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An evaluation framework for ICT capacity building projects

John Lannon

Synopsis

The evaluation of international development projects and programmes has gained increased attention in recent years. However the focus is often on reporting to external audiences, particularly donors, with not enough attention given to the internal decision making processes required to achieve better results. This study looked specifically at development projects that aim to improve the capacity of local organizations and institutions in developing countries through the implementation of information communication technology (ICT) based systems. It developed an innovative new framework for the evaluation of these projects and pilot tested it in an action research initiative in Armenia.

Introduction and Background

In recent years donors have shown interest in projects that build organisational and institutional capacity through the implementation of technology based systems that help achieve positive social change. The funding is typically channelled through international non-governmental organisations (INGOs) that act as donor proxies and provide the necessary expertise to oversee and manage the project. Like all development interventions they are based on an assumption that Western capital, knowledge and technological capability is essential for the transformation of 'underdeveloped' areas. They tend to have a wide range of stakeholders, both

internal and external, with a large degree of heterogeneity and a broad diversity of perspectives (Diallo and Thuillier, 2005; Thatcher et al., 2006; Zhang et al., 2010). Investment in ICTs is often viewed locally as deflecting resources from vital core activities and the levels of commitment amongst stakeholders may vary significantly, as can the levels of familiarity with the potential of ICTs.

ICT capacity building projects are typically located in organizational, economic and political contexts that are insecure and subject to change. Local organisations and institutions are constantly reacting to changes in their environment and to new circumstances and opportunities brought about by other actors. Consequently there is a need to ensure flexibility while remaining focused on the long term objectives of the capacity building intervention.

Issues and Questions Considered

In the international development sector evaluation is often hampered by the high number of stakeholders involved, resource scarcity, and lack of engagement with the instrumental and overly rational approaches imposed by donors or their proxies. The presence of intangible project outcomes can be difficult to define and measure (Khang and Moe, 2008; Ika et al., 2012), and while some projects have well-defined short-term objectives, the long term benefits are often implicit and not clearly articulated.

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With funded ICT capacity building projects there is likely to be a mismatch between what is really needed or useful, and what is provided. Part of the reason is that technology is conceived as an objective and rational entity, not as something that incorporates social, cultural and political values. This can result in a gap between ICT system design and the actuality of the local environment in which the system is being deployed.

This research presents an approach to the evaluation of these projects that balances the demands of external stakeholders with the needs of internal/local stakeholders. Drawing on work undertaken in the areas of ICT for development (ICT4D) and information systems evaluation, a two phase approach is proposed in order to address short term expectations and long term outcomes. This results in two separate evaluation loops. The first is primarily focused on determining project efficiency and effectiveness through purposeful action linked to the project lifecycle. The second assesses impact by determining if and how a project has contributed to long term social change. It recognizes that determination of desired long term improvements is a process of negotiation that requires meaningful engagement by a wide range of stakeholders.

As part of this study a framework was developed to guide teams through evaluation loop one. It consists of five distinct stages, namely definition, exploration, modelling, implementation and review (DEMIR), and is designed to ensure that the necessary strategic analysis and project evaluation activities are built in at all stages of the project lifecycle.

Methodology

The DEMIR framework was pilot tested on an ICT capacity building project in Armenia. The project took place over an eight month period, and was based on a proposal to a donor organization that sought funding for a capacity building intervention with human rights NGOs in the country. It was submitted by an INGO that has a track record of helping human rights organizations use ICTs to maximize their impact. The proposal was based on meetings with the Armenian NGOs in May 2010, at which their information management needs were discussed. The INGO was subsequently asked by the donor to work with four of the NGOs to address their most pressing needs.

An action research approach was taken to testing the suitability of the DEMIR framework as an evaluation tool on this

project. This ensured that the results were based directly on understandings of people who used it.

Outcomes and Findings

Use of the DEMIR framework indicated that its focus on problem definitions, activity models and criteria for success worked better than the goal/objective/indicator approach typically used in such projects. The research highlighted how local NGOs' pre-existing ICT skills affect their participation in an externally funded ICT capacity building project. Variations in levels of organizational structure and information practices were evident in the case of the four NGOs, and as a result there were mixed experiences when eliciting and documenting their information needs. The project also showed that in donor-driven projects it can be difficult to build the trust and understanding necessary for successful completion. This, combined with NGO lack of readiness for ICT adoption, meant there were changes to the activity models and criteria for success during the implementation/review stages. It also became clear that the approach taken to evaluation needs to be situationally driven rather than prescriptive, and that evaluation must be carried out continuously during the project cycle to allow for adjustments and revisions. In the case of the Armenia project some of the adjustments were caused by changes in the political environment in the country. Ongoing loops of learning and action were necessary in order to react appropriately to these changes, and DEMIR's iterative and flexible approach to review/implementation added to the likelihood of effective solutions.

The project manager's role on the project was found to be particularly critical. In effect she was both project manager and user liaison, and this allowed for consistent approaches to internal and external environment risks. In addition to assuming day-to-day management of the project she also ensured the delivery of organizational value for the NGOs. Furthermore her understanding of the worlds of technical development and human rights enabled her to perform a hybrid role (Heeks, 2006) on the project. This contributed significantly to the effective use of the DEMIR framework.

Following this action research, the INGO adopted DEMIR as a framework to guide their ongoing project work. It has also been used by other INGOs, most notably on the initial phase of a technologically enabled missing child alert system in South Asia. Further work is ongoing on long term impact evaluation and on broadening its use into other areas of international development.

A full copy of the paper can be obtained at:

An evaluation framework for ICT capacity building projects: Action research in Armenia, Information Development, <http://idv.sagepub.com/content/early/2015/11/02/0266666915615645.full>
DOI:

10.1177/0266666915615645
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