

Does playing games make farmers more innovative?

To help farmers embrace innovation in agriculture, they need information. Digital games might be a way to share such information and keep it top of mind.

Background: How do farmers learn about innovation in agriculture?

Farmers used to learn about new scientific research and knowledge relevant to their practices through direct interaction with someone introducing them to new methods. Now farmers can directly and swiftly receive information about agricultural innovation on their phones. But digital information is also likely to be misunderstood, ignored or buried under a sea of other notifications. Gamification has helped to keep information front of mind for other areas, such as health. Games are like skits: they bring information to life. For example, a digital game could support decisions on what and when to plant for a more successful harvest. Will gamification work in agriculture?

Conducting the research

We examined different gamification approaches for three different outcomes:

- *Knowledge sharing*
- *Research*
- *Product marketing*

Following a literature review, we conducted 22 key informant interviews with agribusinesses, insurance sector professionals, marketing professionals, knowledge sharing experts and game developers. These allowed us to analyze which barriers need to be overcome to support potential for gamification for agricultural innovation.

project facts

Key words

Agricultural extension, Gamification, Innovation, Sub Saharan Africa, Farmer behavior, Game-Based Learning, Learning Through Play

Behavioral themes

Gamification
Processing information

Research design

Qualitative research

Scope

Start date: 31st January 2023
End date: 7th July 2023

Location

East Africa

Partner

Alliance Biodiversity - CIAT

Ethics approval

NA

- » Information on gamification in agriculture—what has worked, what approaches exist—is very scarce.
- » While there is huge interest in gamification, challenges such as games being too complicated or farmers having limited access and familiarity with sophisticated technology get in the way of scaling the strategy.
- » Game developers must consider how farmers access and interact with technology to ensure technology they build is accessible

Implications

For game developers and implementers who are pursuing more efficient knowledge sharing:

- Potential for gamification for knowledge sharing and data collection is huge, but how it is done will determine its chances for uptake and success.
- Uptake amongst farmers will be higher if implementers put champions into place that showcase how a gamification approach has helped them.

For farmers: Farmers tend to be reluctant to embrace innovation, but observing peers who are champions of using new technology can support uptake and exposure to better information, cutting short the time needed to visualize what success looks like for them.

Recommendations for future research

- » How can gamification enhance training and be used for knowledge sharing and improving data collection?
- » Learning from past gamification projects means that attention needs to be paid to understanding experiences from previous gamification attempts, particularly in the private sector.
- » How can gamification be implemented and scaled across different socio-cultural geographies?
- » What is the business case for gamification for those seeking to provide it?

Further reading

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To cite:

Busara. 2024. *Does playing games make farmers more innovative?* (The aha! moment No. 2). Nairobi: Busara. DOI: doi.org/10.62372/SUVT1829

The aha! moment summarises key facts and insights from Busara's research projects.

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