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Turning Data into Value

Data Monetisation

Mike Turner
Monetisation the new business model

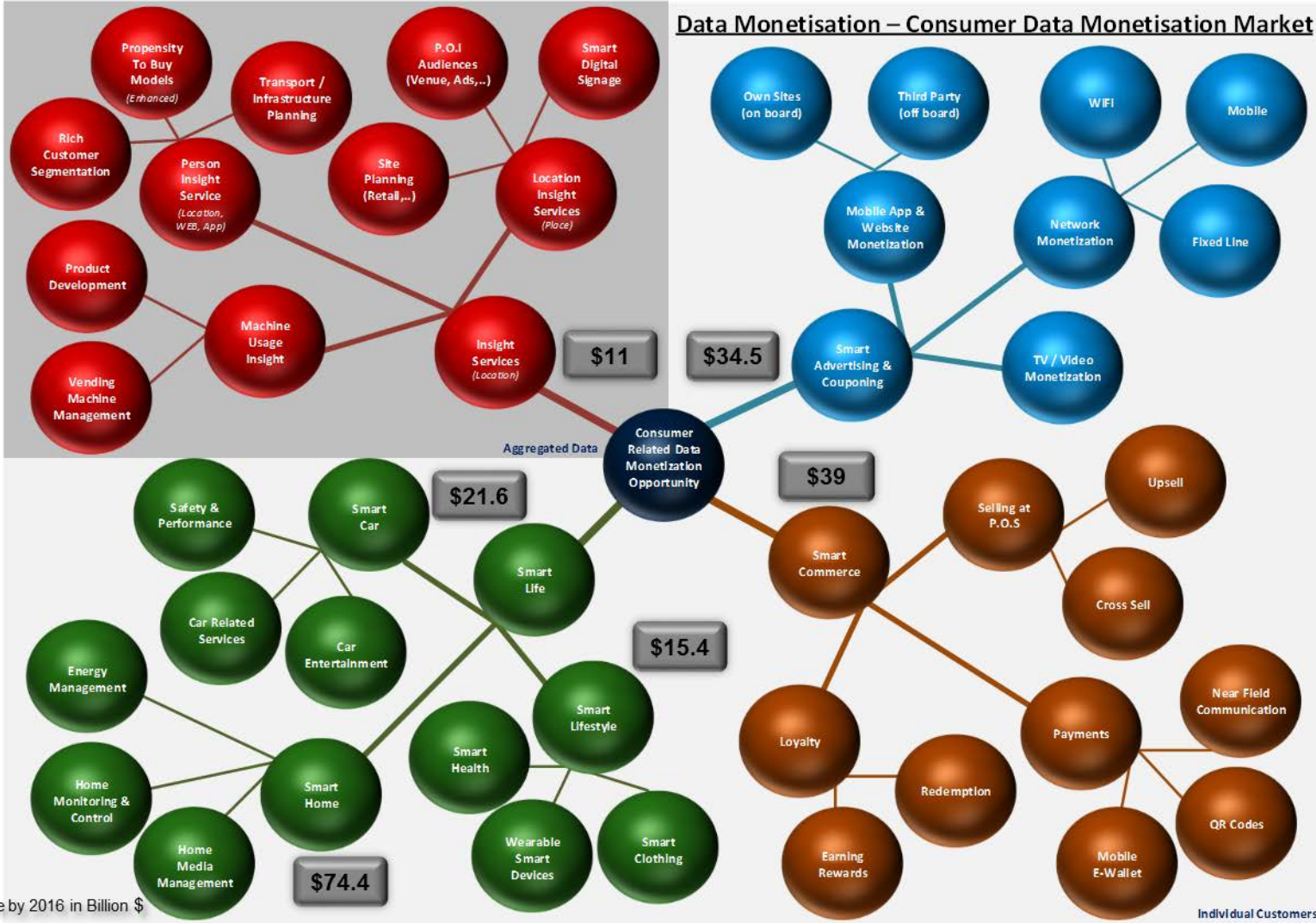# Data Monetization - What is data monetization

……"a form of monetization, involves maximizing the revenue potential from available data by institutionalizing the capture, storage, analysis, effective dissemination, and application of that data. Said differently, it is the process by which corporations, large and small, leverage data to increase profit and efficiency, improve customer experience and build customer loyalty"……

Data Monetisation – Consumer Data Monetisation Market

Red cluster (Aggregated Data): Propensity To Buy Models (Enhanced), Transport / Infrastructure Planning, P.O.I Audiences (Venue, Ads,..), Smart Digital Signage, Rich Customer Segmentation, Person Insight Service (Location, WEB, App), Site Planning (Retail,..), Location Insight Services (Place), Product Development, Machine Usage Insight, Vending Machine Management, Insight Services (Location) — **$11**

Blue cluster: Own Sites (on board), Third Party (off board), WiFi, Mobile, Mobile App & Website Monetization, Network Monetization, Fixed Line, Smart Advertising & Couponing, TV / Video Monetization — **$34.5**

Center: Consumer Related Data Monetization Opportunity

Green cluster: Safety & Performance, Smart Car, Car Related Services, Car Entertainment, Energy Management, Smart Life, Home Monitoring & Control, Smart Home, Home Media Management, Smart Health, Smart Lifestyle, Wearable Smart Devices, Smart Clothing — **$21.6**, **$15.4**, **$74.4**

Brown cluster (Individual Customers): Smart Commerce, Selling at P.O.S, Upsell, Cross Sell, Loyalty, Payments, Near Field Communication, Redemption, Earning Rewards, Mobile E-Wallet, QR Codes — **$39**

Figures: Global market size by 2016 in Billion $

DATA MONETIZATION – DIGITAL DISRUPTION

Disruptors

318*

481*

153*

118*

10*

4*

4*

5

Pillars of disruption

Mobile   Social   Cloud   Big Data Analytics
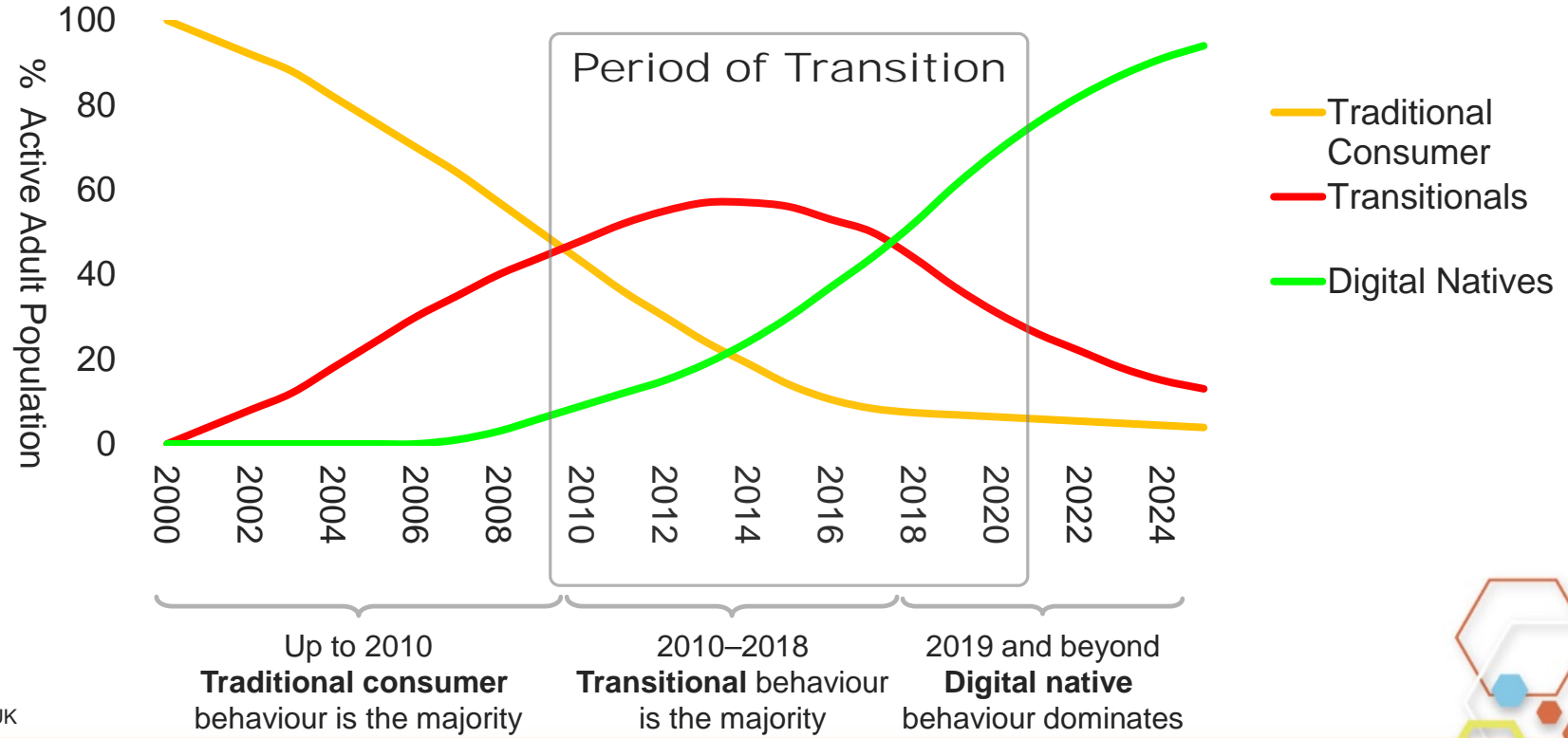
Traditional Business Models ?

Digital disruption has demolished 52% of the Fortune 500 since 2000
(SOURCE: CONSTELLATION RESEARCH, 2014)

"But there is a bigger lesson - which is that a retailer without a substantial online presence, including mobile, is on a fast road to obsolescence" *Robert Peston - BBC*

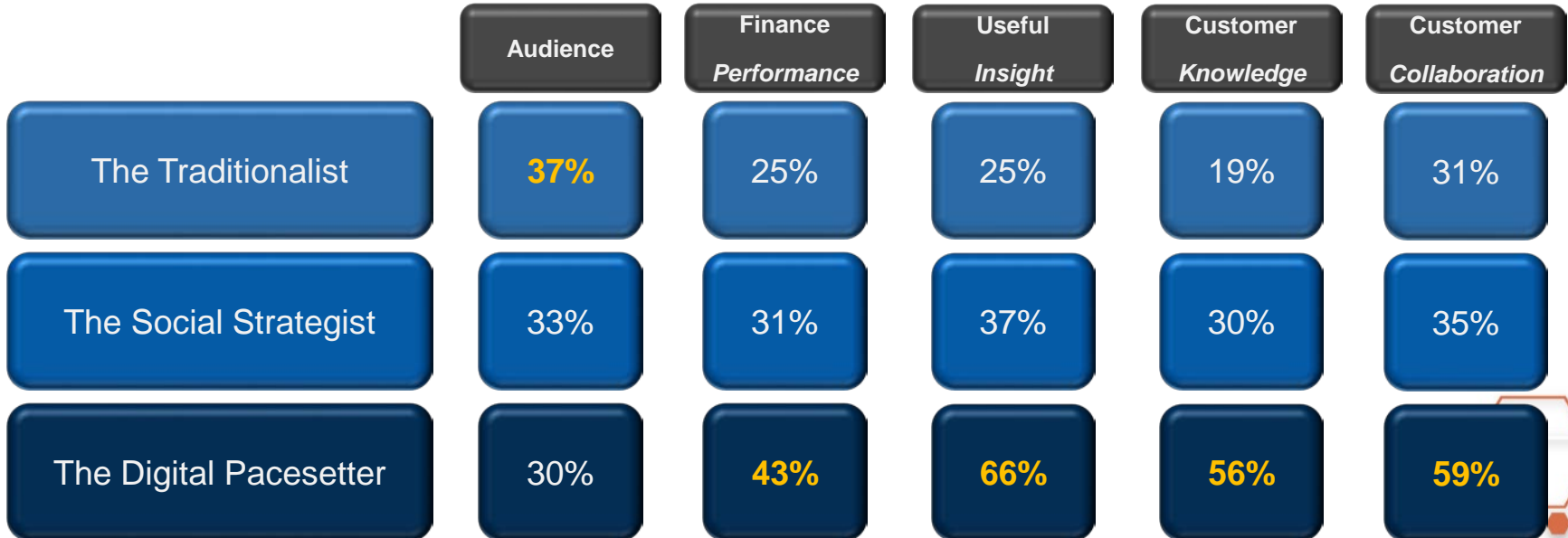* Company evaluation in billion USD, 2.4.2014 Reuters

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Consumer Trends The decade of change

Period of Transition

% Active Adult Population

100 — 80 — 60 — 40 — 20 — 0

2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 2024

— Traditional Consumer
— Transitionals
— Digital Natives

Up to 2010
Traditional consumer behaviour is the majority

2010–2018
Transitional behaviour is the majority

2019 and beyond
Digital native behaviour dominates

Source: PwC UK

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Marketing Leaders – The Modern CMO

Three Key Findings

1. CMOs believe advanced analytics will play a significant role in helping them reach their goals, but feel underprepared to capitalize on the data explosion and social media.

2. CMO's influence on a strategic level is increasing within their companies.

3. CMO's see a significant business opportunity in mobile applications over the next 3-5 years

	Audience	Finance *Performance*	Useful *Insight*	Customer *Knowledge*	Customer *Collaboration*
The Traditionalist	**37%**	25%	25%	19%	31%
The Social Strategist	33%	31%	37%	30%	35%
The Digital Pacesetter	30%	**43%**	**66%**	**56%**	**59%**

Source: IBM – Stepping up to the Challenge

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Customer Decision Hub - Direct Path to the customer

Actual demand	Real-Time Interaction	Location Based	Next-Best Action	Real-Time-Interaction	Sales Offer
1	**2**	**3**	**Outbound**	**4**	**2**
Inbound	**Inbound**	**Inbound**	**Outbound**	**Inbound**	**Outbound**

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MARKETING TODAY

OMNI CHANNEL CHALLENGE

Single Channel

Single Touch Point

Single Touch Point

Multi-Channel

Multiple Touch Points Acting Independently
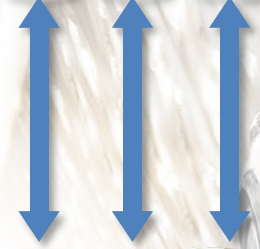
Channel Knowledge & Operations In Technical & Functional Silos

Cross-Channel

Multiple Touch Points Of A Single Brand
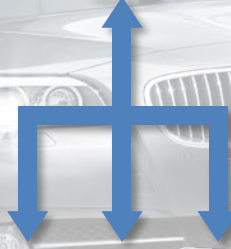
Single View Of Customer, Operate In Functional Silos

Omni-Channel

Brand Experience

Single View Of Customer With Coordinated Strategy

Marketing Today – Consumers do not think in channels

Data Monetization - analytics are crucial in monetizing data

Big Data + Advanced Analytics + Embedded (real time) Decision Making = Monetization
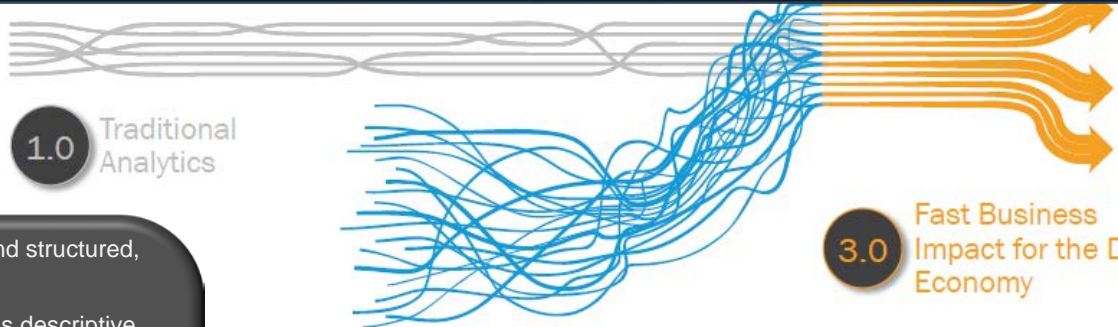
1.0 Traditional Analytics

2.0 Big Data

3.0 Fast Business Impact for the Data Economy

- Data sources relatively small and structured, from internal systems
- Majority of analytical activity was descriptive analytics, or reporting
- Creating analytical models was a time-consuming "batch" process
- Quantitative analysts were in "back rooms" segregated from business people and decisions
- Few organizations "competed on analytics"— analytics were marginal to strategy
- Decisions were made based on experience and intuition

- Complex, large, unstructured data sources
- New analytical and computational capabilities
- Data Scientists" emerge
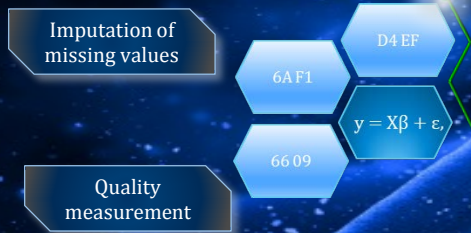- Online firms create data-based products and services

- Analytics integral to running the business; strategic asset
- Rapid and agile insight delivery
- Analytical tools available at point of decision
- Cultural evolution embeds analytics into decision and operational processes
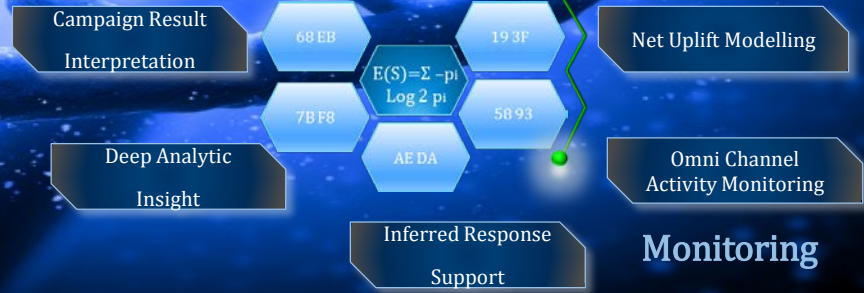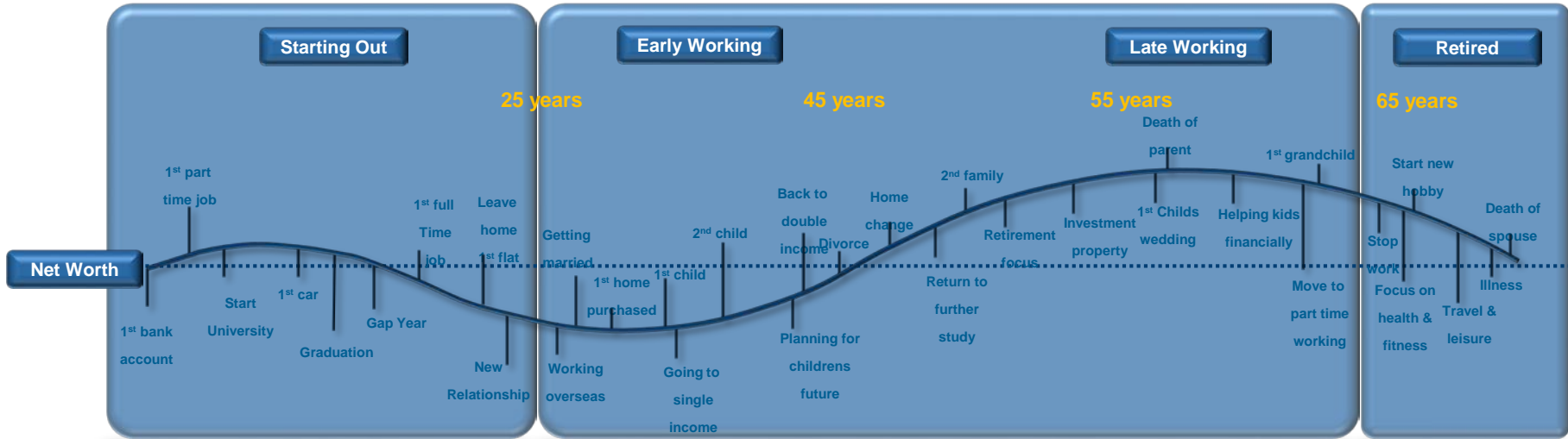- II businesses can create data-based products and services

Digital DNA

Insight

Acquisition

Monitoring

Clustering Profiling

Text & Categorisation

Association Recommendation

Propensity

Enhancement

Imputation of missing values

Quality measurement

Campaign Result Interpretation

Net Uplift Modelling

Deep Analytic Insight

Omni Channel Activity Monitoring

Inferred Response Support

Digital **DNA** PROFILE
Score 81.3%
R.A.G

From data acquisition and on boarding through to insight , understanding and on going Monitoring. Analytics drives enhancement, interpretation and understanding at all levels
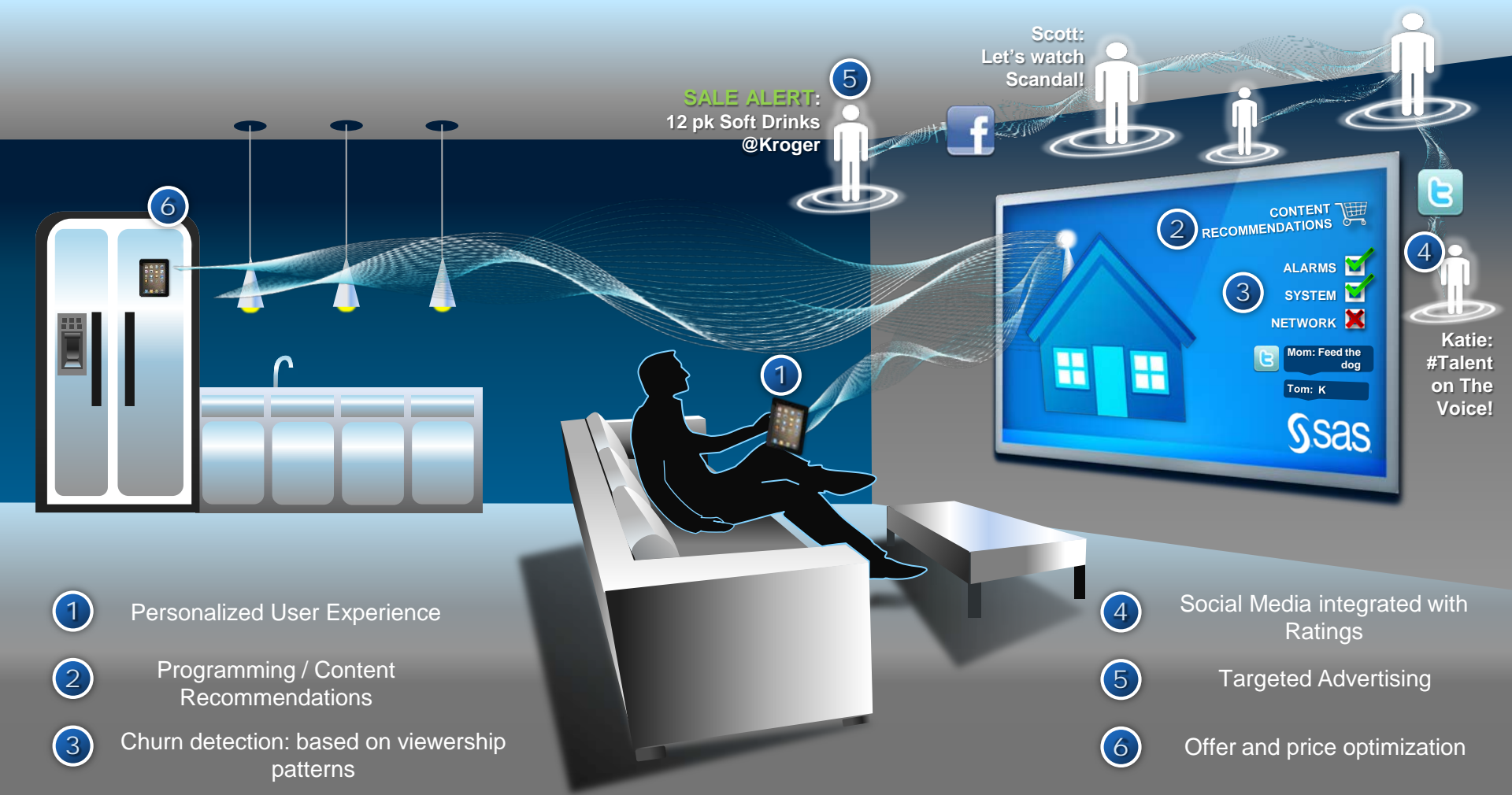
7A A0

86 71

$X \eta Y = \phi$

11 3A

E7 9F

D4 EF

6A F1

$y = X\beta + \varepsilon,$

66 09

68 EB

19 3F

$E(S) = \Sigma - pi$
$Log 2 pi$

7B F8

58 93

AE DA

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Data sourcing – Life stage events and Big Data

Starting Out   **Early Working**   **Late Working**   **Retired**

25 years   45 years   55 years   65 years

Net Worth

1st part time job
1st bank account
Start University
1st car
Graduation
Gap Year
1st full Time job
Leave home
1st flat
New Relationship
Getting married
1st home purchased
Working overseas
2nd child
1st child
Going to single income
Back to double income
Divorce
Planning for childrens future
Home change
2nd family
Return to further study
Retirement focus
Investment property
1st Childs wedding
Death of parent
Helping kids financially
1st grandchild
Move to part time working
Start new hobby
Stop work
Focus on health & fitness
Travel & leisure
Death of spouse
Illness

Campaign Library

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SALE ALERT: 12 pk Soft Drinks @Kroger

5

Scott: Let's watch Scandal!

CONTENT RECOMMENDATIONS

2

ALARMS ✓
SYSTEM ✓
NETWORK ✗

3

Mom: Feed the dog

Tom: K

4

Katie: #Talent on The Voice!

6

1 Personalized User Experience

2 Programming / Content Recommendations

3 Churn detection: based on viewership patterns

4 Social Media integrated with Ratings

5 Targeted Advertising

6 Offer and price optimization

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Data Monetisation – Operating Models

Brands

- Organisations work collaboratively with their customer data and get relevant customer data in return through new Ecosystems
- Travel / Entertainment / Hospitality
- Small Retailers
- Small Banks & Insurance
- CPG single brand
- Consumer Electronics
- Small local businesses

1000s per Country

Differentiation

Brand Led Ecosystem

- Brands with own named customer base that are strong enough to lead their own Eco system
- Strong Lifestyle Brands: Clothing, Cars, Sport teams
- Big Retail Chains
- Travel related Ecosystems (like Airline Alliance)
- M2M (car, utilities for home, health)
- CPG Group brands
- Large Banks, Insurers

10s per Country

Innovation

New Hub Ecosystem

- Spin offs or 'Green Field' companies that broker information
- JVs such as Telco originated starting from messaging
- Banking originated starting from payment processing
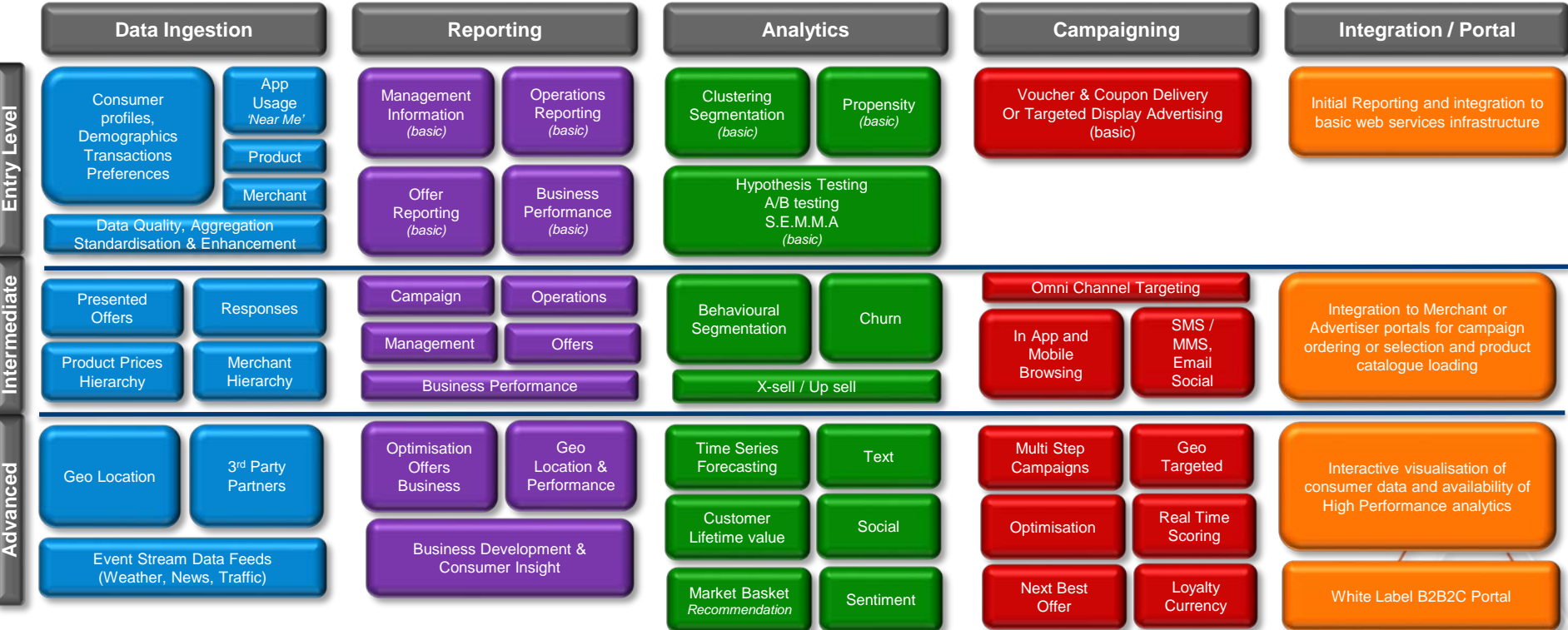- Start up originated starting from any mobile oriented opportunity

1 or 2 per Country

Transformation

3rd party service providers and contributors (Agencies, Business Services, Bureaus, Solution Services, etc.)

Monetisation - Key Service components

Data Ingestion	Reporting	Analytics	Campaigning	Integration / Portal

Entry Level

- Consumer profiles, Demographics Transactions Preferences
- App Usage *'Near Me'*
- Product
- Merchant
- Data Quality, Aggregation Standardisation & Enhancement

- Management Information *(basic)*
- Operations Reporting *(basic)*
- Offer Reporting *(basic)*
- Business Performance *(basic)*

- Clustering Segmentation *(basic)*
- Propensity *(basic)*
- Hypothesis Testing A/B testing S.E.M.M.A *(basic)*

- Voucher & Coupon Delivery Or Targeted Display Advertising *(basic)*

- Initial Reporting and integration to basic web services infrastructure

Intermediate

- Presented Offers
- Responses
- Product Prices Hierarchy
- Merchant Hierarchy

- Campaign
- Operations
- Management
- Offers
- Business Performance

- Behavioural Segmentation
- Churn
- X-sell / Up sell

- Omni Channel Targeting
- In App and Mobile Browsing
- SMS / MMS, Email Social

- Integration to Merchant or Advertiser portals for campaign ordering or selection and product catalogue loading

Advanced

- Geo Location
- 3rd Party Partners
- Event Stream Data Feeds (Weather, News, Traffic)

- Optimisation Offers Business
- Geo Location & Performance
- Business Development & Consumer Insight

- Time Series Forecasting
- Text
- Customer Lifetime value
- Social
- Market Basket *Recommendation*
- Sentiment

- Multi Step Campaigns
- Geo Targeted
- Optimisation
- Real Time Scoring
- Next Best Offer
- Loyalty Currency

- Interactive visualisation of consumer data and availability of High Performance analytics
- White Label B2B2C Portal

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Privacy – What should we do?

European Privacy Seal
DE-110026 / Valid till 2013-08

TRUSTe ▶
Certified Privacy

ValidSoft

EUROPEAN DATA
PROTECTION SUPERVISOR

- Structured and multi tiered opt in programs

- Consumer Privacy Controls

- Personal data capture, storage and ongoing use

- Retention and Encryption methods

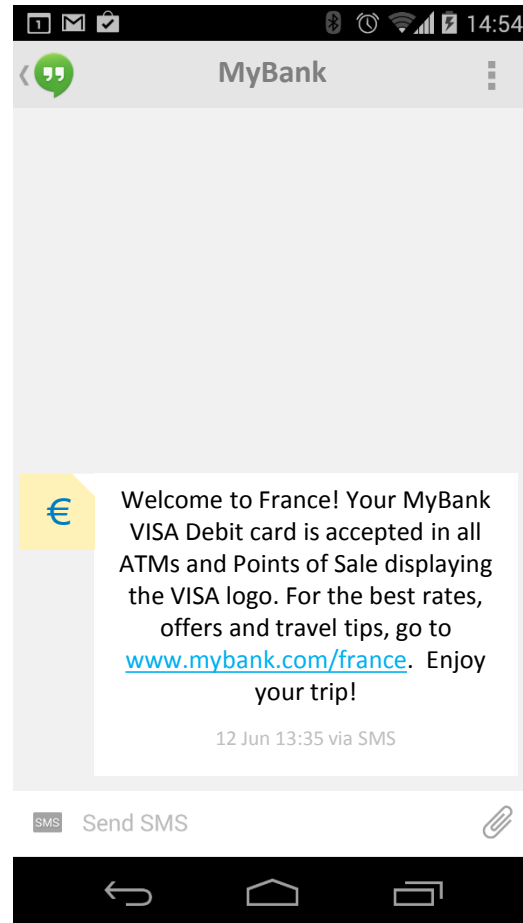- Passive Data Collection
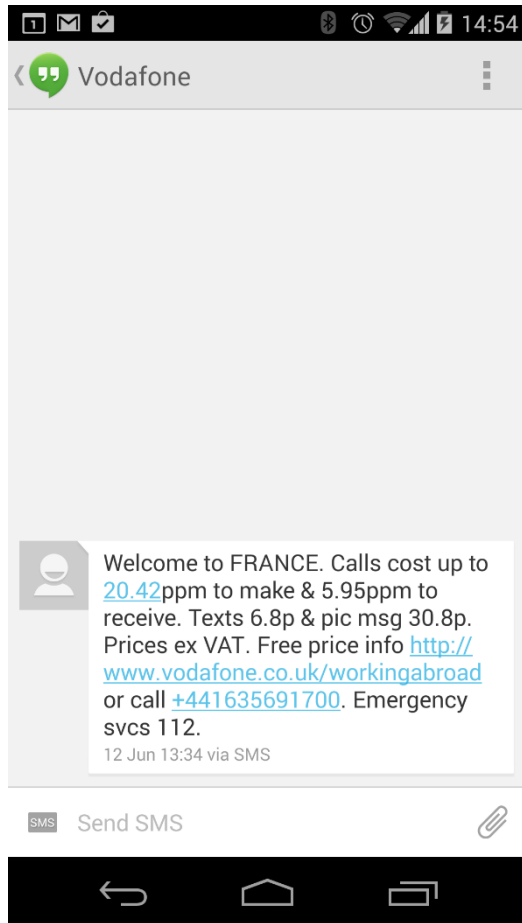
SAS® Forum
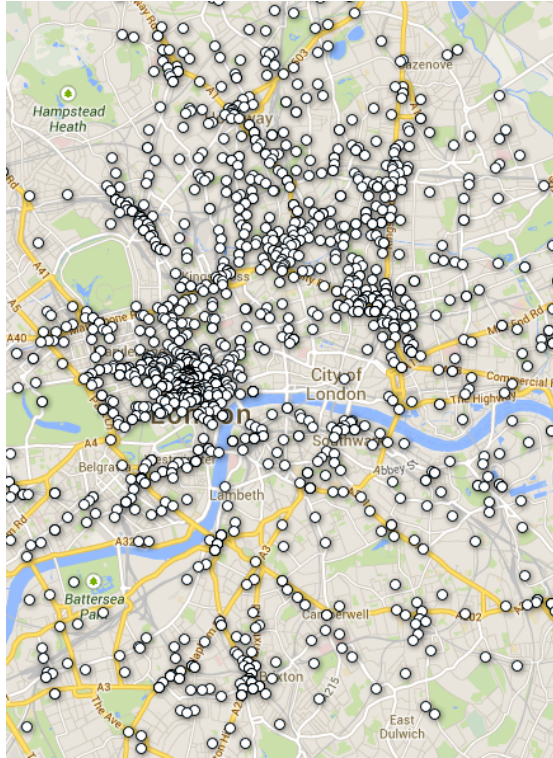BeLux 2014

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# Data Monetisation

Example Financial Services Market propositions

‹ 💬 Vodafone　　⋮

Welcome to FRANCE. Calls cost up to 20.42ppm to make & 5.95ppm to receive. Texts 6.8p & pic msg 30.8p. Prices ex VAT. Free price info http://www.vodafone.co.uk/workingabroad or call +441635691700. Emergency svcs 112.

12 Jun 13:34 via SMS

SMS　Send SMS　📎

‹ 💬 MyBank　　⋮

€　Welcome to France! Your MyBank VISA Debit card is accepted in all ATMs and Points of Sale displaying the VISA logo. For the best rates, offers and travel tips, go to www.mybank.com/france. Enjoy your trip!

12 Jun 13:35 via SMS

SMS　Send SMS　📎

1. Download open crime data from data.police.uk

2. Create geographical clusters of high crime with SAS
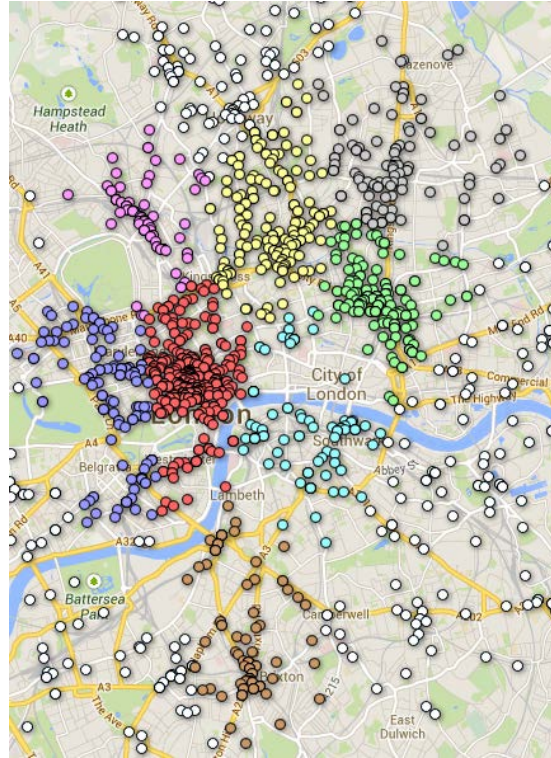
3. Programmatically create actionable geofences from clusters with SAS
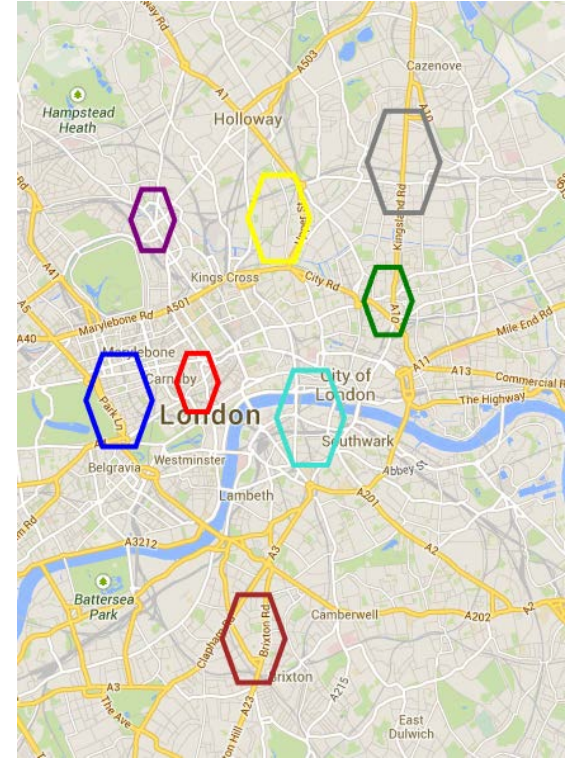
Fraud
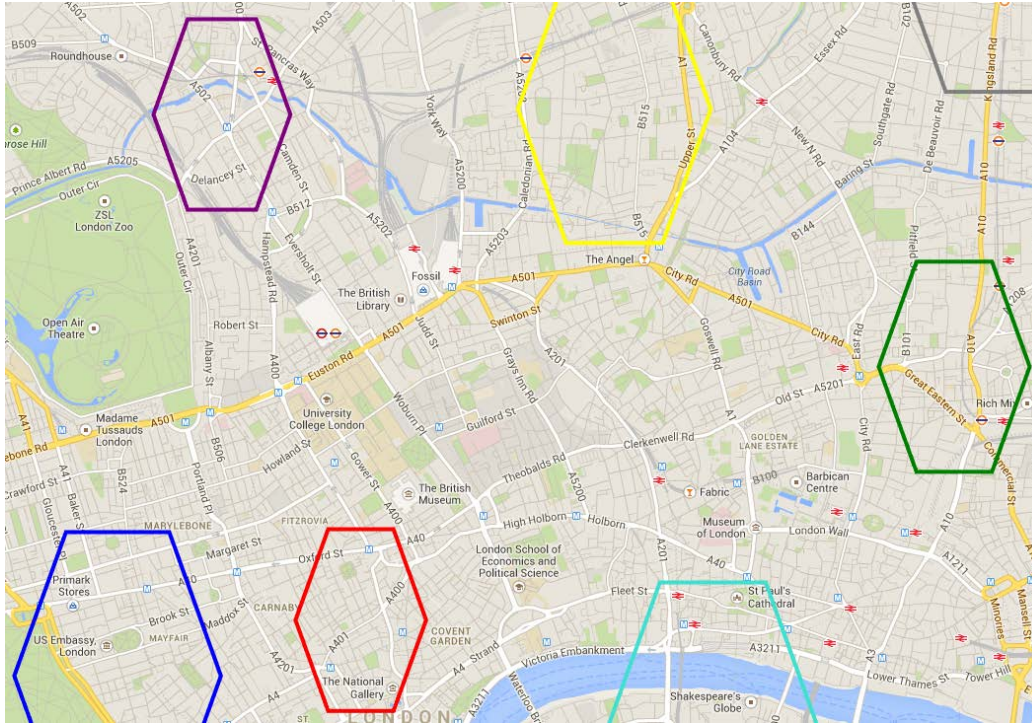
Other MyBank card-holders have reported fraud in the Shoreditch area. Please take care of your card! For card safety tips go to www.mybank.com/safe.

12 Jun 13:35 via SMS

- Notes
- Data: Metropolitan Police Service 'theft from person' data, March 2014, http://data.police.uk/data/
- Clustering with SAS FASTCLUS Procedure
- Visualisation: Google Fusion and Maps
- Photo: (c) Transport for London

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Data Monetisation

Example Telecommunications Market propositions

Media

Click to call

Click to M-Site
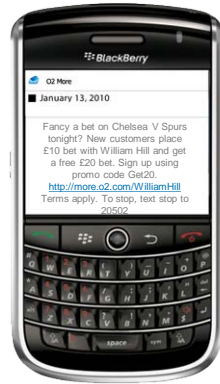
Click to App
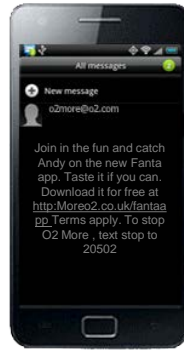
Location Based Messaging

MMS

Video

Direct Response

Acquisition

Download

Promotion
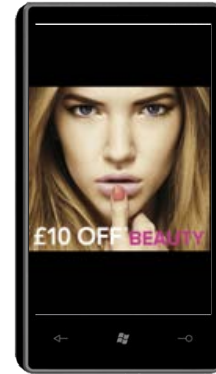
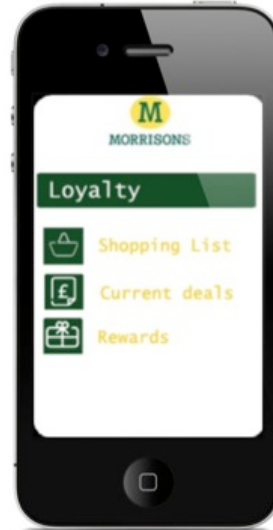Engagement

Awareness

Making the little things easier

Encompassing

- Loyalty cards
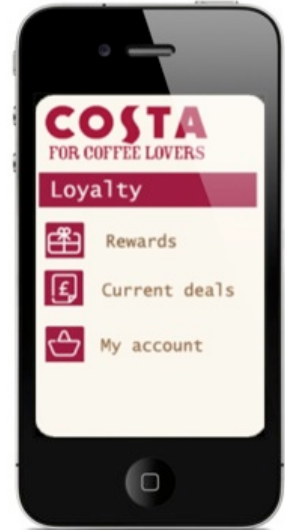- Travel cards
- Payments

Building long term loyalty

Connecting the physical to the digital

Create a new loyalty programme

Mobilise existing programme
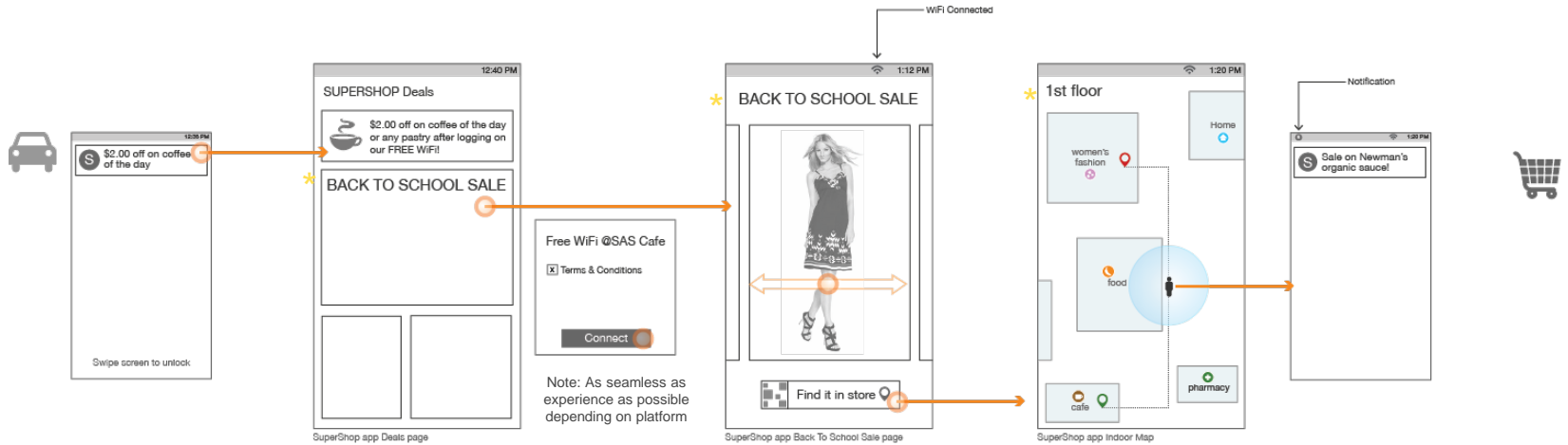
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GREGGS

TESCO

ASDA

Data Monetisation

Example Retail Market propositions

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Case 1 Sally | DEDICATED CUSTOMER

WiFi Connected

Screen 1 (12:36 PM): $2.00 off on coffee of the day — Swipe screen to unlock

Screen 2 (12:40 PM): SUPERSHOP Deals — $2.00 off on coffee of the day or any pastry after logging on our FREE WiFi! — BACK TO SCHOOL SALE — SuperShop app Deals page

Free WiFi @SAS Cafe
[X] Terms & Conditions
Connect

Note: As seamless as experience as possible depending on platform

Screen 3 (1:12 PM): BACK TO SCHOOL SALE — Find it in store — SuperShop app Back To School Sale page

Screen 4 (1:20 PM): 1st floor — women's fashion — Home — food — cafe — pharmacy — SuperShop app Indoor Map

Notification

Screen 5 (1:20 PM): Sale on Newman's organic sauce!

Based on a geo-fence around the store, a notification pops up while Sally is parking her car with a special offer

Tapping on the notification takes Sally into the app where she starts the process of connecting to the WIFI network

Sally browses Back To School Sale offers on her app while she is enjoying coffee, and sees a dress that she is interested in

Sally is passing by the food section on her way to look at clothing from the Back To School Sale. The app sends her a notification alerting her to an item that might interest her based on the recipes she has saved recently
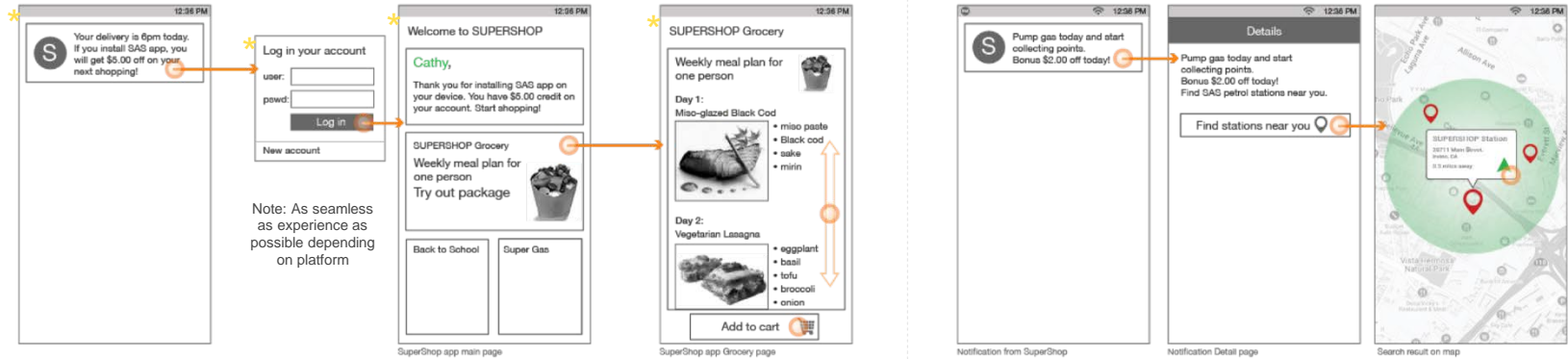
Parking lot   Cafe   Shopping   Payment

Seamless Store Experience

12:36 PM

Your delivery is 6pm today. If you install SAS app, you will get $5.00 off on your next shopping!

Log in your account
user:
pswd:
Log in
New account

Note: As seamless as experience as possible depending on platform

Welcome to SUPERSHOP

Cathy,

Thank you for installing SAS app on your device. You have $5.00 credit on your account. Start shopping!

SUPERSHOP Grocery
Weekly meal plan for one person
Try out package

Back to School | Super Gas

SuperShop app main page

SUPERSHOP Grocery

Weekly meal plan for one person

Day 1:
Miso-glazed Black Cod
• miso paste
• Black cod
• sake
• mirin

Day 2:
Vegetarian Lasagna
• eggplant
• basil
• tofu
• broccoli
• onion

Add to cart

SuperShop app Grocery page

Pump gas today and start collecting points. Bonus $2.00 off today!

Notification from SuperShop

Details

Pump gas today and start collecting points.
Bonus $2.00 off today!
Find SAS petrol stations near you.

Find stations near you

Notification Detail page

SUPERSHOP Station
28711 Main Street,
Irvine, CA
0.3 miles away

Search result on map

Cathy receives an offer for installing the app

After logging into her account, Cathy sees confirmation of the credit to her account for installing the app, and notices a package offer that interests her

Cathy appreciates that the package offer uses her past order history to create a meal plan that works for her.

On the weekend, Cathy is driving to visit her parents. On her way, she receives a notification from the app with an offer for 2 dollars off on gas. Tapping on the notification takes her into the app where she can find nearby stations and press go to navigate to the station
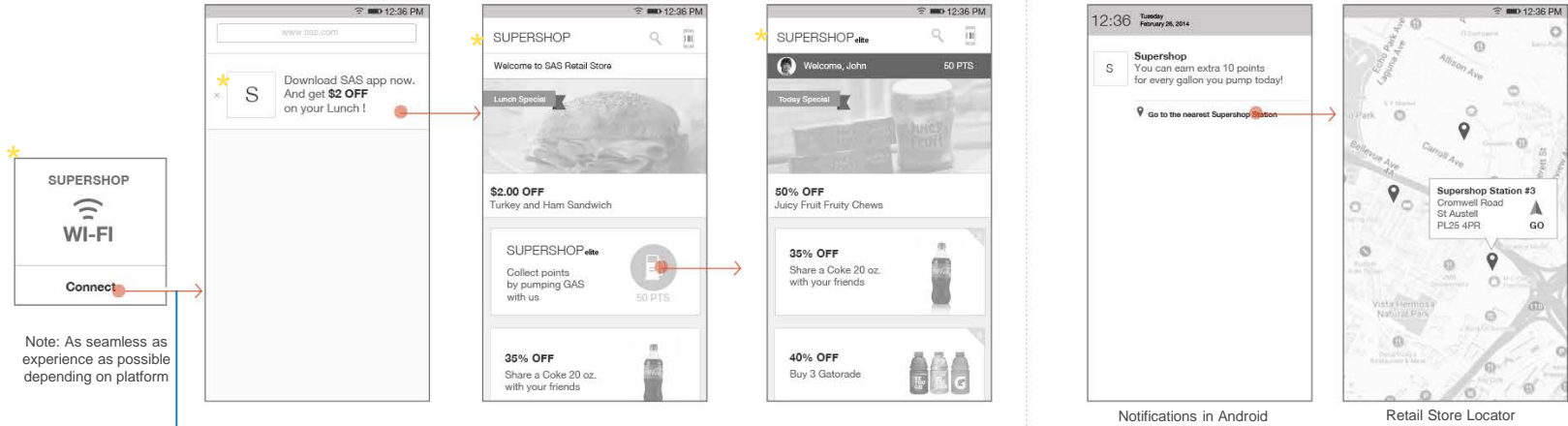
PC_Web   Shopping   Gas Station

Smooth transition from pc_web experience to app experience

Note: As seamless as experience as possible depending on platform

When John connects to WIFI in the shop he sees an offer if he downloads the app

Once John installs the app he see the offer for lunch and also sees additional offers for the station and possibly the retail store.
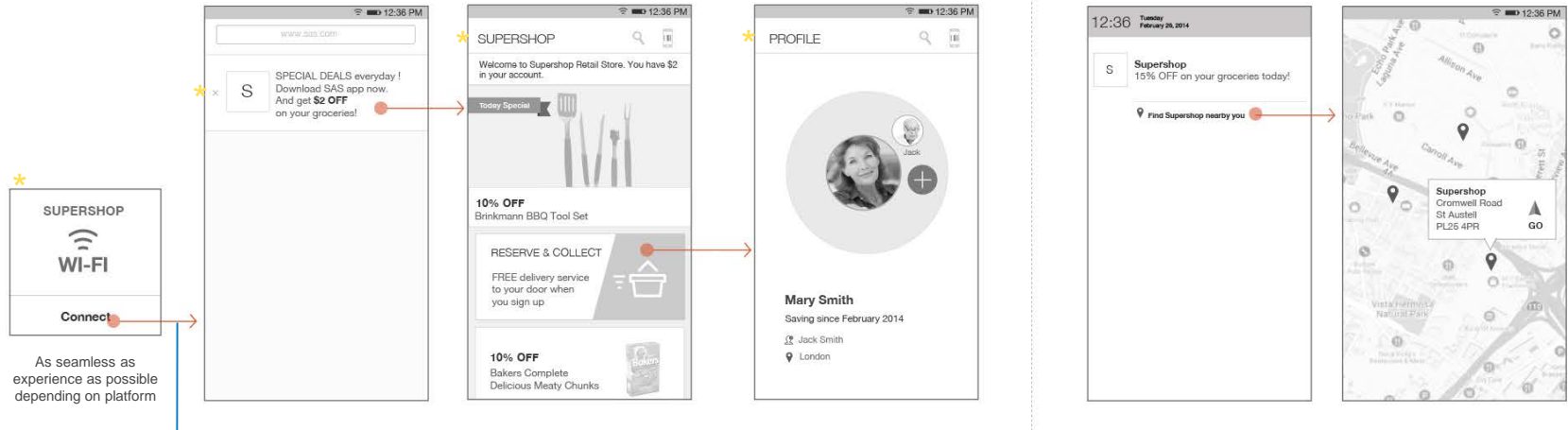
If John creates an account and becomes an elite member, personalized offers are shown based on John's purchase history.

In addition, John can choose to share the offer to friends.

Notifications in Android

Retail Store Locator

Converting anonymous customer to elite customer

Case 4 Mary & Jack

THE BARGAIN HUNTERS

As seamless as experience as possible depending on platform

Check if Mary has the app, if not display the promo to download the app.

When Mary first uses the app she sees current offers for the store, even if she does not create an account, the app will still have the ability to learn her habits and personalize offers

If Mary chooses to create an account she has the ability to:

· Join as an individual or setup multiple profiles for her family.

On the weekend, Mary and John are on their way to do the grocery shopping for the week at a competitors market. While driving, Mary crosses a geo fenced boundary around the market, and receives alert with an offer for 15% OFF of her groceries at SuperShop. Tapping on the notification takes her into the app where she can find nearby location and press go to navigate to the store.

Transforming the bargain hunter to elite shopper

THE EXTENDED RETAIL EXPERIENCE

KEY VALUE:

- Find stores, banks, and petrol stations near you and navigate there

- Receive location based deals when and where they matter the most via geo fence and beacon technologies

- Indoor mapping plus directions to help you find what you are looking for quickly and efficiently

- Browse a map based view of deals and offers both indoors and outdoors.
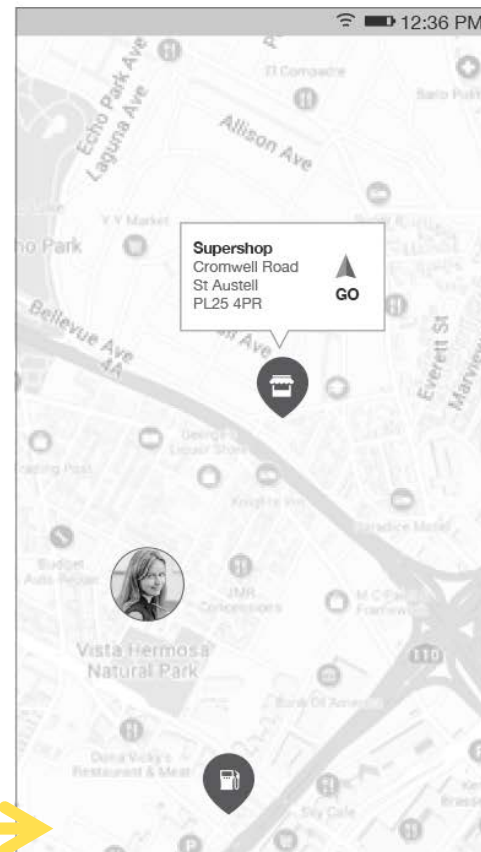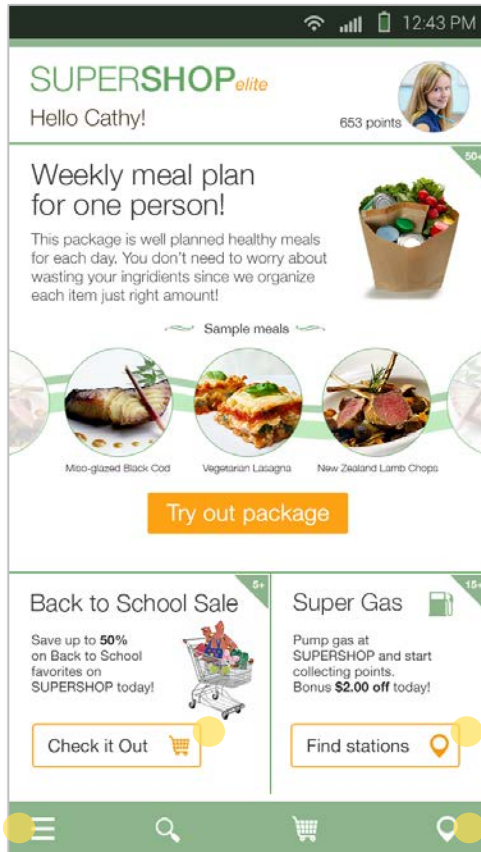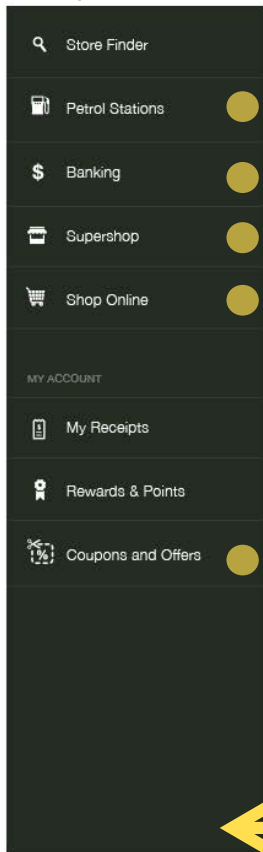
Summary – Key Issues and Topics

- Data Monetisation is a real opportunity now

- Analytics and big data power this new opportunity through a customer decision hub

- Privacy is a real issue but one that can be managed

- There are opportunities in all market sectors and companies need to look to adjacent market sectors and possible partnerships and collaborations

- Don't be a 'me to' player look to be truly disruptive and original for longevity.
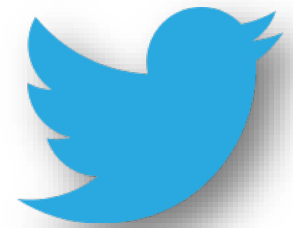
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Thank You & Any Questions

5. What is the estimated billion dollar value of Smart Commerce by the end of 2016?

   A. $11

   B. $21.6

   C. $39

Tweet your answer:

Example: @spicyanalytics 5C

Start of your tweet   Question #   Your answer

Prizes to win:

1st prize: a ticket for Analytics 2015
2nd prize: a book of Prof Bart Baesens: "Analytics in a big data world"
3rd to 30th prize: chocolates with pepper

Winners will be contacted post-Forum !