

## Chapter 4

# Participatory Monitoring and Evaluation of ICTs for Development

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### ABSTRACT

*In this chapter I call for participatory monitoring and evaluation (M&E) of information and communication technology for development (ICT4D). I describe the ontology of ICT4D as complex and unpredictable. I favour an epistemology that is based on systems thinking and adaptive management as a foundation for participatory approaches. The M&E of ICTs faces a number of challenges including the lack of a unifying theoretical framework, the need to define users and purposes for each evaluation, the importance of agreeing on the type of causality that is expected, and the reality of short-term project durations. In response to these challenges I review established and emerging approaches such as Utilization Focused Evaluation, Outcome Mapping and Most Significant Change that embrace participation. Participation is a term open to many interpretations; to clarify its meaning I offer several ladders of participation. I conclude with a reflection on the conditions necessary for participatory approaches to gain acceptance in this field. A major lesson in participatory M&E is to understand the methods and to go beyond and be vigilant of the conditions that enable their application.*

### INTRODUCTION

In this chapter I advocate a participatory monitoring and evaluation (M&E) approach to ascertain the benefits and risks of information and communication technology for development (ICT4D). I lean on the track record of participatory approaches in

the fields of rural and international development. In both fields it has long been understood that the goals of interventions mean different things to different stakeholders, and this has implications in the evaluation field. I provide a theoretical justification for a participatory approach from a review of this field's ontology – the nature of what is 'knowable' – as well as from its epistemology – the nature of the relationship between the observer

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the knowable. I argue that ICT4D is characterized by complexity and that systems thinking provides us with the language to interpret it. I propose that constructivist approaches that embrace multiple stakeholder perspectives are necessary, and to be effective they in turn require stakeholder participation in the M&E process.

The field of M&E of ICT4D faces the following challenges:

1. *Theoretical framework*: Very few evaluation case studies are based on an established theoretical framework about development.
2. *Audiences and users*: A stakeholder analysis is necessary, including a differentiation early on between individuals and groups involved in a project –whose views need to be collected- versus the actual users of evaluation findings.
3. *Purpose*: A balance is needed between learning purposes of formative evaluation and impact assessments typical of summative evaluation. This balance is often not made explicit from the start leading to confusion in methodology.
4. *Causality*: An agreement on the assumptions about causality is important (attribution Vs contribution). The extent to which an activity is directly linked to an impact or result is debatable. It is not always clear that an ICT4D activity has been responsible for a measurable change, rather than the political, social or economic factors associated with it.
5. *Time dimension*: An agreement on the dimensions of change that will be measurable is needed from the beginning, including outputs, outcomes, and results or impacts. It is common for impact not to be evident during the lifetime of short projects.
6. *Multiple methods*: Context matters a great deal and there is no single methodology that fits all situations; a range of methods needs to be adapted to each context.

I address the above challenges and describe methods that embrace participatory M&E and that are taking root in the evaluation field and that merit testing in the context of ICT4D (Butcher & Yaron, 2006; Ramírez, 2007). The methods belong to an epistemology that embraces complexity, multiple voices and systems thinking.

## **Overview of Chapter Objectives and Structure**

This chapter has four sections. I begin with a Background on ICTs, ICT4D and I review the ontology and epistemology of this field; I close the section with an example. The second section is a Response to the Challenges. I provide a brief review of systems thinking and adaptive management, two perspectives that embrace the complexity of this field. In the third section on Methodological Innovation I provide a brief review of participation, its promise and some of the critiques surrounding it. I continue with a brief mention of Key Evaluation Questions as a steppingstone to method selection, and I highlight some features of Outcome Mapping and Most Significant Change. In the Conclusion I focus on the conditions necessary for emerging and participatory approaches to take root in M&E of ICTs for Development.

## **BACKGROUND**

Information and communication technologies (ICTs) have become yet another tool for poverty alleviation and improving livelihoods. A decade ago their potential began being touted as revolutionary. Their promise was to improve health services, extend educational opportunities, reduce costs and increase efficiencies for businesses and for society as a whole (Negroponte, 1995) and for rural development in particular (Richardson & Paisley, 1998). It remains a fact that the bulk of hardware and software is designed to suit the

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