

## Agricultural Applications of Tablets and Smart Phones

Jay Yates  
Extension Program Specialist III  
Risk Management

Jackie Smith  
Professor & Extension Economist

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### Introductions



- ⊙ Presenters
- ⊙ Participants
- ⊙ What we want to accomplish today.....
  - ⊙ What can Tablet/Smart Phone do to make you a better decision maker?
  - ⊙ What works best for you.
  - ⊙ Where would it fit if you already have computer and smart phone?

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### Tablets and Smart Phones



- ⊙ Trying to use General Category names.
- ⊙ We are using iPads. Has been leader.
- ⊙ More apps for them.
- ⊙ We have developed our first apps for the Apple Store..for iPhones and iPads.
- ⊙ But we are getting prepared to address other platforms..Android and Microsoft.

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Questions to find out where to start?



- ⊙ How many DO NOT have an iPhone or other smart phone?
- ⊙ Who has iPad or other tablet?
- ⊙ Who has both tablet and smart phone?
- ⊙ Who has an Android tablet? Phone?
- ⊙ Who has a Microsoft tablet? Phone?
- ⊙ Do you sync to computer?

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Tablets and Smart Phones



- ⊙ What is an iPad? Tablet in general?
  - ⊙ Light, touch screen, quick start, limited ports, email, read books, pictures, music, surf the net, etc....
- ⊙ iPhone vs iPad. Tablet vs Smart Phone.
- ⊙ iPad2 vs iPad3 vs iPad mini?
- ⊙ Other tablets and smart phones?
- ⊙ Android, Microsoft and other alternative platforms?

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Do you need a Tablet?



- ⊙ What will a tablet do for you that your laptop will not?
- ⊙ Then do you need a Tablet?
- ⊙ Does your Tablet replace computer?
  - ⊙ Are you comfortable with key board?
  - ⊙ Plan to create documents on your tablet?
- ⊙ What can you do with tablet that you cannot with smart phone?

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### Tough questions



- ⊙ Do you need Desktop, Laptop, Tablet and Smart Phone?
- ⊙ Which iPad?
  - ⊙ Memory?
  - ⊙ iPad2, iPad3, Mini?
  - ⊙ Wifi only or Cellular Data?
  - ⊙ iOS6

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### To make your iPad work for you



- ⊙ Apps
- ⊙ Safari and other browsers
- ⊙ Pages, Keynote, Numbers
- ⊙ Email
- ⊙ Camera
- ⊙ Face time
- ⊙ Non-Apple Tablets: Android, Microsoft
  - ⊙ File operations, more standard ports, somewhat more like laptop. (More later.)

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### What else makes an iPad more productive?



- ⊙ Keyboard
- ⊙ iCloud
- ⊙ Sync with computer
- ⊙ Printing
- ⊙ Display on projector or monitor
- ⊙ Android Tablet?
- ⊙ Microsoft Tablet?
  - ⊙ In general these are more like your computer.

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### iPad compatible with computer?



- ⊙ File Sharing?
- ⊙ Pages, Keynote, Numbers?
- ⊙ Safari?
- ⊙ iCloud?
- ⊙ More compatible with Mac?
  
- ⊙ Android and Microsoft tablet do give you more compatibility with your P.C. More connections to printer, drives, etc..
  - Ports, File Operations, Some have longer battery life.
  - USB, External Hard Drive, Mouse, etc..
  - More complete keyboard. Heavier sometimes.

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### The other platforms? Other tablets? Anything we haven't mentioned yet?



- ⊙ This is where you find out that Jay's head is packed with useful facts!
  
- ⊙ Android--Jay
  
- ⊙ Microsoft--Jackie
  - Best chance to replace laptop with tablet? Have your same software-Office, file operations, folders, etc..
  - Which operating system? Get ready for a very different windows whether it is Windows 8 RT, Pro, etc..
- ⊙ Other Tablets? For books, games, etc..

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### Pick up an iPad for some hands-on time.



- ⊙ Turn it on
- ⊙ Charging, Cables, etc..
- ⊙ Learn to touch screen
- ⊙ Pull apart, pull back together
- ⊙ Slide something
- ⊙ Home button
- ⊙ Camera
- ⊙ iTunes
- ⊙ App Store
- ⊙ Find QR code reader app

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Use QR code reader.



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### Hands-on -- Other



- Settings
- Open another App (DTN)
- Rearrange Icons
- Make a Group
- Close apps
- Delete app
- Take a picture and press email button
- Screen Shot
- Put Short Cut on Home Screen (for a web site)
- The Seam—good example
- Safari Bookmarks

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### Useful General Apps



- Many that use location
- Dragon, Docs To Go, Evernote, etc..
- Weather, Maps, Navigation, Flashlight
- Plant ID, Tank Mix, Ag Markets, etc..
- ....and a million more
  
- Later—More Specific Ag Applications

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Today we think we will help you with these points.



- ⊙ What can a Tablet/Smart Phone do to help you make better, more timely decisions?
- ⊙ Help you decide what you need?
- ⊙ Where does Tablet fit into your electronic bag of tools?

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Agricultural Applications of iPads and iPhones (Not as many for Androids and Microsoft)

- ⊙ Better manage risk
- ⊙ Increase profitability
- ⊙ Easier access to market information
- ⊙ Make decisions on the tractor or in the pickup.
- ⊙ Have information on costs, breakeven prices and breakeven yields with you all the time.
- ⊙ Have access to information at all times to adjust or execute components of your marketing plan.
- ⊙ See Handout...will look at this later.




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Better Decision Making with iPads and iPhones—and other platforms as they are developed.



- ⊙ We are developing apps to add to your set of tools to be able to obtain/calculate the information to improve your decisions.
- ⊙ Introduce you to existing apps that can give you on-the-go data and tools to improve your decision making.
- ⊙ We will stay in contact as we improve our apps and as we find existing apps that could be valuable to you.
- ⊙ Be sure we have your e-mail address if you want us to send you information on apps.

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### Better Decision Making with iPads and iPhones



- ⊙ Special emphasis on encouraging you to develop a **written marketing plan** that you keep up to date and are prepared to take action at any time.
- ⊙ Everything we do in this project is designed to take advantage of new technology to help you **make more accurate and timely decisions**.

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### Good Decisions based on Planning and Good Information



- ⊙ We want you to be prepared to take advantage of a profitable price.
- ⊙ We want you to set price objectives that you know are profitable.
- ⊙ We do not want you to just try to hit the top of the market. We do not want your marketing plan to be to just hit the top of the market.
- ⊙ You have to be able to accurately estimate your yield and your costs to be able to project what a profitable price is for you, anytime a pricing opportunity is available.

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### Good Decisions based on Planning and Good Information



- ⊙ We want you to have information to evaluate your risks. We want you to understand how to use price risk management tools and production risk management tools. Our main goal is to help you obtain those tools...for us to develop apps and/or help you find them.
- ⊙ Even if we don't concentrate on them today, there are many good production related apps. Included on list we hand out.

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Developing and Implementing Your Marketing Plan-First Apps to be identified or developed for some of these steps.



- o Identify short and long term goals.
- o Establish production estimates.
- o Calculate breakeven and profit price goals.
- o Know the market and market outlook.
- o Identify the marketing tools to be used. Compare under different market outcomes.
- o How much should you forward price. Hedge?
- o When, how much and how are you going to sell? Time to get specific.
- o Invest time and money to do it right.
- o Revise and Review marketing plan as conditions warrant
- o Maintain Discipline

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Ag Apps



- o Who has a good Ag App to share with the group?
- o See handout for large list of Ag Apps.
- o Other favorite useful Apps?

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Our Crop Apps



- o Available in App Store
- o Free
- o Crop Cost
- o Water Cost
- o Water Calc
- o Search for Crop Cost
- o See next slide. Enter data into Crop Cost.

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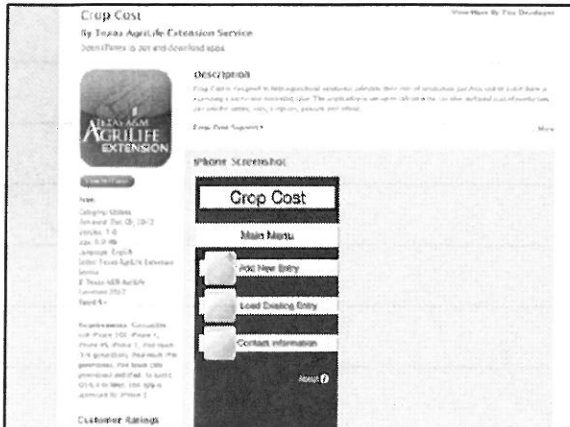
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**Example Pivot Irrigated Cotton**  
Enter Data into Crop Cost app

- Yield 1,250 lbs
- Seed \$70
- Fertilizer \$90
- Chemicals \$70
- Irrigation Fuel \$105
- Tractor & Pickup Fuel \$22
- Labor \$24
- Crop Insurance \$30
- Repairs \$32
- Interest-Operating \$12
- Other \$1 (Could use this to add profit goal per acre.)
- Harvest \$80
- Overhead \$200

Assumes seed income covers ginning.

**TEXAS A&M AGRILIFE EXTENSION**

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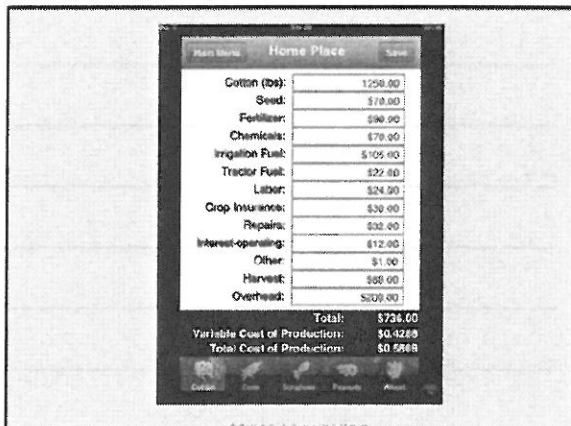
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## Now to Our Other Apps

- Water Cost
- Water Calc




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**Water Cost**  
By Texas AgriLife Extension Services  
Open iTunes to buy and download apps.

**Description**  
Water Cost calculates your own and average irrigation system by entering field size, irrigation, and operation options per month, water coverage and cost of fuel per acre- inch. Additionally, it calculates the expenses applied per acre.

Water Cost Screenshot

**Free**  
Category: Utilities  
Released: Dec 14, 2012  
Version: 1.0  
Size: 2.1 MB  
Languages: English  
Label: Texas AgriLife Extension Services  
© Texas A&M Ag Life Extension  
Release #1

**Requirements:** Compatible with iPhone, iPad, and iPod touch. Requires iOS 5.0 or later. This app is certified for iPhone 5.

**Customer Rating**

Gall Per Acre Inch	50.00
Cost Per Acre	60.00
Total Acre/Inch	3000.00

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**Water - Calc.**  
By Texas AgriLife Extension Services  
Open iTunes to buy and download apps.

**Description**  
Water Calc. calculates crop water in the High Plains (subirrigated) Basic Course water District calculate their water use based on an extensive model established by the district. By entering beginning and ending submeter readings, the app will chart, & produce a calculation for acre inches applied per annual irrigation cycle.

Water Calc. Screenshot

**Free**  
Category: Utilities  
Released: Dec 14, 2012  
Version: 1.0  
Size: 2.1 MB  
Languages: English  
Label: Texas AgriLife Extension Services  
© Texas A&M Ag Life Extension  
Release #1

**Requirements:** Compatible with iPhone, iPad, and iPod touch. Requires iOS 5.0 or later. This app is certified for iPhone 5.

**Customer Rating**

Commission Factor	33
Acre Inches Applied	8.00
Fuel Cost	6.00
Cost per acre inch	60.00
Cost per acre	300.00
Application/acre	8.00

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### Special Spreadsheets Designed to fit iPad

- T-Yields
    - For area counties just recently updated.
    - Especially important when no APH history.
  - Comparative Profit
    - Compare alternative crops considering net returns and ratio of total insurance guarantee to pre-harvest expenses.
  - Insurance Comparison
    - Comparison of RP and RP-E at high and low harvest prices.
- We plan to do more of these.




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The screenshot shows a spreadsheet with columns for different crops and their yields. The crops listed include Corn, Soybeans, Cotton, Rice, and Wheat. The spreadsheet is organized into sections for each crop, with sub-columns for different yield metrics.

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The screenshot shows a spreadsheet comparing various scenarios for crop revenue and expenses. The scenarios are labeled Scenario 1 through Scenario 6. The rows include Crop Revenue, Crop Expenses, Net Return, Pre-harvest Expenses, and Total Guarantee.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6	Scenario 7	Scenario 8
Crop Revenue	\$ 158,850.00	\$ 103,250.00	\$ 30,300.00	\$ 87,500.00	\$ 79,800.00	\$ 138,020.00	\$ 85,500.00	\$ 91,875.00
Crop Expenses	\$ 161,150.00	\$ 75,000.00	\$ 50,800.00	\$ 24,300.00	\$ 54,300.00	\$ 75,150.00	\$ 103,800.00	\$ 67,800.00
Net Return	\$ -2,300.00	\$ 28,250.00	\$ -20,500.00	\$ 63,200.00	\$ 25,500.00	\$ 62,870.00	\$ -18,300.00	\$ 24,075.00
Pre-harvest Expenses	\$ 25,000.00	\$ 45,000.00	\$ 10,000.00	\$ 15,000.00	\$ 5,000.00	\$ 20,000.00	\$ 45,000.00	\$ 20,000.00
Total Guarantee	\$ 21,300.00	\$ 17,250.00	\$ 10,000.00	\$ 48,200.00	\$ 20,500.00	\$ 42,870.00	\$ 23,300.00	\$ 44,075.00
Guarantee-to-Expense Ratio	0.75	0.38	0.20	0.32	0.20	0.67	0.22	0.22

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### Future Plans for this Project



- Other Platforms
- Insurance Apps
- Other?
  
- **We encourage suggestions from workshop participants for Apps needed.**

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### Wrap-Up



- Evaluation
  
- Adjourn

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**Jay Yates**  
 Extension Program Specialist III  
 Risk Management  
 FARM Assistance Analyst




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**Contact Information:**  
 Texas AgriLife Research and  
 Extension Center  
 1102 East FM 1294  
 Lubbock, TX 79403

(806) 746-6101

[jayates@ag.tamu.edu](mailto:jayates@ag.tamu.edu)

<http://lubbock.tamu.edu>  
<http://agrilife.org/southplainscottion>  
<http://agrilife.org/southplainsprofit>

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