

The Effective Use of Social Media in Agricultural Extension

Henry Thomas and Avril Robinson
Shedmeeting Pty Ltd

Farmers can get ideas to change the way they farm just by seeing at a bit of gear sitting in another farmer's shed. These ideas can motivate farmers to refashion implements, alter practices, and sometimes, even small changes, can have big impacts. We can point to one example where a cane farmer was unable to adopt a controlled traffic farming system because he was having problems with plant cane establishment. The wide throat billet planter he was using was clumping, causing poor soil contact with the cane billets and uneven plant cane establishment.



The underside of a "super single" wide throat billet planter

This farmer saw a video clip we created showing how another farmer had used a simple 100mm diameter tube running down the centre of his wide throat planter to force billets to fall on either side, preventing clumps forming. This achieved

an even plant establishment with fewer billets. After watching this video, the farmer made a decision, there and then, to make a similar change to his planter. This enabled him to adopt controlled traffic row spacings on his farm, transforming his entire farming system.

This example provides a useful illustration of the key findings of research stemming from our collaboration. We used video clips that combined direct-to-camera testimonials with detailed coverage of farming practices to facilitate technology transfer amongst farmers in order to increase uptake of best management practices in the Australian sugar industry. From this work, we recommend that before extension practitioners jump onto this social-media bandwagon, they develop a robust understanding of the behavioural mechanisms that underpin farmer-to-farmer learning. However, while the benefits of farmers learning from other farmers from activities like field days and farm visits are widely recognised by extension practitioners, little has been previously written about the precise behavioural influences that are at work, let alone how they can be effectively harnessed in social media. Our concern is that without this understanding, efforts to facilitate farmer learning online may be misdirected and potentially ineffective.

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Henry Thomas



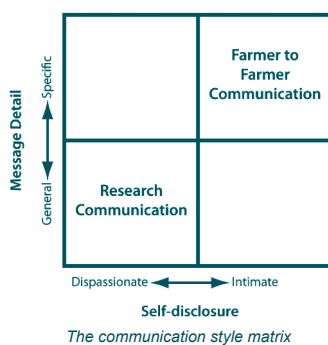
Avril Robinson

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The nature of farmer-to-farmer communication

We invited cane farmers to a video roadshow that was held in 12 cane growing regions from Mossman to Maryborough. During the video roadshow, farmers watched three presentations, each containing video clips that covered a range of related farming practices. After each presentation, farmers participated in open-ended discussions about the practices they had seen. Qualitative analysis of transcripts of these recorded discussions (n=118) revealed two important dimensions of farmer-to-farmer communication previously unreported. Firstly, in 94% of coded thought units (the unit of analysis), farmers favoured a language of operational detail over generalisable abstractions. That is, they would communicate about innovations in their operationalised form by describing the specific activities associated with given practices and the tools and procedures they employed. Even when they were referring to concepts, they did so by way of concrete examples. Secondly, by revealing this narrative of objects, processes and events, farmers engendered trust in one another by reflecting on their own firsthand experiences. Ultimately this made their communication very efficient. In 99% of the coded thought units, farmers implicitly accepted the claims being made by both the farmers in the video clips and each other, with almost no time wasted arguing over differences in opinion. Instead, farmers worked together to build a shared understanding of the specific contexts in which practices being discussed were known to have worked.



Perhaps most interesting is how when these two axes, self-disclosure and message detail, are expressed as a communication style matrix, they

reveal differences between farmer-to-farmer communication and other forms of extension communication like presenting research findings. This is because research results are expected to be generalisable and bias free, so their communication style is deliberately general and dispassionate.

This matrix provides a useful starting point for understanding how this socially regulated interdependency between operational detail and self-disclosure in farmer-to-farmer learning leads to behavioural influence.

How farmer-to-farmer learning triggers change

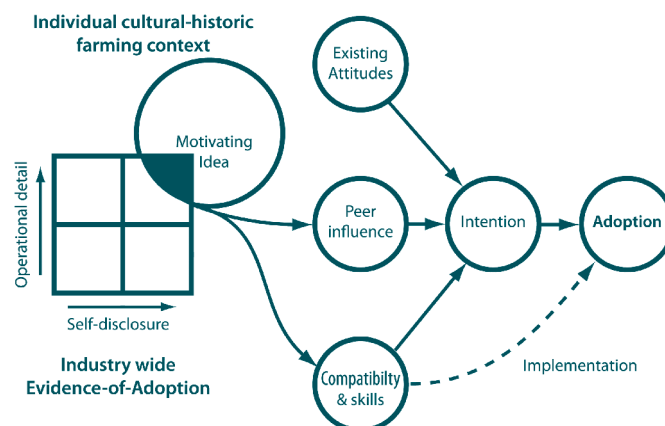
The discrete set of farming activities used by each farmer reflects their individual learning and life experiences. These cannot be separated from the collective life experiences, knowledge, history and cultural norms of their family, community and the broader rural society within which they live. This is what makes the constraints and circumstances of every farming enterprise somewhat unique, in that every farm and farmer brings a different mix of strengths and weaknesses, which ultimately provides for different risk and opportunity profiles when it comes to adopting any given practice change. Therefore, every farmer is likely to have different motivations and knowledge gaps, along with different attitudes and skills, all stemming from different life experiences.

Looking at this in another way, it is useful to think of farmers as systems integrators. It is well understood that system integrators have knowledge needs that far exceed the range of components they may actually be using at any given point in time. In the case of farmers, this is because they need

to customise processes and components, as they tailor farming systems to meet their specific needs. As a result, farmer's first preference is for information to be highly contextualised. That is, to learn from someone else who has already done something under similar circumstances to their own. Baring that, they need a broad knowledge of the potential components and processes from which they can choose. This comes about from farmers sharing evidence of the adoption of these components across an industry, all of which occurs in various formal and informal social settings.

It is at this intersection between evidence of other farmers' adoption across an industry and the cultural-historic context of individual farming enterprises, where motivating ideas are formed. The term 'idea' was chosen here because farmers will often reflect on how they 'got the idea' to make a change after seeing something that someone else was doing.

Motivating ideas lead to behavioural influence when farmers find sufficient evidence to make changes. At this point, we found that attitudes towards making these changes were already positive (and possibly unlikely to easily change). Instead, evidence-of-adoption allowed farmers to implement their ideas by providing positive feelings of encouragement (peer influence), perceptions of skill and evidence of compatibility. Peer influence is particularly important because perceptions of self-identity are so intertwined with the activity of farming. That is, the way farmers choose to farm reflects the type of farmers they believe they are and aspire to be. For instance, production-oriented, lifestyle-focused or environmentally conscious. However, it is only through



in Agricultural Extension

operational detail that farmers are able to visualise how to implement changes within the context of their existing farming system. Combined, these influences triggered the intention to adopt, which ultimately leads to the physical act of implementation that results in adoption.

The six rules for videoing farmers to facilitate video mediated social networks

Several insights relating to farmer-to-farmer learning emerged from our work. Firstly, a tacit social contract amongst farmers to be truthful and sincere, which makes their communication style both egalitarian and efficient. This is because so little time is wasted arguing over differences of opinion, instead farmers share what they know in such detail that each farmer has the 'raw data' to form their own opinions and conclusions within the frame of their own farming context.

Secondly, the social acceptance of innovations by successive groups of adopters turns out to be an intrinsic aspect of the discourse about innovations, even if this is not overtly stated. This is because farmers need to discern the relative risk profile of any new practice they might be considering. That is, if the practice is new they will need to possess greater skill themselves to successfully implement it, whereas if the practice is more mature, others can be relied on to provide advice where knowledge gaps exist.

Thirdly, using video clips to share farming practices across an industry allows farmers to mitigate risks associated with individual development efforts by aggregating risk across a network of individuals who possess different expertise and experience, increasing aggregate adoption. Finally, as has already been noted, operational detail is the language through which farmers communicate with one another about farming technologies and practices.

From the perspective of how scientific information is communicated to farmers, these insights help to explain why current approaches, where general principals are communicated dispassionately, have such a limited impact on farmers' actual decision making. Clearly scientific research by its nature must continue to provide objective and generalised principals, however as

We developed six simple rules for creating videos to enable video mediated social networking to occur.

agricultural research is developed and localised in regional settings, its adoption would benefit significantly from capturing and communicating the experiences of local collaborating farmers involved in its development.

From this perspective we developed six simple rules for creating videos to enable video mediated social networking to occur. This approach refashions technology transfer from an archaic top-down process into a participatory bottom-up approach that enables change by facilitating the transfer of innovations between farmers using video. These six simple rules are as follows:

1. Provide a role model, that is, a person who can demonstrate mastery of a technology or practice, i.e. **a farmer gives the presentation.**
2. Be in a location where the behaviours of interest can be observed, i.e. **the presentation is given on their farm.**
3. Communicate intimately and directly to convey local knowledge and experience as well as the attitudes and judgments that informed them i.e. **the farmer talks directly to the camera, in their own words, about their own experiences.**
4. Observe the behaviour, as well as the judgments and skills involved in its execution i.e. **the farmer demonstrates the sequence of actions involved in the practice,**
5. Provide memorable images and descriptions that are easily recalled i.e. **important aspects of the practice, particularly those that are difficult to describe verbally, should be illustrated visually.**
6. Communication should be chunked down into easily accessible pieces i.e. **each video clip presents a single practice or technology.**

We assume that extension practitioners will have or acquire all the prerequisite technical knowledge and skills needed to video farmers and edit the recordings together into video clips.

In aggregate, our video clips proved to be very influential, with 60% of survey participants (n=78) indicating they planned to change one or more of their farming practices from the specific ideas they got from watching the Video Roadshow presentation or Virtual Bus Tour DVDs we produced. Perhaps more surprisingly, over half of these farmers (32% of survey participants) had already adopted that practice over the course of the year prior to being surveyed as result of watching the DVDs.

In the light of these results, RD&E institutions and the bodies that fund them may wish to re-examine commonly used program logics. Our experiences suggests that the narrative of components, processes and events that reflect industry experiences with practice change is as important as the suitability of the practice itself, in furthering its adoption. Thus, effective lower cost adoption pathways are possible when industry-wide evidence-of-adoption is used from the development phase onwards, to facilitate video mediated farmer-to-farmer learning exchanges. Our insights also reveal how highly evolved farmer-to-farmer learning exchanges are, with social mores regulating conditions for efficient and effective learning exchanges to occur. Few other business environments share knowledge for the common good in such an altruistic way. Clearly, much can still be learnt about the nature of these exchanges.

During 2008 until 2010, Henry Thomas and Avril Robinson collaborated in the creation of an extension website, three Virtual Bus Tour DVDs and the Tropical City Group Video Roadshow. The research analysis reported here is detailed in Henry's PhD thesis available from the University of Southern Queensland. Financial support for these projects was provided by the Sugar Research and Development scholarship program, Queensland Primary Industries and Fisheries, CANEGROWERS, the Department of Agriculture, Fisheries and Forestry's Caring for Our Country program, North Queensland Dry Tropics, the Pioneer Cane Growers Organisation, and Burdekin Productivity Services.

ENET



FROM THE EDITOR

While thinking about a theme for the newsletter I came across a paper sent to me by Warren Hunt about the history of Extension in Australia. This got me thinking about how extension has changed especially over the last few decades and the increasing use of computer technology in our extension delivery.

Early last year we featured social media in ExtensionNet but there are many more ways we use technology in extension. In this edition we look at decision support systems, apps, collaborative information management and the use of videos in extension.

Our feature article deals with the use of videos in extension. The authors make some very interesting observations about the use of this medium, how to use it effectively and why their videos work. An article about decision support systems in vegetables outlines the development of the system with users in mind and a user guide in the form of a YouTube video. Decision support can also come

in the form of an app which does not need mobile reception once downloaded – very handy since many of the regions we work in are still out of mobile range.

Our final article deals with a Land Use database. This project is in the early stages of developing a collaborative information management and communication platform. What is exciting about this is that the author Ian Kininmonth is keen to provide a follow-up article in this newsletter about what is working, what is not working and what could be improved in this project.

And about the history of extension? – I promise to bring you a summary on that in the next edition.

Happy reading

Kate

PRESIDENT'S PIECE

Community Development and Extension Reflections on the 2012 APEN Member survey

Austin McLennan, APEN President

APEN has recently concluded its email survey of members for 2012 and, with 136 responses, it has been great to receive feedback from over a quarter of our members.

One of the interesting aspects of this year's survey is that we asked members to nominate the broad focus of their work.

Not surprisingly, given the agricultural roots of the extension discipline, a majority identified with primary industries (78%) and a significant number with natural resource management (45%) (It was possible in the survey to identify with more than one area). However, what particularly stood out to me was the 23% of respondents who identified with the area of community development.

Now, I can't be certain what they all meant when they ticked the 'community development' box, but here is a quote from a UK-based organisation:

The role of community development is to support people and community groups to identify and articulate their needs, and to take practical, collective action to address them. It works with communities of place, interest and identity, helping diverse and competing community voices to be heard.....Community development is both a practice and an occupation. Individuals,

informal groups and organisations can all practise community development, whether in paid or unpaid roles.... Community development can – and should – be practised in all sectors, whether public, private or voluntary.

Community Development Foundation 2012

Is it just me, or could this describe the work of much extension practice? Try substituting the word 'extension' for the term 'community development' in the quote above and see if you agree.

While the exact relationship between extension and community development might be up for grabs in an academic debate, at a practical level it is clear that that having prosperous primary industries, healthy environments and thriving communities are related goals.

It is also clear that extension approaches can be used to work with issues in each of these areas – primary industries, the environment and the community – and that a number of extension practitioners already see themselves as working across all three.

For this reason, expect to see a greater focus on community development aspects of extension in future APEN activities as

well as our current strategic plan (currently under review). This is just one example of how the APEN management committee is using the 2012 Members survey to ensure APEN remains a valuable and relevant professional association for all who work in extension. Thank you to all who provided your feedback.

Once again, I trust you will enjoy this edition of ExtensionNet and that it continues to enrich your extension thinking and practice – whichever cross-sections of the extension community you inhabit.

Best wishes,

Austin McLennan

APEN President

P.S. A version of this article can also be found on the APEN President's blog at www.apenpresident.blogspot.com.au.

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Accessed June 2012.



VegTool

Decision support technology for the Australian vegetable industry

Gerard Kelly, Horticulturist, NSW Department of Primary Industries, Dareton. NSW.

Accessing up to date agronomic and financial information is essential to assist growers' farm management. Applying this information with the use of technology can enhance both decision making and production practices.

New technology, in the form of VegTool, a gross margin analysis decision support tool helps to improve the financial understanding of vegetable production costs and returns. Whilst calculating a gross margin is one method that helps farm budgeting and planning, it can also enable growers to identify important variable costs and assist decisions about management practices and cropping programs. Once VegTool is installed on a computer, there are four simple steps to use the program – Enter Crop Details, Enter Operating Costs, Print Financial Summary and Compare Scenarios.

VegTool was developed specifically for the vegetable industry and its development was undertaken with input from producers and industry leaders. This approach allowed the feedback gathered to be incorporated into the design. The low confidence of some producers with computers was highlighted, and this led to VegTool being developed as a grower friendly program. Several features that cater to individuals' different learning styles were integrated into the design process and these help maximise the usefulness and functionality of the program. There is a workbook, audio-visual tutorials, data displayed as graphs and tables, conversion and numeric calculators and help guidelines displayed on each screen.

The format of the workbook is similar to the program screens and calculation worksheets and provides an option to enter information on paper beforehand. The data recorded in the workbook can later be transferred into VegTool. This option is useful to those less comfortable with computers and also allows users time to collate the required figures. The workbook is accessed and printed from the opening screen.

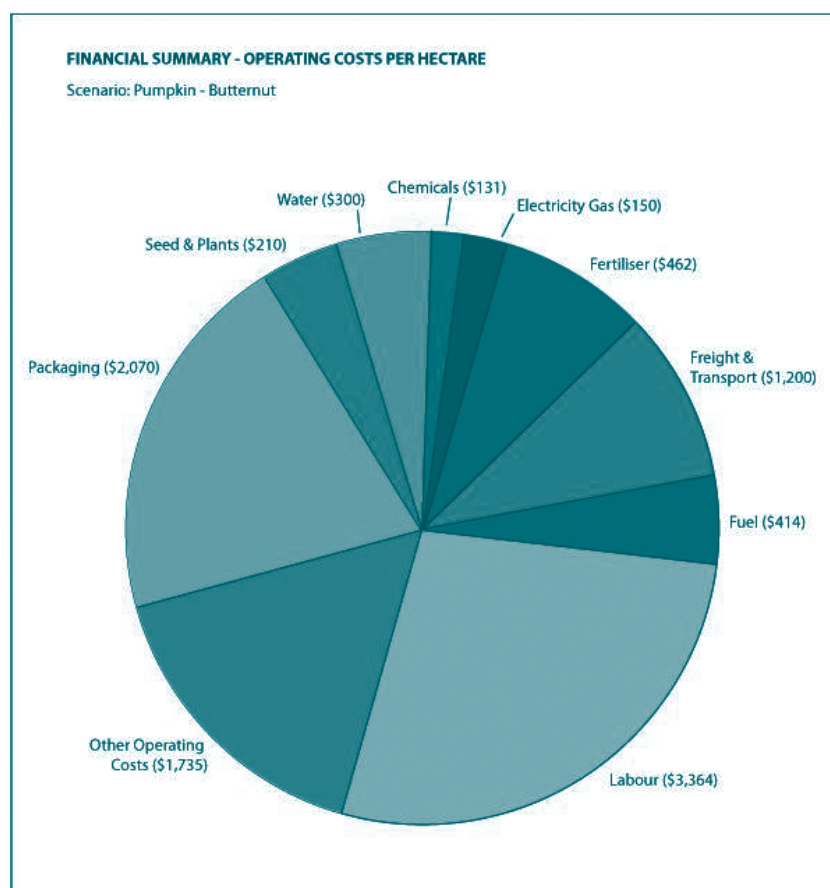
There are four brief audio-visual tutorials, one at each screen, which are accessed by clicking the tutorial icon. They provide instructions, are easy to view and can help users if they are unsure about how to proceed at any stage of the program.

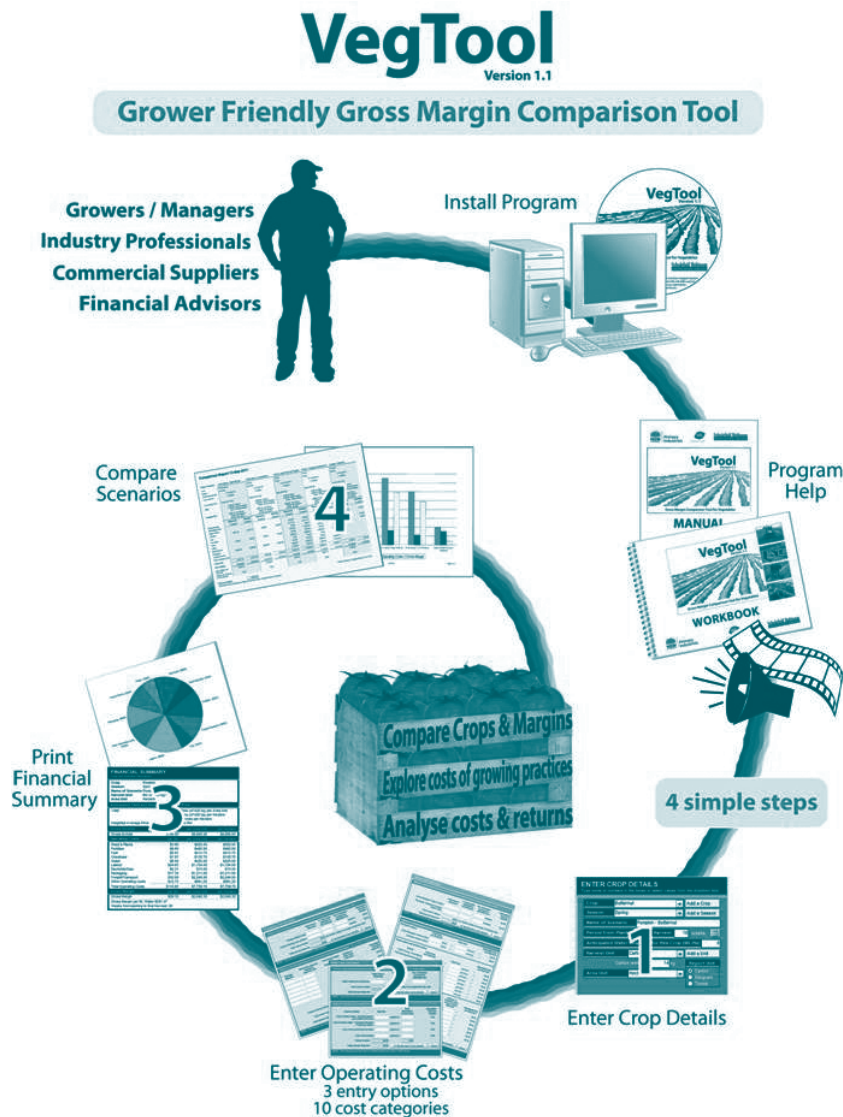
Working with finances and figures can be challenging, so VegTool provides users with options to enter data and view reports. For reports, there are graphic formats such as pie charts and bar charts which are colourful, have visual impact and are easy to interpret. Tables with significantly more detail can also be accessed and analysed.

VegTool has options to enter from 10 to over 400 variables in order to produce a gross margin, or financial summary report. There are ten individual operating cost calculators covering growing and handling practices which generate most of the financial data. The 'Enter Crop Details' and 'Enter Operating Cost' sections of VegTool are where growers can explore, customise and develop financial understanding of their enterprise costs. Preparing and comparing the income and costs of current and/or planned crops and practices provides experiential learning and allows their planning and decision making skills to be developed. The representation of the data reports in tabular and or graphic formats adds



Gerard Kelly





To expand the accessibility of information about VegTool, two different presentations which introduce the program and its benefits and demonstrate how to use it are available on YouTube.

variety to how the results can be interpreted and what users can learn about their crop management practices and costs.

Raising the awareness of VegTool and communicating its uses and benefits has been the focus of the latter stages of a vegetable industry funded project called VegBiz. Participatory and experiential methods are being used to disseminate VegTool to the vegetable industry's growing regions in Australia. Several target audiences that can benefit from using VegTool have been identified for activities. These include growers, managers, industry professionals, commercial suppliers, financial service providers and rural support workers.

Traditional methods such as media articles that explain VegTool have been published in a wide cross section of horticultural print media and vegetable industry publications. Descriptions of the program are also available at various vegetable industry organisations websites.

To expand the accessibility of information about VegTool, two different presentations which introduce the program and its benefits and demonstrate how to use it are available on YouTube. These presentations are easily accessed by clicking on the URL link contained in communications distributed about VegTool.

Whilst many growers are too busy to attend meetings, selected small group workshops and information sessions are still being conducted for the industry within important vegetable growing regions. These are mostly conducted in conjunction with scheduled grower or industry activities and tend to engage motivated and leader producers. During these sessions VegTool is demonstrated and practical case studies that highlight its benefits are presented.

Presentations to increase the awareness and availability of VegTool are also being made to industry professionals and rural support workers. These groups include vegetable industry development officers, department of primary industries staff, rural financial counsellors and agricultural consultants. These people have contact with vegetable growers through their service provision and are an important conduit for expanding the knowledge and distribution of VegTool.

VegTool demonstrations and distribution of information is also occurring at various regional and national field days. The events allow direct contact with interested individuals and opportunities to exchange, discuss and explain the benefits that VegTool offers.

Webinars are also being used to promote VegTool among service providers. These groups are an important target audience because they have existing commercial contact with vegetable producers. They can utilise VegTool to compliment the agronomic, financial and support services they provide. Staff from large national, and smaller regional, rural supplies companies and business are also some of the recipients of the extension strategy.

Funding for VegTool and VegBiz has been contributed by the New South Wales Department of Primary Industries, Horticultural Australia Ltd. and Scholefield and Robinson Horticultural Services.

CropMate™ and VarietyChooser: Developing the Technology of Extension

Elizabeth Warden and Graeme McIntosh, NSW Department of Primary Industries

Web-based and smart phone applications are fast becoming an essential tool for activities on the farm. As concise and accurate information is needed quickly, providing information through these avenues is becoming the next challenge for extension providers. New South Wales Department of Primary Industries (NSW DPI) Broadacre Cropping Unit has developed two tools to fill this void: CropMate™ website and VarietyChooser (iOS application – iDevice app). The rationale behind these tools was to give farmers and advisors access to the best agronomic decision support tools whenever they need it, in an easy and intuitive format.

CropMate™ (<http://cropmate.agriculture.nsw.gov.au/>) is a free NSW DPI and Grains and Research Development Corporation (GRDC) website that is a decision support companion for grain growers, advisors and consultants structured to follow the cropping season. Included in the website is detailed weather and long term climate information from the Bureau of Meteorology, decision support tools such as VarietyChooser (web based version), SowMan, a nitrogen topdressing tool and a calculator for salvaging crops for hay, silage or grazing.

VarietyChooser is an application (app) developed for iPhone and iPad, and incorporates information from the Winter Crop Variety Sowing Guide, an annual publication by NSW DPI. VarietyChooser provides mobile interactive support to assist selecting crop varieties. This is done by providing the user with comprehensive information on grain yield and disease resistance and tolerance ratings on varieties of nine crops (wheat, canola, triticale, barley, chickpea, faba bean, field pea, lupin, and oats). Once downloaded

from the Apple App Store, this free app can be used without mobile reception or wireless internet, making it very handy to take out into the paddock out of range.

Version 2 of the app has been updated with the latest grain yield results from GRDC's National Variety Trial data and allows farmers to quickly and easily compare yields across a range of crop options. The latest information on crop diseases such as stripe rust and other varietal characteristics is also now available through the new version. The new app also allows for closer analysis on the impact of grazing on grain recovery and crop yields.

Current extension

Both CropMate™ and VarietyChooser have been presented at various forums including GRDC Grower and Advisor updates, GRDC Technical workshops, field days across NSW and in local and rural media. CropMate™ is a valuable source of information all found in one place for agronomists and consultants, who use the website for their day-to-day extension role.

Monitoring usage

Google Analytics was used extensively to determine how CropMate™ users were making use of the website. Since the launch of the website in late February 2011 there has been an average of 496 visits per month (Figure 1). The peak use in the first year occurred from May to August and again in November. On average 46% of visits were return visits.

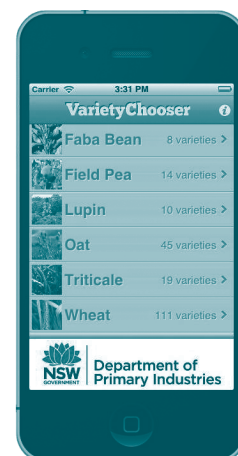
The use of the VarietyChooser app was monitored by download data from the Apple



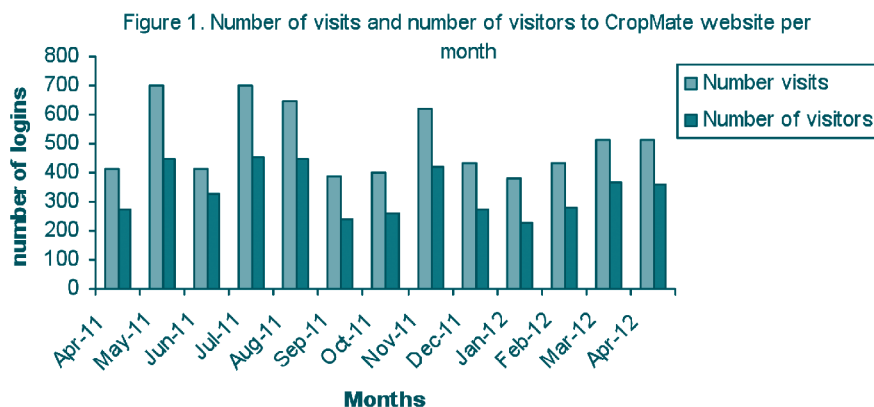
Elizabeth Warden



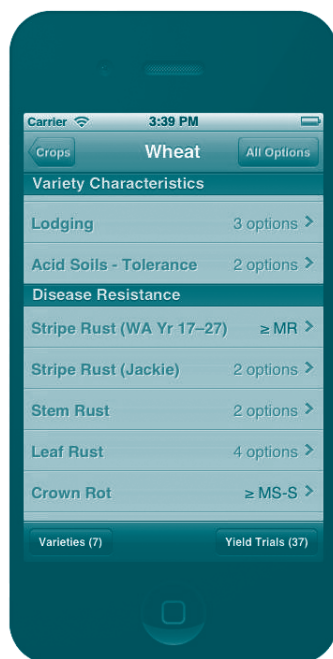
Graeme McIntosh (Left)



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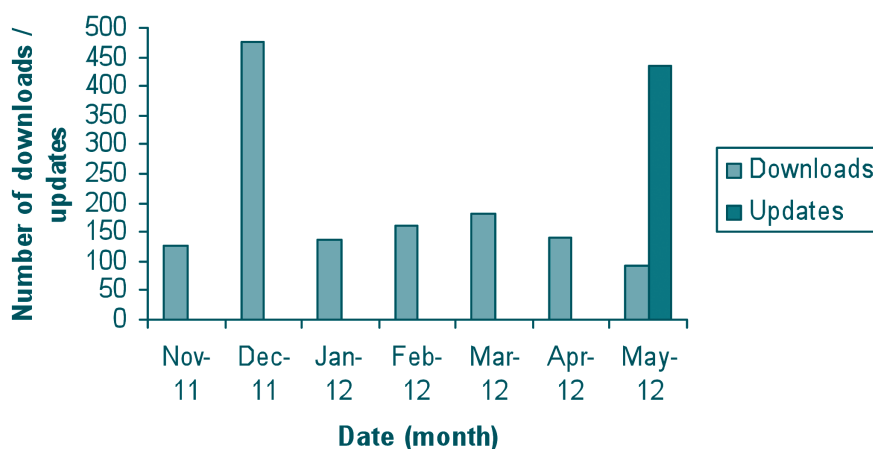


CropMate™ & VarietyChooser (Continued)



The future of extension rests heavily in web-based and mobile technology due to an increasing number of farmers and other agricultural stakeholders utilising this technology.

Figure 2. Number of downloads/updates of VarietyChooser app



App Store. The pilot version of VarietyChooser was released in November 2011 and was downloaded to 1,223 iDevices (Figure 2). The 2012 version (or version 2) with updated varietal yields and trait data was released in May 2012. 434 users updated the current version of the VarietyChooser app in the first 5 days and 85 users downloaded Version 2 onto their iDevices.

Survey results for Variety Chooser

As well as download data from the Apple App Store, survey data was sourced from a network of NSW DPI District Agronomists (DA's) through the Survey Monkey website. The dataset of results used for this survey were of 10 responses, all from DA's predominantly in central and southern New South Wales. The gender of respondents was nearly equal, average age of all participants was between 30 and 49 years and 50 % of the participants used VarietyChooser regularly.

67% of survey participants found the VarietyChooser app 'easy to use', 33 % found it usable and no respondents said it was too difficult to use or navigate. Approximately 45% of those participants use it regularly during decision making of a cropping programme. One comment stated the VarietyChooser app was "quick and convenient", demonstrating the potential of the app to be the first source of information provided in a timely manner, before using the NSW DPI Winter Crop Variety Sowing Guide for more detailed information.

Future Extension

Methods to add to an extension plan of CropMate™ and VarietyChooser under consideration include:

- Continuing the use of Google Analytics.
- More extensive surveying of the users of CropMate™ and VarietyChooser.
- Developing other media tools, such as webinar and MP4 videos (using Camtasia software) uploaded to the internet.
- Utilising our traditional NSW DPI extension network to improve and promote our web based and smart phone tools.
- Gather case studies of how CropMate™ and VarietyChooser has changed and enhanced on ground practice.

The future of extension rests heavily in web-based and mobile technology due to an increasing number of farmers and other agricultural stakeholders utilising this technology. The task for those involved in extension is to embrace and develop this technology for the benefit of those in the broader agricultural community.

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Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important.

Bill Gates

TargetOn: Web-based Information Sharing and Engagement For Sustainable Agriculture

Ian Kininmonth, Environmental Knowledge Systems Australia (EKSA)

*Once a new
technology
rolls over you,
if you're not
part of the
steamroller,
you're part of
the road.*

Stewart Brand

The market for land management information

The Perth natural resource management region of Western Australia is home to a rapidly growing population of over 1.8 million people. The peri-urban environment is home to over 20,000 farmers and small landholders who have stewardship of around 30 percent of the region's natural resources. Using ABS statistics, it is estimated that around 80 percent of potential customers have broadband internet access. Achieving adoption of more sustainable land use and management is an enormous task which requires 21st century tools to help achieve.

This article provides an overview of how the Perth Region NRM sustainable agriculture project is using web-based technology, tools and services to collaboratively manage and share information with rural land managers across the region.

Current priorities are determined by funding through initiatives such as the Australian Government's Caring for Our Country (C4oC) program and the Carbon Farming Initiative (CFI). Project extension officers and partners work with various communities of practice – horse property owners, orchardists, grape growers, graziers and small landholders to achieve adoption of BMPs associated with perennial pasture establishment, revegetation of streamlines, contour banking and management of nutrients. Around 300 land managers are being targeted over a two year period with related extension and engagement activities including property planning, field days, workshops, journal and media articles. A number of technologies and tools are being used to support information management and communication for the project. These are outlined below.

Information is valuable – database it!

Since 2005 EKSA have been providing information services to support the project. Primarily this has involved databasing information resources into the EKSA Land Use database and developing information products for the project which over time have included the following:

- LandSmart soil assessment and management tool (DVD).
- Grape growers and orchardists irrigation and nutrient management (BMPs) database (DVD).
- Perth region BMPs wiki (collaborative website).
- Various hard copy reports using the database.



Information resources are organised into libraries

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The sustainable agriculture project

The sustainable agriculture project has been operating since 2005. Like many similar projects across Australia the project is tasked with engaging with land managers to achieve adoption of best management practices (BMPs) and implementation of on-ground change in land use and management. Over time the project activities have changed depending on funding sources and priorities. In the main however, the information has remained largely the same.

Getting information online and accessible

Recently EKSA have designed and developed a collaborative online database and information management platform called TargetOn. Data and information resources have been imported from the EKSA Land Use database into the sustainable agriculture project's new TargetOn site – called the Sustainable Agriculture Information Hub - to provide an easy to maintain database of around 3,000 libraries and information resources.

TargetOn has been developed using a combination of open source technologies including the Drupal content management system (CMS) and MySQL database. Drupal has over 16,000 modules (and growing) and 1,600 themes contributed by a community of over 17,000 programmers. MySQL is the world's most popular open source database and is used by sites such as Facebook and Google Analytics. EKSA have designed TargetOn and developed a number of new Drupal modules to enable easy configuration to individual client's requirements.

Some of the key features of TargetOn include:

- Information resources module for databasing different resource types such as files, urls, photos, contacts, events and news items.
- Libraries module which enables easy categorisation and structuring of information resources.
- Calendar and news modules which enables 'feeds' of relevant events and news to be displayed.
- Mapping module which enables the location of project, case study and trial sites and associated information resources (e.g. photos) to be displayed and accessed via a Google map.
- Profile module which enables individual customers to map their location using a Google map tool and upload photos, property plans and other information.

The benefits of the TargetOn platform to the sustainable agriculture project include:

- Intuitive and easy to use. Project staff and permitted users can easily update and maintain content online, from wherever they have internet access.
- Enhanced service delivery. All information is in the one place and accessible to customers, 24/7.
- Smoother workflows and reduced costs associated with development and delivery of information.
- Funders and potential partners can easily see the results the project is achieving.
- Reduced risks of disruption to service delivery as a consequence of extended staff absences or loss.
- Project staff have more time to focus on their core business activities e.g. one-on-one and group engagement.

eNewsletters – promoting relevant information and services to the customers

An important component of communication is the preparation of eNewsletters using a platform called Campaign Monitor. Campaign Monitor enables eNewsletters to be prepared online and sent to email lists. eNewsletters contain teasers of information with links back to the information hub for the customer to obtain more information. Developing content in the information hub and linking customers back at every opportunity is an important part of the communication strategy. This is done to ensure that customers are constantly reminded of the site and the services and information products provided by the project, as well as to avoid duplication of information sharing processes.

Analytics – you can manage what you can measure!

Analytics provide insights into the effectiveness of the communication plan, the site and eNewsletters. They enable real-time monitoring of communication activities and evaluation of what's working, what's not working and what could be improved.

Campaign Monitor generates real-time analytics which show things such as the number of eNewsletters and associated links opened and the number of shares made by recipients via email, Facebook and Twitter. Data is also available on individual behaviour.

Google analytics has been embedded into the information hub and provides insight into such things such as the number and regional origin of visitors, return visits, pages visited and visitor pathways, key words used to get to the site and referrals from other sites. In the first month, with minimal promotion the site received around 650 visitors making 3,000 page views. It is interesting to note that the most visited pages were those with the case study and trial sites.

Failing to plan is planning to fail

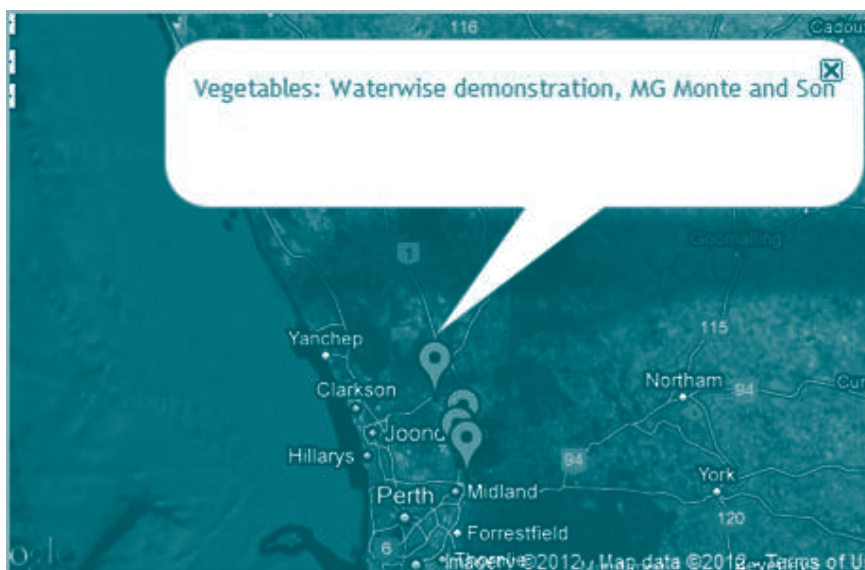
A plan has been prepared for the project to ensure that information management and communication activities are aligned to project processes and activities and vice versa. Important features of the plan include a schedule to coordinate the timing of information inputs and outputs and a schedule of targets to guide implementation and associated monitoring.

Technology and information are ever changing

The content and functionality of the information hub is like land use change and management; it is a work in progress. We aim to contribute follow-up articles to the APEN newsletter highlighting strategies and best practices and lessons learned as we progress.

The information hub can be found at <http://sustainableagricultureperth.targeton.com> or by Googling the words 'sustainable agriculture perth'. More information about TargetOn can be found by Googling 'EKSA'.

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Interactive maps of case study and trial sites enable customers to visualise and access location-based information

New APEN members

If you've recently joined APEN, welcome! You'll reap plenty of professional and personal rewards. If you've been in APEN for a few seasons now, be sure to say hello to the new members.



Catalina Montalvo A

Hi, I'm Catalina Montalvo A. from Chile. I studied agronomy, with a specialty in animal science...I'm not very sure if you have that career there, but here is an engineer of plant and animal Systems. I work for Dairy Chile, well, here is called "Consortio Lechero", and I'm in charge of the Extension department. It's funny because we call it a department and until last month I was the only member. This is important to say, because here in Chile people do technology transfer, but just by intuition. We don't have the tools or strategies to do it. It is just something that some people have a more developed natural ability in than others. And that's a huge problem. We are not sure if we are correctly transferring the information that we want, or if the producers are understanding and applying the content learned. That, precisely, is my biggest challenge here... to evaluate and to put on stage the knowledge about extension for the people that practice it day by day.

Welcome to these new members who have joined since last edition. We're glad to have you all on board.

Graeme McIntosh NSW

Alice Muller VIC

Krista Cavallaro QLD



Graeme McIntosh

District Agronomist for the Dareton District

Graeme McIntosh is the District Agronomist for the Dareton District (Lower Murray Darling Catchment). He joined NSW Agriculture in 1998 as a Rangelands Extension Officer. He is currently the District Agronomics at Dareton. Graeme co-ordinates a number of farmer groups in the Lower Murray Darling (LMD) each year and works with the farming system group Mallee Sustainable Farming (MSF) and the LMD CMA to address management issues in the district through research and extension projects. In 2010, Graeme worked as the Project Officer managing the development of the NSW DPI, GRDC decision support website CropMate™. Graeme also manages the development of the NSW DPI iDevice App VarietyChooser. This App assists farmers, advisors and retailers in selecting winter crop varieties using NVT and a comprehensive range of crop traits. Version 2 was recently released the App Store on the 2nd May 2012. The technology based projects have enabled Graeme to develop an interest in extension using technology such as social media, websites and Apps.

The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn't think they could learn before, and so in a sense it is all about potential.

Steve Ballmer

Upcoming Conferences

Invigorating Agriculture Conference

You may have already heard about the Invigorating Agriculture conference being held on August 2&3 in Adelaide this year... but just letting you know that the program is out and registration has opened. The program is jam packed full of inspirational stories, ideas and tips that will be of interest and professional benefit to a broad range of people, but particularly young professionals working in Australia's agricultural industry.

Check out the conference website <http://www.invigoratingag.com.au/>

21st National Vocational Education and Training Research Conference

Co-hosted in 2012 with TAFE SA, the 21st staging of NCVER's popular National Vocational Education and Training Research Conference 'No Frills' in Adelaide will be an opportunity to celebrate, collaborate and connect; and as it is our big anniversary, we plan to add some 'frills'.

Check out the conference website <http://www.nofrills.ncver.edu.au/>

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Guidelines and deadlines

Submissions should be made in MS Word 6.0 with minimal formatting. A portrait photograph of the author is required. All photographs, figures and/or tables ought to be provided as separate files (preferably TIF or JPEG; photos scanned at 300 dpi). Feature articles should be around 1000 words and minor articles 500 words. The editor reserves the right to edit submitted material to meet space restrictions. Letters to the editor or general items of news of interest to the network are welcome. Articles should be submitted at least four weeks prior to publication.

Preference is given to articles that are grounded in some form of project or event.

Editing: Kate Charleston

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Production management: Rosemary Currie, APEN Secretariat, Wodonga, Victoria.

Opinions expressed in ExtensionNet are not necessarily those of the Australasia-Pacific Extension Network (Inc.) unless otherwise stated.

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