## Farmer's engagement with smartphone technology and mobile apps

Stephen Hyde

## **Abstract**

The aim of this study was to investigate the attitudes and opinions of farmers towards smartphone technology and examine farmers engagement with farming related agricultural apps. This study was carried out in summer of 2020 in conjunction with University College Dublin and Teagasc, state agency for research, advisory and education in agriculture, food and rural development in Ireland.

Participants were selected for this study on the basis of being either a beef or dairy farmer and a user of smartphone technology and regularly engaging with agricultural related apps. A total of ten farmers were chosen to participate in semi-structured interviews in order to examine and understand what factors are influencing farmers engagement with smartphone technology and agricultural related apps.

It became apparent that Irish farmers have positive attitudes and opinions towards smartphone technology and are open towards the adoption of apps and frequent use for farming purposes. Both beef and dairy farming enterprises were using similar apps for farming purposes and had similar motivations for adoption. It was found that participants within dairy farming and with larger herd sizes were engaging with an increased number of apps for work. It was also evident that there was a difference in the type of apps being used between the two categories. However, there are a number of factors identified affecting the adoption and use of this technology. Confidence, ease of use and connectivity are some of the barriers identified preventing adoption and continued use.

This study concluded that there is a large quantity of apps being used on beef and dairy farms but the adoption and use of these apps varies for different reasons. There is a change required in the way these apps are developed if they are to be successful. Developers must address the factors affecting adoption and use in order to increase popularity and success. These factors can be addressed and corrected if a user centred design approach is taken throughout the development of the app which takes the end user into consideration. Overall, the current attitudes and opinions towards smartphone technology and mobile apps is positive.