Mobile for Development Impact

GSMA

WEBINAR

Getting the most out of your data:

A case study in mobile agriculture & thoughts for the M4D sector

We're just waiting for participants to dial in and we'll start the webinar shortly.

Please use the **call back function** to dial in to the webinar. This should appear as a pop up box, which invites you to share your phone number to receive a free call back that automatically joins you to the webinar audio.

To ensure a clear line for everyone, all participant lines will be muted. Please ensure you **DO NOT UNMUTE** your line.

Please feel free to send any questions as a <u>private message</u> to Alex Smith – this can be done at any time via the chat function. Questions will be answered during the Q&A following the presentation.

Mobile for Development Impact

WEBINAR

Getting the most out of your data:
A case study in mobile agriculture & thoughts for the M4D sector

May 2014

Adam Wills, Analyst, GSMA Mobile for Development Impact
Natalia Pshenichnaya, Senior Manager, GSMA Mobile Agriculture

GSMA™

The MasterCard Foundation

OMIDYAR NETWORK™

Agenda

1. Introductions

2. The M4D opportunity – in terms of user analytics

3. xAgri Info – a case study in value of user analytics

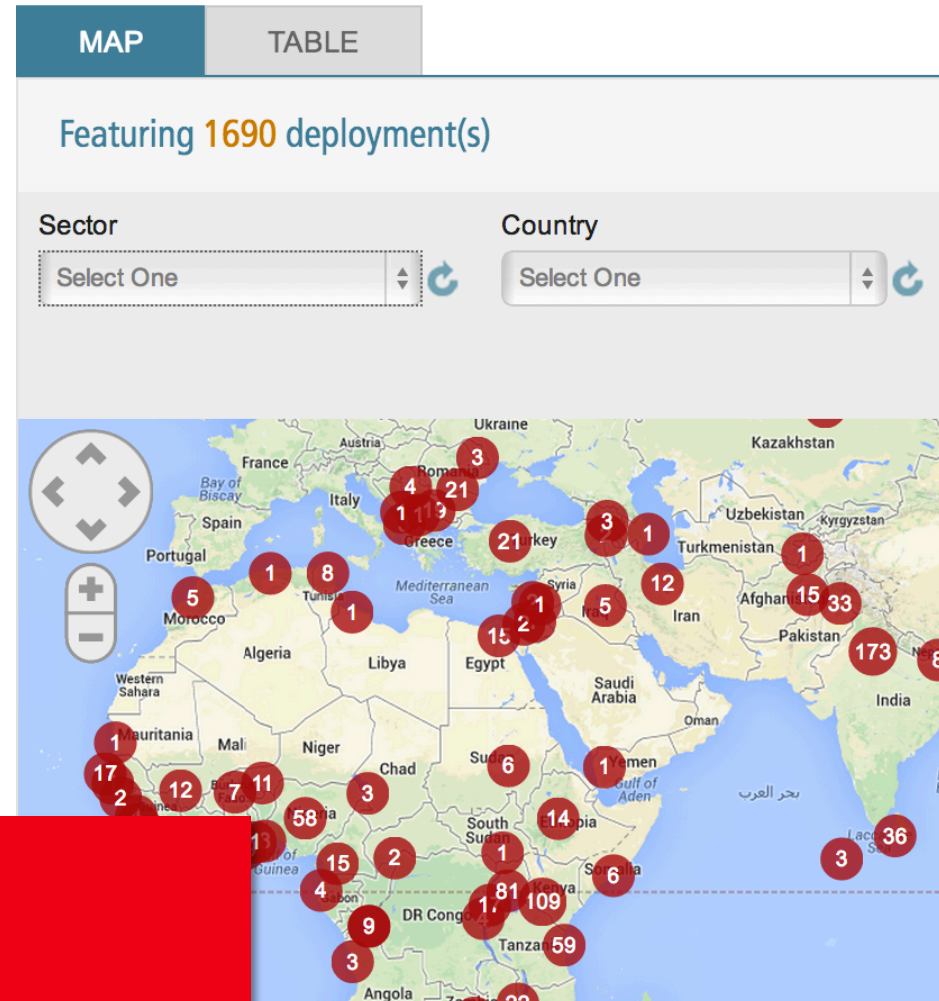4. The importance of analytics in project implementation

5. Q&A

Mobile for
Development Impact

Adam Wills,
Analyst,
GSMA Mobile for Development Impact

GSMA Mobile for Development Impact

Mobile for Development Impact supports the digital empowerment of people in emerging markets through a central platform of data, analysis and insight used to inform investment and design decisions for mobile services.

www.gsmaintelligence.com/M4D

MAP   TABLE

Featuring **1690** deployment(s)

Sector
Select One

Country
Select One

GSMA Intelligence
Mobile for Development

Case study: Kopo Kopo

GSMA Intelligence
Mobile for Development

ANALYSIS
Mobile platform wars

February 2014

GSMA Intelligence
Mobile for Development

March 2014

The importance of partnerships to mobile operators' value added services

The problem of scale

The mobile phone has been used in over **1,600 products and services** in the M4D space

Challenge

Scale and commercial viability have still not been achieved by the vast majority of M4D services.

How can M4D service providers best utilize what data they already have to address this?
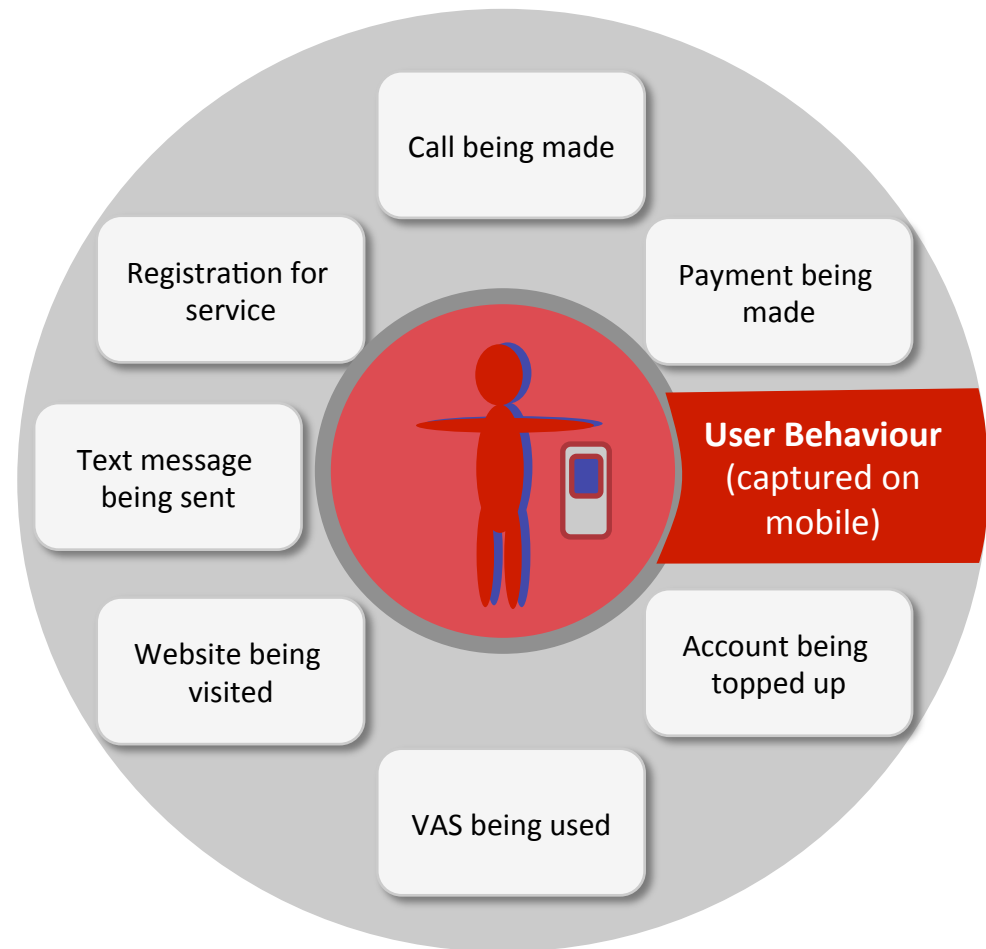
M4D - The mobile opportunity

M4D services across sectors:
- Mobile money
- Mobile agriculture
- Mobile health
- Etc.

Have something in common

Mobile as a SMART delivery channel

But don't' simply assume M4D services are capturing and using such data

Call being made

Registration for service

Payment being made

Text message being sent

User Behaviour (captured on mobile)

Website being visited

Account being topped up

VAS being used

Examples of the kind of behavior captured over mobile

Case Study: value of user analytics

An example of using analysis of usage data as the basis for decision making

xAgri Info

An **MNO led service**

delivered over a **USSD platform**

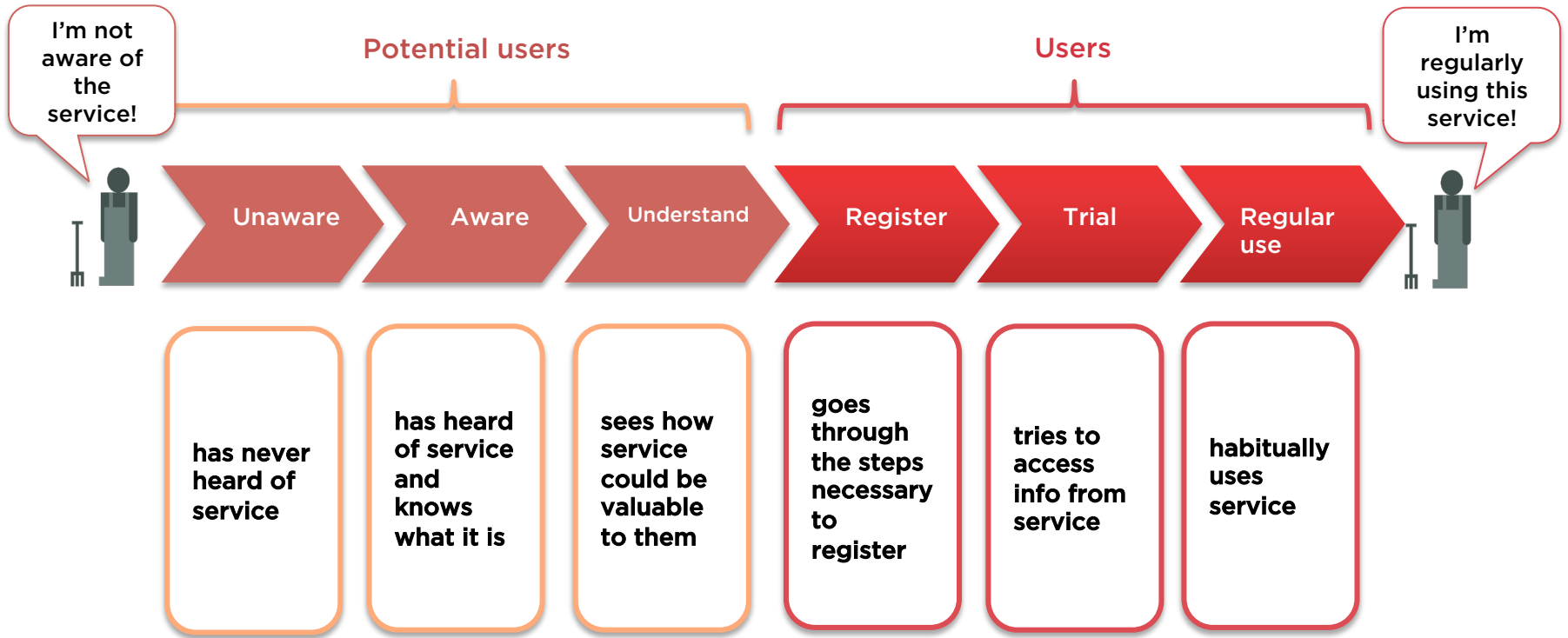Over **100,000 registered users**

Service offers information services in the areas of:
- ✓ **Market prices**
- ✓ **Agronomy information**
- ✓ **Weather**

The service has been **live for over one year**

Taking Users on a Journey

Some questions we were asked

How does the customer journey tell me where I'm losing value?

How many people are stuck in the journey toward regular use of my service?

Where should I focus resources to see improvements in usage

What we did

1

Get the data… (below is a dummy sample table)

user_id	timestamp	content_type	charge	status_id
1	12/05/2014 00:00	MARKET_PRICE	0.01	1
2	13/05/2014 07:12	AGRONOMY	0.01	1
3	14/05/2014 14:24	WEATHER	0.01	1
4	15/05/2014 21:36	WEATHER	0.01	1
5	17/05/2014 04:48	WEATHER	0.01	1
6	18/05/2014 12:00	MARKET_PRICE	0.01	1
7	19/05/2014 19:12	MARKET_PRICE		0
8	21/05/2014 02:24	AGRONOMY		0
9	22/05/2014 09:36	MARKET_PRICE	0.01	1
10	23/05/2014 16:48	MARKET_PRICE	0.01	1
11	25/05/2014 00:00	MARKET_PRICE	0.01	1
12	26/05/2014 07:12	MARKET_PRICE	0.01	1
13	27/05/2014 14:24	MARKET_PRICE	0.01	1
14	28/05/2014 21:36	AGRONOMY	0.01	1
15	30/05/2014 04:48	AGRONOMY	0.01	1
16	31/05/2014 12:00	WEATHER	0.01	1
17	01/06/2014 19:12	WEATHER	0.01	1

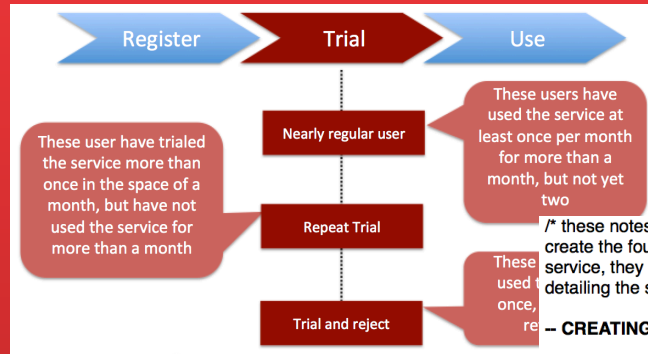Key data is a <u>log of users</u>… and their <u>transactions</u> with the service

What we did

1

Get the data!! (i

trans_date date	trans_timesta timestamp w	service_ charact
2012-12-07	2012-12-07	AGRONO
2012-12-07	2012-12-07	AGRONO
2012-12-07	2012-12-07	AGRONO
2012-12-07	2012-12-07	MARKET_
2012-12-07	2012-12-07	MARKET_
2012-12-07	2012-12-07	MARKET_
2012-12-07	2012-12-07	MARKET_
2012-12-07	2012-12-07	WEATHE
2012-12-07	2012-12-07	WEATHE
2012-12-07	2012-12-07	WEATHE
2012-12-07	2012-12-07	WEATHE
2012-12-10	2012-12-10	AGRONO
2012-12-10	2012-12-10	MARKET_
2012-12-10	2012-12-10	MARKET_
2012-12-10	2012-12-10	MARKET_
2012-12-10	2012-12-10	MARKET_
2012-12-10	2012-12-10	MARKET_
2012-12-10	2012-12-10	MARKET_

(Key data is a lo
with the service

2

Then used a <u>framework</u> for segmenting customers we have data for, and created a set of <u>technical notes</u> (in SQL code) to segment customers based on the data

Register → Trial → Use

Nearly regular user

These users have used the service at least once per month for more than a month, but not yet two

These user have trialed the service more than once in the space of a month, but have not used the service for more than a month

Repeat Trial

These used once, re

Trial and reject

Tech notes

/* these notes document the code used in postgreSQL to create the foundation tables for analysis of xAgri Info service, they can be used to accompany the technical notes detailing the segmentation process */
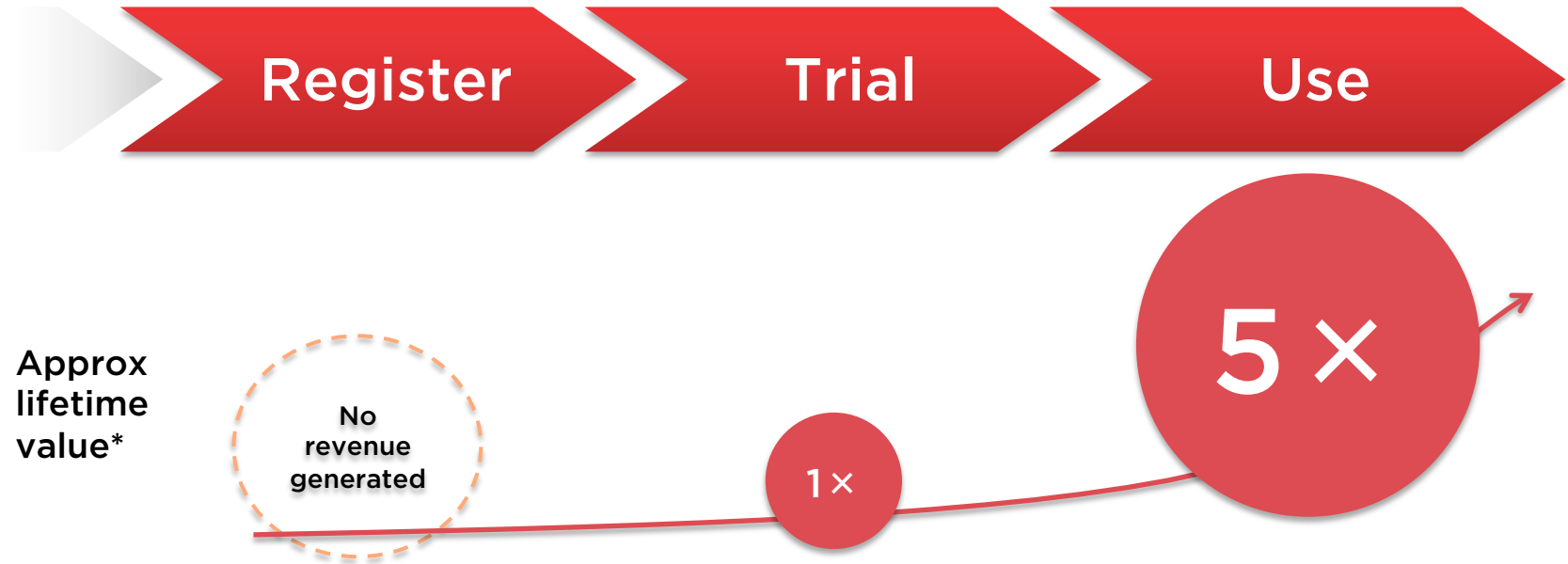
-- **CREATING BASE TABLES**

-- **create the reg_user table**

-- *uncomment as required*… [when you see this line, the code directly below can be pasted directly into a postgreSQL console]…
/*
Create table reg_user
(Customer_ID int,
Age int,
Gender int,

Framework

What we did

1 Get the data!

trans_date date	trans_timesta timestamp wi
2012-12-07	2012-12-07 A
2012-12-07	2012-12-07 A
2012-12-07	2012-12-07 A
2012-12-07	2012-12-07 M
2012-12-07	2012-12-07 M
2012-12-07	2012-12-07 M
2012-12-07	2012-12-07 M
2012-12-07	2012-12-07 W
2012-12-07	2012-12-07 W
2012-12-07	2012-12-07 W
2012-12-07	2012-12-07 W
2012-12-10	2012-12-10 A
2012-12-10	2012-12-10 M
2012-12-10	2012-12-10 M
2012-12-10	2012-12-10 M
2012-12-10	2012-12-10 M
2012-12-10	2012-12-10 M
2012-12-10	2012-12-10 M

(Key data is a
with the servi

2 Then came
customers v
(in SQL cod

These
the se
once i
mont
used
more

Fram

3 Using this segmentation we can generate a picture of the customer base according to different usage segments

13% Use — 4% Regular user

28% Trial

59% Register

59% Registered non user

5% Potential User

7% Repeat Trial

16% Trial and reject

3% Lapsed regular user

6% Infrequent user

Pay-off for investment
Uncertain pay-off
Unlikely pay-off
No pay-off

What value am I losing?

Register → Trial → Use

Approx lifetime value*

No revenue generated

1×

5×

For xAgri Info, those who 'use' the service are **5 times more valuable** than 'trial' users.

*segment value calculated by looking at the average number of months active x average monthly ARPU for segment. This gives a conservative estimate of how much value customers in the segment will generate over a longer period
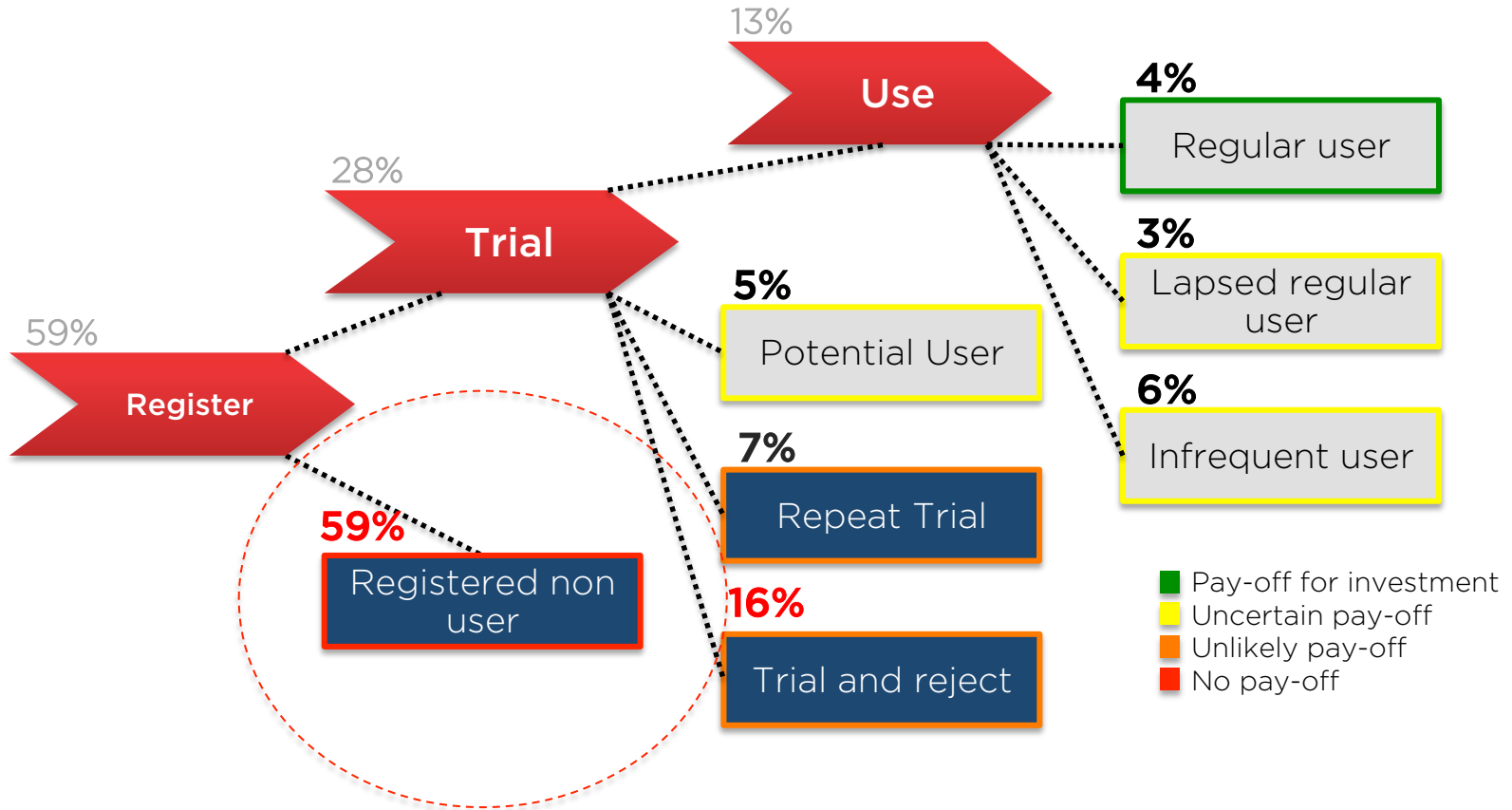
Where are my users stuck?

Register ▶ Trial ▶ Use

% of registered user base

59%

28%

13%
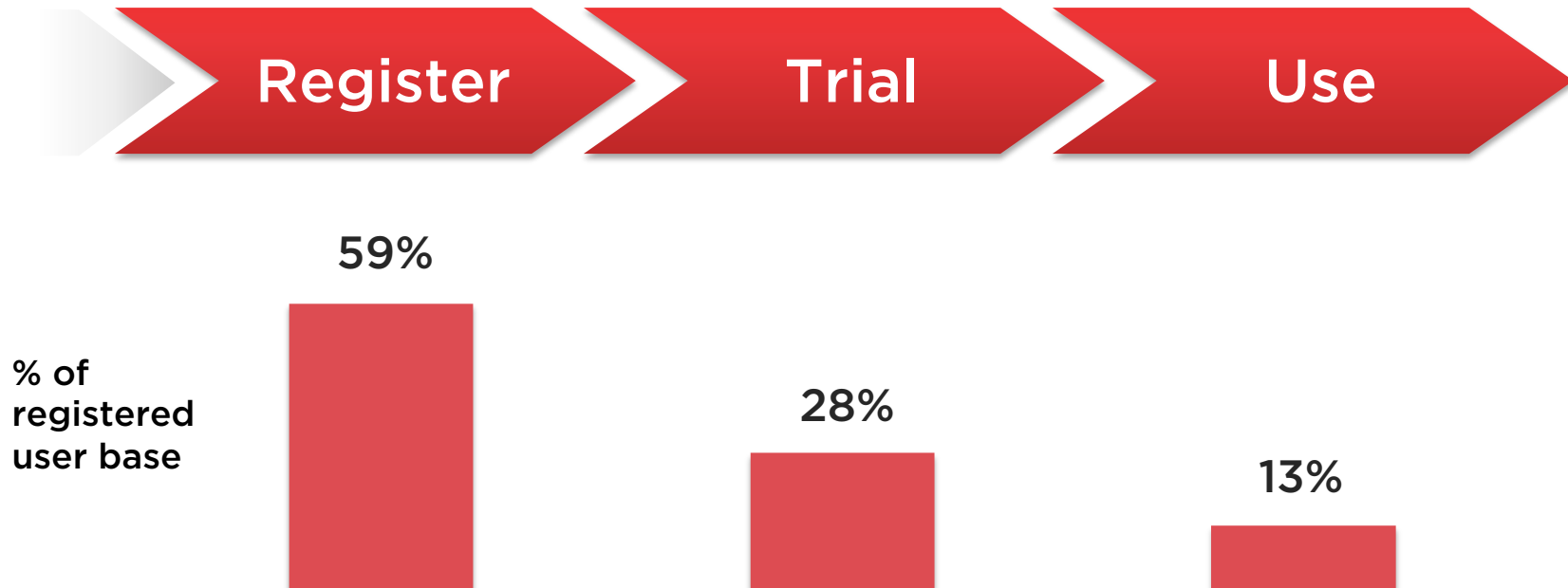
The clear **bottlenecks are around registration and trial**, **87%** of customers are stuck at these stages

* 'Use' defined as using the service once on a monthly basis for at least two months

Where to focus?

13%

Use

59%

Register

28%

Trial

4%
Regular user

3%
Lapsed regular user

5%
Potential User

6%
Infrequent user

7%
Repeat Trial

59%
Registered non user

16%
Trial and reject

■ Pay-off for investment
■ Uncertain pay-off
■ Unlikely pay-off
■ No pay-off

Focus on the biggest bottleneck here

59%
Registered non user

Ideas for "registered non-users"

59%

Registered non user

These users have signed up, but have never used the service

Idea 1: try to convert straight after registration	Idea 2: Make the service nature clear in marketing	Hypothesis testing: work out the biggest challenge for the segment
• Evidence of demand • Going unfulfilled	• many similar services 'push' content • Marketing use case properly?	• Don't understand service nature (push/pull)? • Don't see/understand value to them? • Are put off by price? • Can't reach content, usability issues

Use… Then Social/Commercial impact

Increased usage

Unaware → Aware → Understand → Register → Trial → Use

Both commercial and social objectives align here
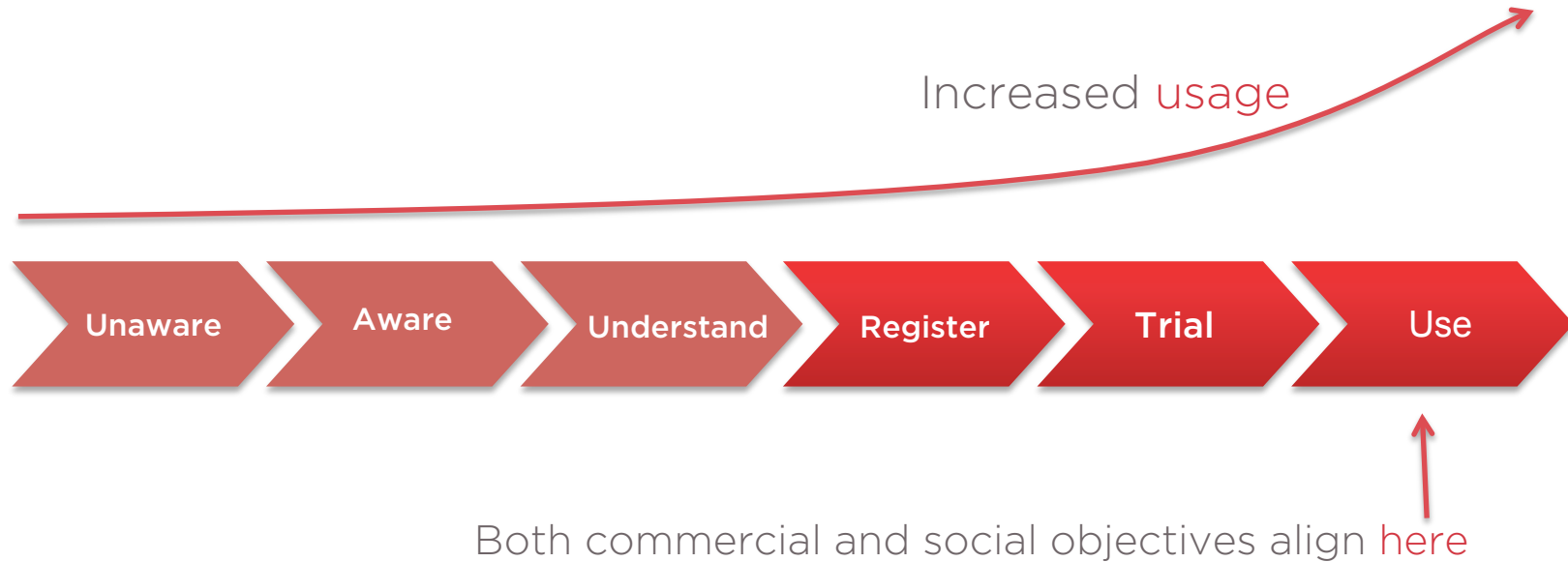
- Usage comes before impact and scale – social or commercial

- Mobile not a magic tool – you need to design things well, and use data to inform

- GSMA seen this apply in Mobile Money and Mobile Ag - can we see more?

Full case study:

Mobile Ag
https://mobiledevelopmentintelligence.com/insight/
Mobile user analytics: a case study in mobile agriculture

Also look at:

Mobile Money
http://www.gsma.com/mobilefordevelopment/wp-content/uploads/
2013/07/Customer-Business-Intelligence-.pdf

Technical notes available:

Mail me for inquiries on this – awills@gsma.com

www.gsmaintelligence.com/M4D

Mobile for Development Impact

Natalia Pshenichnaya,
Senior Manager, GSMA Mobile Agriculture

What we do:

- catalyse uptake of scalable, commercial mobile services that benefit the agriculture sector in emerging markets.

We work with:

- mobile operators, VAS providers, development community and agriculture organisations.

We provide:

- risk capital, targeted consultancy, M&E tools;

- best practices, partnership brokering for wider industry.

Find us: www.gsma.com/mobilefordevelopment/programmes/magri

Why BI is important to mAgri deployments

analysis

recommendations

implementation
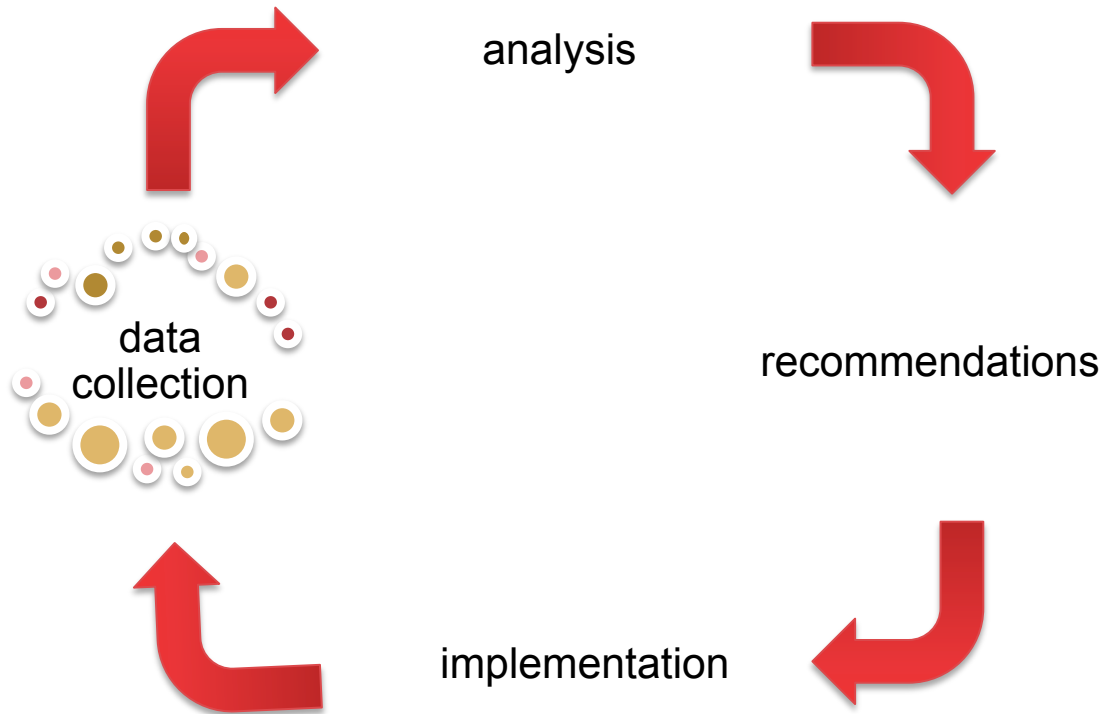
data collection

Data available for BI:

- Usage logs;

- User testing results (report, video, photo);

- Case studies & interviews;

- Phone surveys results;

- Record of service and content improvements;

- Record of marketing activities.

Recommendations
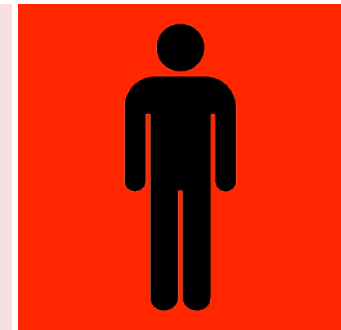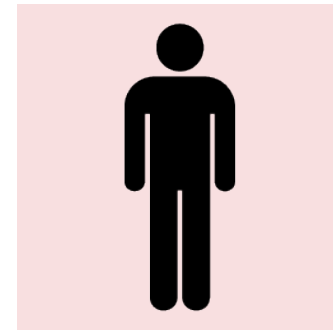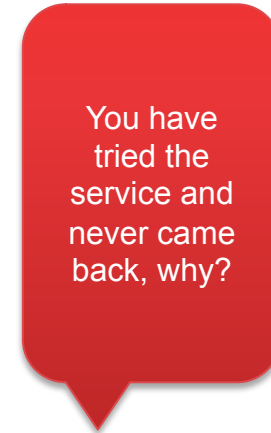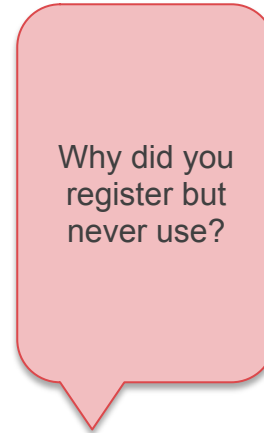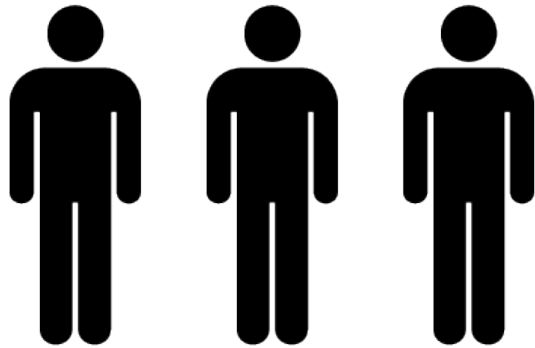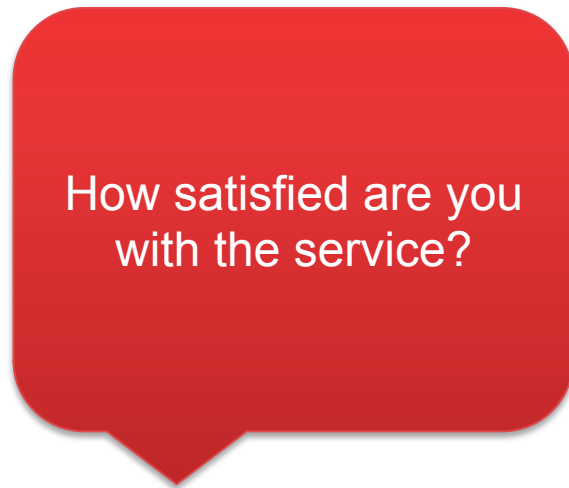
- First thing first – data collection – capture the data on user behavior to get full picture:
  - – if possible capture data on user profile;
  - – time of access;
  - – channel of access;
  - – duration of browsing;
  - – transaction status;
  - – charging;
  - – type of content.

- Create the dashboard that incorporates the most important usage KPIs and monitor on regular basis;

- Compliment data analytics with qualitative data capture: segment your users, generate hypothesis, validate assumptions.

Mobile for Development Impact

Q&A

Please feel free to send any questions as a **private message** to **Alex Smith** – this can be done at any time via the chat function. Please include to whom you are addressing your question:

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