

Handover summary

Project FarmEd

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Team leader: Georgina Scott

Group Leader: Kai Faulkner

Trekkers:

Amelia Rose Gartner, Ganan Ganeshanatham, Patrick Moloney , Lily Clements, Daniella Foley and Ashley Xu.

Note - it is compulsory to take a funny photo (known as the 'swagiculture shot') on a farm visit if you are undertaking Project FarmEd! It is tradition!

Abstract:

Bula February Trekkers!

The overall aim of the FarmEd project is to improve the farming practices of farmers in Fiji. This is by providing farmers with information which can aid in their farming practices to increase their yield on crops for more sustainable income and save money on other products being used on the farms such as chemicals. The end goal is to develop an Application for an Android/iOS download to a tablet or smartphone device using IBM Watson as a platform for providing the information. By doing this we are also aiming the product to younger farmers to “make ag sexy” again as an ageing population of farmers has seen a decrease of upcoming younger farmers. Surveys have been completed and documents can be found in the Handover folder. Currently, the team have been conducting soil tests on farms and undertaking a Consultancy Service which provides this information to farmers in the form of a hard copy report to start the business model and create initial revenue as the App requires between \$40,000 to \$120,000 investment to develop the App be Servion. Initial sponsorships include \$12,000 from IBM which will be provided once the App development has commenced.

From the development of the project, initial research and interviews have been conducted in Sigatoka, where Trekkers are currently residing in as a project team. From our interviews we gauged the literacy levels, technology levels and access to internet. This detail can be found in the **XXXX** spreadsheet. From this we have found that younger people in the age group of 15 to 40 were more tech savvy than people in the age group of 40 to 70; which is a majority of current farmers. Technology is the way of the future and there is a gradual shift towards it in Fiji. Most businesses will become obsolete in the future without technology advancements, hence, our goal of creating an application with the short term goal of providing a consultancy service.

From our research and interviews with many farmers and locals we have also found that there is a gap in communication between the different “classes” of farmers and the Ministry of Agriculture (MoA) which is the government body for Agriculture in Fiji. It was found that they have a bias towards helping the higher end, more established farmers and not so much the lower end local farmers who need their help and guidance the most. It was also found that they were conducting soil tests, however, they would not receive the results for a long period of time; if at all. And it would just be the results with no recommendations, which is where our service fills in this gap as it is a tailored face-to-face service with a 1 week turnaround on providing the consultancy report after the initial interview and soil test have been conducted.

The current model for selling our consultancy service is based on the “Tesla Model” which the Project Everest General Manager, Tink, gave us an insight to on his visit to our team in January. We would love to help out the lower end farmers and give them advice on which crops to plant for higher yields etc., however, as a social business we first need to gain the resources and revenue to do so. Like Tesla business model, they sold their first model to the

higher end market for a high price and received revenue which they were able to put back into the development of another Tesla model which was cheaper. Likewise, we are aiming at the higher end farmers to create sales and revenue to put back into the business to develop the consultancy service and ultimately the Application which would be available to all levels of farmers once developed.

We strongly recommend the February Trekkers continue this social business model of providing the consultancy service whilst still progressing the development of the Application which would entail all of our consultancy service in a single location in the application for easy access and up to date information. Any outstanding consultancy reports should be completed as soon as possible and contact made with those farmers to arrange a meeting to provide them with the report and run them through it in detail. Receive feedback from the reports and use it as an avenue to further improve of the service provided. Also, connection should be made with farmers which have not been contacted and visit their farms the gauge whether they would be interested in the service. Establish relationships with the farmers and be super friendly to engage them in general conversations. To do this, follow the XXXX and XXXX guides on the step by step process on how to engage with the farmers, what questions to ask followed how to engage and pitch the sale of the consultancy report to the farmers. We would further suggest planning out and expanding on the subscription model of payment. It was too early stage for us to push the subscription model to the farmers, as they barely had a week to read the consultancy report. However, in the future this will be important in securing a constant inflow of funds as the aim is to do a report every harvest. Possible avenues may be to have a simple soil test after the first consultation or to move into different types of farm reports, such as one for water system management.

The February team should also look to continue engaging/establish good relations with relevant stakeholders for the development of the Application such as weather, telecommunication providers (Vodafone and Digicel), databases for the information, the use of IBM Watson and integrating it into the application (refer to meeting minutes on already established connections and discussions). Additionally, the current corpus of knowledge from which IBM Watson draws its information from should be explored further.

[Summary of the task, your findings and the way forward, no more that half a page].

The abstract is to be on one page on its own.

Introduction:

[In depth into what your task was, what stage/s of the design thinking process you're up to, some of the anticipated challenges. One page maximum]

The most important work now is to continue the testing process for the consultancy report. Since our market is mid to high tier farmers, they often already practice many of our suggestions such as appropriate pesticide usage. This means we must make sure that the reports provide value to these farmers if we want word to spread and more farmers to come for consultancy reports.

As the Application is still being tested with locals and farmers to be fine tuned for user friendliness, required input information such as weather, fertilisers, crop information etc. still need to be sourced and affiliations with

The Problem:

[Explain the problem and justification of its existence. One page maximum]

The agricultural industry in Fiji has seen an ageing population in farmers with fewer farmers in the younger generations joining into the industry. This is due to the lack of incentive and interest by millennials to join the industry based on the idea that agriculture is 'unsexy' and the work effort required. These negative perceptions of farming are due to low revenue and income security, coupled with a high labour demand. Lack of information available to farmers concerning modern farming practices and new innovation further hinders the development and expansion of the industry.

There are only a select few of farmers that are using techniques which are just sufficient enough to produce high-quality produce that satisfies the demand of local hotels, restaurants, supermarkets and the export market. Many of the farmers supply their produce to the local markets as a result for a cheaper price compared to food grown to export quality standards. As a result, FarmEd strives to address these challenges by boosting farmers' productivity, yield quantity and quality by providing guidance to these farmers. These farmers which we aim to help are at the lower end, however, we have found that in order to establish a business to do so, we have to aim at the higher end market to build our revenue and business before we can help the lower end farmers as a large amount of funding to develop a product to be available to the wider market. The lower end farmers are typically subsistence farmers, so we aim to eventually help commercialise their vegetable production through providing farming techniques by way of providing information about suitable crops for specific soil types,

effective use of pesticides and fertilizers and techniques to save farming resources such as watering and flooding issues; a common problem found with farmers. By providing this service to solve these issues we hope to expand our business and provide the farmers with quality information so that we can reach out to other farmers by marketing techniques such as testimonials and word of mouth as farmers may not be aware and seeking out this service. Overall, introducing innovative farming techniques that are shown to improve yields will improve food security of Fiji with more farmers producing a wider variety and quality produce in the long-term. By creating a digital service, such as an application, we also hope to make agriculture enticing to the younger generation.

**Your Solution/s:*

[SWOT analysis and business model canvas of each opportunity. One page per solution maximum].

* Only if relevant to your project.

Solution Stage 1: Face to Face Consultancy Service - Undertake soil test and provide results along with recommendation for farmers

See document: 170103 FarmEd Business Description 01 AG

Strengths:	Weaknesses:
Opportunities:	Threats:

Solution Stage 2: Digitalised Application for Farmers to Access on their Tablets/Smartphones

Strengths:	Weaknesses:
Opportunities:	Threats:

Future Actions:

[Detailed suggestions for future actions. Two pages maximum].

Top priority

- Follow up Vinod around 2 weeks in to check in with him and see if he has implemented the suggestions and what trouble he has run into.
- Follow up Puskar 2 weeks in for feedback on the report and see if he has implemented the suggestions and what trouble he has run into.
- Continue making sales and write up Consultancy reports. Call up farmers on the Contact Spreadsheet (Rows 73 to Row 78) as these farmers need to be contacted for a farm visit and attempt to make a sale! or just visit the farm still and gauge their interest in the consultancy service and get as much information as you can from the visit (farming practices etc)
 - **BEFORE VISITING A FARM AND MAKING A SALE, MAKE SURE YOU GO OVER THE FOLLOWING 2 DOCUMENTS AS THESE OUTLINE THE STEP BY STEP PROCESS ON HOW TO ENGAGE FARMERS FOR THE SALE. THESE DOCUMENTS ARE ESSENTIAL!**
 - **170111 First Sales Pitch 01 AG**
 - **170109 Consultancy Visit Step by Step guide 01 AG**
- Set up a test to measure the effectiveness of the consultancy reports so future trekkers can monitor the success of the information we have provided in the consultancy reports. The success can include how much of the consultancy report was actually implemented, has their crop yields increased, have they saved money on their

chemicals such as pesticides, fertilisers and still getting the same crop yields or better and have the chemicals been used been effective

- **KEEP DEVELOPING THE APPLICATION**
 - This is ultimately our end goal; an application with a single source to access everything we have provided in our reports plus more such as weather warnings, weather predictions, recommended crops for specific soils, identification of pests, recommended practices for farming in general etc. Bear in mind that the app really as to be user friendly for farmers as their literacy levels are very varied and are generally on the lower end.
 - The documents for these are in :
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Other Outstanding Items

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Appendix:

[All supporting documents. If in doubt, the document will go in the appendix].

Referencing:

All references should be completed in Harvard. For interviews or other non-published sources, complete an interview summary and include it in the appendix. Reference interview summaries in the Harvard style when writing statements on which they are based.

Other Must See Documents: