Presentation start

# Intro

<Conversational tone>

My name is Weilon, from Data Farmers Team  
Hands up if you know whether your backyard can grow crops

This is called arable land, which is land that is able to grow and cultivate crops.

This is a growing problem.

# Problem

People aren’t aware of whether their land will remain arable or not over a certain period of time.

I.e. are they able to grow and cultivate crops on a particular area of land in the next 5 years?

# Why it’s a problem

Climate change manipulating the state of the land

* Land that previously was able to grow land may no longer be able to due to less rainfall and increased heat
* Colder regions of land may now be able to cultivate land due to more favourable conditions

Technology improving

Farming generally a big long term investment. A lot of the time, people don’t see the risk.  
Saudi Arabia spent US$40 billion to develop its agricultural sector during the 1980s

# What we want our solution to be (need to be more concise what/how/why)

A web app to show the overall arable land trends, using Google API and IBM Bluemix.  
Allows people to see whether it is economically viable to cultivate land in the long term.

Allows people to save time by having the web app do all of the calculations and data analysis for them

Helps save money by helping people choose the appropriate crop that would have the best chance of growing -> less risk of crops dying

Helps make money by optimising the variety and amount of crop to grow, which maximises profit.

# Demo

We’re going to show you a web app

<show web app>

# Market (how much money we can make, or target audience)

Farmers  
Investors – investing in places with best potential profit/risk

# Any other organisations doing what we’re doing

CSIRO  
Mainly in the field of research. Hasn’t generally not been done commercially  
Saudi Arabia spend $40 billion USD in researching and creating its agricultural sector in the 1980s

# How is it viable to ANZ

Maximises profit by minimising loss through analysis of the land before cultivation  
This also minimises risk  
Allows agribusinesses to form a strategy around land analysis, as it gives them a way to select the best crop variety and quantity

In short, it helps manage production risk

# Other research

Put in any raw data, and show whether it will be arable or not later

Success story of new arable land rice fields in Queensland

# Future plans

More detailed analysis of soil, where web app calculates whether the land will be arable given a set of inputs, such as nutrients in the soil, rainfall levels etc.

Work with ANZ to make it more integrated with their risk analysis process when making investments

# Conclusions

Essentially, we have created a web application using technologies provided by IBM and Google to show arable land trends.  
This solves the problem of the difficulty of determining whether land is able to be cultivated in the long term.

Thank you ANZ, IBM, GitHub and all of our other sponsors.