

Online Farm Trials: Impact Research 2020-2021 (Third wave)

Dr Alison Ollerenshaw, Assoc Prof Helen Thompson, Dr Nathan Robinson, Ms Jude Channon, Mr Paul Feely, and Ms Jennifer Corbett
Centre for eResearch and Digital Innovation

Executive Summary

Overview

Online Farm Trials (OFT) is a web portal, systematising on-farm and field-based cropping research trial data for Australia's grains industry. Operational since 2014, the portal contains 4,900 grains trial projects. Longitudinal research has been conducted to examine OFT impact on decision making and to examine how it supports practice change.

Impact research was first implemented in 2015 by researchers at Federation University Australia's Centre for eResearch and Digital Innovation. The research assessed the impact of OFT on decision making and supporting practice change, providing broader insights and focus on the impact of technology in the grains industry. A series of reports – two impact research reports and a social report – provide evidence and insights about the impact of OFT on users of trial research developments and trials contributors from the grains industry.

This 'third wave' extends the breadth and longitudinal nature of the research by examining the barriers and enablers to technology uptake, and the impact of OFT on decision making and practice change. The research methods and instruments used in this study are consistent with the previous research waves.

A range of factors were explored through this research including: frequency of OFT use, quality of content, usability and navigability, usefulness of content, level of support required to build end users' knowledge, participant experiences of the OFT innovation, trust in the data and as an information resource, community connection, capacity for user input, and the potential for further development within the sector.

Research Methods and Results

Qualitative and quantitative data was collected for this research. This included data about OFT usage and media metrics, online surveys and in-depth interviews. Thirty-three surveys and two in-depth interviews were completed. Key findings indicate that:

- OFT usage has been relatively stable across many of the indices and is comparable with the preceding data collection period.
- OFT content was considered by the study participants to be high quality and was meeting their needs and expectations. Participants reported regular and continuing use of the portal.
- Access to information and data had enhanced participants' skills and knowledge and was being applied in their work activities to inform decisions and facilitate work planning.
- The portal enabled connections within the grain industry with information available on OFT being shared, within and across workplaces and networks. OFT is also used to source information which enables connection between users and other researchers. For some

participants OFT was associated with a reduction in costs and an increase in productivity contributing to more efficient work practices.

- The usability and functionality of OFT was highly regarded by research participants. The user-friendly interface and the capacity to search and access extensive data sets were valued by many study participants.
- There were examples where participants were unclear about the trust relating to some of the OFT data. However, this did not detract from their overall positive perceptions and use of OFT.

Many of the findings in this third wave are consistent with previous research findings. The evidence confirms that OFT is making a difference to users by supporting decision making and practice change at the individual and industry levels.

Recommendations

Research findings provide insights to guide future OFT developments, enhance user experience, increase awareness across the sector, and to consolidate the research outputs. Recommendations have been grouped into broad themes that include:

1. Increasing awareness of OFT and expanding OFT promotion.
2. Continuing to review and enhance the OFT search functionality.
3. Developing guidelines to improve the quality of trials data.
4. Exploring the potential for partnership with other research and development corporations.
5. Reviewing and conducting future impact research for OFT.
6. Preparing outputs from the OFT impact research.