Forum

Cross-Sector Information and Communications Technology Funding for Development: What Works, What Does Not, and Why

Abstract

The Internet and related technologies are inherently collaborative in nature. It is possible to leverage information and communications technology (ICT) for development more effectively when a variety of sectors collaborate to implement these technology solutions to meet civil society objectives. Unfortunately, the relevant sectors involved in ICT for development often do not work together either effectively or efficiently. This article outlines the primary roadblocks that limit useful cross-sector collaborations and offers solutions to promote more effective partnerships.

Introduction

I have spent the last decade working in information and communications technology (ICT) for development in more than 40 countries, primarily in Europe but also in the Middle East, Africa, Latin America, and Asia. I currently serve as chief technology officer for the Open Society Institute (OSI) and developed OSI's internal systems infrastructure and its global Internet program. Before joining the OSI, I spent close to a decade managing operational ICT initiatives for another network that spanned 55 countries. Although I have worked in both the nonprofit and for-profit sectors, my unique experiences at OSI taught me what makes for successful ICT for development and cross-partnership relations. In addition to managing a \$33 million budget over 7 years at OSI, I also managed to raise more than \$20 million in institutional partnerships. Table 1 provides a shorthand visual representation of the key differences between sectors that make partnership so challenging.

Successful partnerships are a product of trust, mutually desired objectives, and an understanding of each partner's position. Cross-sector ICT partnerships often focus only on trying to resolve the technology problems. They miss the step of forging consensus on principles and goals that differ significantly among partners. This is why so many donor meetings promoting cross-sector collaboration end up with few concrete results. Potential partners often skirt the difficulties of operationalizing successful collaboration, preferring to discuss collaboration rather than to engage in it.

Although ICT is a natural tool for facilitating collaboration and aggregating resources, it can only be leveraged if the collaborators speak the same language and understand each other's objectives. Unfortunately, each sector often perceives ICT from its own perspective with little understanding of how a potential partner perceives it.

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Sector	Responsible to	Capacity Investment	Currency of the Sector	Time Unit = 1	ROI/SROI
Corporation	Stockholders	High	Profit	X * 0.5	ROI
NGO	Stakeholders	Low	Trusted source	X * 1	SROI
Foundation	Living donor/ foundation board	Low-High	Trusted source	X * 0.5	SROI and ROI through PRIs
Government/ Multilateral	Bipolar constituencies	Med-High	Politics Policies	X * 0.5	SROI and ROI

Table 1. The Partnership Matrix

Note: The time column is defined as a unit of time equal to 1. It is multiplied by a whole number or a fraction to exemplify how quickly each sector moves on an initiative in relation to the other sectors. NGO = nongovernmental organization; ROI = return on investment; SROI = social return on investment; PRI = program-related investment.

The Role of Nongovernmental Organizations (NGOs)

NGOs are the front-line troops tackling social sector development issues. Funders often support an already well-established local NGO with the credibility, contact network, understanding, and trust to serve the community they wish to affect. This substitutes for funders creating their own operational initiatives.

An NGO's primary stakeholders are the consumers of its services and the volunteers who contribute to its efforts. The organization's mission defines its constituencies. The Red Cross may depend on its funders for support, but its primary stakeholders are its volunteers and the people they service. NGOs have a more difficult task balancing sustainability with mission than their for-profit counterparts whose sole objective is to meet the bottom line. The dual objectives of mission and sustainability may at times conflict.

Ironically, an NGO can find itself trying to maximize sustainability yet completely alienating its primary stakeholder community in the process. For example, after September 11, 2001, the Red Cross made a decision to stockpile unused funding and resources against a potential terrorist follow-up. That decision conflicted with the perceptions of the current victims it was serving and of many of the people supporting the Red Cross whose expectations were that all funding would be used for the crisis at hand (McCaffrey 2002). A reasonable business decision to plan ahead that most corporations would have applauded actually conflicted with the Red Cross's mission and the needs of its primary stakeholders. This example reflects how closely nonprofit missions are tied to the needs of their constituents, needs that have to be served sometimes at the expense of the organization's own sustainability.

Collaboration in pursuit of leveraging ICT successfully is a daunting task for many NGOs. Historically, they have valued their organizations by the information and constituents they "owned." This perceived value and uniqueness act as a substitute for significant financial assets. Unfortunately, calculating organizational value on pre-Internet criteria and modes of operation is antithetical to leveraging ICT effectively. Some NGOs mistakenly believe the data they amassed pre-Internet is still valued at the higher costs incurred to collect it. However, once that information is available online, both the value and cost of collection are diminished. NGOs that understand this leverage ICT effectively by sharing information and constituents with their peers. The worth of their information is not derived from its ownership but from the value-added services that aggregate it and turn it into useful knowledge. Pooling content and constituencies is imperative for NGOs to take full advantage of growing their user base and their value.

ICT has historically been financed as part of the administrative capacity of an organization. NGOs are chronically underinvested in this area for a variety of reasons. Many organizations define the needs of their current mission as so compelling that it overrides a more efficient approach to investing in organizational capacity. This attitude is reinforced by funders who support initiatives that meet their funding guidelines while doing their utmost to limit support of administrative costs. Few funders support ICT capacity building for nonprofits. Even fewer support nonprofit experimentation with technologies. Yet capacity support and research and development funding are staples of ICT deployment in the commercial sector.

Each sector has a particular currency it uses to establish value and barter with partners. This currency differs significantly between sectors. In the nonprofit sector, the trusted-source relationship is the currency of choice. It involves establishing relationships of trust and credibility with various constituencies that share similar values and missions. The premise of the trusted-source relationship dictates that if an organization does good, people will hear about it through the long-standing trusted-source networks that span the globe. The value of people, institutions, and projects in the NGO space is defined by the strength of trusted-source relationships.

A nonprofit with a solid trusted-source relationship influences other actors to collaborate with and promote it. It influences constituents to trust in its products and services, although little money is actually spent establishing brand recognition and loyalty. It influences the media to promote its activities through public service announcements. Finally, it more effectively promotes successful requests for discounts, donations, and grants for its initiatives from the commercial sector. The trusted-source relationship is a significant factor in calculating the financial value of any nonprofit enterprise both in terms of how its resources are valued and the inkind and discounted arrangements it can accrue as the result of its standing.

Defining a mission and carrying it out credibly are crucial factors in developing trusted-source relationships. A trusted-source relationship cannot be bought and, by its nature, must be earned. Once earned, it must be protected at all costs because losing it can diminish the real value an organization has accumulated, both in terms of credibility and financial value.

The measurement for return on investment (ROI) differs significantly in the nonprofit environment because NGOs rely on the trusted-source relationship rather than on profit as the currency of choice. Social return on investment (SROI) substitutes for ROI in the nonprofit sector. Unfortunately, unlike the formulaic and straightforward ROI measurements forprofits use to measure return, SROI metrics are often as varied and subjective as the missions that nonprofits create to meet these metrics. They are a mix of objective measurements and more subjective quality of life measurements.

Although not as quick as commercial entities to turn ideas into reality, NGOs are significantly influenced by the needs of their constituents and can often turn around relatively quickly to meet particular objectives. ICT issues take longer simply because nonprofits are not as experienced with the use of technology as their commercial counterparts.

The Role of Commercial Enterprise

The commercial sector has an important role to play in ICT for development—both as investor and expert. More than any other sector, it understands how to take a successful socially responsible enterprise to the next step of revenue generation and long-term sustainability.

Commercial enterprise successfully demonstrates real and perceived value to the investors they answer to by focusing on the bottom line. The loyalty of their customers is purchased through a combination of marketing strategy and useful products. Consumers are fluid, however, and markets are subject to changes in product line, marketing strategy, and financial objectives. The relationship commercial entities have with their customer base may color how they see the constituents of development projects they may wish to partner on. They may relate to NGO constituencies more as consumers than as recipients and stakeholders in fulfilling a mission objective. In practice, two local commercial entities in the United States and Nigeria have more in common in language and practice than a local commercial and noncommercial entity working together in the United States. The methods of collaboration, metrics of success, and language used to promote projects differ greaty between the two sectors.

When for-profits market their products, their approach is to convince consumers that they need something they did not know they wanted in the first place. An excellent example is the way oil companies market higher octane fuels to consumers to convince them that their cars will run measurably better if they use the higher priced fuels. Selfbranding is also important in the for-profit context because it sells more products. Although not legally recognized, in the public's mind, Kleenex has become synonymous with tissues and Xerox with photocopying.

Cross-Sector ICT Funding

Nonprofits, by contrast, "promote" their values and their missions. Selling a value is somewhat of an oxymoron. Nonprofits do not start out by trying to convince constituents about a perceived need. *Their very existence and mission objectives already imply the need.* You do not start an NGO soup kitchen unless there are people that need feeding. People buy into the mission because it resonates with their values. Nonprofit partners and constituents do not take a favorable view of an organization that promotes itself over its mission. It is perceived as having to exaggerate organizational effectiveness at the expense of substance.

At the height of the dot-com craze, there were many solid socially responsible projects with revenue-generating potential. Ironically, many had been turned away by the public sector because their focus and potential was not well understood or did not fit neatly into the criteria of individual foundation funding portfolios. Commercial investors recognized the income-generating potential of these ICTrelated social venture projects and wooed them with venture capital. The catch-22 was that the investors wanted to drop the core socially responsible elements of these initiatives because they were considered unprofitable. If you pull the wings off a butterfly it is still technically a butterfly but it loses a heck of a lot in the transformation.

Many initiatives that do not, at first, seem to be commercially viable become so once they have successfully met their intended missions. In 1996, OSI funded high-speed Internet access in Romania and other Central and Eastern European countries by creating an Internet service provider (ISP) when there was absolutely no market for it. It was done purely to meet the connectivity needs of the student and civil society constituents that OSI was supporting. Eventually, the ISP met its mission objectives and thus gained local credibility. This allowed it to transform into a commercially viable spin-off business. Had it been initially evaluated as a traditional business venture to meet the needs of the targeted constituency, it would not have been created. Had it gone ahead as a traditional business venture meeting all the ROI metrics it is likely it would not have serviced the identified targeted constituents to stay solvent. The Grameen microlending bank and cell phone project is another good example of this transition (Fuglesang and Chandler 1993; Canadian International Development Agency 2000).

Children's Television Workshop/Sesame Street, Newshour/Macneil Lehrer Productions, and National Geographic Magazine/National Geographic Productions are all examples of traditional socially responsible projects that have spun off successful profit-making components.

The distinguishing factor between a social venture with revenue-generating potential and a pure business venture is that the former must first meet its social mission before it can become profitable. Using traditional business school metrics, many of these projects do not meet the appropriate criteria for financing without radically refocusing their mission. Refocusing typically loses the social element (the original objective) and destroys a real opportunity to create and nurture a sustainable, socially responsible enterprise.

The currency of the commercial sector is profit. Well-run for-profits rely on a very clear and objective set of indicators and metrics to determine ROI and the success of their operations. This contrasts with successful nonprofits that often have subjective missions that are open to interpretation. Although the currency and objectives of for-profits are clear, they often have trouble translating these values in the nonprofit context because their indicators are a subset of of the indicators nonprofits deal with. There is an entire dimension of guality-of-life impact and measurements that do not come into play. Effective partnership between nonprofits and for-profits in the ICT for development space requires an expanded vocabulary and set of principles to bridge the differing language, values, and metrics of the two sectors.

Commercial entities understand that using technology strategically and effectively necessitates investing in organizational capacity. A for-profit invests in ICT capacity to generate revenue, reduce expenses, or increase operational efficiency. This leads to further investment in capacity, which in turn leads to more revenue, increased efficiency, and so on. There is a clear cycle of benefit to these investments in the for-profit sector that is lacking in the nonprofit sector. Corporations can buy technology and integrate it into their business with technology service resources that they own or subcontract. By contrast, most nonprofits do not own and cannot afford to subcontract these resources. Nonprofits are therefore limited in their ability to digest and internalize technical innovation.

Commercial enterprise has the fastest turnaround where project and funding decisions are concerned. This is necessary in a sector where deal making, mergers, and acquisitions are a cornerstone of profitability. Unfortunately, the other sectors in question are not influenced by these dynamics, and consequently, their ability to make decisions as quickly as commercial entities is limited and can sometimes lead to a fair amount of frustration between partners.

The Role of Foundations

Foundations have often been at the forefront of supporting new and creative initiatives that fundamentally change the nature of civil society. The foundation sector was an early supporter of public television. Sesame Street and other educational programming would not have gotten their start without this support. I am privileged to work for OSI, which has arguably changed the face of civil society in the former Soviet Union through innovative and creative programs. For all their accomplished social impact through investment, foundations face a unique set of challenges in the ICT for development space.

Regarding stakeholders, foundations have the opposite problem of government and multilateral agency funders described later in this article. Where the latter institutions are accountable to very broad constituencies, private foundations are accountable to nobody but their living donors or boards who manage in the name and interests of deceased donors. Corporate foundations represent the philanthropic interests of their corporate parent. This may often be defined as enlightened self-interest dictated by the health of the for-profit institution and the relationship with its investors. The only other institutional accountability foundations have is to the government agencies that set the financial and legal regulatory parameters governing their operation.

The consumers of foundation services are their grantees, but foundations are not beholden to them. The resources that foundations need for sustainability come from endowments and individual or institutional donors. If its grantees disappeared tomorrow, a foundation could still exist, with its assets, and choose a new set of grantees. A case in point is the March of Dimes Foundation. After polio was eradicated, it found a new mission and new constituent (Sills 1980). Accountability issues are the reason that decisions made by foundations often seem arbitrary. They are simply not accountable to the stakeholders that require other sectors to act efficiently, responsibly, and in a timely manner. Foundation decision making is guided by a commitment to a mission defined by the founding entity. How quickly foundations move and what methodology they employ to make decisions is fully subjective outside their regulatory requirements.

Traditional foundations created from Industrial Revolution financing operate on a number of principles antithetical to the ICT and Internet culture. An interesting characteristic of these institutions is that they do not have a culture of cooperation. Foundation boards tend to analyze different sectors, determine whether other foundation players are involved, and look elsewhere to find their own unique niche. The proposal review and approval process can take months and multiple board meetings. Unfortunately, ICT-related proposals have a short shelf life. If they take longer than six months to approve, they may as well be rewritten. Foundations tend to operate on fixed program budgets cast at the beginning of the year, whereas technology is an ever-changing animal and requires opportunity funding to seize opportunities.

New foundations financed by technology profits tend to have a culture of collaboration bred by the sector they work in. They know how to more effectively leverage their technical and financial resource and many have active living philanthropic donors and family as board members. They are also very comfortable with the concept of exploiting venture capital to solve development problems. Newer technology foundations have other limitations, however. They are largely untested in the development field and the technology crash has limited their resources and ability to develop that expertise. Although newer technology philanthropists know how to identify a problem and spend money on it, they are just starting to develop the experience and the social sector networks that traditional foundations have developed and nurtured over years. The newer technology foundations often stick to narrow, less controversial domestic agendas focused on training, children, animals, and the environment.

Like their corporate counterparts, foundations have not been able to address properly the new breed of proposals I refer to as "corgs" (Peizer 2000). Corgs are hybrid ICT projects with a core

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social component (.org) and a supplemental revenue-generating potential (.com). They are a direct outgrowth of the Internet revolution, which couples low entry costs and huge reach with the unique information and services some entrepreneurial NGOs can provide. Subsequently, the Amazon.com equivalents of the social sector are often not funded properly and cannot reach their potential.

Foundation investment in its own capacity is inconsistent from institution to institution. Foundations are not typically affected by external forces that require other sectors to perform more efficiently. Foundation investment in technology is often a personal choice either promoted or discouraged by internal opinion leaders. The more progressive technology foundations invest in this capacity whereas the smaller traditional foundations often do not. The larger traditional foundations all have some sort of technical capacity and technical staff; however, whether they use them as efficiently as possible is an open question. What is certain and relatively consistent is that most foundations underinvest in developing the technical capacity of their grantees. Most do not employ their own operational technical staff to provide input into funder proposals of a technical nature.

Foundations operate on the same trusted-source relationship principles as do nonprofits. The perception of their value by other nonprofits is not shaped by the size of their endowment. Instead, it is shaped by how successful they are at funding initiatives that truly are effective and at associating with trustedsource NGOs that other NGOs hold in high regard. Foundations can take inordinately, and I would suggest, inappropriately long amounts of time to decide on project funding. This is particularly true in ICT grant making where quick turnaround is at a premium and taking months to cogitate on a proposal is simply unacceptable.

Foundations such as nonprofits tend to focus on SROI. However, through the program-related investment (PRI) vehicle, they may also flirt with actual ROI metrics with some for-profit social value investments. The reality is that foundations are somewhat schizophrenic when it comes to SROI and ROI. Foundations ask nonprofits to demonstrate sustainability plans so they do not rely on foundation funding subsidies in perpetuity. In practice however, when a progressive nonprofit comes up with a plan that generates real revenue, it is often castigated or turned down by these very same foundations for creating more of a business proposal than a social value enterprise.

The Role of Governments and Multilateral Development Agencies

Governments and multilateral development agencies have a unique role to play in ICT for development. Although they have a number of significant issues that hamper some types of project implementation, they are excellent conveners and can bring various sectors together to support an initiative. That is often the role that agencies such as the UN Development Programme (UNDP) play. These agencies, as well as individual governments, are also natural policy initiators and promoters. Finally, based on sheer dollars required, this group is often best positioned to support expensive national infrastructure initiatives, especially in developing countries where commercial enterprise does not wish to take the initial risk.

Being accountable to too many constituents across the political spectrum is an issue unique to governments and multilateral players when trying to satisfy their primary stakeholders. You can never satisfy everyone, and when you try, it is usually a disaster. Just as governments cannot afford to ignore their electorates, most multilateral development agencies cannot avoid the individual politics of the donor countries that fund them. Because these institutions have to satisfy a diverse range of interests, many projects are compromised from the start and burdened by prerequisites and project criteria that affect the very objectives they purport to serve.

It has been said that the Soros Foundations Network's work was far more effective, with far less money, than similar work by many government and multilateral agencies. To be fair, the network had a very different mandate because it had a living donor who was used to winning and losing big. Its risktaking mandate was to demonstrate successful pilots within constituencies that were ready to facilitate change. Governments do not have that luxury. They serve the need of a diverse constituency that often sacrifices efficiency for bureaucracy to satisfy their concerns and severely restrict risk taking. Further issues arise when agencies, such as the World Bank, are implored by those they are responsible to, to engage in ICT for development work that is supplementary to their primary mission, and the

outcomes clearly demonstrate their lack of expertise in the area. The stakeholders of these agencies should be the people on the ground served by them. In fact, these agencies answer to the politicians or funding agencies, or both, that provide their mandate.

Many potential grant recipients avoid government-funded initiatives because the cost of managing the process and meeting all the bureaucratic requirements is not worth getting involved in for a small, efficient NGO. Government and multilateral agency projects are often burdened by rules and procedures set up to meet a variety of litmus tests, resulting in a nightmarish application and projectreporting process. These politically expedient methods of project management are antithetical to implementation success. As a result, many government initiatives around the world are flush with money but are as useful as a giant Trojan hamster. Although every business knows that its focus must be on satisfying client needs, these agencies think they know better than their local clients what they really need. They employ an "if you build it, they will come" approach, which often does not work.

Many donor countries fund various development agencies to promote the economic interests of their own nationals. Consequently, it is not unusual to see a highly paid foreign consultant jet in for a few days and write a report about poorly understood local circumstances instead of employing local trusted sources to define the problem and its resolution. With a few notable exceptions, my experience with multilateral agencies implementing ICT projects to meet a social need has not been positive. It is also very depressing to see tax dollars wasted on dysfunctional methodologies.

Government and multilateral agencies typically invest in their own technical capacity. As with foundations, whether that capacity is used as efficiently as possible is an open question. Underinvestment in developing the technical capacity of their grantees is still a problem, although typically less so with these agencies because they often have significant capital to invest in the projects they support. The real issue is if they are mandated to spend it properly. Sometimes funds are overallocated and wasted on unnecessary capacity to satisfy a proposal prerequisite and not the real needs on the ground.

Most development agencies rely on the trustedsource relationship model used by foundations and NGOs when dealing with these institutions. However, they rely on a more political currency when dealing with their governments and with other likeminded institutions. The most politically motivated development agencies are regarded with the healthy suspicion one would expect NGOs to show when humanitarian efforts are delivered with a political skew. Similarly, agencies such as the World Bank that do ICT for development work as a supplement to their core activities suffer from not being viewed as trusted-source institutions by other NGOs because of their hybrid activities.

Reliance on ROI or SROI by this sector is institution- and project-dependent. For example, the World Bank and International Monetary Fund typically rely on ROI metrics, whereas government development agencies such as the Canadian International Development Agency typically rely on SROI. However, this may change from project to project and can become confusing when various agencies mix their mandates and their measurement criteria. The need to meet the demands of various constituents, mandatory project bidding processes, and other rules all conspire to make government and multilateral project and funding decisions not only irksome but also very slow to turn around.

Some Practical Solutions

To facilitate successful cross-sector partnerships requires a systemic change in the model of responsibility that influences cooperation and institutional decision making. The most realistic strategy for developing partnerships to promote social change through ICT involves working within the constructs of the existing system by leveraging its strengths and limiting its weaknesses.

For example, government and multilateral projects are better than corporations at supporting expensive national infrastructures, bringing various parties together to collaborate, and promoting policy. That is where they should focus their attention rather than on implementation projects that are better handled by foundation funders or social enterprises. If they are involved with the latter projects, it should be as a funder that regrants to an implementing partner rather than as project implementer. Organizations such as the UNDP are exceptionally good at convening local stakeholders across sectors and providing logistical support. The World Bank can provide analytical support to ICT for development projects and make initial loans and guarantees to projects with good potential for social and profitbased return. These institutions do not necessarily have to manage and implement these projects though. They can leave them to other agencies such as the International Development Research Centre, the Swedish International Development Agency, Department of International Development, and so on, with far better track records of successful local project implementation.

Corporations can more easily provide deep discounts and promotional offers than outright donations. They can volunteer human expertise (very important) and make equipment grants when this fits into their community affairs mandate. They can concentrate their philanthropic efforts on social value initiatives that fit into fee-for-service models. For example, projects involving education, job training, health care, and certain types of service provision are better revenue-generation models than projects involving human rights work or poverty alleviation. Commercial donors function best at the point in the social value food chain when an ICT project that has achieved social value is ready take the next step toward long-term sustainability and scaling. At this stage the metrics for success are clear and are more in line with traditional business measurements.

Foundations often have the best relationships with local nonprofits. They can act as filters in identifying successful projects, assist in developing partnership opportunities, and cooperate to jointly fund initiatives that foster local success. Some foundations have expertise in particular sectors or geographies and should be relied on accordingly.

Some NGOs have excellent initiatives but are not ready to collaborate with others to leverage them. They may seek funding for their own projects to monopolize a leadership position or channel limited funding to their member organizations. All funding sectors should encourage NGOs with similar, proposals to collaborate on joint initiatives before funding them. Funding should not be provided to one institutional proposal over a similar overlapping proposal unless clear qualitative differences are found between the two proposals or a credible case for not collaborating is made. A potential partner or funder should recognize the inherent conflict between mission and sustainability that NGOs sometimes find themselves in. NGOs must be vetted for efficacy, assisted with capacity building when required, and trusted with resources to meet local needs. A legitimate evaluation and support process mechanism should also be in place during and after funding is completed. What NGOs need in the ICT for development space is a better understanding of how they can more effectively facilitate their missions using technology. They also need technical and financial help in defining their online presence, and training and support in deploying ICT tools effectively.

If each sector concentrated on what it did best rather than trying to cover all aspects of the ICT for development space, it would create more benefit overall. Developing world markets are not yet mature. It is often easier to meet a social need and catalyze a new and vibrant market for a fraction of the cost it would require in the developed world. Partnerships that extend sectoral strengths while limiting their weaknesses should be fostered to combine more effectively social and economic development. Finally, everyone's objective must be clearly focused on solving the real problems on the ground *from the perspective of the local entities needing assistance*. These are the crucial ingredients for project success.

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