What is ODK Scan?

ODK Scan is an Android application that uses computer vision to capture certain machine readable data types from paper forms and transforms them into electronic data. All of the data processing and digitization is completed on the device, thereby reducing the need for internet or cellular connections at the time of data capture. The use of computer vision algorithms to process the data reduces the amount of manual data entry necessary, but manual data entry is possible by exporting the data captured on ODK Scan to ODK Collect. Currently, the data types that ODK Scan can digitize are bubbles and check boxes, but other data types such as text and numbers can be identified and entered manually.

How do I use ODK Scan to collect data?

The first requirement for ODK Scan is to have a form (.jpg format) and a template (.json format) that show and define the location of each field. Next, the ODK Scan application has to be installed on an Android device (smartphone or tablet). For the most basic form types, the form, template, device, and application are the only requirements.

If you want to collect data types that are not automatically digitized, such as text and numbers, you must also install ODK Collect to be able to manually enter these data.

If you want to have a central location for storing the data contained on each form, you must create an instance of ODK Aggregate. Instructions for how to configure Aggregate can be found here.

{REQUIREMENTS}

- Android device
- ODK Scan application
- .jpg form
- .json template

{OPTIONAL}

- ODK Collect application
- ODK Aggregate instance

How do I install ODK Scan and ODK Collect?

Both of these applications are available for download in the Google Play store. You can find further instructions on these pages if needed:

http://opendatakit.org/scan

http://opendatakit.org/use/collect/

How do I create a form and template for use with ODK Scan?

The tool here allows you to transform XLSX spreadsheets created in Excel or similar applications into scan-able paper forms: http://uw-ictd.github.io/XLSXGenerator/

Can I scan forms that weren't created with the XLSX Form Generator?

Yes, but it is not recommended. The template making process is difficult and the performance is often sub-optimal. There is a template making application available here for creating the json file: http://uw-ictd.github.io/TemplateMaker/

What do I do with the form and template after I've created them?

The form and template must be placed in a specific location on the device to work properly. *Important:* the form and template must be called form.jpg and template.json, respectively. To load a new form and template:

- 1. Connect the device to a computer and turn on USB storage.
- 2. Navigate to ODKScan > form_templates for the proper location for the template files.
- 3. Create a new folder with a meaningful name for the project.
- 4. Each form template (template.json) and image (form.jpg) must be transferred to this folder.
- 5. Eject the device from the computer and open ODK Scan > Settings > Templates to ensure that the transfer worked. The name of the folder will be the template selected (i.e. if the folder is named Maternal Health and the form and template are placed inside, the template you select is also called Maternal Health.)

Once the template and form are on my Android device, how do I use them?

There are instructions on the technical setup and use of ODK Scan at (http://opendatakit.org/scan). The technical guidelines can be used for general training, but a user training should be designed each time a new form is introduced and used with ODK Scan.