Agriculture Health and Safety Mobile App Evaluation Rubric

| | CATEGORY 1 (Poor) | | 2 (Fair) | 3 (Good) | 4 (Excellent) |
|-----------------|---|---|--|--|--|
| RELEVANCE | Content | Content is not reliable, accurate and error-free | Some of the content is reliable, accurate and error-free | Content is generally accurate, reliable and error-free | Content is accurate, reliable and error-free |
| | Advances Agricultural Health and Safety | The app has no value in providing information to advance agricultural health and safety | The app has limited value in providing information to advance agricultural health and safety | The app has good value limited value in providing information to advance agricultural health and safety | The app has great value and is ideal in providing information to advance agricultural health and safety |
| FUNCTION | <u>Technical</u> <u>Performance</u> | Multiple technical issues, works on limited OS versions and does not function as described | Occasional technical issues, works on a few OS versions, functions somewhat as described | Rare technical issues, works on several OS versions, generally functions as described | No technical issues, works on many OS versions and functions well as described |
| | <u>Usability</u> | Difficult to operate, demonstration and instruction are consistently required | Demonstration is required to operate, instruction is sometimes required and may be available | User can launch app, instruction is initially required and available but is not needed thereafter | User can launch and operate the app independently, no demonstration or instruction is needed |
| | Information Delivery | Cannot save, share or export data | May not save, share or export data | May not save but can share and export data | Can save, share and export data |
| VALUE & PRIVACY | <u>Value</u> | Costs to download, access and upgrade, and ads may be present | Free to download and access, in-app purchases required and ads are present | Free to download and access, no in-app purchases required, ads are present | Free to download and access, no in-app purchases are required and no ads |
| | Advertisement | Aggressive ads that modify settings without consent, has third-party tracking, no limit/block option | Ads modify settings without consent, third-party tracking, option to limit/block for a fee | Limited ads modify settings with consent, third party tracking, free option to limit/block | Limited or no ads or third party tracking, free option to limit/block |
| | Privacy Disclosure | No consent or disclosure, accessed data beyond what app needs to function, no privacy policy | No consent or disclosure, accessed data is beyond what app needs to function, privacy policy complex and hard to find | No consent but has disclosure, only accesses data that app needs to function, privacy policy is accessible | Consent and disclosure, only accesses data that app needs to function, privacy policy is easy to read and accessible |
| | <u>Confidentiality</u> | Permanent and impermanent identifiers are collected for advertising purposes, identifiers are not encrypted | Impermanent identifiers are collected for advertising purposes, identifiers are not encrypted | Impermanent identifiers are collected for advertising purposes, identifiers are encrypted | Identifiers are not collected for advertising purposes |

Category Definitions

| Criteria | Category | Description | | |
|-----------------|---|---|--|--|
| RELEVANCE | Content | Content is accurate, relevant, consistent, clear, grouped, regularly updated, reliable, engaging, language is non-offensive and complies with regulatory requirements. <u>Back to rubric</u> | | |
| | Advances agricultural health and safety | App can be used for reference, information access, prevention, education, awareness, calculations, gaming or entertainment and serves the overall purpose of reducing agricultural workplace incidents, injuries and illnesses in or advancing agricultural health and safety. Back to rubric | | |
| FUNCTION | Technical performance | App has no technical issues, functions well, works across platforms, processes quickly, is accurate, 508 compliant, functional, customizable for specific apps., measurement tool is calibrateable, support is housed within the app and technical team available for issues. Back to rubric | | |
| | Usability | Visual elements are appealing, cognitive burden for determining functionality is low, instructions for use are clear, app is intuitive, navigation is consistent, app has a real feel connecting the data to the user, app is tested, efficient, effective, complete, readable and easy to learn, app is developed for the end user. Back to rubric | | |
| | Information delivery | Effective presentation of data back to the user/second party/development team, has options for reporting, users can share information across platforms or with other parties and information can be exported to print or copy. Back to rubric | | |
| VALUE & PRIVACY | Value | Relates to the cost of the app to download, upgrade and control ad behavior. Back to rubric | | |
| | Advertisement | Ads, if provided, are delivered to the user with context and control. User has options to control ads through Do Not Track (DNT) mechanisms that prevent or limit access of ad tracking networks. Ad delivery techniques are discussed which may include standard "push" notification, add new icons to the mobile desktop and modifying user browser settings. Back to rubric | | |
| | Privacy disclosure | Transparency of the app developer in accessing user data such as geolocation, contact lists, calendar information, photos, mobile usage history, audio and video recordings, unique user identifiers, etc. A privacy policy may include the type and amount of data being collected or shared, how the data will be used and to whom it will be shared. Back to rubric | | |
| | Confidentiality | Relates to unique user identifiers and its encryption. In general, these identifiers should not be used for advertising purposes. Permanent identifiers are ones that the user cannot change such as device-specific International Mobile Equipment Identity (IMEI), Unique Device Identifier (UDID) in iOS devices and device-specific Media Access Control (MAC) Address. Impermanent identifiers may be reset by the user and includes Android_ID in Android devices, and subscriber-specific International Mobile Subscriber Identity (IMSI) and MSISDN. Back to rubric | | |

Score calculation:

There are three criteria which are broken down into a total of 9 categories. Each category is scored from 1 (poor) to 4 (excellent). Category scores within each criteria are averaged to obtain a criteria score. Criteria scores are averaged to obtain an overall weighted average score. The overall weighted average score is multiplied by a conversion factor of 1.25 to obtain a five-point scale rating rounded up to the nearest integer.

Relevance score = (Content + Advances agricultural health & safety) ÷ 2

Function score = (Technical performance + Usability + Information delivery) ÷ 3

Value & Privacy score = (Value + Advertisement + Privacy Disclosure + Confidentiality) ÷ 4

Overall weighted average score = (Relevance + Function + Value & Privacy) ÷ 3

Five-point scale rating = Overall weighted average × 1.25

This means that the Relevance score has most influence towards the overall score. This is followed by the Function score with the Value & Privacy score having the least influence towards the overall score.