



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

DEVELOPMENT OF A TOOLBOX - AN ONLINE LIBRARY FOR SMART TOOLS AND OTHER RESOURCES AVAILABLE TO THE AG SECTOR

Sub theme: Knowledge & information (KPIs, benchmarking, big data, decision-making tools)

Eva Schröer-Merker

Massey University, Institute of Agriculture and Environment, New Zealand

Abstract:

The pace of technological development is vast, and exponentially increasing. Research suggests that this will also have an ever increasing impact on farming, with the deployment of drones and sensors as just the beginning.

The Agri One Centre of Excellence in Farm Business Management in New Zealand is a Joint Venture by Lincoln and Massey Universities and is funded by DairyNZ and RMPP via the Primary Growth Partnership (<http://www.agrione.ac.nz>).

Our research into decision making and information management has shown that formalisation and the use of software solutions / apps is largely driven by compliance requirements. Other drivers for adoption are the perceived value add and low entry barrier in terms of cost. While documentation is an important means of fulfilling compliance requirements, it can also be a first step towards improvement.

Many standalone solutions are already available, many of them for free or at a low cost - especially apps. However, with many choices available to the farmer, they face the risk of delaying or not making a decision at all.

More challenges lie ahead in the communication to and with farmers, covering a wide range of topics. The following collection represents the results of a Connectivity Workshop, held by the Centre of Excellence in Farm Business Management:

- *Convenience / interface / formats*
- *Common language / understanding*
- *Value proposition / desire to change*
- *Internet / connectivity*

If these challenges are not addressed appropriately, there is risk of lack of adoption of existing solutions.

One focus for the Centre of Excellence in Farm Business Management is improving connectivity between the agricultural community and research. For this, a website was created including webinars and a large community of researchers, farmers, rural consultants and other stakeholders around the world with interests in farm management.

A special feature of the website is the Toolbox, which acts as an online library for smart tools and other resources available to the agricultural sector (<http://www.agrione.ac.nz/apps-and-software/categories>). It has a wide range of categories as well as search filters and provides the opportunity to rank or comment on listed tools. This was developed following extensive desk research on the use and categorization of tools. Following, it was enhanced and is under constant development guided, in part, by stakeholder workshops. In combination to this, there is a wide range of blogs, specifically aimed at recent technological developments in agriculture.

This is all aimed at supporting people in the primary sector to make better informed decisions.

In the future, farmers will have to be able to be connected to stay on top. Smart systems will increasingly 'talk' to each other in order for collected data to be useful to the end-user and to have

the biggest impact on their business (the Internet of Things). But all this available technology also creates confusion and requires knowledge and industry capability development to ensure the potential is are fully realised.

Keywords: *Smart technology, Technology, Adoption, Connectivity*