Digital Green: Leveraging Local Knowledge and Talent for Video-Based Information Dissemination

Teaching Notes

Author: Ashish Ranjan & Kavitha Ranganathan
Online Pub Date: January 15, 2020 | Original Pub. Date: 2018
Subject: Sustainability in Business, Public & Nonprofit Management
Level: Basic | Type: Direct case | Length: 5321 words
Copyright: Certain material used with permission of Indian Institute of Management, Ahmedabad. © 2018. All rights reserved.
Organization: Digital Green | Jeevika | Organization size: Medium
Region: Southern Asia | State:
Industry: Information and communication
Originally Published in:
Publisher: Indian Institute of Management, Ahmedabad
DOI: http://dx.doi.org/10.4135/9781529702170 | Online ISBN: 9781529702170
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Introduction

Digital Green (DG) is a prime example of a development intervention aimed not only at the poor but “by the poor”, as a content or knowledge disseminator to rural users. The case is written in the form of multiple scenes that unfold organically to paint a bigger picture of what the organisation does and the different players and groups that take part to make this intervention a success.

The reader is exposed to different view-points and actions taken by the different stakeholders: Kashiram, the Village Resource Person (VRP) from Jeevika, Ramsakhi the self-help group member and Abhinav an Assistant Program Manager (APM) for Digital Green.

Positioning of the Case

This case can be used in courses that teach “Development and ICT” and generic courses in BOP development that want to highlight issues related to local relevance and buy-in (adoptability), social dynamics and understanding ground realities.

The teaching note highlights how this case can be used to generate a fruitful discussion for a typical 60–90 minute classroom session.

Recommended Reading

Before reading the case, students should be asked to visit the Digital Green website, www.digitalgreen.org, to understand the scale of operations and get a macro picture of the organisation. This case provides a complementary grassroots view on the happenings at the ground level.

After a quick introduction to Digital Green, which can be elicited from the students, in terms of what it does, the countries it operates in and its overarching mission, the instructor can lead with the following questions:

Classroom Discussion

What in your view are some of the major hindrances to the success of any ICT4D (Information and communication technologies for development) intervention?

Note that the assumption here is that this case comes up some time in the latter half of the course after other cases like the One Laptop Per child Project and e-Choupal, so students will be in a position to come up with some meaningful answers.

The students may come up with some or all of the following points:

- Not understanding the local relevance
- Hammer looking for a nail: top-down approach
- Financial feasibility and sustainability
- Non-scalable design
- Suspicion of intent of outsiders who bring the intervention
• Complicated technology that users cannot understand or use
• Social constraints and hierarchies

Try to put these points down on the classroom board as they emerge, and try to bring forth as many as possible.

The rest of the class will now revolve around looking at each of these issues in the context of Digital Green – which of these issues is relevant to DG and how has DG tackled them?

Understanding the Local Relevance

“The partners working with farmers identify locally relevant content across the agriculture value chain, produce videos of 8–10 minutes and disseminate them to groups of farmers in a hub and spoke form.” (Digital Green)

The case brings forth the importance of grassroot/bottom-up content creation. Content of local relevance is of utmost importance in any information intervention. Digital Green is structured to generate this content at the local level and disseminate it to those who will find the content meaningful. Livelihood practices (farming, agriculture, animal husbandry) that form the core of DG’s content are generally applicable only locally. The model followed by Digital Green ensures that the content is not disseminated too far from its origin. Also, by ensuring that the content is generated by a local, and not by an external expert, it makes doubly sure of its relevance.

Hammer Looking for a Nail: Top-Down Approach for Building a Solution, and Then Look for the Problem

Many ICT4D interventions are criticised for their top-down approach, that is, create a tool and then look for problems it can be applied to. However, DG’s approach was the reverse. They were concerned about the ineffectiveness of the existing agriculture extension workers network in India. The system consists of the Training and Visit system, where over 100,000 civil-service extension officers visit villages to disseminate expert agricultural information. However, for a vast country like India, this number proves grossly inadequate, with the ratio working out to roughly 1 extension worker for 2,000 farmers.

DG realised that the best resource for a farmer was other progressive farmers who tried out new methods, and not the extension worker. Hence, they wanted to strengthen this social network among farmers. They tried out different methods like posters, audio-segments, etc., before narrowing down to video-based information dissemination as the most effective form.

Financial Feasibility and Sustainability

The problem DG tried to solve was the following: “How can the speed and effectiveness of agriculture extension be improved at a reasonable cost?” (Rikin Gandhi, Digital Green)

Digital Green has very consciously tried to keep the costs of its system low, by using technology that is relatively low cost: TVs, DVD players, video cameras and PCs. In a cost-benefit study of their system, it found that DG was ten times more effective (in terms of lower cost and higher adoption rates) than the traditional extension system.
Non-Scalable Design

A common evaluation criteria for an ICT4D intervention is scalability.

At this point the instructor can digress a bit from the case to discuss the use of scalability as a metric for a social enterprise.

“Scale has become embedded in the social enterprise lexicon as one of the unquestionable touchstones …. scale almost always implies standardization – how else can we reach large numbers of clients in an efficient and financially sound way? But standardization comes with a price, especially in terms of the complexity of services offered and the degree of responsiveness to clients. What can suffer is … providing genuine solutions that address poor clients’ underlying problems (Impact). We fool ourselves – and endanger the very people we set out to serve – if we do not critically examine the underlying assumptions and the potential consequences of a relentless focus on scale.” – Tony Sheldon, Executive Director, Programme on Social Enterprise, Yale School of Management

As suggested by the quote, the need to scale coupled with the need to customise solutions leads to an inherent contradiction. There are innate trade-offs in addressing scalability for interventions that thrive on local knowledge and customised solutions. Digital Green is a ripe candidate to evaluate these trade-offs in scale versus customisation, as it concentrates on digitally capturing and disseminating local solutions to local problems. Furthermore, Digital Green is at the juncture where it wants to scale out to new geographical regions: Bihar, in this example, where the agricultural problems and solutions from other areas may not be relevant.

Digital Green tackles this problem by organising villages as a hub-and-spoke model, multiple local hubs where the content is created, and then disseminated to the spokes of that particular hub.

Also, the radius for knowledge travel is customised depending on the type of knowledge/content (see figure below). Localised content is spread over a smaller distance and generalised content travels further.

The localised contents compose 80% with Identifiable Peers and Accessible Services and it’s enclosed in a small area. The generalized contents compose 20% with Comparable Agroecology and Common services and it’s enclosed in a large area with localised contents inside it. Few symbols in the image represent population density at different locations inside the localised and generalised contents.

Figure 1: Localised versus generalised content reachability
Suspicion of Intent of Outsiders Who Bring the Intervention

It would be naïve to assume that people will fearlessly adopt a new farming practice or livelihood generating technique if the source of that content is someone they do not or cannot trust.

Digital Green faced some of these issues when it started creating its first set of videos. Initially it tried using agricultural experts in its videos but the viewers were not receptive to taking advice from some “strangers” that they could not relate to. It then decided to feature local farmers as the actors in the videos, someone from a similar socioeconomic demographic as the viewers. This ensured that the actors in the videos were not perceived as outsiders teaching them but locals who were adopting the technique within similar local constraints.

“…. they (the farmers) preferred to watch a fellow farmer share his or her experiences in a manner similar to the informal social networks that they were used to interacting with.

The first two questions that farmers often ask when they watch these videos is ‘What is the name of the farmer in this video?’ and ‘Which village is he or she from?’ to authenticate that the content comes from a source that they can relate with before considering a change in their behaviour.” (Rikin
Gandhi, Digital Green)

Also, to help build trust in the community, the sequencing of videos is carefully chosen. The mediator first screens videos that showcase practices that offer visible short-term rewards. Other practices like mulching, for example, are shown later as this has a longer gestation period in terms of the gains in soil fertility.

**Complicated Technology That Users Cannot Understand or Use**

Although in Digital Green’s case the technology used by the end user is not complicated (they are just watching a video), the Digital Green staff did realise early on that just watching a video was not enough to convince someone to adopt a new practice.

“On distributing these videos, we initially experimented with setting up a TV in front of a public square next to a stack of DVDs that farmer choose to access as they pleased. Though there was an initial novelty, the community quickly became disinterested as they couldn’t understand its purpose.” (Digital Green)

Hence the role of a mediator was developed, someone who would stay there throughout the screening, answer questions, engage the farmers and convince them to adopt the practices.

**Social Hierarchies and Constraints**

Many social interventions have to deal with inherent issues related to class, caste, gender and traditions. For example, for a telecentre to be set-up, past studies have found that where it is set-up and who it is manned by, plays a huge role in who gets to use it. As this case points out, caste and gender issues were very much in play in the self-help groups that Digital Green was working with.

The case highlights how DG has been successful in breaking class/caste barriers and gender power equations by encouraging women and those from marginalised castes to take the lead in making and starring in the videos, and act as agents of social change by becoming VRPs.

“The extension agents or farmers that are featured in the videos know that they will be seen by others in their respective communities as role models. We want to stimulate this creation of ‘local stars’”. (Digital Green)

**Lack of Good Relations Between Different Entities, Stakeholders**

Another aspect that can be touched upon is the dynamic between Jeevika (the local organisation) and Digital Green. Questions that have been raised include whether the VRP is paid adequately by the government for the work he needs to do for Jeevika and Digital Green. Who ultimately gets the credit for the impact: Jeevika or Digital Green?

The instructor can wrap up the case discussion by summarising the salient features of Digital Green, including (1) a grassroots participatory process for content production, (2) a video-based database and content dissemination, (3) local mediation during video dissemination and follow-up for encouraging adoption.
http://dx.doi.org/10.4135/9781529702170