HANDS ON SMARTPHONE APPS
Using your phone as a farm tool
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You own a smartphone so you have a multipurpose tool always to hand to enhance your every day working life on the farm.

Introduction

There are two ways you can use your smartphone on the farm – one is to enhance the way you as an individual use it, and the other is to encourage the use of smartphones amongst your staff and colleagues as a collaboration tool. In both cases there are some crucial basic principles that you should be familiar with.

1. You can use your phone without a connection: there are lots of productive uses for your phone that do not require you to have reliable reception.
2. If you do use a connection (internet or broadband) – think of the cost, especially if you asking your staff to use their phones out on farm and they are paying for accessing online information. This is the data component of your plan or allowance. And think of the reliability of the connection – make sure that you can access what you need to when you need to. Consider whether providing a farm wifi system for your staff, or farm owned smart phones with preinstalled apps (along with Fair Use Agreements etc) might be a good idea.

Master the Basics

All smartphones have a number of built-in capabilities, irrespective of operating platform (IOs, Android or Windows), brand (Apple, Samsung, HTC, Nokia etc) and model. This includes (of course) the ability to make phone calls and send texts. But even these basic capabilities can be enhanced by understanding the options.

And every app (program) installed on your phone has different operating options - so it is well worth spending a little time and get familiar with how to find those options, and tweak them to suit your.

Get familiar with concept of sharing – that is sending your info or allowing someone else to see it. It adds power to what you do!

Like a computer, you will end up having your own personal information on the phone - your contacts list, and your photos, along with saved passwords and so on. Security could be an issue (can anyone pick up the phone and see it?) and have you got a copy somewhere else? so that if your phone falls in the trough or the vat, it’s not the end of the world.

In order to access more apps you generally have to sign up with the store associated with your phones: Either the Itunes App Store, the Google Play Store (Android) or the Windows Store, or the store associated with your brand of phone (Samsung, Nokia etc). You could be asked to put in credit card details but there is
always an option to say None, or to put it in later. Apps are available as free, trial (versions) or paid, with and without advertisements. Be aware they may or may not suit your purpose so you also need to know how to uninstall them! It’s well worthwhile looking at the rating given by other users and the number of downloads to find out what others have thought of their experience with any particular app.

You can download apps from sources other than the official stores – there is a setting on your phone you may need to uncheck to allow this to happen. Be aware that no content or usage criteria have been met before these apps are made available, so be comfortable that the source is a safe one.

Which brings us to the issue of viruses on phones – yes it is possible, so investigate the security apps available on your app store for your particular device.

When you are looking for an app, consider whether you need it to work when you don’t have a connection and then check to see whether it has off line capabilities. Some check that you are connected before you can open it, so offline use could be a huge issue.

There are a huge number of accessories available for smart phones, some of which may really make a difference to your day.

- Protective cases-good brands are LifeProof and Otterbox and give protection from dust and moisture.
- Arm bands or belt clips – stops them falling out of your pocket!
- Solar chargers to help boost the charge when you are away from the office
- Portable charger
- Bluetooth head sets for communicating handsfree

**What else can you use for phone for?**

**Camera**

As with any other standard app, your camera has settings. If your model doesn’t have some of these options there will be an app available on your app store that will offer the same functionality.

- Panorama shots – several photos joined together to give a wider view than is possible with one photo
- Bursts - multiple shots in rapid succession. Good for showing a process
- Tags – inserts descriptive tags about the content of the photo
- Storage – choose where the photos are stored – on the phone itself, or on a memory card.

Your phone camera has the ability to insert the GPS coordinates inside any photo you take, enabling you to show it on an electronic map. This also works with video.

**Voice**

Don’t be afraid to talk to your phone or to yourself – all the best people are doing it! The voice memo is an easy way to write notes and reminders to yourself without having to stop and use the keyboard. In addition you can send those recordings to other people if you need to – even get them typed up by someone
else! Also some of the newer phones can be controlled by voice – they have a driving mode. This is a much safer way to make calls than riding the bike or driving the tractor and dialling. Couple it with a bluetooth headset and you are living the health and safety dream.
If you have a lot of reading to do – get an app that reads the text out loud to you. This works with pdfs and ebooks and is ideal for listening and learning while getting the cows in.

**Calculator**
Speaks for itself

**General ‘office’ functions**
Many phones come with an app that will open documents (Word and pdf) and spreadsheets. Maximise the availability of these files to you and your staff by putting them onto your phone. You may need to redesign spreadsheets in particular to make them more user friendly on the smaller screen and with fat fingers.

**Printing from your phone**
It is now possible to print directly from your phone to your printer. It needs to be done through the internet – Google’s offering is called Cloud Print, but is not limited to android devices and there are similar products for other systems. (i offering is?)

**Calendars and Tasks**
Set yourself reminders using either of the above – it’s a good way not to forget and to set priorities. Better still, if you share or invite others to your tasks and appointments you can set up a farm wide system so there will be no excuses for missing meetings!

**Extra Functionality with Apps**
You can also enhance your phone use by getting apps that do the basics in a way that suits you better than the ones preinstalled on your phone.

- Alternative Keyboards – swipe keyboards, big keys, different colours – most of these options are only available for Android.
- Dashboards – brings together relevant elements of other apps and puts them on one screen. For example, today’s weather, events, tasks due, missed calls etc
- Email & SMS – many alternative apps for managing emails, texts, contacts, and calls
- Calendars & Tasks
- Colours and design – find one that suits you
- Note taking

**Ideas for Farm use**

**Texts**
- set up a contact group so that you can easily text the same message to a group of your colleagues all at the same time.

**Photos**
- snap dockets as goods arrive and receipts for purchases in town so that you always have a record, and put in a named folder
- take photos before you go to get a replacement – ensures that you or your supplier gets the right one. Annotate the photo by circling or putting an arrow on the important part of the photo before you share it or to remind yourself.
• Turn on the Geo tag option on the camera, AND the GPS option on the phone itself and embed the location information inside the photo. Great for recording hazards, location of buried water or power lines etc and displaying easily on either a phone app, or on a computer. Also brilliant for recording the precise location of effluent pods.
• Take a clear photo of your farm map and use it instead of the paper version. You can easily zoom in to check details, and annotate to record specific events or hazards.

**Video**

• Record a maintenance procedure, or taking something apart (so you have a reference to put it back together). There are many apps that allow you to edit video by adding text, slowing down and clipping etc

**Documents**

• Make your SOPs, manuals and farm policies into PDFs, documents or ebooks so that you and your staff have access to them whenever needed. You will probably need to redo them to optimise them for smaller screens.
• Your farm map as a PDF gives extra options for annotations not available if you use a photo of the map
• Spreadsheets to do quick calculations are great – redesign them for the small screen and use drop down boxes etc to limit hassles in entering numbers or data

**Investigate farm apps written by others**

• Search your app store for apps related to farming in NZ – keywords, dairy, NZ, farm, grazing, etc

**Collaboration**

The usefulness of your smart phone is increased exponentially by sharing – so you can see items from your phone on your PC at home, or so that your colleagues, managers and rural professionals can have access to information that you choose to share.

The best way to accomplish this is to make use of an online (cloud) based storage system such as Drop Box, Google Drive or Evernote. (iCloud has restrictions for non Apple devices). They all provide free space with the option to increase storage by paying a monthly fee. Google Drive gives the most free space at time of writing. You don’t have to be permanently connected (and using data) to make use of these sites.

You can:
• Have one copy of important documents that everyone can access as required
• Have a central fill-in document so everyone sees the latest version and there are no multiple version
• Share photos and videos of farm operations
• Create a farm calendar for events or rosters
• Share the task list – one list, one place, everyone access

DropBox, Google Drive and Evernote work in different ways with different functionalities – all equally valid so you need to investigate which one might suit your purpose best.

**Custom Solutions**
Have your key SOPS, trouble shooting instructions or farm policies made into apps and available for your staff only. No internet connection would be required after the first download and information always available to the user, wherever they are on farm. Use lots of photos, diagrams and colour at no extra cost and easy and cost effective to update.

**Resources**

*Agritec's Informational Apps*

(not available for iPhones or for Windows phones as yet.)
Two informational apps to show how how-to information can be packaged for phone use. One off download, and then available without a connection.

*Heat Detection in Dairy Cows:* Aimed at new or inexperienced staff to remind them what to look for in heat detection, how to correctly apply tail paint and heat mount detectors


*Maintaining Milk Quality in Dairy Herds:* What do the milk grades actually mean? General principles of plant cleaning and cooling.


**OneFarm**


Part of a collaboration between Massey and Lincoln Universities to coordinate the supply of education, training and professional development. Filter by Android or Apple
These are suggestions for apps that you might find useful. There are many available that fulfil the same functions, and we recommend that you investigate which ones will suit your purpose best. You may need to register/sign in to any of these sites before you can download.

**Android**

![Android logo]

**Windows**

![Windows logo]

**Apple**

Google Play Store
Windows App Store
Apple App Store

**Annotate Photos**

Skitch
Skitch
Skitch

**Photo Enhancing**

Snapseed
Photo Editor
[Photo Editor by Aviary](https://photoeditorbyaviary.com/)

**Video Editing**

Magisto
Movie Moments
Magisto

**Measurement Tools**

Smart Tools (P)
Swiss Army Knife
iMetalBox

**Conversion**
Convert Pad
All Units Converter
Converter Plus
**PDF/EBook Reader**
Mantano Reader (P)
Foxit Mobile PDF
ABookReader (P)
Mantano Reader (P)
**Big Keys Keyboard**
Big Buttons
*Can’t do*
Fleksy
**Tasks**
Tasks Free
Bookmark gmail.com/tasks in browser (for Google Tasks)
Any.DO
GoTasks or gTasks (for Google Tasks)
**Shared Repository for Notes, docs, photos etc**
Evernote
**Google Drive**
Drop Box
OneDrive/One Note
ICloud
Evernote
Google Drive
Drop Box
**OneDrive/One Note**
ICloud
Evernote
Google Drive
Drop Box
OneDrive/One Note
**ICloud**
**GPS Tracking**
GPS Essentials
Trail Buddy
voYaa – GPS Tracks & Trails

**Google Goggles**
Google Goggles
Bing Vision
Google Goggles

**SOS**
One Touch SOS
One Touch SOS
SOS My Location

**Using your phone - Basics**
http://www.beginandroid.com/