

RESOURCES

HOME » RESOURCES

Data, Data, Everywhere: Leveraging Technology for better Data Management

Charles Guedenet Created 11/05/2014 Blog ADVANCED



Charles Guedenet, M&E Advisor at IREX, explores how, 'Technology is helping us collect more data, more quickly but how do we manage it effectively so that it can be used for better decision-making and learning?'

The list of online and offline database options out there is long and getting longer, each one offering different pricing models and features. The challenge now is matching your specific project or organizational needs with the right platform that has your must-have features and is within your budget. At the M&E and Tech conference held in DC last September, I hosted a learning table discussion on this very topic. The stories shared around that table and those I've heard from the dozen or so M&E and tech specialists I've spoken to on this topic have left me with the following key take-aways:

- The process of assessing information needs and getting organizational buy-in is as important as selecting the right technology platform;
- There is no clear industry leader offering an all-in-one solution to the data management challenges of medium to large non-profits;
- Selecting a platform, customizing it, and then implementing it is almost always harder than people expect it to be.

What do we mean by a data management platform?

A data management platform can mean different things to different people. So, to be clear, in this blog post I am referring to a web-based platform that enables an organization to (at the very least) store, manage, analyze and report data across time and geographic areas, both at the project level and at the organizational level. My primary interest is the integration of monitoring and evaluation data and program data but several platforms also allow you to integrate grants management and financial systems all into one single system.

Process is important: selecting a platform

At IREX, with 21 country offices and a diverse portfolio of over 60 projects, we tackled this challenge by first defining what a **participatory and inclusive process** for selecting, customizing, and implementing a data management system would look like. This process is absolutely critical for a number of reasons:

- It cultivates from the very beginning **organizational buy-in** to a platform that will ultimately serve multiple purposes and diverse stakeholders;
- It helps ensure that the platform you select and customize is **inclusive** of the minimum information management needs of all expected end users;
- It sets **realistic and shared expectations** around timeline, resource needs, and the actual value-add of the platform.

The process of selecting a platform may take as long as six months or as little as one depending on the level of urgency, the complexity of your information management needs, and the financial or staff resources you have available. IREX approached the process by creating a working group and hiring an external consultant to support an internal assessment of information needs and database system requirements. In Table 1 below, I've added a sampling of key criteria that can be used for assessing technology platforms against your organization's information needs and system.

Table 1: sample criteria for assessing technology options

Sample criteria	Description
Sustainability	Is there a significant user base (more likely to find support for future development)? Will the system continue to be relevant and kept up-to-date technologically for the next 10 years or beyond (is there proof of concept)? Can the platform functionality grow to meet emerging organizational needs (e.g. can it integrate with other systems)?
Ease of use	How intuitive is the platform to the typical end user? What training and documentation is available? Will responsive technical support be provided?
How is data entered/exported	Is it possible to enter and access data both online and offline? Can spreadsheets be imported into the system and data exported in different formats? Can the database platform be synchronized with other systems?
Data analysis and reporting	What are the dashboard and custom reporting capabilities?
Type of data	Can you store and manage not just quantitative data but also text, photos, and GIS coordinates?
Cost	How much upfront investment for customization? What are costs for annual maintenance or future upgrades? Consider pricing model (e.g. by user license or size of project)? What staff training and materials will need to be budgeted?
Security	Can user access to data and permission levels be defined? Is data sufficiently encrypted?

Process is important: customizing and implementing the platform

Process is as important in the selection of the data management platform as it is in the customization and implementation. Nearly everyone I've spoken to made a point of underlining how long and challenging it is to develop a database management system because one, it's an iterative process and, two, familiarizing programs staff to effectively use it takes time. Therefore, the advice I received was to **phase-in new data management platforms over time**.

- Consider initially piloting the platform in 1-3 programs or offices first before going to scale. A gap analysis conducted during the pilot will help you determine what modifications need to be made.
- As with any new initiative, it's important to document lessons learned throughout the process and to report on progress made against objectives your organization set during the planning phase.
- Consider turning the working group that was charged with selecting the platform into a steering committee to guide implementation. **The implementation of the database management platform should be participatory and inclusive from start to finish!**

Finding the right technology solution

Finding the technology solution that is appropriate for your organization's data management needs can be overwhelming given the growing number of options out there. Typical questions that arise include: should I develop a custom database or use a pre-built out-of-the-box solution and what are the pros and cons of using open source software versus closed source (aka proprietary or commercial) software? It doesn't help that software vendors typically promise the moon and more given enough time and the right amount of money.

To help meet this challenge, it's helpful to **learn from the successes and failures of other international development organizations**, many of whom have generously shared their stories with the general public.

- NPOKI and n-Village hosted a webinar series in 2013 for INGOs called "[Connecting the Information Dots](#)" that looks at specific web-based solutions implemented by their member organizations.
- An assessment of MIS technology options conducted for PSI in 2012 can be found [here](#).
- Although a bit dated, a [report](#)published by idealware in partnership with Nten provides a useful evaluation framework for weighing the trade-offs and advantages of data integration features across different applications.

Leave a Reply

Connect with:



Your email address will not be published. Required fields are marked *

Comment

Name *

Email *

Website

Post Comment



LEARN

- [Resources](#)
- [Blog](#)
- [Evaluation](#)
- [Online field guide](#)
- [Media gallery](#)

THE M&E THURSDAY TALKS

[Upcoming Webinars](#)

OPPORTUNITY

- [Events](#)
- [Jobs](#)
- [Fundings](#)

OUR NETWORK

- [About us](#)
- [Partners](#)
- [Users](#)
- [Contact us](#)

COMMUNITIES

- [Human Rights Hub](#)
- [Effective Inter-](#)
- [Religious](#)
- [Peacebuilding](#)
- [Mentorship Program](#)
- [The Iraqi Knowledge](#)
- [Sharing Platform](#)
- [Peace Exchange](#)
- [Breaking Barriers](#)
- [Education for](#)
- [Peacebuilding M&E](#)
- [Network for](#)
- [Peacebuilding](#)
- [Evaluation](#)

[ADD A RESOURCE](#)

[LOGIN](#)

[HELP](#)



© Copyright 2017, Search for Common Ground

