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# ICT Learning Review Findings

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2<sup>nd</sup> edition

*[www.development-innovations.org](http://www.development-innovations.org)*

# Glossary

<b>CSO</b>	Community Service Organization (nonprofits, civil society groups, non-governmental organizations, etc.)
<b>DI</b>	Development Innovations project
<b>TSP</b>	Technology Service Provider (technology firm)
<b>ICT4D</b>	Information and Communications Technology for Development
<b>ICT</b>	Information and Communications Technology
<b>ODK</b>	Open Data Kit
<b>SP</b>	Service Provider
<b>STTA</b>	Short Term Technical Assistance
<b>UX</b>	User experience (how the user experiences the technology)

## Abstract

Social media and information and communication technology (ICT) tools have been increasingly in-demand and widely used by Cambodians in recent years. According to a mobile research study conducted by DI's partner Open Institute, Mobile Phones and Internet in Cambodia 2015, almost one third of Cambodians have access to the Internet and Facebook; only 3% of users access the site through computer, while 80% access it exclusively through phones.

## Background

Development Innovations is a five-year project that helps civil society organizations (CSOs) & technology companies to design and use information and communication technology (ICT) solutions to address Cambodia's development challenges.

## Purpose

During an STTA in April and May 2016, ICT Learning Specialist Kristen Roggemann interviewed 12 DI grantees and four technical service providers who had worked under DI grants to identify and document challenges faced and lessons learned throughout the grant implementation process. Based on these learnings, the DI team hopes to more effectively develop resources and provide targeted coaching and advisory support services to DI grantees and the wider DI stakeholder community during the project extension period from 2016-2018.

## Methodology

Working with the DI Advisory Services team, Kristen developed a standardized interview guide for both interviewee populations (grantees and service providers), focusing specifically on probing for drivers behind challenges in grant implementation as well as tactical steps grantees took that made the grant process easier.

# Outline

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**POSITIVE**  
**feedback**  
**identified**  
**from**

**CSOs**

**TSPs**



## Positive feedback from CSOs included:

- 100% of CSOs responded positively to use ICT in the future
- CSOs had a largely positive attitude about ICT4D, citing that ‘it’s the future’ and that ‘the next [ICT4D deployment] will be easier, the first time is always the hardest’
- CSOs identified significant organizational benefits from the grant, such as: cost savings in field data collection, the identification of new revenue streams, internal staff ICT capacity and knowledge increased, and the strategic decision to hire ICT4D specialists
- CSOs are eager and curious to learn more about ICT deployment globally and investigate ‘what else is out there’
- Some CSOs found that working with service providers forced them to review their internal processes and catalysed an operational ‘refresh’ as inefficiencies were identified



## Positive feedback from TSPs included:

- Working with an NGO allowed them to learn about new platforms and technologies (open-source, ODK, etc.)
- The in-depth user knowledge that CSOs brought to the relationship enabled TSPs to bring that knowledge to bear for other customers (organizational learning)
- Going to the ‘field’ and seeing their technology being tested by actual users (especially in rural or low-income settings) was an extremely rich learning opportunity for TSPs to understand the user experience needs of these communities
- Working on social problems with CSOs ‘felt good’ – TSPs found an emotional reward and passion in their work they don’t get from commercial clients
- While challenging at times, TSPs largely came out of the grant experience with a desire to work more with CSOs and in the development sector
- TSPs were able to learn a lot about working with CSOs from the grant and derive a lot of lessons learned to make next time easier

# Gap analysis: What did our grantees struggle with?

DEFINE

DISCOVER

DESIGN

DEVELOP

DEPLOY

SCOPING AND DESIGN PHASE

WORKING WITH A SERVICE PROV.



Pretty clear understanding of problem



Hard to translate this into user needs and “journey” for service provider



Lots of difficulties with design and UX/prototyping process and refinement



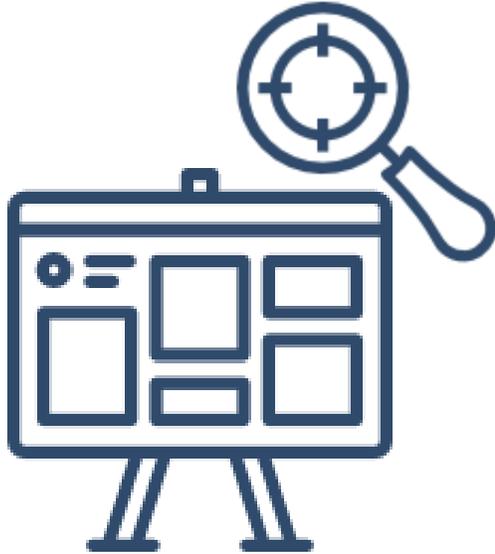
Total lack of understanding of software development; lots of challenges working with TSPs



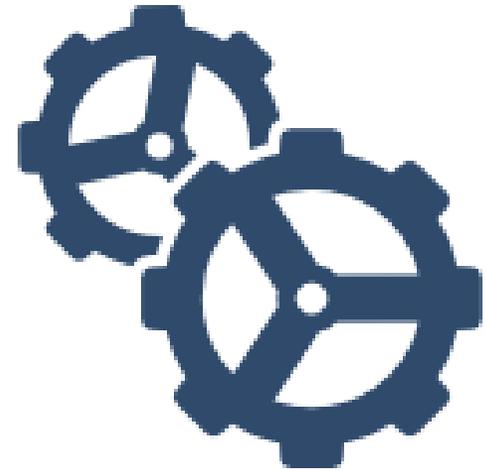
Did not address but we know there are challenges

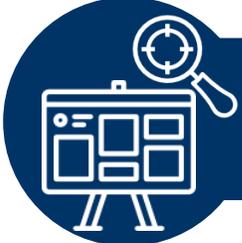
# Findings

**Scoping & Design**



**Working with a Service Provider**





# Scoping and design phase

**Technology is NOT the answer, it is a tool**

ICT takes time, budget and patience to do properly

**Budget adequate time up front for design**

Design always takes longer than expected; ensure both you and your service provider have time + budget for realistic design phase

**Be realistic about your expectations**

Not possible to achieve scale and sustainability in six months

**Design for and with the end user**

Don't design technology in Phnom Penh and expect it to 'work' in the village setting or field office; involve your end user in design

**Set a realistic timeline and budget**

Make sure your timeline and budget have enough time upfront for a long design process (including budget for the service provider)

**Internal process needs to be set before engaging with service provider**

Develop internal operating procedures for project, including who has the ability to give feedback, who takes final decisions and who is managing service provider relationship



# Working with a service provider

## **Do market research**

Your relationship with your service provider will be crucial to success: shop around, choose wisely and ensure staff managing relationship have adequate experience and seniority

## **Staff up accordingly**

Ensure your project manager has the ability to break down internal processes into clear concepts and maps, and ideally has some knowledge or experience in ICT

## **There is no “obvious”**

Don't assume your service provider understands anything about your work: Explain all processes and data flows, even “obvious” ones

## **Create good critics**

Before bringing a prototype for end user feedback, educate your users to be good critics with a pre-feedback training session on technology

## **Seek alignment**

Focus from the very beginning on alignment between the service provider and the program team

## **Communication is key**

Set clear processes for communication with your service provider and use transparent, collaborative project management tools as much as possible (Basecamp, Balsamiq, Dropbox, Google Docs, etc.)

# Tactical Tips & Tricks for great ICT projects

**CSOs**

**TSPs**

# CSOs

- Before choosing to develop a tool or app, see what already exists and is available to use on the market
- Wait until the technology is fully developed to develop training and promotional materials
- Consider language carefully: think about developing all forms/surveys/content in the local language first – don't start with English and then translate unless necessary
- Get visual: draw out on a whiteboard or big piece of paper where data exists within your organization and how it flows, and map out all process pathways
- At the end of the design phase, have the service provider present the full system specifications back to you so you ensure everyone is on the same page
- Record voice content in small chunks, so that you can re-record in small pieces rather than having to re-record the whole script
- Invest in getting to know your service provider early on in the process to build trust and confidence more quickly

# TSPs

- Try to use non-technical language with your NGO client and be ready to create a significant amount of documentation explaining the 'basics' of the service you're developing
- Ensure you work together on the requirements/specifications and have a clear SOW with deadlines signed off on by the client
- Ask client to provide one project manager from the client side, and channel all communication through that point of contact
- Schedule an initial training with the NGO client about the software development methodology you employ, technical language and general 'what to expect' guidelines
- Plan your internal resources so that you have budget and time for a longer design and development phase and enough budget and time for de-bugging/fixes/customizations
- Go and observe all field-based design and testing so you can understand end-user context and pain points
- Because most NGOs won't be able to pay you until they receive their grant payments themselves, structure your budget and internal cash flow planning accordingly



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# Thank you

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