Digitalizing Monitoring and Evaluation - insights and learning from the pilot in Tanzania

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How can staff easily see if a project is meeting both short-term outcomes and long-term goals?

Data collection can be an onerous chore, often left until the last-minute right before a report is due. But performance data is a valuable resource that can help country programs better manage their projects throughout the year.

As part of the wider efforts in digital transformation at Helvetas, the Learning and Innovation team, which coordinates the Digital Monitoring and Evaluation (M&E) initiative, launched a pilot project in spring 2021 to digitize the collection, analysis, visualization and use of M&E data by project teams. Digitalization reduces the administrative burden and time needed to collect data. Digital tools also make summary data such as average wages of vocational trainees or total number of new businesses set up by region available immediately to both project staff and country directors.

On 23 November 2021, a virtual webinar was held, open to staff from the pilot countries Bolivia, Nepal, Benin, Ethiopia, and Tanzania as well as countries interested in joining the next phase of the initiative. Doreen Kimbe, M&E Officer for Tanzania, was interviewed live by Rebecca Laes-Kushner, Policy Consultant, about her experiences going digital, successes and challenges and tips for countries just starting the digitalization process. A recording of the webinar is available on Pamoja, as are the slides (in English, French and Spanish).



Student training in Tanzania

Youth Employment through Skills Enhancement (YES)

Tanzania's Youth Employment through Skills Enhancement (YES) Project seeks to improve the living conditions of economically and socially disadvantaged women and men in three districts in the Dodoma and Singida regions of Tanzania.

YES works with over 15 vocational training providers and 34 artisans who train more than 800 trainees a year in a wide range of fields, including masonry, carpentry, welding, solar power installation, tailoring, motor vehicle mechanics, hair dressing, computer & secretarial and mobile phone repair. Trainees also learn soft skills such as financial literacy, record keeping and entrepreneurship. After training, participants may look for jobs or start their own businesses.

Why Doreen started going digital

Doreen used Kobo in her prior job and brought that expertise with her to Helvetas. She created a survey to demonstrate the potential of the tool. She was assisted by Daniela Lilja, who worked in Switzerland and then Tanzania; Daniela helped Doreen convert some paper surveys to digital form and also made detailed how-to instructions on using Kobo Toolbox. She helped me so much and we learned from each other, Doreen commented.

Today's world is digital, Doreen told the webinar attendees.

Attending the Information and Communications Technology for Development (ICT4D) conference a few years ago also influenced Doreen, giving her ideas on how to transform local operations to digital.

Tanzania began its digitalization process with the YES project several years ago, but Doreen has also worked on training staff from other projects, such as the Grain Post-harvest Loss Prevention (GPLP) project. She also shares ideas on digitalization with external partners, such as Kisedet, an organization that helps street children in Tanzania.

Tanzania's pre-digitalization workflow

The YES project uses multiple forms throughout the project lifecycle (see Figure 1). Potential trainees fill out a preselection form; a baseline intake survey is then completed for each trainee. Trainers fill out several reports regarding the number of students attending and graduating. Helvetas staff verify the employment of trainees three months after their graduation in order to pay vendors for successful outcomes, part of Results Based Financing (RBF), and also run follow-up Tracer studies on participants a year later to see how the program changed their lives.

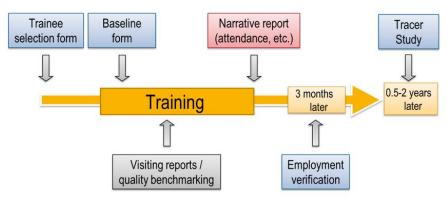


Figure 1: forms used in YES project

With paper forms, a staff member was needed just for data entry. Data accuracy could be an issue due to errors when data was input into Doreen's outcomes spreadsheet. Doreen, project managers and office leadership often had to wait to get information about projects because the data hadn't been entered yet. That meant the information wasn't useful as a real-time management tool.



Inputting student intake data into Kobo Toolbox via Smartphones

Digital tool #1: Kobo Toolbox for data collection

The digitalization process began with Kobo Toolbox. Kobo enables users to create surveys, or forms that collect data.

Many of the forms for the YES project have been put in Kobo and others are scheduled to be added. Doreen has found that having some forms in both paper and digital format is not ideal since information is coming from two sources, so current plans involve transitioning to solely digital forms. During the webinar, Doreen stressed the importance of having a single source of data.

- Pre-selection paper & in Kobo
- Baseline information in Kobo
- Monitoring visit form will be put in Kobo
- Quality benchmarking paper form, will be put in Kobo Employment verification in Kobo
- Tracer study survey in Kobo

Doreen raved about the benefits of using Kobo Toolbox. It saves time, increases efficiency as well as accuracy, improves data management and simplifies the workflow because the data is already in the system. It's also easy to share information with partners and the annual report for HO is also much faster to write reports since the data is readily available. The data is up-to-date, providing real-time information on projects.

Doreen has found her colleagues positive about the digitalization process.

They saw the cost of paper forms was high for both money and time. Sometimes the digital tool could be hard to understand, but they were positive about it.

Kobo Toolbox presented a bigger challenge for the project's partners, the training providers, some of whom found the technology difficult. Helvetas' response was to hire a staff member who trained them in using Kobo Toolbox. Helvetas provides partners with tablets so they can collect the data on their classes. Surveys are provided in KiSwahili as well as English.





Teachers and students working in class

Digital tool #2: visualization software

The next step for Tanzania is visualization software, which Doreen has begun learning over the course of the pilot. Visualization software will enable Doreen to create graphs that highlight key points.

I'm here to learn it, how it can be useful for us, Doreen said about visualization software.

Online visualization software, such as PowerBI and ThoughtSpot, allow users to upload spreadsheet data and then make custom graphs and summary tables. Data can be sorted and filtered in different ways and with different levels of detail. For example, Figure 2 shows the average earnings of trainees by type of training (bee keeping, mechanics, painting, etc.).



Figure 2: average earnings by type of training

Figure 3 dives deeper into the data, showing the earning levels for trainees who learned from an artisan (in orange) versus at a vocational training center (VTC) (in blue). Insights from the data can help Helvetas staff manage the program better.

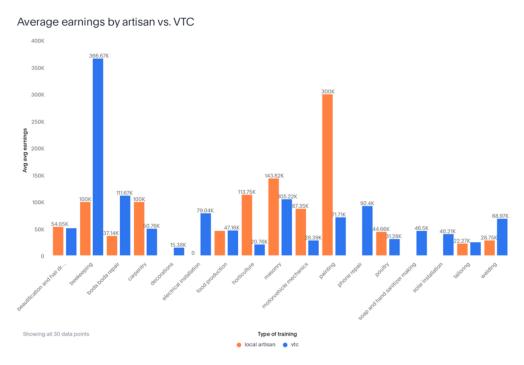


Figure 3: average earnings by field of training and trainer type (artisan vs. school)

Doreen smiled when she saw a dashboard with YES data for the first time. This was her goal: to make data accessible and useful to herself, project staff and managers.

At other NGOs, Doreen has seen how dashboards enable staff to understand main points and not have information overload. Dashboards provide multiple summary graphs on a single screen (see Figures 4a and 4b). The graphs update automatically as new survey data is uploaded into the visualization software.

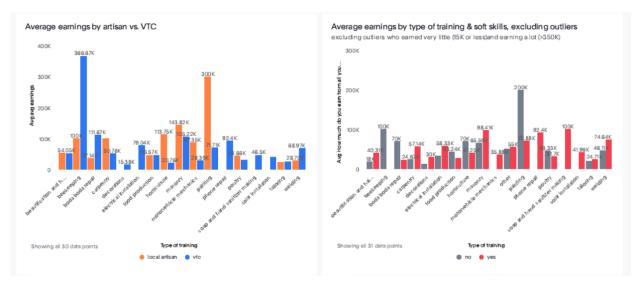


Figure 4a: Part of YES's pinboard in ThoughtSpot

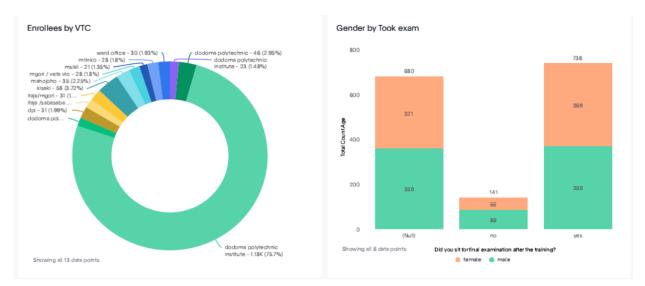


Figure 4b: Part of YES's pinboard in ThoughtSpot

Project lifecycle

Attendees also discussed the use of data collection during the project management lifecycle. For example, a mid-year review of the outcomes will help project managers identify ways they should change the project, including staffing changes, which will then help them build a more accurate budget for the next year.

Organization-wide digital push

The digitalization pilot is part of an effort by Helvetas to digitize M&E throughout the organization. Kai Schrader, one of the project managers for the pilot, commented: "Using digital tools for M&E is so critical to improving the quality & reliability of data, enhance the ability to analyze and use data collected and to pave the way to data-driven and results-based management. We are thrilled to be working with the pilot countries, in their various stages along the digitalization process, to help them maximize the use of data for results-based management."

In 2022, the pilot project will expand, rolling out in additional countries and expanding to additional projects in the existing pilot countries.

Stay tuned for more updates on this project.



Inputting student intake data into Kobo via Smartphone



YES students in "classroom"

Internal Initiative on Digital Monitoring and Evaluation (M&E)