final report

Project code: B.NBP.0735

Prepared by: Ben McGrath

                            FRESH

Date published: October 2013

Phone app for pasture management - development of app and web-based version

Abstract

Development of phone apps for applications in agricultural industries is increasing rapidly. This project follows a scoping study (B.NBP.0668) which investigated the development, need and potential impact of an electronic forage budget and pasture/land condition application, for use with existing hand-held devices, for the northern grazing industry. The basis of the app is the integration of the Stocktake program developed by DEEDI and the incorporation of tools within the GLM course. Based on survey results availability of the pasture management app will significantly increase the number of producers assessing pasture condition and undertake forage budgets, leading to better pasture condition, reduced risk for pasture and animal performance.

This project covers the app and web version development work. The overview and management of the app and web version development and testing by DEEDI can be found in the MLA final report NBP.0693 "Phone app for pasture management – overview of development".

Executive summary

The project developed a first round version for iPhone and provided it to DEEDI for testing and it is supported by a full working website for data storage and product reference material. Android and iPhone applications were developed and made available for users on April 15, 2013. More than 500 accounts were registered (the 3 years total target) within 1 month or release. We consider this a great success.

1. Project objectives

1. Developed the Forage Budgeting App (working title, imonitor pastures) for smart phones using both Apple and Android platforms to required specifications (as per response to DEEDI/MLA Tender submitted by Fresh and dated 9 March 2012).

2. Developed a web-based version of the same app, which can be used independently of smart phone technology, to required specifications.

3. Provided maintenance support for the apps and website

2. Success in achieving milestone

This project provided the technical development of the App. Detail of the APP and its functionality and testing is provided in MLA report NBP.693.

All milestones completed to specifications to enable a successful launch on April 15 2013.

Specific steps in achieving the milestone included.

- Working closely with DEEDI to ensure the app meets required specifications, cost and time lines,

- Develop 1st round draft for iPhone only and provide to DEEDI for testing.

- Integrate feedback from testing into second version of iPhone app and release for further testing.

- Finalise application and design interface for working application.

- Design and development of Content Management System

- Test and refine in consultation with DEEDI

- Develop subsequent mobile versions for Android and a working version for the ipad mobile devices

- Develop web-based version of application

- Test and refine all versions ready for launch

- Warranty bug support for the apps and website for 3 months from launch

3. Milestone 3

3.1. Finalised application and design interface for working application

3.2. Designed and developed Content Management System, including testing with DEEDI and associated refinement

3.3. Developed mobile versions for Android and iPad mobile devices

3.4. Developed web-based version

4. Milestone 4

4.1. Tested, refined and launched all versions

4.2. Contributed to Final Report of DEEDI project (B.NBP.0693)

4.3. Provided copies of all products and associated documentation to MLA and DEEDI

5. Milestone 5

5.1. Provided maintenance support for the apps and website

5.2. Provided Final Report including usage and any significant issues.

FRESH will provide maintenance support for the apps and website for 3 months from launch. Following that warranty period, a maintenance agreement will be required to accommodate user feedback issues or changes the Android or Apple operating system (that may disrupt functionality).

6. Recommendations

While the wireframing and prototyping phase took longer than expected with multiple rounds of feedback, we have gained back a lot of ground with the development of the iOS application.

One way that this has been done has been to implement iterative changes as feedback has been provided rather than stick with a strict feedback loop which would introduce further delays. So that we may continue this process we recommend that feedback be provided on a regular basis.

Delays were incurred as input calculations were inaccurate. It would have been a timesaver should all the calculations been accurate and working, as it stood the calculations proved to require significant rework in situ. This added significant time to the development of this project.

A clearer understanding of the outcome from the sponsor perspective would have also assisted in a smoother delivery. Decisions about functionality were

being altered during the development phase. Ideally these decisions would have been understood prior to this phase of the project.

The legal terms proved to be a late hold up for apple store submission. Given that this is only content having these at the start or close to the start of the project would have been preferable than towards the end.
A maintenance agreement is established to accommodate user feedback and changes to the operating environment

7. Appendices

1.User Feedback to May 14, 2013.pdf

This document is the aggregated feedback from users of the application to date.

Andrew O'Dea   kelvinfalls1@gmail.com Apr 24
  "darling downs towns? where are the rest?"

Craig Apr 30 May 2 craig@tallawang.com
"Hi, App is useless unless you are in Qld, when is the NSW version coming out?"

lizzy.rowe lizzy.rowe@hotmail.com
"I'm trying to set up but the program thinks I'm in NT and I can't seem to change it. I'm in NSW"

Steve Munge smunge78@gmail.com May 14
"Hello I have entered a new paddock onto the property but it is not there when i do a cattle movement. It is on my property though."