

Institutional Barriers to Information Access for Development in South Africa and Beyond: A Practical Guide to Dysfunctional Relationships

by Brett Galimidi, MEM 2005

Introduction

Today, technology-based systems of information creation, access, and exchange are emerging as a new resource to manage the complexity of diverse development situations that stem from varied sociopolitical systems, cultural views, and economic motivations. Information and Communication Technology (ICT) is gaining ground in the international community as a solution to traditional development problems because of its potential to bring information and education to those who are lacking it, to connect those who are isolated, and to foster community involvement in projects (UN 2001; UNDP 2001; Bridges.org 2003). The focus of ICT is not the technology itself, such as internet access or networked databases, but its ability to enable the interactions necessary for representation of multiple stakeholders in decision-making processes through collaborative tools such as online communities, remote conferencing, and other knowledge-sharing means (UNECE 1998).

ICT solutions, however, can be problematic as they involve numerous parties in the project design, implementation, and monitoring stages. These parties each come to the table with their own interests and assumptions, and the project is likely to be shaped according to

those who hold the most power and resources. If ICT is to be a tool that levels the playing field in the decision-making process, it is critical to understand the formation of key relationships between actors during ICT project development and the effects these interactions may have on resulting efforts. This article uses South Africa's Western Cape Province as a case study to address relationships between ICT donors, designers, implementing organizations, communities, and governments and to illuminate the hurdles and opportunities of ICT projects.

Background

South Africa is currently undergoing several political and economic changes that have enabled the generation of many ICT projects. South Africa's apartheid government left behind a legacy of sorrow, violence, and social destruction that must now be addressed. The end of apartheid in 1990 and the beginning of democracy in 1994, however, set the scene for a new era of 'entrepreneurial' inspiration, including a significant increase in NGOs working on development issues. In addition, despite its cruelty, the apartheid regime had developed an effective economic infrastructure, emanating from financial centers in Johannesburg and Durban and the exploitation of diamond and gold reserves around the country. This economic expansion was supported by a strong physical infrastructure of well-maintained roads, significant power generation, and wide-reaching communication systems. While this

Brett Galimidi, a product of the San Francisco Bay Area, spent several years studying applications of internet-based technologies and is now finding ways to use them for environmental management and protection.

previously benefited only the wealthy white elite, it may now serve as a valuable system for all people, especially those left behind technologically during apartheid.

South Africa's existing infrastructure, in conjunction with general post-apartheid government and NGO interest in fixing the damage from the previous forty-plus years (although with little agreement on how to fix it), has paved the way for the country to serve as a testing ground for ICT solutions. For example, one of the provincial governments (equivalent to the state-level in the US) has implemented an online system that, aided by call centers in rural areas staffed by local residents, distributes useful government information on everything from health to democratic rights to job skills.

Methods

In the summer of 2004, I traveled to South Africa to gain direct insight into the current state of ICT projects and the institutional structures that are promoting (or preventing) them. I worked with a Cape Town-based NGO directly addressing ICT access issues and conducted my own research focused on ICT project design and implementation. Through semi-structured interviews, I asked questions about perceptions of ICT use in development, barriers that may prevent the use of ICT solutions (including socioeconomic factors, culture differences, and education levels), how information flows and is controlled, if there is collaborative decision-making, and if communities' support the projects.

My primary investigatory emphasis was at the government/NGO level rather than the community level. While site visits to assess current project implementation played a small role in analysis, most interviews were conducted in Cape Town, the *de facto* center of NGO and ICT action, with NGO staff, government officials, and on-the-ground practitioners back from the field.

Key Relationships¹

Institutional structures are complex, filled with nuanced relationships and motivations. While understanding the full suite of interactions in a relatively short period of research is extremely difficult, my results point to several key relationships that are core to project development and provide some insight into the ways that their dysfunctions can impact the design and outcome of ICT projects. To be clear, the problems described below neither exist in every case, nor provide a full survey of the tensions in the ICT process. Rather, I describe common pitfalls that may be predicted, recognized, and addressed to make ICT a more effective solution for development issues.

Project donors/project designers

A fundamental relationship in an institutional structure addressing development problems is that between project donors and project designers. Donors, more often than not, are aid agencies, governments, or foundations, while designers are typically NGOs.

Several themes persisted in the interviews (Figure 1). It became clear that a critical breakdown occurred between the expectations of donors and the on-the-ground realities of a project. Donor expectations come from a number of influences and motivations (Chapin 2004), which, in turn, may influence the direction of a project, particularly for local NGOs. This influence can cause the project to veer from the designers' area of expertise, while forcing it to conform to a set of goals that may not be appropriate to the project's local context. In one case, an NGO I spoke with repeatedly felt burdened by the heavy bureaucracy associated with some donor sources, whereby, as recipients, they did not have direct control over how the money was allocated. They also spoke of "funding from a distance" issues in which the donors do not quite grasp the field situation and thus offer to help in ways that are not particularly useful. For

Figure 1. Dynamics of the project donor / project designer relationship

Breakdown	Cause	Result
Donor expectations and on-the-ground project realities	<ul style="list-style-type: none"> • Bureaucracy • “Funding from a distance” • North-South philosophical differences 	<ul style="list-style-type: none"> • Conform to goals of the donor organization rather than take advantage of the abilities of the organization
Donor need for quick quantification of success and long-term horizons often necessary for a project to reach its full potential	<ul style="list-style-type: none"> • Donors need to please their investors with fast, positive results • Many NGOs competing for resources allows selectivity on behalf of donors 	<ul style="list-style-type: none"> • Inappropriate measures of project “success” • Project focus on short-term rather than long-term results • No “core funding” to be used for non-project specific administration
Continual need for funding forcing designers to comply with donor wishes, even if not in the best interest of the project	<ul style="list-style-type: none"> • Limited donors • Little ability for designers to push back on donors • Job security fears 	<ul style="list-style-type: none"> • Projects that meet donor needs more than community needs • Perpetuation of need-based relationship

example, with ICT, many US and European companies like to donate old computing equipment to schools in Africa and elsewhere. This often can be problematic as few people in these areas have the technical knowledge to administer the machines, deal with software crashes, and provide other basic maintenance operations. In addition, conflicts that emanate from North-South philosophical differences, such as the need to help communities with economic development in the first place, had prominence.

Another regular breakdown existed between donors’ consistent need for short-term quantification of success and the long-term horizons often necessary for a project to reach its full potential. With many NGOs competing for resources and funding sources that are linked to investor appraisal, easily quantifiable success measures have become increasingly important (Stem et. al. 2005). In the case of ICT, this may mean that “number of internet-connected computers” is the key measurement for project success rather than “successful community-derived development projects enabled by ICT.” The former is clearly easier to quantify, but the latter might better measure the actual success of the project.

The project designers also had their own institutional challenges of social understanding,

technical capacity, and financial resources. The most obvious problem was the continual need for funding. The competition for money, unfortunately, sometimes leads NGOs to alter their desired plan or reshape their areas of expertise to meet funders’ desires. As one NGO leader said, “organizations are simply not in the situation to stand up to funders.” Not only do NGOs not have the financial security to push back, but, in less developed countries, they also are often staffed by people who may have serious difficulty finding work somewhere else. In South Africa, and likely elsewhere, this creates a significant disincentive to rock the relationship boat with regular funders. Other complaints aired during interviews included the difficulty in obtaining “core funding” – that which facilitates general NGO administration rather than specific projects – and a lack of accountability on the NGOs’ part that, if addressed, might enhance the credibility of these organizations in the eyes of their funders and thus earn them more project discretion.

Project designers/project recipients

A second relationship critical to ICT implementation is that between the project designers and the project “recipients,” or

Figure 2. Dynamics of the project designer / project recipient relationship

Breakdown	Cause	Result
Lack of cultural/ contextual understanding	<ul style="list-style-type: none"> • Initial assumptions of designers • Information gathering from a few powerful "community leaders" • Rapid-assessment approaches that limit visibility of community subtleties • Assumption that "community" represents unified actors with common interests 	<ul style="list-style-type: none"> • Solutions that may not adequately address the root causes of the problems at hand
Beliefs about ICT and the implementation of information-based solutions	<ul style="list-style-type: none"> • Assumption that the primary barrier to access is physical, such as a computer and internet connection • Assumption that all information is good information 	<ul style="list-style-type: none"> • No addressing of socio-economic factors at play • Possible perpetuation of biased, false, or subversive information • Little time spent assessing other non-ICT options
Little or no upward input into projects	<ul style="list-style-type: none"> • Paternalism • Assumptions of recipient need on behalf of designers 	<ul style="list-style-type: none"> • Continued distrust of outsiders • Perpetuation us-versus-them feelings in some areas

intended beneficiaries of the work (Figure 2). The relationship between funders and NGOs described above ideally implies that the views and insights of the project designers, if not beholden to donors, would match those of the communities they are attempting to help. This, however, is not necessarily the case.

Project designers at times lacked a cultural and/or contextual understanding of the situation at hand. One practitioner who works primarily in a South African township (an apartheid-era relocation site for black South Africans) pointed to several reasons why this may happen. First, general initial assumptions on behalf of the designers may significantly influence projects. Second, a lack of full insight into community dynamics, which results from dealing only with community leaders who may wield power in their own self-interest as opposed to the community's, can bias the local input projects receive. Finally, as mentioned, donor pressure may shortchange projects if, for example, a rapid assessment approach to problem solving is required that does not permit time to understand community subtleties. Also,

it was a common assumption among designers that a community represents a unified front of actors with similar and common interests. This is rarely the situation (Agrawal and Gibson 1999; Mohan and Stokke 2000).

Indeed, a number of assumptions reappeared in my interviews with project designers, some vocalized outright and some implied. Perhaps the most basic assumption was that the real limitation preventing people in communities from utilizing information for economic advance is physical access to a computer and internet connection. Needless to say, there are numerous other barriers to "access": education level, language ability, social constraints, and economic limitations (Okpaku 2001). To be fair, while this mentality still exists in some circles, many project designers do understand the complexities of information access and some, like the NGO for which I worked, are addressing this directly. A more common problem with ICT project designers was the belief that all information is good information. There was little acknowledgment of the possibility that information provided to community

members may be biased, false, or lacking in relevant content. Finally, I observed that many people working on ICT solutions spent little time evaluating other non-ICT options for addressing community needs and thus assumed their solution optimal.

Troubles with the designer relationship were also apparent from the perspective of the recipients. A recurring frustration among recipients was the lack of upward input into projects. This problem was described repeatedly to me, with regard to development projects in general, by my contact working in the township. Paternalism, a frequent critique in development projects (Chambers 1994), can result in this type of unidirectional project. ICT has the potential to ameliorate this dynamic by opening channels for collaborative decision-making. It is particularly counterproductive, therefore, to become paternalistic in the implementation of ICT projects. The potential for multidirectional information flow is widely recognized by designers, but its practical implementation proved to be difficult. Similarly, nearly all fieldwork contacts interviewed said that project recipients often have an inherent distrust of information provided by outsiders, especially from whites with whom they associate the oppression of apartheid and, to some extent, the perceived unfairness of modern capitalism. ICT can pose a solution for this problem as well through increased transparency of sources and, again, through the multidirectional information flows.

In the South African context, my research also pointed to a more profound disconnect in the designer/recipient relationship. In discussing township development projects, it was noted that apartheid has resulted in a “psychological hangover” that prevents some black Africans from pursuing a life outside of the apartheid mentality although it is legally over. After decades of oppression, many citizens do not recognize they have any democratic rights at all. From an information-use perspective, those marginalized by apartheid have little under-

standing of how outside information could help them address the problems they face (Jagwanth 2002). Of course, this is not a cognitive failure on behalf of the community members as much as it is an assumption by project designers that community members actively want access to information. Designers may simply conclude that if information is available, it will be used. While community members may benefit tremendously from increased access to information, they must first understand those benefits. Designers must be careful, however, not to oversell ICT either. One interviewee mentioned the problem of community members expecting ICT solutions to solve all of their problems. “The computer will get me a job” had been overheard more than once.

Unfortunately, the effects of apartheid are still quite strong, as evidenced by the township’s existence and the severe economic disparity that continues between blacks and whites. Addressing apartheid as history ignores the current psychological realities of the affected people. While project designers may assume that people are eager to change their current situation, many community members do not consider change a possibility due to the hangover effect. Marginalized people’s desire to use new tools like the internet to gain footing in current society may simply not exist.

Project recipients / project recipients

The final relationship category discussed here occurs within a group of recipients (Figure 3). These intra-community relationships can pose a challenge to project designers, as they are often cultural in nature and require anthropological-type methods to uncover. ICT project budgets rarely allow for this depth of analysis. Much of the insight discussed here comes from two key individuals: the one working in the township and another working with an indigenous group in northern Namibia.

Interviews with project leaders indicate that some breakdowns existing within a community

Figure 3. Dynamics of the project recipients / project recipients relationship

Breakdown	Cause	Result
Little post-apartheid understanding of democratic rights among those in the townships	<ul style="list-style-type: none"> • Decades of oppression resulting in a "psychological hangover" from apartheid • Townships still under authority of powerful "community leaders" rather than the central government 	<ul style="list-style-type: none"> • Projects implemented that the recipients may not utilize
ICT solutions or attempts not well received by recipients	<ul style="list-style-type: none"> • Felt threatened by a loss of power, tradition • Leaders/headmasters often embarrassed to admit they had no computer knowledge • Aggregation of power by a few "leaders" in the townships 	<ul style="list-style-type: none"> • Resistance among some to ICT projects • Inefficient implementation
Corruption among community leaders	<ul style="list-style-type: none"> • Little means to hold community leaders responsible, by residents or the government 	<ul style="list-style-type: none"> • Near impossible to get legitimate information on the needs of the recipients • Lack of accountability by those who are in charge

create tensions between community members and thus affect the overall acceptance of ICT.

Both the township and the Namibia cases involve people that were marginalized for several generations. As the ruling classes changed their country's sociopolitical trajectory to suit their needs, these communities were neither allowed to practice traditional ways nor be part of the dominant regime. Now, although legally considered equal, many people are in a state of social limbo where they feel neither "traditional" nor "modern." As a result, a vacuum exists that can profoundly affect an ICT project. New generations knowing only of oppression have developed their own social systems within the larger post-apartheid context. The townships in particular, often with tens or hundreds of thousands of residents, have entrenched power hierarchies and social strata that developed in reaction to government oppression.

Within that vacuum, daily actions of various individuals within the township, Namibia, and elsewhere present an even more nuanced challenge than community-wide issues. As mentioned earlier, it is common to think of a "community" as a unified entity. Communities are dynamic and consist of individuals who have their own interests.

With regard to ICT, those interviewed reiterated three common themes. The first was the loss of power. Several village elders in the Namibia case and township community leaders felt threatened by an influx of outside information. They saw their control and status as vulnerable. Second, many school headmasters and other leaders were embarrassed that they had no working knowledge of computers. Instances were reported by my internship NGO where teachers and leaders had hidden donated computers for "safe keeping" rather than learn how they worked so they could teach the students. Third, as with any development project, corruption is a danger. Particularly in the township, where community leaders aggregated power during and after apartheid, abuses of power were common in many NGO-led projects. This was perpetuated as project designers often turned to these leaders for direction instead of others in the community that may have a better working knowledge of a problem.

This third relationship category is complex and changes with various cultures and socioeconomic realities. While the details change with each project, project designers can anticipate the potential imbalances in intra-community relationships and address them to maximize project effectiveness.

Discussion

Development projects are frequently constrained by the institutional structures that initialize and enable solutions from the outset. ICT projects are no different. Currently in South Africa – and there is little reason to believe these relationship issues are unique to this country – ICT projects are at risk of failure due to the same sort of institutional barriers that hamper traditional development models. Shifting needs and priorities on behalf of all involved may overshadow the original goal of a project, and those in need of help will endure the most of these relational breakdowns.

The true success of ICT projects can be elusive when the wrong indicators are measured. ICT is a new paradigm in development, which has few set precedents; repeated failures could result in the wholesale abandonment of the concept. To avoid this, the numerous participants in the project design and implementation process should openly address the existing institutional structures that may affect the project and the relationships within. In turn, proper expectations may be set by designers and thereby increase the likelihood that projects will work towards attainable and beneficial goals and will be given the opportunity to reach those goals over a long-range horizon, if necessary.

Care must be taken by ICT project designers and funders to address possible dysfunctions in the relevant relationships, as they may be detrimental to overall project success. ICT can be tremendously powerful and beneficial. To reach its potential, designers must anticipate breakdowns and problems, and resolve them proactively rather than reactively. In doing so, project successes will become more common and will benefit all involved: donors, NGOs, communities, and individuals.

Acknowledgements

My thanks go out first to those in South Africa who helped bring this project together: Teresa for

her insights into ICT and introductions to others working in this area, Craig for his inspiration and dedication to the people of the townships, and Olmo for his keen perspectives and love of a good pint. I am also grateful to all of the people in South Africa who took the time to talk with me, those who helped fund this research, and of course to my friends, family, and colleagues who have relentlessly supported my ideas and efforts.

Endnotes

¹These relationship categories are comprised of the following individuals: Project Donors – any of the potential monetary supporters of projects, including foundations, aid agencies, and governments; Project designers – a broad category comprising all individuals and organizations involved in the project creation, implementation, and monitoring stages; Project Recipients – those who are the intended beneficiaries. These categories are designed to remove the connotations of social differences (such as “indigenous people”) and need (such as “rural poor”).

References

- Agrawal, A. and C. Gibson. 1999. Enchantment and disenchantment: The role of community in natural resource conservation. *World Development* 27: 629-649.
- Bridges.org. 2003. The 8 Habits of Highly Effective ICT-Enabled Development Initiatives. Bridges.org, Cape Town, South Africa.
- Chambers, R. 1994. Participatory rural appraisal (PRA): Challenges, potentials and paradigms. *World Development* 22: 1437-1454.
- Chapin, M. 2004. A challenge to conservationists. *WorldWatch* Nov/Dec: 17-31.
- Jagwanth, S. 2002. The Right to Information as a Leverage Right. Pp 3-16 in *The Right to Know, the Right to Live: Access to Information and Socio-Economic Justice*, R. Calland and A. Tilley, eds. Open Democracy Advice Center, Cape Town, South Africa.
- Mohan, G. and K. Stokke. 2000. Participatory development and empowerment: The dangers of

- localism. *Third World Quarterly* 21: 247-268.
- Okpaku, J. O. 2001. Ownership of Problems, Intellectual Property and the Digital Divide: The Enabling Challenge of Solutions. Presented to the World Intellectual Property Organization (WIPO), Geneva, Switzerland.
- Stem, C., R. Margoluis, N. Salafsky, and M. Brown. 2005. Monitoring and evaluation in conservation: A review of trends and approaches. *Conservation Biology* 19: 295-309.
- United Nations. 2001. Information and Institutions for Decision Making. Report to the Secretary General. Department of Economic and Social Affairs of the United Nations Secretariat. UN, New York.
- United Nations Development Programme (UNDP). 2001. Creating a Development Dynamic: Final Report of the Digital Opportunity Initiative. UNDP, New York.
- United Nations Economic Commission for Europe (UNECE). 1998. UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. UNECE, Geneva, Switzerland.



Alfred Russel Wallace. 1869. *The Malay Archipelago: The Land of the Orang-Utan and the Bird of Paradise. A Narrative of Travel, with Studies on Man and Nature*. Harper and Brothers, New York.