries of the projects (Hentschel, 1994 cited in Brett, 2003).

[2] More recently this has been called Participatory Learning and Action, to emphasize its suitability to more than rural contexts, and to emphasize the more gradual learning aspect. PRA/PLA involves identifying stakeholders and understanding their needs by conducting interviews, drawing local maps and daily routes, diagrams, seasonal calendars, using visual aids and, most importantly of all, inviting solutions from the community itself, i.e. community participation.

F. A Critique of Telecentres and Participation

We return now to the issue of participation in telecentres. "Participation" is advocated heavily by several authors (Blattman et al, 2003; Hunt, 2001; Kanungo, 2004; Proenza, 2001; Roman and Colle, 2002) but its complexities are not explored – Who should participate? Does participation lead to greater success? Is participation a paradoxical notion – always imposed by outsiders who own the initiative? It is useful here to review some experiences as revealed by telecentre case studies.

Firstly, when the different needs of stakeholder groups *are* identified, telecentre management appears to reflect the token participation that Heeks (1999) and Cleaver (1998) warn against. The first example is one from Our Voices, where preliminary fieldwork has been conducted. Our Voices is a community radio project and telecentre in a village around 100 miles north of Bangalore, India. The donor—NGO model emphasizes "community participation". The senior project manager (in an interview with the author) states "we thought management should be completely from the community. So we took two representatives from thirteen groups to form the management committee". In Van Belle and Trusler's (2005) analysis of a multi-purpose community centre in Western Cape, South Africa, they state that twelve "community representatives" were chosen but do not state how or why these particular groups were chosen. Do these representatives truly reflect community diversity and views? Or are they simply the most educated, articulate and/or politically strongest?

Secondly, the term "community" is largely accepted as a straightforward notion, echoing William's (1973, p.76) concern that it is seen as a "warmly persuasive" term, when in fact, the reality is far more complex. At Our Voices, a young, local woman was hired as a studio manager for the community radio (illustrating local participation and gender sensitivity!). However, she became one of four key people at the station, and the donor agency felt that a radio station of four was not community radio. Was this a question of too much participation but of not enough people? Subsequently, she asked for a pay rise, was denied it and was told that her radio programmes were "not innovative enough". I was also told by the donor management that she could have been becoming "too empowered". In return, she told me "I am a village girl. How innovative can I be?" Perhaps this was the explanation as to why I was later told by one interviewee that she was approached by Divya (the studio manager) with a piece of paper (a complaint on street drainage) and asked to read it in her own words (to emphasize her participation?). The example illustrates that there will always be more vocal members of the "community" than others but they have a difficult balance to achieve – in this case, neither threatening the donor agency nor speaking on behalf of the rest of the community to the extent that they impose their views on others.

Ironically, sometimes telecentre literature emphasizing participation does not reflect participation in its own research methods. For example, Kanungo (2004) emphasizes the project team's commitment in the MSSRF Information Villages project, where "hardships and repeatedly unfulfilled or broken promises have left villages to harbor a negative mindset with respect to anything having to do with Government or related to NGOs. As a result, seven to eight months were spent in developing confidence and building credibility" (Kanungo, 2004, p.412). According to him, "right from the beginning, the people of the villages were involved at every stage. Moreover, every

month village volunteers and the project staff meet and review what has been accomplished and discuss new initiatives" (Kanungo, 2004, p.418). There is much emphasis on participation and stakeholder analysis. Yet the author states that research was conducted mostly with project staff and information village volunteers, and that "limited direct interaction took place with users" (Kanungo, 2004, p.410). Interviews with users themselves would have provided a more balanced perspective.

Eventually, participation is a top-down concept in itself. Van Belle and Trusler (2005)'s research in Western Cape states that the "business plan [was] developed by the project manager during other pilot projects" (i.e. a blueprint taken from other projects, rather than being truly contextual) but "built around the centre eventually becoming a financially self-sustaining entity" (p.142) – so the initiative is designed by outsiders, but with the expectation that the local community will take charge. The paradox then arises that although the project manager was very much an individual with the "missionary zeal" that Roman and Colle, 2002 (p.6) call for, this was to the detriment of the community. One interviewee states that "if he was not here, everything would fall apart. Not that we are not in control, everyone knows what they have to do in here. But he is the one, not with the ideas, we all have ideas, but he is the one that puts the action to the ideas and makes sure that things get done" (cited in Van Belle and Trusler, 2005, p.148). On the contrary, the project manager's view is "I have difficulty with instilling an entrepreneurial spirit because the entrepreneurial spirit just isn't there… People like following instructions. They like the comfort zone of knowing how much they are going to earn for a specific task. They would prefer … somebody taking responsibility of generating the income and taking part of that .... not realizing that the responsibility is actually theirs" (Van Belle and Trusler, 2005, p.148).

Who, then, actually owns the telecentre? An interview with the Our Voices project manager illustrates this paradox of "participation": "in the first few months, they (the villagers) put a lot of energy into the project. These days you have to keep telling them what to do … development, development, development. We can either approach community radio as what the community wants … if you make it that, it will only be music. At [the donor agency], we can't justify all this equipment just for entertainment, there has to be a development angle. You have to keep pushing programming in a certain direction".

Even if this tension is resolved, and the "community" (while bearing in mind this is not a holistic entity) does take ownership of an initiative, the pre-requisites of sustainability simply may not exist. Simpson (2005) comments on the lack of success of the Australian government's Networking the Nation fund which required rural and regional communities to identify their own ICT-related development needs, propose their own solutions and seek funding, and then manage these projects. There was indecision about needs, and then management, and subsequently, the projects failed. As Cleaver (2001) states, strong participation has its own weaknesses – the danger of devolving responsibility to a group which is under-resourced financially or in terms of a social infrastructure.

G. Conclusions

Community participation is frequently advocated in telecentre projects, with the assumption that this will lead to long-term sustainability. There are a number of other areas that need exploration in this assumption, including the concept of information and information needs, deeper exploration of the term "development", and inferences of causality and impact.

However, we find that a) the notion of a "community" is problematic, b) stakeholder analysis may be suggested as a part of an interpretive evaluation but is difficult to enact, and c) if these stakeholders are identified and whether they participate in a strong or a weak manner, there is no hard evidence from development *or* information systems literature that participation will lead to greater project success in telecentres.

This research therefore aims to make a contribution to the existing literature on participation in information systems and development by asking – does community participation make a telecentre project more successful? There has been sufficient rhetoric on participation in telecentres – the need is now to unpack this rhetoric.

References

Avgerou, C. (1998) "How Can IT Enable Economic Growth in Developing Countries?" *Information Technology for Development*, 8 (1), pp.15-28.

Barki, H. and J. Hartwick (1989) "Rethinking the Concept of User Involvement", *MIS Quarterly*, 13 (1), pp.53-63.

Blattman, C., R. Jensen and R. Roman (2003) "Assessing the Need and Potential of Community Networking for Development in Rural India", *The Information Society*, 19 (5), pp.349-364.

Brett, E. (2003) "Participation and Accountability in Development Management", *Journal of Development Studies*, 40 (2), pp.1-29.

Burkie, S. (1993) *People First: A Guide to Self-Reliant, Participatory Rural Development*, Zed, London.

Caspary, G. and D. O'Connor (2003) "Providing Low-Cost Information Technology Access to Rural Communities in Developing Countries: What Works? What Pays?", *OECD Development Centre, Working Paper No. 229*, OECD, Paris.

Chambers, R. (1983) *Rural Development : Putting the Last First*, Longman, London.

Chambers, R. (1994) "Participatory Rural Appraisal (PRA): Challenges, Potentials and Paradigm", *World Development*, 22 (10), pp.1437-1454.

Chambers, R. (1997) *Whose Reality Counts ? Putting the First Last*, Intermediate Technology, London.

Ciborra, C. (1993) *Teams, Markets, and Systems : Business Innovation and Information Technology*, Cambridge University Press, Cambridge.

Clarkson, M. (1995) "A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance", *Academy of Management Review*, 20 (1), pp.92-117.

Cleaver, F. (2001) "Institutions, Agency and the Limitations of Participatory Approaches to Development" in *Participation, the New Tyranny?*, (Cooke, B. and U. Kothari eds) Zed, London, pp.36-55.

Colle, R. and R. Roman (2001) "The Telecenter Environment in 2002", *Journal of Development Communication: Special Issue on Telecenters*, 12 (2). Last accessed: 4 April 2007. Last updated: Not known. Address: http://ip.cals.cornell.edu/commdev/documents/jdc-colle.doc

Colle, R. (2005) "Memo to Telecentre Planners", *Electronic Journal of Information Systems in Developing Countries*, 21 (1), pp.1-13.

Davis, F. (1989) "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology", *MIS Quarterly*, 13 (3), pp.319-340.

DeLone, W. and E. McLean (1992) "Information Systems Success: The Quest for the Dependent Variable", *Information Systems Research*, 3 (1), pp.60-95.

DeLone, W. and E. McLean (2003) "The Delone and McLean Model of Information Systems Success: A Ten-Year Update", *Journal of Management Information Systems*, 19 (4), pp.9-30.

Dunn, C. (1996) *Stakeholder Theory and Community Groups: A New View* Last accessed: 25th March 2005. Last updated: Not known. Address: http://www.rohan.sdsu.ed/faculty/dunnweb/pubs.iabs96.html

Escobar, A. (1995) *Encountering Development : The Making and Unmaking of the Third World*, Princeton University Press, Princeton, N.J.

Esman, M. J. and N. T. Uphoff (1984) *Local Organizations : Intermediaries in Rural Development*, Cornell University Press, Ithaca.

Ferguson, J. (1994) The Anti-Politics Machine : "Development," Depoliticization, and Bureaucratic Power in Lesotho, University of Minnesota Press, Minneapolis.

Freeman, E. (1984) *Strategic Management: A Stakeholder Approach*, Pitman, Boston.

Gavin, T. and C. Pinder (1998) *Impact Assessment Stakeholder Analysis* Last accessed: 3 June 2005. Last updated: Not known. Address: http://www.enterprise-impact.org.uk/pdf/StakeholderAnalysis.pdf

Gomez, R., P. Hunt and E. Lamoureux (1999) *Telecentre Evaluation and Research: A Global Perspective*, IDRC, Ottawa.

Gosling, L. and M. Edwards (2003) *Toolkits: A Practical Guide to Planning, Monitoring, Evaluation and Impact Assessment*, Save The Children, London.

Guba, E. G. and Y. S. Lincoln (1989) *Fourth Generation Evaluation*, Sage, Newbury Park.

Harris, R. (2003) "Sustainable Telecentres? Two Cases from India" in *The Digital Challenge: Information Technology in the Development Context*, (Madon, S. and S. Krishna eds) Ashgate, Aldershot, pp.124-135.

Hartwick, J. and H. Barki (1994) "Measuring User Participation, User Involvement, and User Attitude", *MIS Quarterly*, 18 pp.59-82.

Heeks, R. (1999) "The Tyranny of Participation in Information Systems: Learning from Development Projects" *University of Manchester Development Informatics Working Paper Series*. Last accessed: 26 January 2005. Last updated: Not known. Address: http://www.sed.manchester.ac.uk/idpm/publications/wp/di/di_wp04

Hentschel, J. (1994) "Does Participation Cost the World Bank More? Emerging Evidence", *HRO Working Paper 31*, World Bank, Washington D.C.

Hirschheim, R. and S. Smithson (1988) "A Critical Analysis of Information Systems Evaluation" in *Information Systems Assessment: Issues and Challenges*, (Davis, G. B. and N. Bjorn-Andersen eds) North Holland, Amsterdam.

Hudson, H. (2001) "Telecentre Evaluation: Issues and Strategies" in *Telecentres: Case Studies and Key Issues*, (Latchem, C. and D. Walker eds) Commonwealth of Learning, Vancouver, pp.169-182.

Hunt, P. (2001) "True Stories: Telecentres in Latin America and the Caribbean", *Electronic Journal of Information Systems in Developing Countries*, 4 (5), pp.1-17.

Introna, L. (1997) *Management, Information and Power*, Macmillan, London.

Jawahar, I. and G. McLaughlin (2001) "Towards a Descriptive Stakeholder Theory: An Organizational Lifecycle Approach", *Academy of Management Review*, 26 (3), pp.397-414.

Jones, S. and J. Hughes (2001) "Understanding IS Evaluation as a Complex Social Process: A Case Study of a UK Local Authority", *European Journal of Information Systems*, 10 (4), pp.189-203.

Kanungo, S. (2003) "Information Village: Bridging the Digital Divide in Rural India" in *The Digital Challenge: Information Technology in the Development Context*, (Madon, S. and S. Krishna eds) Ashgate, Aldershot, pp.103-123.

Kanungo, S. (2004) "On the Emancipatory Role of Rural Information Systems", *Information Technology and People*, 17 (4), pp.407-422.

Kaplan, R. and D. Norton (1992) "The Balanced Scorecard: Measures That Drive Performance", *Harvard Business Review*, January-February pp.71-79.

Kawalek, P. and T. Wood-Harper (2002) "The Finding of Thorns: User Participation in Enterprise Systems Implementation", *The Database for Advances in Information Systems*, 33 (1), pp.13-22.

Klecun, E. and T. Cornford (2005) "A Critical Approach to Evaluation", *European Journal of Information Systems*, 14 (3), pp.229-243.

Madon, S. (2000) "The Internet and Socio-Economic Development", *Information Technology and People*, 13 (2), pp.85-101.

Madon, S. (2004) "Evaluating the Developmental Impact of E-Governance Initiatives: An Exploratory Framework", *Electronic Journal of Information Systems in Developing Countries*, 20 (5), pp.1-13.

Madon, S. (2005) "Governance Lessons from the Experience of Telecentres in Kerala", *European Journal of Information Systems*, 14 (5), pp.401-416.

Markus, L. and J.-Y. Mao (2004) "Participation in Development and Implementation - Updating an Old, Tired Concept for Today's IS Contexts", *Journal of the Association for Information Systems*, 5 (11-12), pp.514-544.

Michener, V. (1998) "The Participatory Approach: Contradiction and Co-Optation in Burkina Faso", *World Development*, 26 (12), pp.2105-18.

Overseas Development Administration (1995) *Note on Enhancing Stakeholder Participation in Aid Activities* Last accessed: 15 June 2005. Last updated: Not known. Address: http://www.euforic.org/gb/stake2.htm

Pouloudi, A. and E. Whitley (1997) "Stakeholder Identification in Inter-Organizational Systems: Gaining Insights for Drug Use Management Systems", *European Journal of Information Systems*, 6 pp.1-14.

Proenza, F. (2001) "Telecenter Sustainability: Myths and Opportunities", *Journal of Development Communication: Special Issue on Telecenters*, 12 (2). Last accessed: 4 April 2007. Last updated: Not known. Address: http://ip.cals.cornell.edu/commdev/documents/jdc-proenza.doc

Reilly, K. and R. Gomez (2001) "Comparing Approaches: Telecentre Evaluation Experiences in Asia and Latin America", *Electronic Journal of Information Systems in Developing Countries*, 4 (3), pp.1-17.

Roberts, B., S. Jarvenpaa and C. Baxley (2003) "Evolving at the Speed of Change: Mastering Change Readiness at Motorola's Semiconductor Products Sector", *MIS Quarterly Executive*, 2 (2), pp.58-73.

Robinson, S. (1998) "Telecentres in Mexico: Learning the Hard Way". in *Partnerships and Participation in Telecommunications for Rural Development: Exploring What Works and Why*, Guelph, Canada, University of Guelph.

Roman, R. and R. Colle (2002) “Themes and Issues in Telecentre Sustainability”, *University of Manchester Development Informatics Working Paper Series*. Last accessed: 26 January 2005. Last updated: Not known. Address: http://www.sed.manchester.ac.uk/idpm/publications/wp/di/di_wp10.htm

Rostow, W. W. (1960) *The Stages of Economic Growth : A Non-Communist Manifesto*, University Press, Cambridge.

Schech, S. (2002) "Wired for Change: The Links between ICTs and Development Discourse", *Journal of International Development*, 14 (1), pp.13-23.

Sen, A. K. (1999) *Development as Freedom*, Knopf, New York.

Shakeel, M. (2001) "Comparing Urban and Rural Telecenter Costs", *Electronic Journal of Information Systems in Developing Countries*, 4 (2), pp.1-13.

Simpson, L. (2005) "Community Informatics and Sustainability: Why Social Capital Matters", *Journal of Community Informatics*, 1 (2), pp.102-119.

Smithson, S. and R. Hirschheim (1998) "Analysing Information Systems Evaluation: Another Look at an Old Problem", *European Journal of Information Systems*, 7 pp.158-174.

Symons, V. and G. Walsham (1988) "The Evaluation of Information Systems: A Critique", *Journal of Applied Systems Analysis*, 15, pp.119-132.

Thamizoli, P. and K. Balasubramanian (2001) "Information Management and Knowledge Empowerment: MSSRF Telecentres in South India", *Journal of Development Communication: Special Issue on Telecenters*, 12 (2). Last accessed: 26 June 2007. Last updated: Not known. Address: http://ip.cals.cornell.edu/commdev/jdc-1.cfm

Treviño, L. and G. Weaver (1999) "The Stakeholder Research Tradition: Converging Theorists-Not Convergent Theory", *Academy of Management Review*, 24 (2), pp.222-227.

Tschang, T., M. Chuladul and T. Thu Le (2002) "Scaling-up Information Services for Development: A Framework for Increasing Returns for Telecentres", *Journal of International Development*, 14 (1), pp.129-141.

Ulrich, P. (2004) "Poverty Reduction through Access to Information and Communication Technologies in Rural Areas: An Analysis of the Survey Results from the Social Impact Assessment Conducted by the Chinese Ministry of Science and Technology and the United Nations Development Program", *Electronic Journal of Information Systems in Developing Countries*, 16 (7), pp.1-37.

Usability Net (2006) *ISO 13407: Human Centred Design Processes for Interactive Systems* Last accessed: January 28 2005. Last updated: 2006. Address: http://www.usabilitynet.org/tools/13407stds.htm

Van Belle, J.-P. and J. Trusler (2005) "An Interpretivist Case Study of a South African Rural Multi-Purpose Community Centre", *Journal of Community Informatics*, 1 (2), pp.140-157.

Wade, R. (2002) "Bridging the Digital Divide: Route to Development or New Form of Dependency?" *Global Governance*, 8 (4), pp.443-466.

Walsham, G. (1993) *Interpreting Information Systems in Organizations*, Wiley, Chichester.

Whyte, A. (1999) "Understanding the Role of Community Telecentres in Development - a Proposed Approach to Evaluation" in *Telecentre Evaluation: A Global Perspective. Report of an International Meeting on Telecentre Evaluation*, (Gomez, R. and P. Hunt eds) IDRC, Ottawa.

Whyte, A. (2000) *Assessing Community Telecentres: Guidelines for Researchers*, IDRC, Ottawa.

Williams, R. (1976) *Keywords : A Vocabulary of Culture and Society*, Fontana, London.

Williams, G. (2004) "Evaluating Participatory Development: Tyranny, Power and (Re)Politicisation", *Third World Quarterly*, 25 (3), pp.557-578.

World Bank (1992) *Participatory Development and the World Bank, World Bank Discussion Papers* (Bhatnagar, B. and A. Williams eds) World Bank, Washington DC.

World Bank (1994) *The World Bank and Participation*, World Bank, Washington D.C.