MODULE 1- PREPARE:

STEP 2- CHOOSING THE SMARTPHONES OR TABLETS

I.   Introduction

This document doesn't aim at giving specific suggestions in terms of hardware (smartphones or tablets). The brands and models change too quickly and not every brand/models are available locally for all operations. It will, however, guide the user on asking the right questions and making the right decisions on which hardware to choose to be more effective.

II.   General comments before purchasing

1.1. Scope of purchase

An important question to ask is "What will we be using these phones for?". This does not only refer to the current exercise (the WASH KAP Survey), but other possible uses your organisation will have for them. You may have other Monitoring & Evaluations needs that could be covered by using mobile phones in the near future and that have different requirements than the WASH KAP (use of GPS, camera, different screen size need, etc). You should try to cover these if feasible, to avoid buying another entirely new set of phones in the coming months because the current ones did not fit these needs.

However, be realistic in that perspective: it is easy to get carried away by ideas that are unlikely to materialize.

1.2. Test the model when possible

These days, more and more people own smartphones. If anyone in the organisation owns an Android smartphone, then it may be possible to try out the needed functionalities of this phone before buying a whole set of phones, to check if that model fits the requirements and is an adequate candidate for the model to purchase.

1.3. Buy a set of the same

Try if you possibly can to buy a set of the same model of phones- this will help you during your deployment, facilitating standard operational procedures, trainings and also troubleshooting.

III.   Features

1.1. Essential features

Many features are used to market and sell phones, however not all of them will be important for mobile surveys. Knowing which ones actually matter will help to keep costs related to the purchase of phones for mobile data collection more reasonable.

1.1.A. Android phone

Must be an Android phone (not an I-phone/I-pad/Blackberry…), otherwise the Open Data Kit mobile application will not work on it. There are many brands to choose from as Android phones are the most sold in the world.

1.1.B. Android version

Although it isn't necessary to have a very recent version of Android to run the application, it can become more complicated with older versions. However, any newly purchased phone will have a recent enough Android version (4 or above).

1.1.C. GPS

Most phones come pre-equipped with a GPS. This is only important if you do intent to use GPS coordinates in your data collection, but even if a specific deployment will not require them, others may (see "Scope of Purchase").

1.1.D. Screen size

For mobile data collection, a larger screen can be a nice feature to have, but it is not essential. A small screen size (320 by 480 pixels for example) will suffice, but will only show one question per screen in a user-friendly manner. Many users will find that typing text is difficult, because a smaller screen size means a smaller virtual keyboard. This needs not be a major hindrance if your data is well-suited for list choices and doesn't require typing much text (the WASH KAP Survey is almost only multiple choice questions) but it may be a problem for other type of surveys.

Tablets can be an option, as ODK Collect also works on Android tablets. However, they are more expensive, bigger to carry and more prone to accidents (cracks in the screen, dropping, etc).

As a reference, a screen size of around 480x800 pixels can be a good compromise.

1.1.E. Battery life

This is difficult to evaluate, because it depends on many factors (type of use, screen size, battery capacity, etc). It is sometimes possible to find more information on this online when searching for a specific phone. The longer the battery life, the better it will be. See also "Battery packs" below.

1.1.F. General robustness

Make sure that you choose a model that is not too fragile, as usually field surveys can be pretty demanding on the phones!

1.2. Less essential features

Some are used to sell smartphones, but are of little relevance for most MDC uses.

1.2.A. CPU power

The application used is actually quite efficient and doesn't require powerful smartphones: some 5 years + phones are still used in the field today.

1.2.B. Memory

There is no need to pay extra for a phone that has a large built-in memory. Unless there is a special need for a large amount of pictures, ODK Collect does not require much space. If more storage space is needed, SD cards can be used instead.

1.2.C. Camera/video capacities

As most phones come pre-equipped with a camera and have video capacities, there is no need to pay extra for special features on this matter, except if image quality is particularly important.

1.1. Suggested accessories

1.1.A. Battery packs

Battery packs can be very useful in contexts where there is little energy source, to ensure that enumerators will not be blocked in their daily work because they have battery problems.

This will of course not suffice in contexts where there is no energy source at all.

1.1.B. Protection case and neck strap

These accessories help to protect the phone from falling and being damaged. The neck strap is also a practical way for the enumerator to carry the phone.