Deloitte.

TCAgents
Quyen Le
Thanh Tran
Thao Nguyen

In 1845, Deloitte started
with one individual

**Power
to the
Ones**

[To edit, click View > Slide Master > Slide Master]

Contents

Overview

Objectives

USDRD – Farming App

• Design

• Development

• Implementation

.- Key Metrics

.- Risks

Overview
The current situation of the farming industry

1. Rising internet and computer ownership

- Internet access: **70%** in 2015, 3% up from 2013

  - Access methods: 30% DSL (5% down) , 29% Wireless (5% up)

- Computer ownership: **71%** in 2015

  - Computer uses in conducting business: 9% with federal government website, 44% with non-agricultural website

2. Average age of farmers continues to rise

- 57.1 (2007) to 58.3 (2012)*

3. Access to land and capital are among the top challenges for young and beginning farmers

- 68% consider land access as top problems**
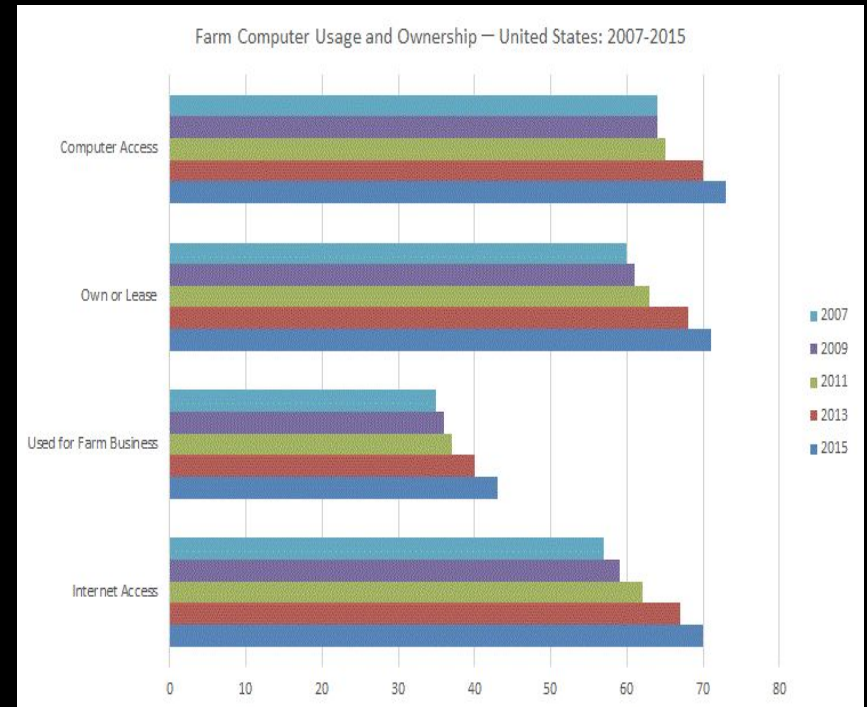
Source: USDA, National Agriculture Statistics Service, Farm Computer Usage and Ownership – United States 2007-2015

Source: *:https://www.agcensus.usda.gov/Publications/2012/Preliminary_Report/Highlights.pdf
       **: http://www.youngfarmers.org/reports/Building_A_Future_With_Farmers.pdf

Objectives

1. Create incentives for existing farmers to adopt technology in production and management

2. Encourage new and young farmers to participate in farming

3. Provide accessibility to real-time information, knowledge and capital

4. Increase interactions between:

    1. Existing farmers

    2. Existing farmers with new farmers

    3. Farmers and USDRD

USDRD – Farming App
DESIGN PLAN

What is the app?

A technology platform that:

- Enable farmers to collect, manage, and share data

- Help farmers make better decision with updated and predictive analysis

- Increase farming productivity

- Connect farmers for sharing and cooperation

Key Features

- **Keep track of real-time farming data**

- **A comprehensive newsfeed for all users, displaying latest news and information on agriculture**

  - Climate/ Daily weather forecasts

  - Market Trends:

    - Technology and machinery

    - Market price of inputs and outputs

    - Supply and demand

  - Regulations: new domestic and global trade policies
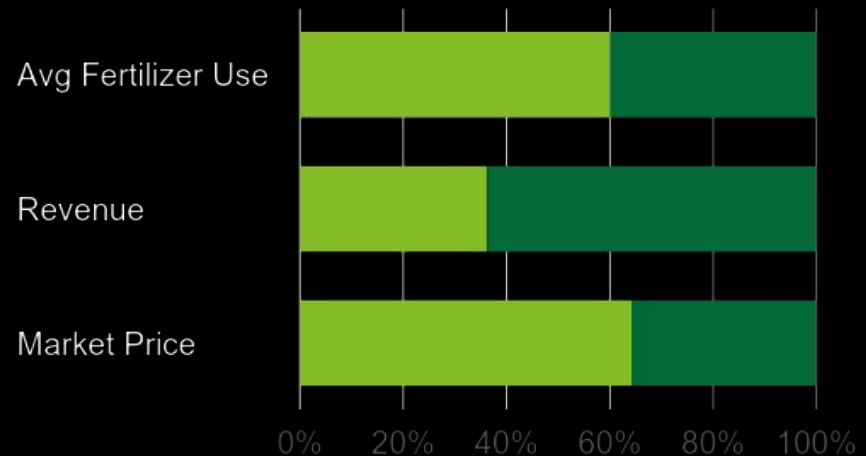
- **Connect farmers**

Source:
Note:

Key Features
Customized evaluation and analysis for individual farmer

- Updated evaluation and analysis throughout the season on real-time basis

  - Including data on sustainability

  - Ranking: show farmer's standing on the national and local scale, in many production areas

Farm A standing in the US

Key Features
Farmland Map

- Farmland Map

  - Show available lands for sale, rent and sharing on the app and USDRD website.

  - Helping beginning farmers and small businesses to acquire land more easily

  - Allocate land efficiently

  - Submit an inquiry form → Information sent to landowner → If interested, landowner will contact that person.
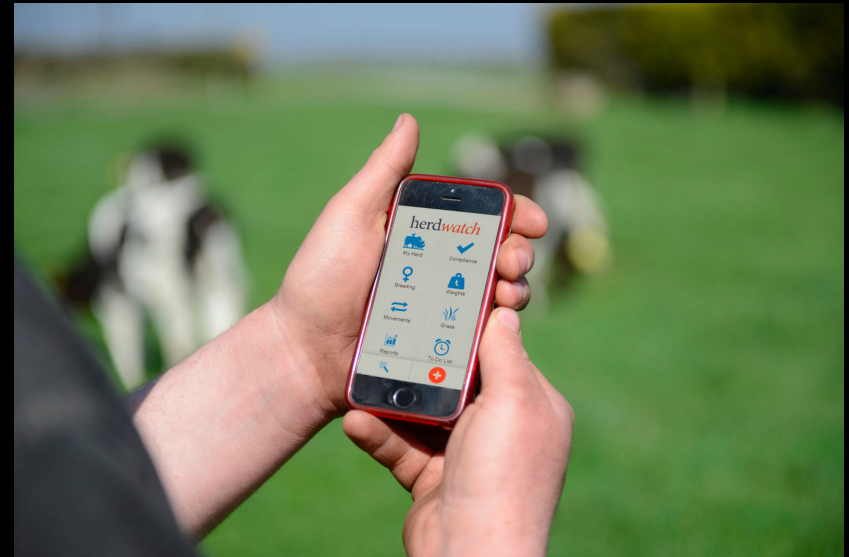

👤	Full Name
✉	Email
📱	Phone
💬	Message

Submit

Sou
Note:

USDRD – Farming App
Development Plan

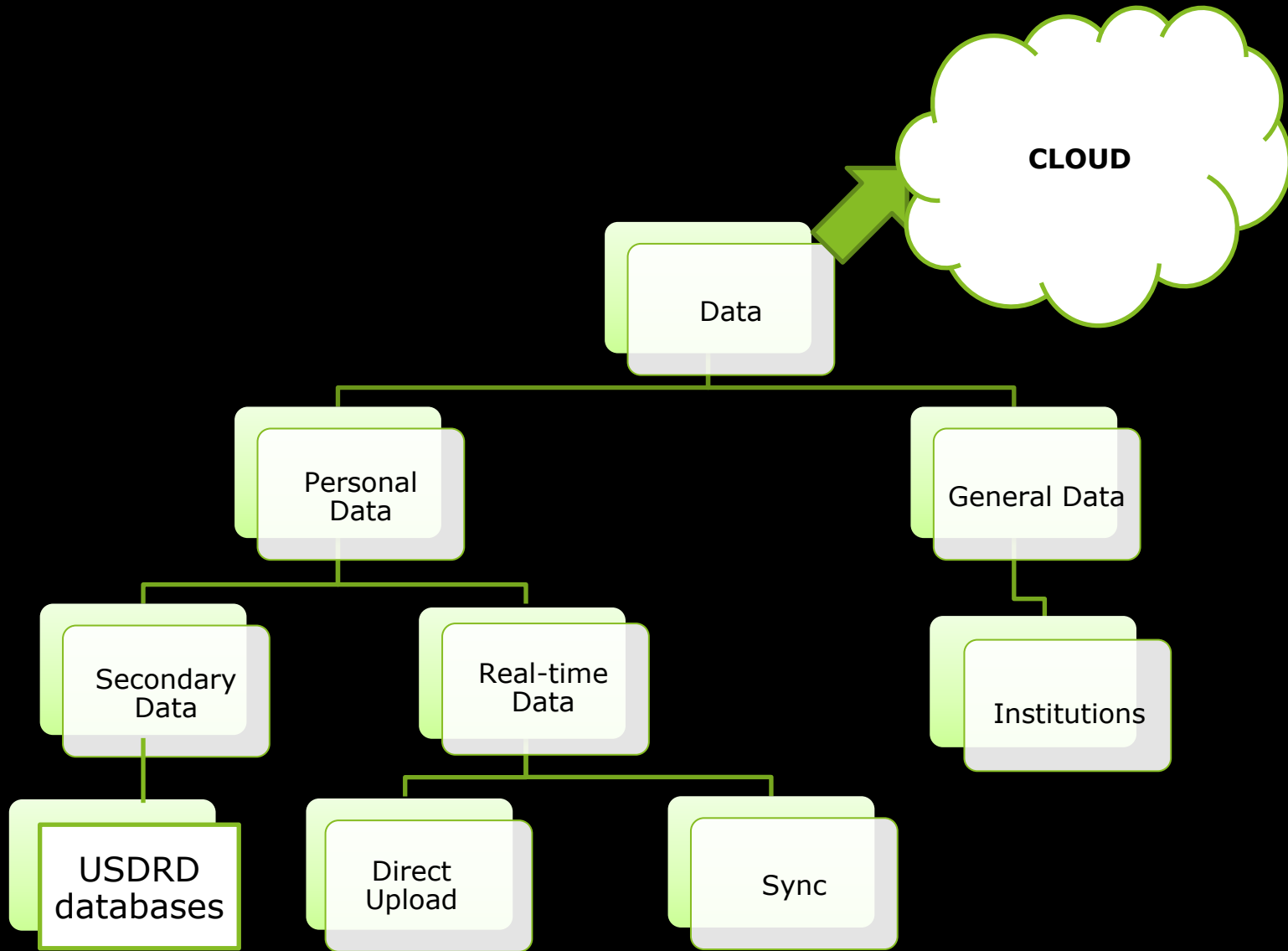# Why Mobile App?
The popularity of Mobile-Agriculture

- 94% of farmers own smartphone or mobile phone*

- Smartphone usage: 40% (mid 2011), up from 10% in 2010*

- Tablet ownership: 47% (2015)**

- Increase in wireless connection in the rural areas

- 33% agriculture apps are considered farms management application → Sync data from other apps

PROCESS OF COLLECTING AND MANAGING DATA

CLOUD

Data

Personal Data

General Data

Secondary Data

Real-time Data

Institutions

USDRD databases

Direct Upload

Sync

Registration steps
How farmers securely register to become a member of the platform

Download the app

Register with basic information

Matching profile with USDRD databases

Verification code sent to phone

Enter the network

Update profile and real-time information

USDRD – Farming App
Implementation Plan

PARTICIPATION INCENTIVES

- Increase productivity with the customized analysis and ranking

- Improve marketing strategy with sustainability figures provided by USDRD

- The application is free to install

PROJECT TIMELINE

Development

6 months

Adopt agile methodology

Create features in a prioritized order

Collaboration between cross-functional teams

Deployment

6 months

Getting Approval

Test

Promotion

Maintenance

12 months

Feedbacks, Tracking

Updates

Key Metrics

- Number of registered farmers

- Average yields

- Number of inquiry forms submitted

- Data Update Frequency

- Ranking change over a period of time

Risks

Table

Data Security and Privacy	• Restrictions on data access (2 factor authentication) • Only registered members can access the data
Bad analytics and irrelevant data	• Agile methodology: Cross-functional team members collaborate to evaluate and improve data quality
Competition with other agriculture apps	• Trust from users • Not-for-profit
Data integration between the app and USDRD website	

Thank you

Contact us

Quyen Le
TCAgents
quyen_le@temple.edu

Thanh Tran
TCAgents
claire.tran@temple.edu

Thao Nguyen
TCAgents
thao.thanh.nguyen@temple.edu

In 1845, Deloitte started
with one individual

**Power
to the
Ones**