Smartphones and Tablets
Moving Herd Recording to a Mobile Environment
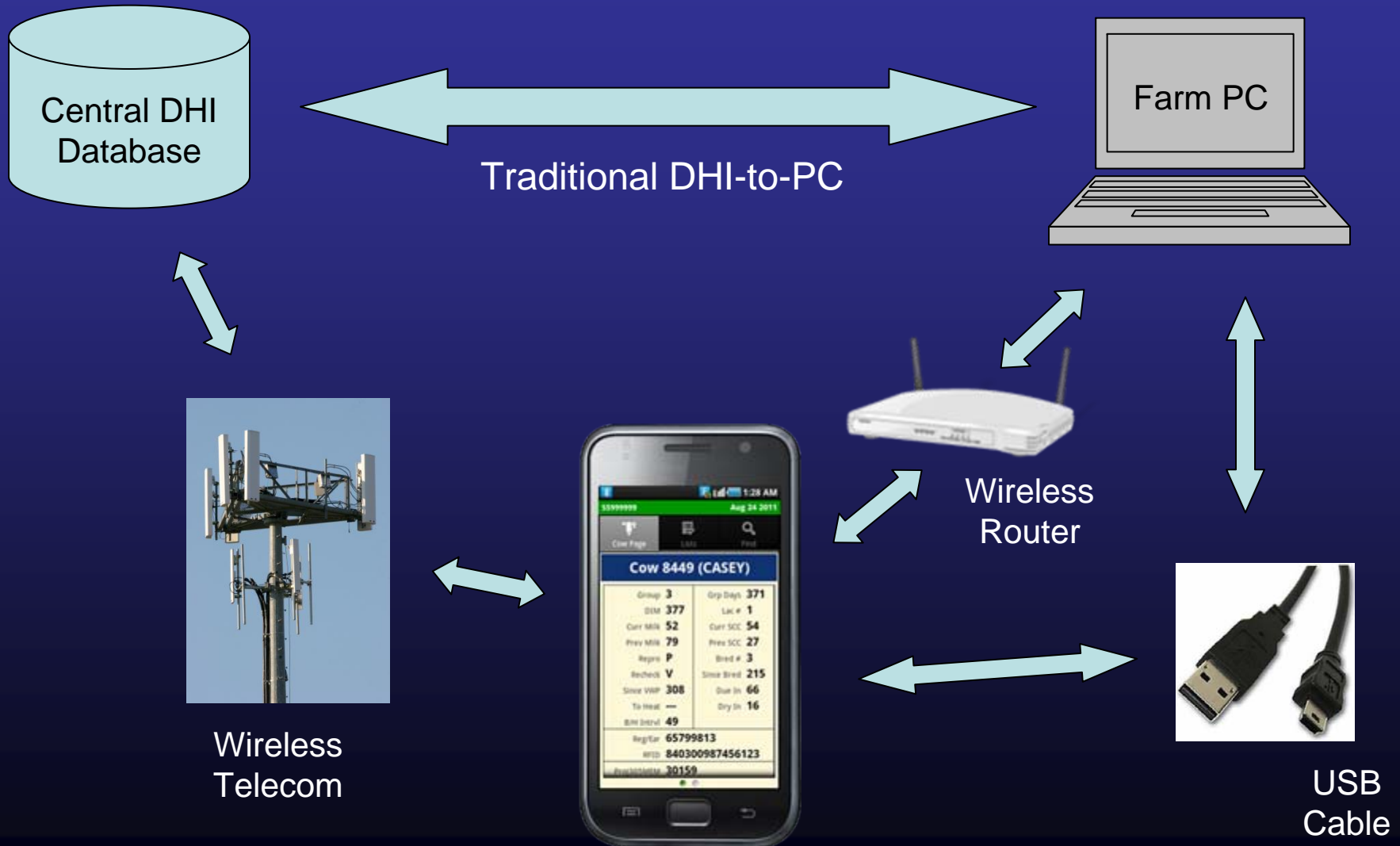
Cork 2012

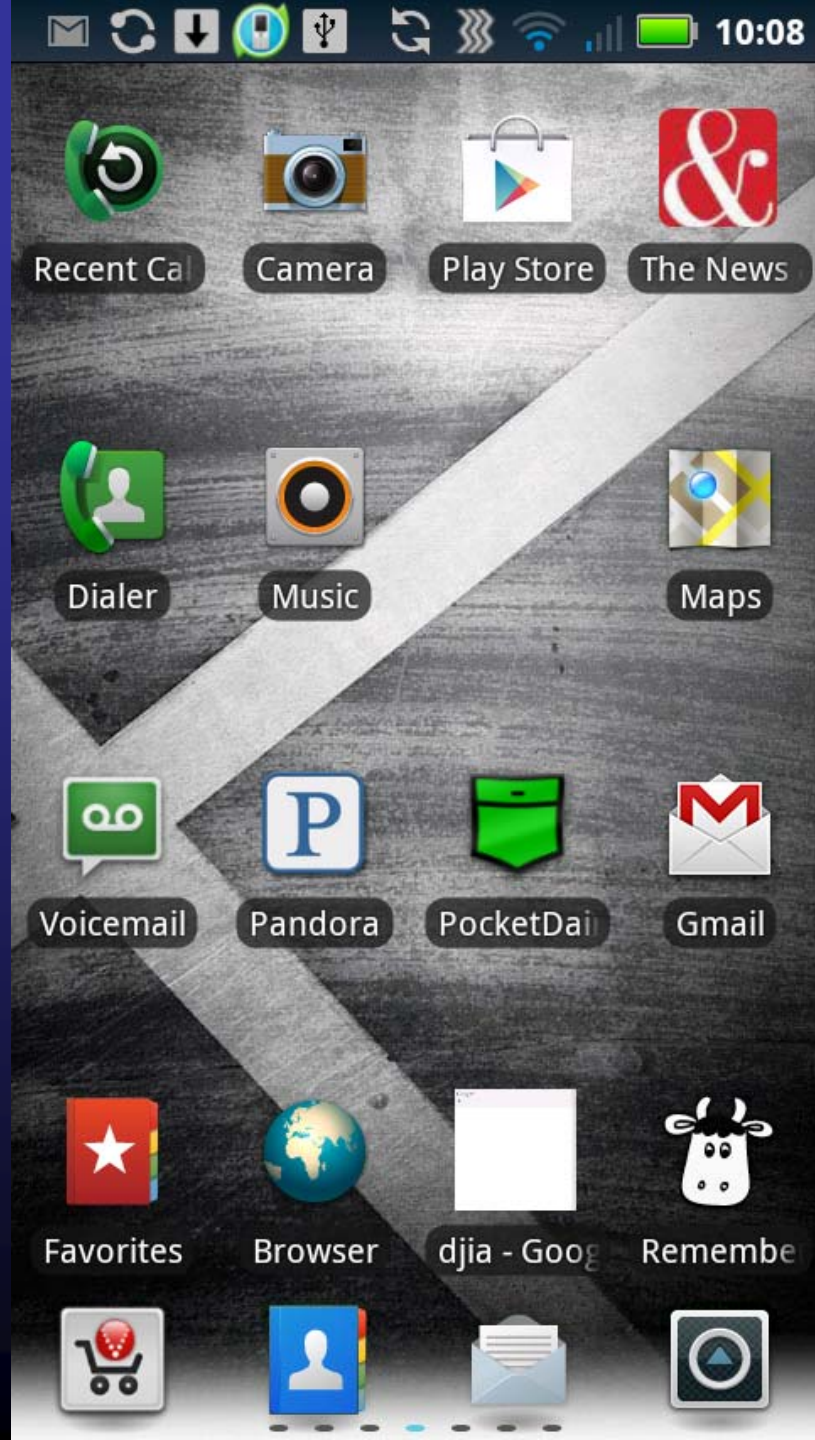**DRMS**
DAIRY RECORDS MANAGEMENT SYSTEMS
www.drms.org

Objectives

- To improve the convenience and usefulness of the desktop computer and the central database
- To deliver these benefits with value

Data Flow

Central DHI Database

Farm PC

Traditional DHI-to-PC

Cow 8449 (CASEY)

Group	3	Grp Days	371
DIM	377	Lac #	1
Curr Milk	52	Curr SCC	54
Prev Milk	79	Prev SCC	27
Repro	P	Bred #	3
Recheck	V	Since Bred	215
Since VWP	308	Due In	66
To Heat	—	Dry In	16
BM Intrvl	49		
Reg/Ear	65799813		
RFID	840300987456123		
	30159		

Wireless Router

Wireless Telecom

USB Cable

33090003

UNIV OF IL DAIRY HERD

52360005

GEO ALVIS & SONS

Cow Page	Lists	Find	Input

Cow 133

Group	**3**	Grp Days	**---**
DIM	**293**	Lac #	**4**
Curr Milk	**83**	Curr SCC	**17**
Prev Milk	**87**	Prev SCC	**27**
Repro	**P**	Bred #	**1**
Recheck	**---**	Since Bred	**219**
Since VWP	**222**	Due In	**62**
To Heat	**---**	Dry In	**2**
B/H Intrvl	**---**		

Reg/Ear	**52331133**
RFID	**---**
Custom 1	**---**
Custom 2	**---**

Cow Page	Lists	Find	Input

Cow 6993 (CINDY)

Group	**4**	Grp Days	**308**
DIM	**Dry**	Lac #	**9**
Milk Dryoff	**0**	305ME	**25288**
Days Dry	**744**	Due In	**---**
Twins?	**No**		

Reg/Ear	**122498561**
RFID	**---**

DaysOp	**899**
SugSSire1	**STRACK2X**
SugSSire2	**138HO4135**
SugSSire3	**---**
Rat	**C**
Custom 6	**---**

| Cow Page | Lists | Find | Input |

Idx	Grp	Rpro	Rck	DIM	DSB	Brd Num
6993	4	C	K	0	0	0
7311	7	B	V	723	109	7
7454	1	C	K	328	0	0
7538	7	---	---	215	0	0
7635	4	C	K	0	0	0
7665	1	P	V	587	336	5
7744	5	C	---	0	0	0
7821	42	P	V	0	469	5
7866	1	B	---	390	217	3
7934	44	P	V	0	434	4
7946	1	P	---	365	245	2
7950	1	P	V	572	371	4
7958	1	B	---	335	217	2
7963	1	B	---	278	203	1
7969	4	C	---	0	0	0
7986	7	---	---	206	0	0
7994	1	P	---	442	245	4
7998	1	B	R	465	231	4
8049	1	P	V	430	357	1

| Cow Page | Lists | Find | Input |

Cow 133

Group	**3**	Grp Days	**---**
DIM	**293**	Lac #	**4**
Curr Milk	**83**	Curr SCC	**17**
Prev Milk	**87**	Prev SCC	**27**
Repro	**P**	Bred #	**1**
Recheck	**---**	Since Bred	**219**
Since VWP	**222**	Due In	**62**
To Heat	**---**	Dry In	**2**
B/H Intrvl	**---**		

Reg/Ear	**52331133**
RFID	**---**

Custom 1	**---**
Custom 2	**---**

10:09

Cow Page	Lists	Find	Input

Cow 7665 (SAL)

PALP	PRH NO G	07/27/11
BRED 5	DOMAIN	06/25/11
CHOR	GnRH TM	06/24/11
PALP	LF2CL2RCL3 PGF	06/22/11
CHOR	PGF TM	06/22/11
PALP	LCL3F1RS	06/17/11
PROT	OvSynch	06/15/11
PALP	LCL3 G	06/15/11
CHOR	GnRH TM	06/15/11
BRED 4	7HO10272	05/14/11
CHOR	PGF TM	05/11/11
PALP	LF2 RCL3	05/07/11
PROT	OvSynch	05/04/11
PALP	LCL1 RCL2 G	05/04/11
CHOR	GnRH TM	05/04/11
BRED 3	7HO10272	04/02/11
CHOR	GnRH TM	04/01/11
CHOR	PGF TM	03/30/11

Cow Page	Lists	Find	Input

Milking Cows   Quick View

To Calve   To Repro

To Breed   To Dry

Filter   **All Animals**
          All Groups

All Lists

◉ **All Animals**

◯ **Cows Only**

◯ **Heifers/Bulls Only**

_____

◉ **All Groups**

◯ **Group #** [|]

To Breed

☑ **Look back limited to** [3] **days**

☑ **Look ahead limited to** [7] **days**

To Dry

☑ **Look back limited to** [7] **days**

[Use Defaults]   [Done]

Cow Page | Lists | Find | Input

Idx	Grp	Rpro	Rck	DIM	DSB	Brd Num
6993	4	C	K	0	0	0
7311	7	B	V	723	109	7
7454	1	C	K	328	0	0
7538	7	---	---	215	0	0
7635	4	C	K	0	0	0
7665	1	P	V	587	336	5
7744	5	C	---	0	0	0
7821	42	P	V	0	469	5
7866	1	B	---	390	217	3
7934	44	P	V	0	434	4
7946	1	P	---	365	245	2
7950	1	P	V	572	371	4
7958	1	B	---	335	217	2
7963	1	B	---	278	203	1
7969	4	C	---	0	0	0
7986	7	---	---	206	0	0
7994	1	P	---	442	245	4
7998	1	B	R	465	231	4
8049	1	P	V	430	357	1

Cow Page | Lists | Find | **Input**

Calved

Bred

Dried

Group Change

Left

New Animal

Repro

Health

Cow 7665 — Group 1

Calv Date	-	05/05/2012	+
Difficulty	-	3 Needed assist	+
Weight	-	1300	+

Cow Idx: 7665   Move to   Grp

Calf 1

Kept ▼   Female ▼   Grp

I	Index	D	DHIA ID
B	Barn	R	RFID

Cancel   Save   More >

Breed

AY Ayrshire ⊙

BS Brown Swiss ⊙

GU Guernsey ⊙

HO Holstein ⊙

JE Jersey ⊙

MS Milk Shorthorn ⊙

WW Red White ⊙

Select language
English

After saving an input
Return to input overview

After saving a repro input
Return to repro list
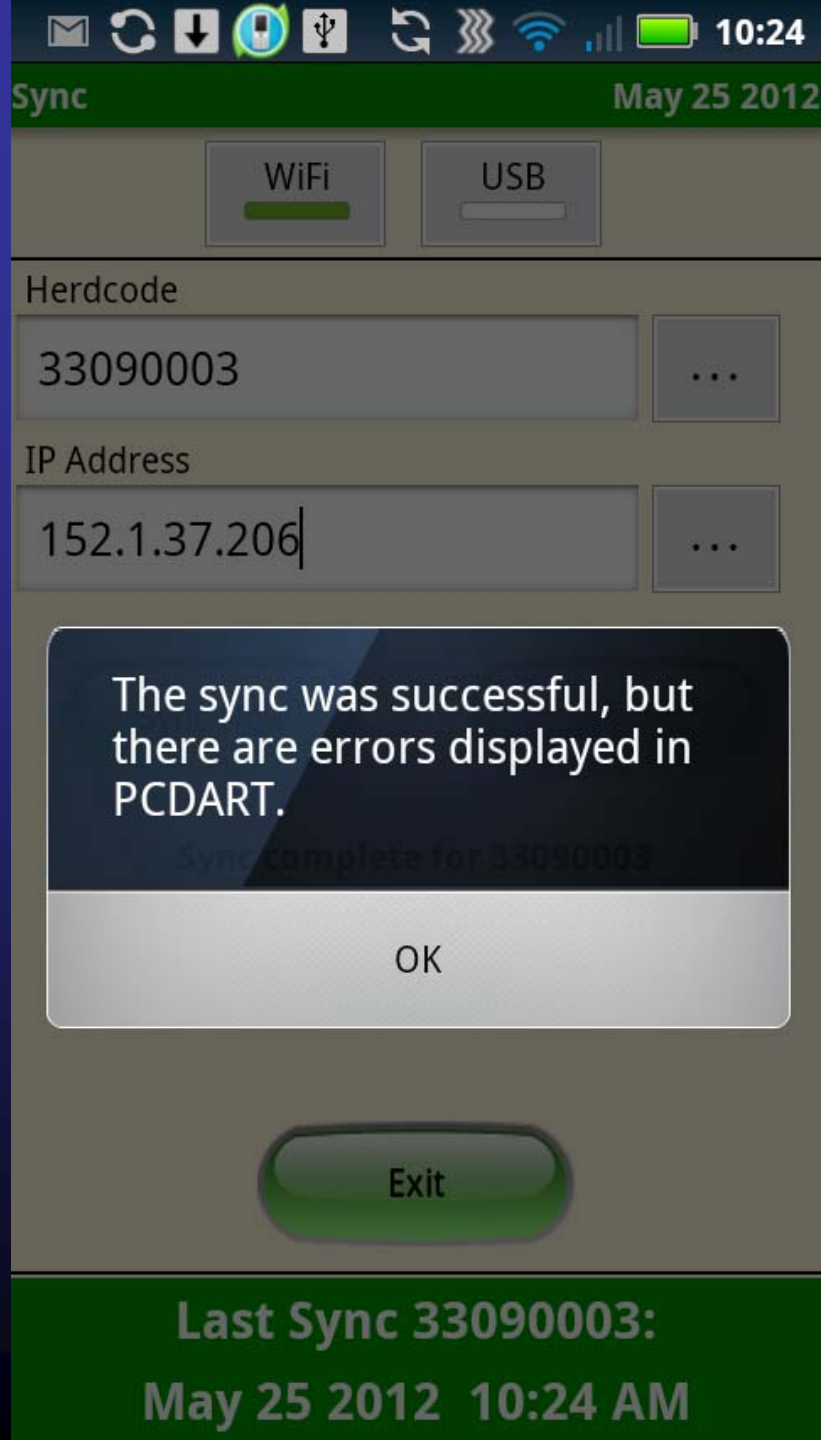
Program Version
1.1.12

Checking for updates...

WiFi

USB

Herdcode

33090003

· · ·

IP Address

192.168.1.143

· · ·

Sync Now

Cancel

Exit

Last Sync 33090003:

Unknown

WiFi

USB

Herdcode

33090003

...

IP Address

152.1.37.206

...

The sync was successful, but there are errors displayed in PCDART.

Sync complete for 33090003

OK

Exit

Last Sync 33090003:

May 25 2012 10:24 AM

Select language
English

After saving an input
Return to input overview

After saving a repro input

Select language

English   ⦿

Español   ○

Hoja de Vaca | Listas | Hallazgo | Entrada

Vacas en Prod

Vista rápida

Parir

A Repro

A Servir

Secar

Filtro

Animales Todos
Grupos Todos

a de Vaca | Listas | Hallazgo | Entrada

Vaca 7934 (CAMAY)

Grupo	**1**	Dias Grp	**---**
DEL	**159**	# Lac	**6**
Leche pesaje act	**147**	SCC pesaje act	**27**
Leche pesaje ant	**150**	SCC Peaje ant	**15**
Repro	**B**	# Serv	**2**
Recheq.	**---**	Dias dsde Serv	**42**
Hasta VWP	**0**	Parir en	**239**
Celo	**1**	Secar en	**189**
S/C Intrvl	**42**		

DHIA ID	**61532605**
RFID	**982000018351032**
Variable 1	**---**
Variable 2	**---**

History

- PocketDairy Palm (2000)
  - Palm operating system
  - **Design discipline** for hardware and software
  - Successful (> 1,100 subscribers)
- PocketDairy PPC (2005)
  - Windows PocketPC operating system
  - **Lack of design discipline** by Microsoft & DRMS
  - Unsuccessful (in terms of popularity)

Progress

- Released to beta users 2011
  - Highly successful – 350+ users within months
  - Surprises
    - Non-phone vs. "Only one device to carry"
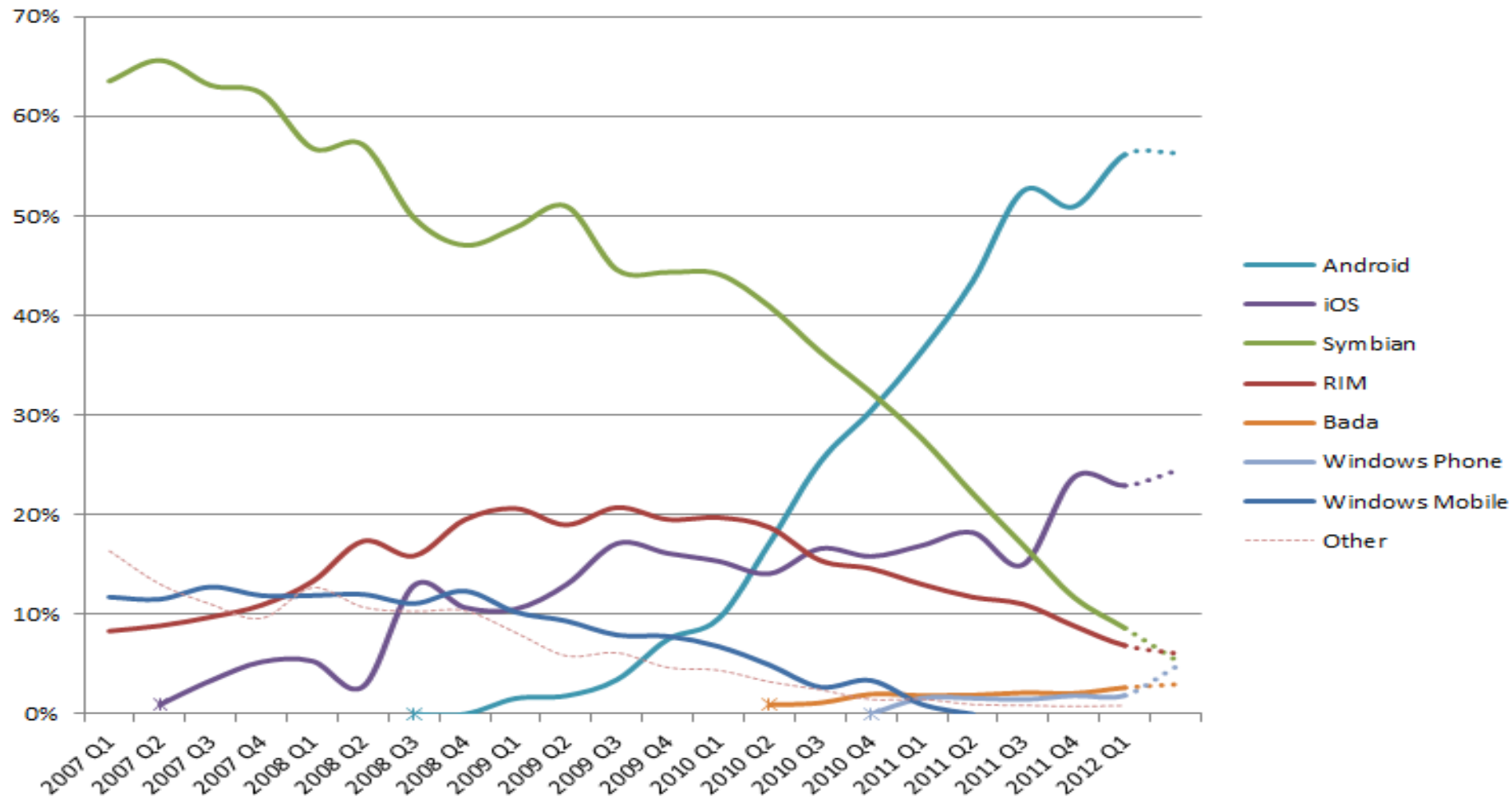   - **Emotional response**
- Full release in June

Farmer Comments

- "I like entering breedings on the Android so much, that I want to **breed more cows**, just so I can enter the breedings on the Android." *Marty Burken, Iowa*

- "I've been using the Pocket Dairy for Android since last year. As a herd manager of over 400 cows, this is an **awesome** tool to have! I love that when I'm not on the farm and my boss calls with a cow question, I can just pull up her info. I'm always prepared now! Thank you for such a great program!" *April Phelps, Virginia*

- "I renewed my cell phone contract and got an Android JUST because of PocketDairy !!! My husband asks me to look for cow , heifer fresh date , breeding date, whatever info needed. I have it on MY phone .... He's going to have to get HIS OWN phone.... But **we love it!**" *Hope Reynolds, Kentucky*

Technical

- Android operating system 2.2+
- Developed in Java
- Uses installed SQL database
- External interface by simple text file
- Foreign language support by XML file
- Avoids the Android Market system (data/updates)
- Works on phones or *non-phone* devices
- Devices can be used for other software
- Why not browser-based? (not always available)

World-Wide Smartphone Sales (%)

Legend: Android, iOS, Symbian, RIM, Bada, Windows Phone, Windows Mobile, Other

- Android (58), Apple (25), Windows Mobile (2)
- Cross platform development tools

Future

- Better telecom coverage in rural areas
- Speech recognition and output
- Delivery of central agency products and services

Summary of Primary Benefits

- Reduces delays in decision-making
- Conserves time
- Conserves walking
- Conserves paper
- Opens channel for central agency in
- Simple to use; no instruction manual

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