M&E of Digital Apps

About Digital Apps

Digital Apps in EORE delivery refers to the creation of educational software that can be downloaded onto a smartphone, tablet, or laptop. The apps may be stand-alone risk education tools or may have EORE messaging embedded into broader educational content.

Monitoring Metrics/Analytics

If permission is given from the user, apps can include tools that gather the location, age, and sex of the user, the time spent using the app, and their progression through the information available. Apps can also easily include quizzes and questions that help to measure people's knowledge, attitudes, and behaviours.

Counting Beneficiaries

A person would count as a "beneficiary" if they have progressed 50% through the available material on a digital EORE app.

It is also recommended that operators track the number of downloads, and the number of people completing 50%, 75%, and 100% of the material, to determine whether users tend to "drop" at certain points, and if those portions of the course can be improved.

Output Metrics to Track

Those using digital apps should plan to track:

- # of people downloading the app (WGBM, and disability status, if possible)
- # of people progressing through messaging at the 50%, 75%, and 100% points.
- Average total amount of time spent on the app.
- Average total amount of time to engage with all relevant messaging on the app.
- Locations of app downloads, to ensure messaging is relevant to where it is being used.
- If applicable, number of reports of EO submitted through the app.
- Average knowledge levels at the start of engagement with the app, at the 50% point, and at completion.

Measuring Successful Engagement

- Levels of engagement with digital apps vary widely, and so a comparison with general averages may not be particularly useful. Instead, it is recommended that operators track engagement levels over time within their app, and aim to improve those levels over time based on analytics and feedback received.

Measuring Knowledge Change

As with online courses, digital apps can include quizzes and tests at various points throughout the learning path to test changes in knowledge.

Designers should be sure to include questions about knowledge related to EO before the messaging is delivered, in order to measure changes in those knowledge levels later on. Those tests at the start of the app may also help determine what messaging can be given less attention and what should be given greater attention in future iterations of the app.

The ”post” tests can also be used to design bespoke review sessions. For example, if a user recalls the official marking signs for their area, but not the unofficial signs, the app may direct them toward a review session of those unofficial marking signs for their region.

Measuring Behaviour Change

Apps provide unique opportunities for measuring behaviours and changes in behaviour.

If permission is given to use location services, the app can be used to determine the amount of time a user spends in and near known hazardous areas.

In addition, apps can be used to ask for

Examples

- Iraq: IHSCO developed an app for Android and iOS
- Myanmar: DCA and Learning Lab. Android.
- Vietnam: Catholic Relief Services and Mage Studio. Android.
- Global (targeting travellers to mine-affected areas). Android.

Limitations

There are a few limitations to be aware of when conducting the M&E of digital apps.

First, to access a digital app a person must have access to a smartphone or tablet. This means that any findings related to knowledge or behaviours would not necessarily be generalisable beyond the subset of the population that can afford these devices.

Second, depending on the context, there may be many people using the app on one device. Therefore, if relying on built-in analytics based on the owner of the phone, it is possible the demographic information may be incorrect. To mitigate that problem, separate logins may be created with demographic information collected on each. This approach would still rely on everyone using the app under their distinct login credentials, and on individuals being honest when setting up profile information.

Third, as with all self-reported behaviours, tracking behaviours based on in-the-moment notifications and questions relies on the honesty of the respondent. Respondents are not likely to be forthright in questions related to activities like scrap metal collection or tampering in a digital environment where their anonymity or confidentiality are uncertain.

Summary and Conclusions

Digital apps offer a means of delivering extensive, targeted information in an interactive manner to a wide audience.

The in-built analytics offer a means of tracking the number of people who have downloaded the tool, the degree of their engagement with the information, and changes in knowledge levels as they progress through the messaging.

Apps also offer unique means of measuring behaviours, allowing (if permission is granted) operators to determine time spent near and around hazardous areas. They also offer a means of asking questions at regular intervals or at random times throughout and after the “course”.

Apps’ major limitations in M&E are around the distance between the user and those delivering the content. There is little incentive to be honest in answering questions on digital apps, either around knowledge levels or behaviours. In addition, multiple people may use the app, so findings disaggregated by sex, age, disability, or other individual characteristics may not be accurate.

That said, the benefits of delivering messaging through digital apps far outweigh any limitations or challenges faced in their monitoring and evaluation.

Programmes or operators looking to learn more about using apps should contact the organisations listed in the examples above, or consider engaging those developing social and behaviour-change based tools in other sectors.