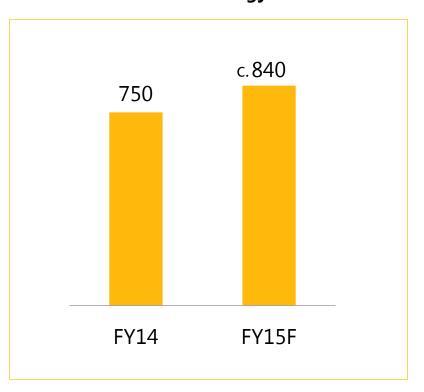


PRODUCT & TECHNOLOGY

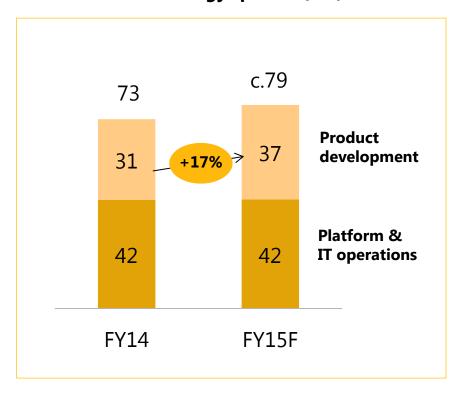
3 November 2014

Investing in product & technology

Product & technology headcount



Technology spend ¹ (£m)



¹ Excludes Betfair US



Agenda

Why Product Matters	Mark Brooker, COO
Development Capability	Paul Cutter, CTO
Platform: Growth & Scalability	Tim Morrow, Sports Technology Director
Security	Swati Lay, Security Director
Product Development	Sylvie McDermott, Product Director
Technology in Marketing	Avi Marco, Director of Enterprise Data Johnny Devitt, Online Marketing Director
Wrap up	Breon Corcoran, CEO
Q&A	





MATERS DUCT

Mark Brooker
Chief Operating Officer

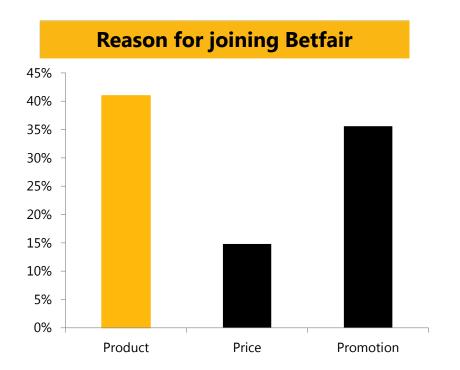
About Me

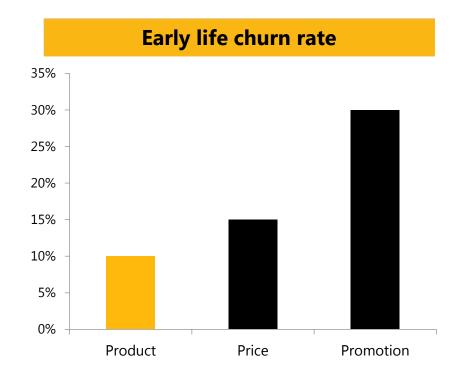




Why does Product matter?

- One of the key levers to run the business
- Helps acquire and retain customers
- Increases monetisation









#ThisIsPlay

◆ betfair

What constitutes product development

Closing competitive gaps

Examples:

- More in-play events / markets
- Casino seamless wallet
- Virtual sports
- Arcade content / promo capability

Improving customer experience

Examples:

- Single sign on for mobile apps
- Easier promo journeys
- Improved market display
- Data visualisation

Feature innovation

Examples:

- Cash Out
- Price Rush
- Money Back Extra



Betfair Product Management Lifecycle





Case Study: Cash Out on Sportsbook

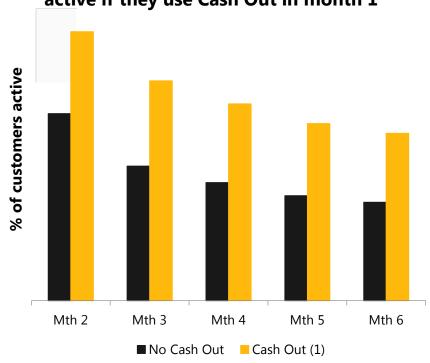
Customer Acquisition



Cash Out is 2nd most cited reason for joining Betfair

Customer Retention





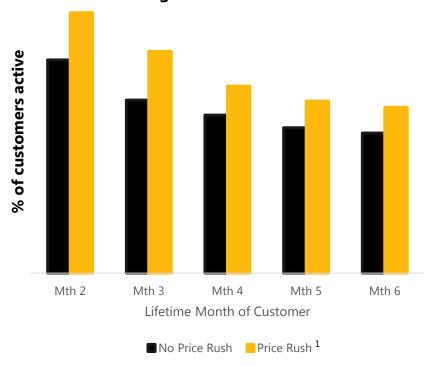
(1) Customer who used Cash Out in Month 1

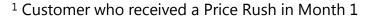


Case Study: Price Rush

Customer Retention

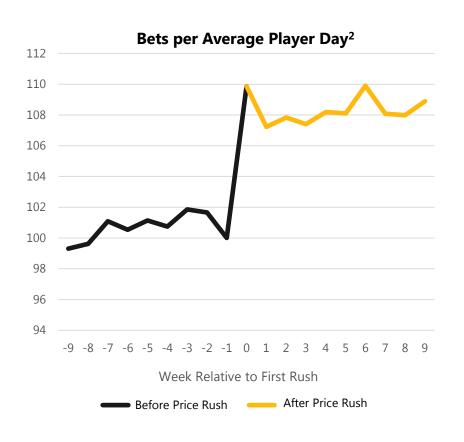
Customers c.20% more likely to remain active receiving a Price Rush in month 1





² Indexed

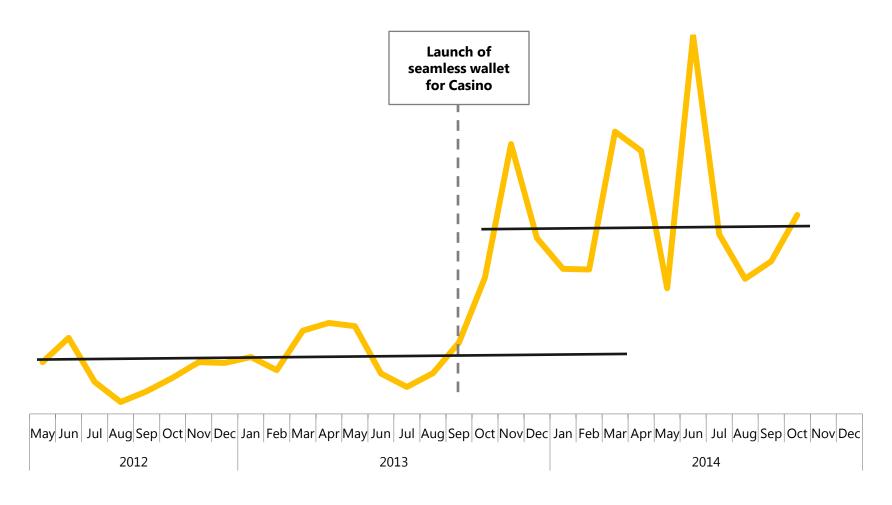
Improved Monetisation





Case Study: Seamless Wallet for Casino

Number of customers cross-sold into Casino

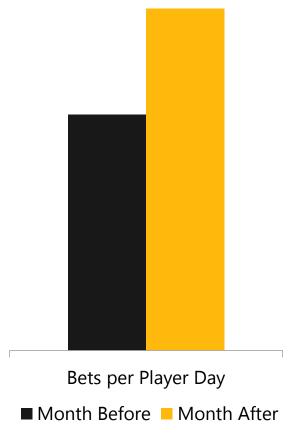




Case Study: Money Back Extra



Impact of Customer Engagement with Money Back Extra





Case Study: Cross market liquidity matching & exposure management

The idea

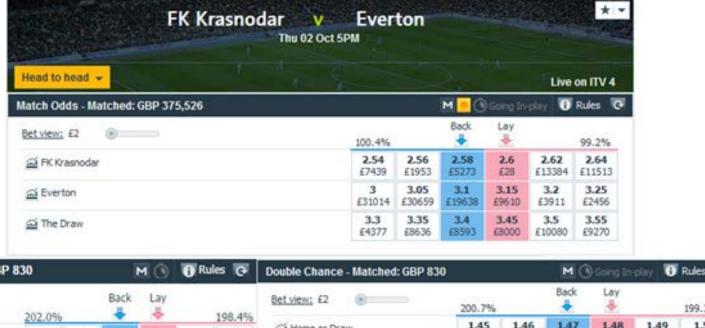
- Match liquidity between separate markets (e.g. Correct score and Under / Over)
- Move exposure calculation to net position across related markets rather than on each individual market

Benefit to customers

- Increased liquidity in secondary markets
- Sophisticated customers will be able to bet more with the same funds
- Sportsbook customers more likely to receive a Price Rush



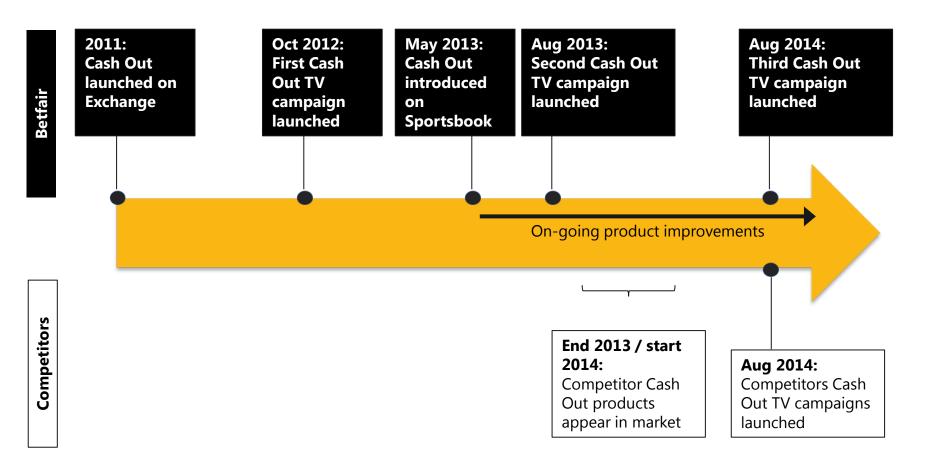
Case Study: Cross market liquidity matching & exposure management







How long does product advantage last?





Implications of transient advantage

- Speed to Market really matters
- Commercial teams drive the Product roadmap
- Good in-house tech required faster than third party suppliers
- Need to keep improving after product launch

Competitive marketplace = constantly raising the bar for product



Matthew Bachner @Bachner_7 · Oct 27

@SkyBet you guys really need to add in a 'cash out' button no amount of times 1 team have let my down







000



Summary: why does Product matter?

- One of the key levers to run the business
- Helps acquire new customers
- Improves retention of customers
- Increases monetisation



- Acts as a significant barrier to entry
- Raises the bar for existing players





DEVELOPMENT CAPABILITY

Paul Cutter Chief Technology Officer

About Me

★betfair Joined Betfair as CTO in February 2014 2014 Director of Software Engineering at BSkyB 2008 2005 VP Technology at AOL Europe Various roles leading technology teams for consultancies and web startups Ph.D. in Mechanical Engineering **Imperial College** 1996 London



About Technology

Over 700 people with a variety of different backgrounds















SONY





Betfair Development Centres

500 developers in 3 locations



Hammersmith, UK

- 100 developers
- Sports platform development

Porto, Portugal

- 200 developers
- Sports platform and channels

Cluj, Romania

- 200 developers
- eCommerce, Games and Foundation



Buy vs Build Mixed-mode development

- Modular architecture built on web standards
- Mix of in-house development with off-the shelf components

In-House

- Strategic value
- Not available on the market
- Desire to differentiate
- E.g. Exchange, Cash Out, Price Rush

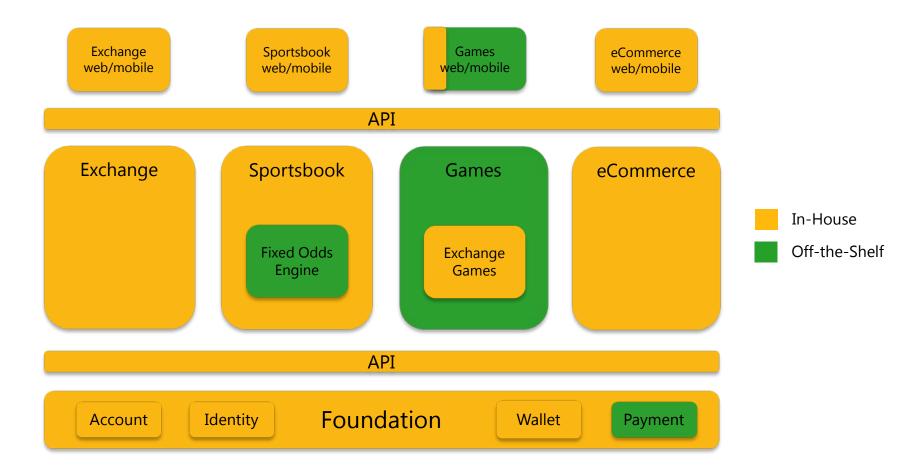
Off-the-Shelf

- Commodity product
- Achieve scale rapidly
- Not a key differentiator
- E.g. fixed odds engine, gaming



Modular Architecture

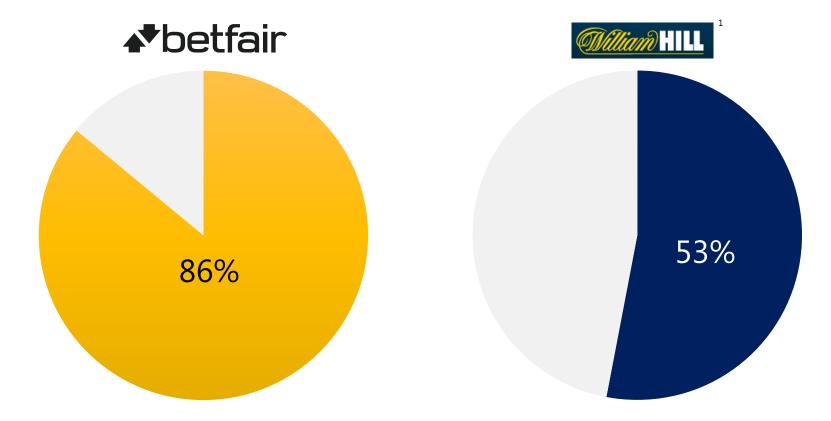
Mix of in-house and off-the-shelf components





In-House Development dominates spend Significantly higher proportion than most competitors

% of development spend in-house (H1 2014)



¹ William Hill results presentation for six months ended 30 June 2014



Benefits of In-House Development



Pace of delivery – we can control how much resource we allocate to key priorities



Innovation – we can try out ideas rapidly and accelerate the ones that work



Knowledge – we keep the knowledge of our platforms within our teams



Value – investing in our near-shore centres gives us excellent value for money



The Way We Work

Focus on lean and agile, and automation

Lean and Agile

- Teams are organised into scrums of 7 or 8 people
- Each scrum is as autonomous as possible
- Rapid, iterative development with releases every 2 weeks
- Work prioritised by commercial teams to deliver most value

High Levels of Automation

- Automated testing for the majority of components
- Tools to automate software configuration
- Moving to full automation of delivery pipeline



Summary

Substantial development capability

- 500 developers in 3 centres of excellence
- Deep technical expertise
- Vast majority of development is in-house

Provides competitive advantage

- Pace of delivery
- Facilitates innovation
- Allows differentiation
- Value for money





PLATEORIA: GROWIE STATE SCALABILITY

Tim Morrow

Director of Technology for Sports

About Me

◆betfair Director of Technology for Sports 2013 ◆betfair 2010 Joined Betfair as Head of Channels shopzilla is now 2006 Architect for Ecommerce platforms at Shopzilla US Various technology companies in Southern California area Queen's University BEng Computer Science 1997



Growth provides challenges

Customer growth

Events & markets

Signature products

- New customer acquisition
- Reactivation of lapsed customers
- Greater breadth of events and markets

- Cash Out
- Price Rush

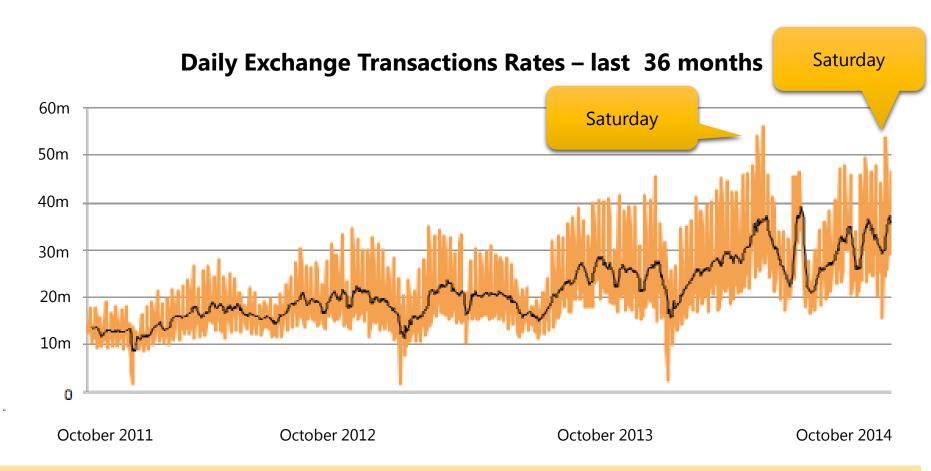
- Over 600k new customers acquired in LTM
- 30% increase in active customers in LTM
- 240% increase in peak simultaneous markets offered LTM
- 100% increase in markets transacted per month in LTM

- Over 20 million Cash
 Outs in LTM
- Over 2 million bets received a Price Rush this year

Challenge: To scale our infrastructure while retaining reliability, performance, security and product delivery pace



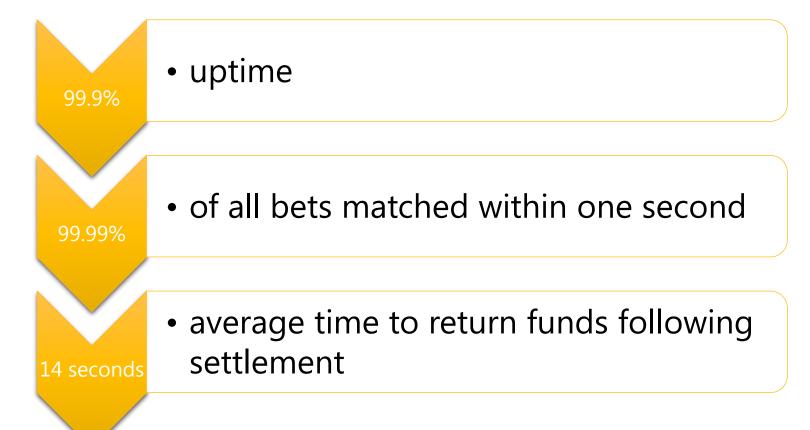
Exchange: Scale



Exchange transactions rates have almost trebled over the last 3 years, requiring a scalable, robust infrastructure



Exchange: Performance



Exchange performance must be maintained while growing and scaling customer demand



Exchange: API

```
"jsonrpc": "2.0",
"result": [
    "marketId": "1.115082007",
    "isMarketDataDelayed": false,
    "status": "OPEN".
    "betDelay": 0, "bspReconciled": false, "complete": false, "inplay": false,
    "numberOfWinners": 1,
    "numberOfRunners": 16,
    "numberOfActiveRunners": 16,
    "lastMatchTime": "2014-10-27T11:30:44.538Z",
    "totalMatched": 678912.6,
    "totalAvailable": 29825.7,
    "crossMatching": false,
    "runnersVoidable": false,
    "version": 851419116.
    "runners": [
        "selectionId": 8891585,
        "handicap": 0.0,
       "status": "ACTIVE".
       "lastPriceTraded": 2.6.
        "totalMatched": 253193.25,
        "ex": {
          "availableToBack": [
            {"price": 2.58, "size": 19.45 },
            {"price": 2.56, "size": 518.24 },
            {"price": 2.54, "size": 38.88 }
          "availableToLay": [
            {"price": 2.6, "size": 27.53 },
            {"price": 2.62, "size": 907.74 },
            {"price": 2.68, "size": 18.15 }
```

- 2.4 Billion API calls per day
- 75,000 API calls per second at peak
- Migrating customers to a new API
- Enables future growth and new capabilities



Exchange: Architecture

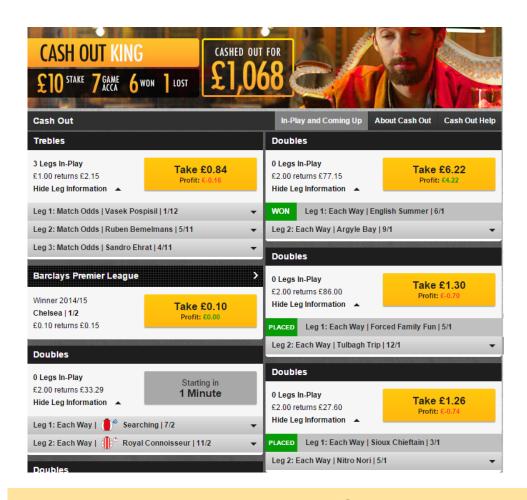
Market and Bet Data

Matching & Exposure

Settlement



Sportsbook: Cash Out case study



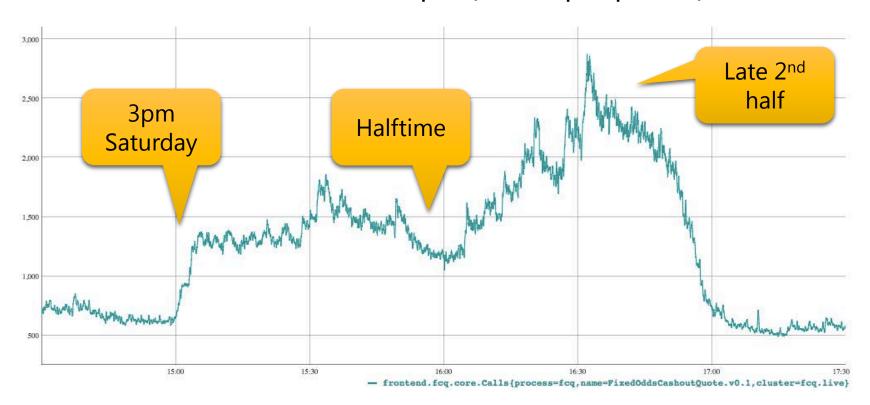
- 70% of all bets eligible
- 40% of active customer sessions on page
- Higher average time on page

Great product features demand increased scale



Sportsbook: Cash Out

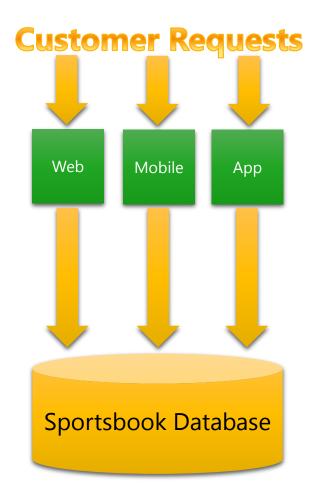
Demand for Cash Out quotes (number of quotes per second)

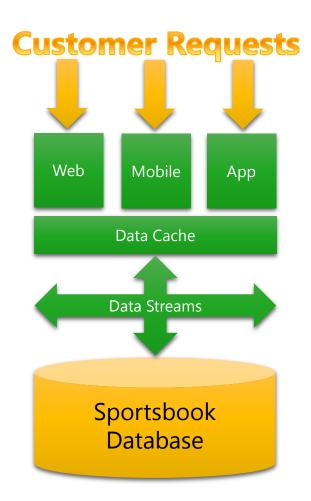


Since last year we have scaled Cash Out quoting by 5x



Sportsbook: Architecture

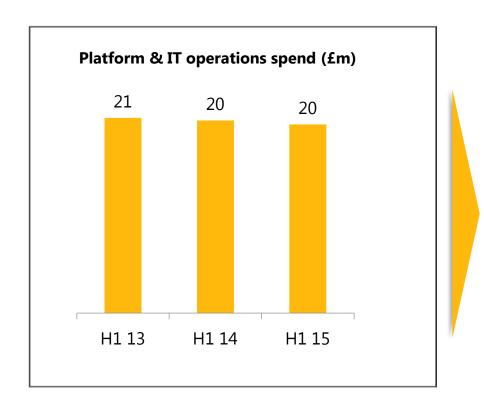


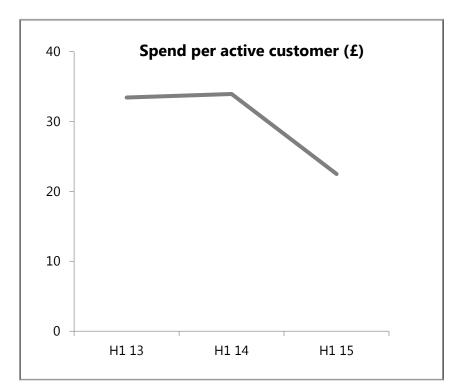


Plan to scale by multiples not by fractions



Scalable, cost efficient infrastructure





Flat spend during a period of strong growth shows the scalability of our infrastructure



Summary

- Growth & new product features place increasing demands on infrastructure
- Investment in hardware & architecture has allowed us to manage increasing scale efficiently
- Continuing to invest in anticipation of further capacity growth

We are rising to the challenge of growth





Swati Lay, Director of Security

About Me

2012	◆*betfair	Joined Betfair as Director of Security in January 2012
2009 —	BARCLAYS	Head of Information Integrity & Protection
2008	BARCLAYS	Head of Security, Commercial Bank, Global Payments & Wealth
2007 —		Head of Technology Risk, EMEA
1998 —		Head of Threat Management, Information Security & Privacy
1997	E DAY OF THE PARTY	BS in Electrical Engineering



Betfair takes security seriously

Business Model **Demands**

- 100% Online
- c.£300 million of customer funds and data

Significant resources

- Over £5 million per year spent on security
- 40 IT security professionals

Experienced team







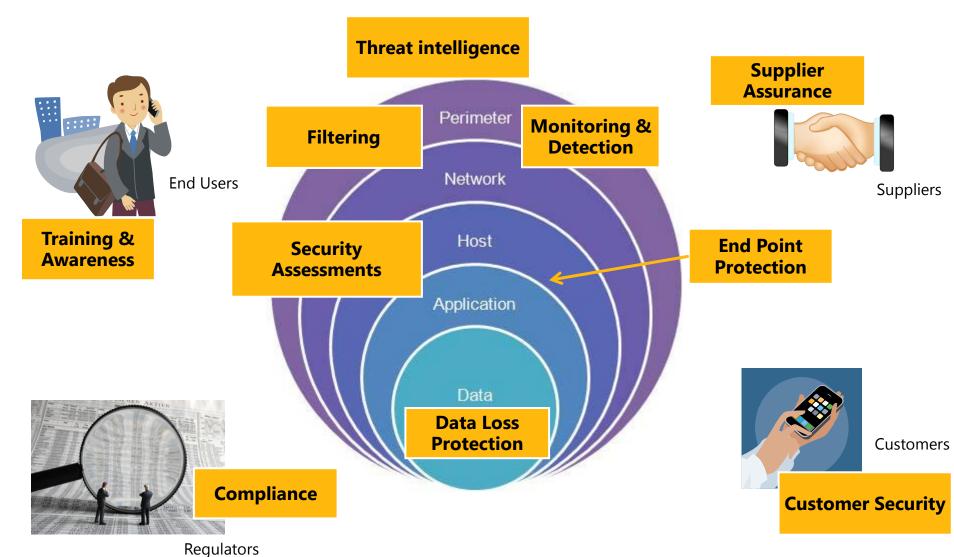








Defence In Depth



Customer Security

- ✓ Real time ID verification
- ✓ 2-Step Authentication
- ✓ Mobile PIN
- **✓ Email Security Alerts**



Customer Security – Real time ID Verification

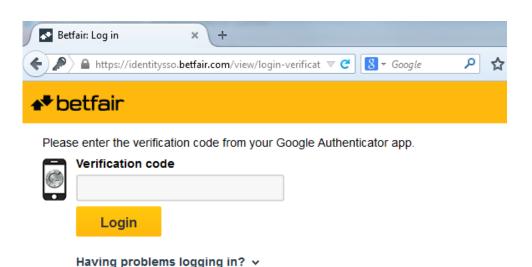


- ✓ Faster
- ✓ More Secure
- ✓ More Accurate
- ✓ Reduces Fraud



Customer Security – 2 Step Authentication





- ✓ Bank level protection of your Betfair Account
- ✓ Reduces chance of account compromise
- ✓ Customers spend more after enabling2-Step



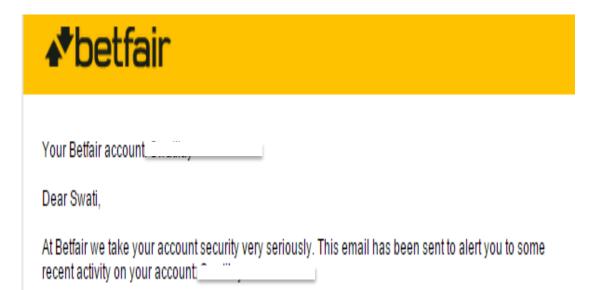
Customer Security – Mobile PIN



- ✓ Faster
- ✓ PIN tied to your mobile
- ✓ Convenient and secure



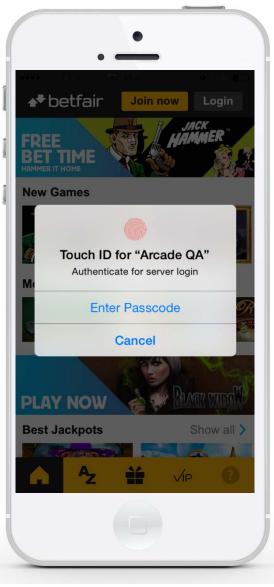
Customer Security – Email Security Alerts



- ✓ Alerts on changes to your account
- ✓ Special alerts for key accounts



Customer Security – What's Next





Summary

- Our business demands high levels of security
- We meet that with our security team & security investment
- We take our customers' security extremely seriously supports stronger acquisition and better retention





BREAK



PRODUCE DEVELOPMENT

Sylvie McDermott Product Director

ABOUT ME

January 2014



Product Director

2011



Head of Mobile

Before











PRODUCT TEAM

Head of **Sports**

Head of E-Commerce **Head of E-Gaming** **Head of UX & User** Research

Head of **Product Optimisation** **Head of Programme** Management

























Driving the Roadmap

Supporting the Roadmap



Challenging the Roadmap



BETFAIR PRODUCT MANAGEMENT LIFECYCLE





1- CLEAR COMMERCIAL OBJECTIVES



CASE STUDY: World Cup

The World Cup 2014 represented our biggest opportunity to acquire customers. As games were in the evening, we understood that our mobile proposition needed to compete to offer a better experience than our competitors.

Commercial drivers

Translate into

Product Roadmap



2 - BENCHMARK AGAINST THE COMPETITION

















Validate









NET PROMOTER SCORE





Change

Roadmap



BENCHMARK AGAINST THE COMPETITION

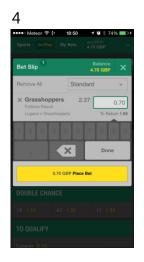


CASE STUDY: Cash Out – Bet 365























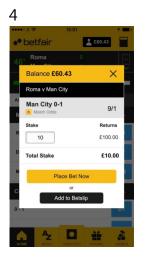
AND HERE IS HOW WE DO IT...

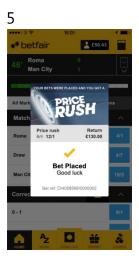
CASE STUDY: Cash Out - Betfair







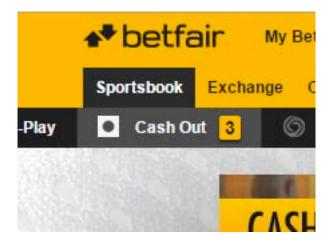














3 - INVOLVE THE STAKEHOLDERS



CASE STUDY: iOS Sportsbook app

Internal Stakeholders

Commercial

Brand

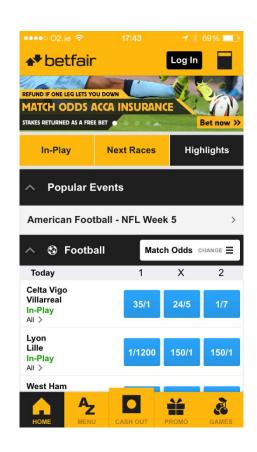
Marketing

Customer Care

Trading

Technology

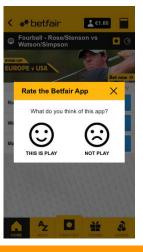
Development Team



External Stakeholders





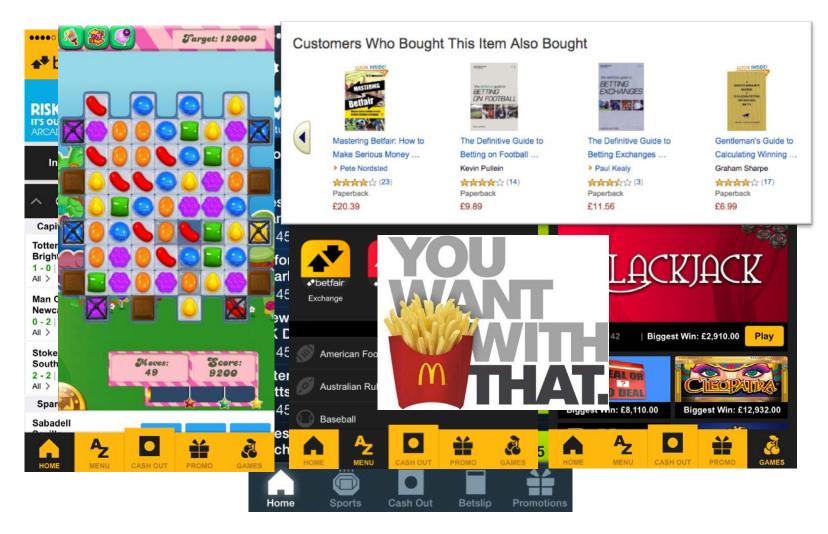




4 - LOOK OUTSIDE FOR INSPIRATION



CASE STUDY: Cross-Sell

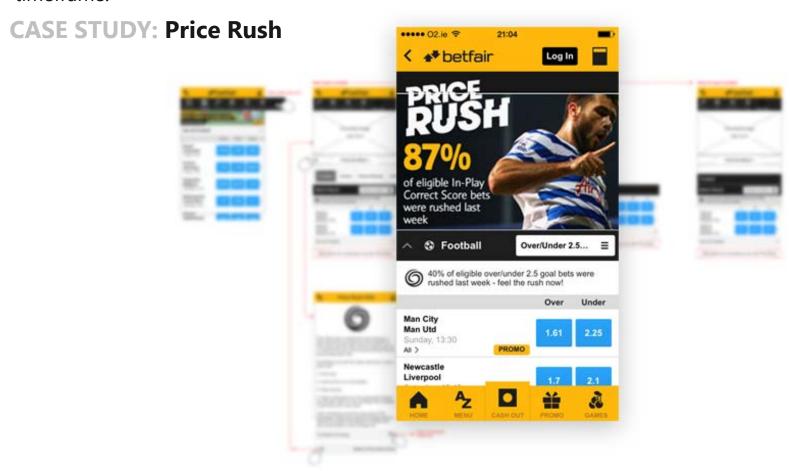




5 - PRIORITISATION WITHOUT LOSING THE VISION



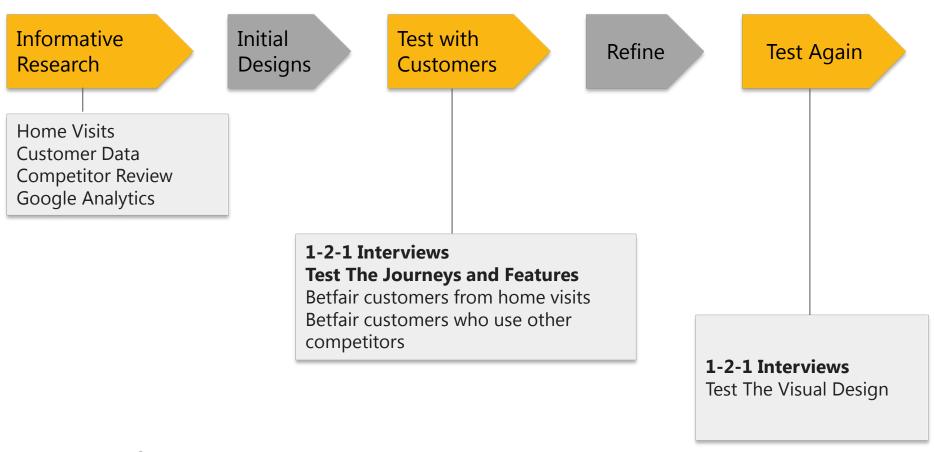
All our designs included full product features but were gracefully de-scoped to stay in line with timeframe.



6 - TEST WITH CUSTOMERS - OURS & THEIRS



CASE STUDY: Arcade Redesign



User Research

Stimulate ideas, validate concepts & test assumptions – all early on, before we commit to Development



HOME VISIT FEEDBACK

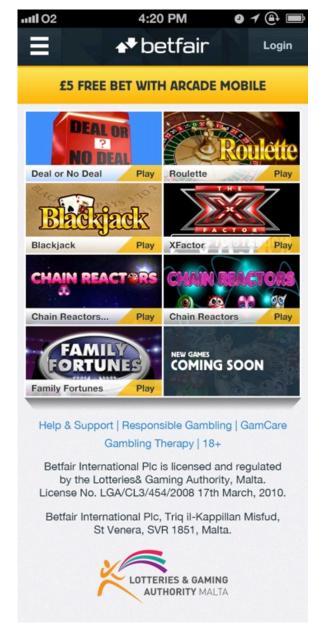
Too much content – difficult to read

I want an experience that reflects my interests

VIPs want to be more engaged

I want to know what other people are playing

All gambling sites are the same to me





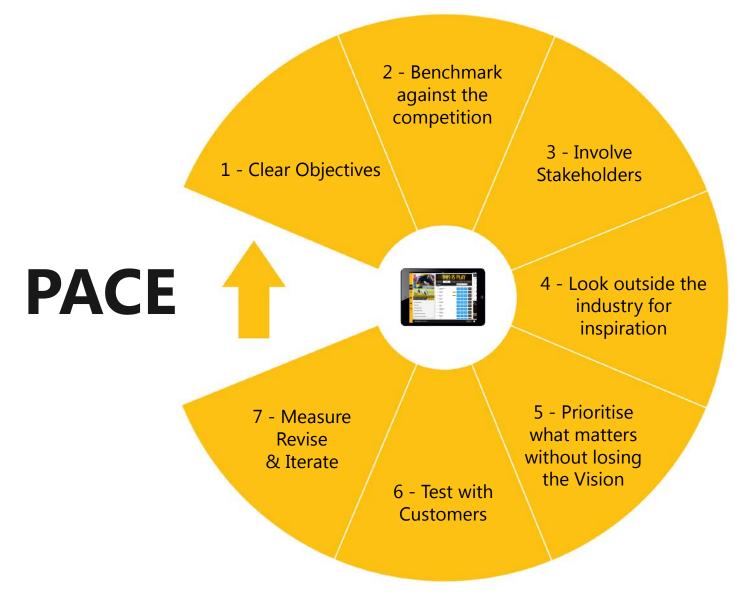
7 - MEASURE, REVISE & ITERATE







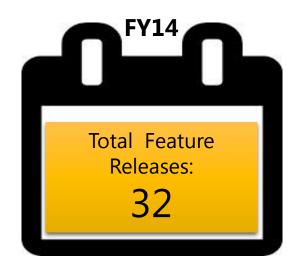
BETFAIR PRODUCT MANAGEMENT LIFECYCLE

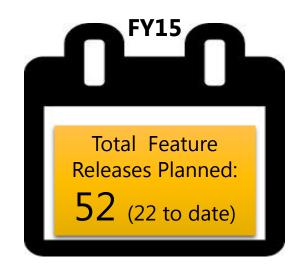




PACE

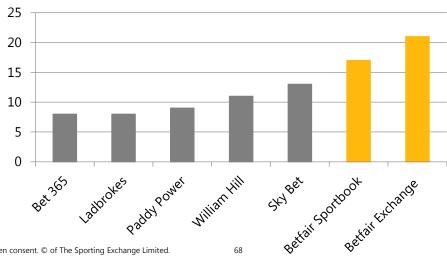






Number of IOS app releases since May 2013

(Source App Annie 29/10/2014)





Summary

- We own and control our product roadmap
- Our product roadmap is driven by our commercial objectives and customer insights
- We are constantly benchmarking and seeking improvement





TECHNOLOGY TRIMARKETING

Avi Marco, Director of Enterprise Data Services
Johnny Devitt, Online Marketing Director

About Me – Avi Marco

2013 **↑** betfair Director of Enterprise Data Services insure Interim CTO 2012 2007 Head of Corporate BI **Room Solutions** 2006 Senior BI and Data Warehouse Architect Business Intelligence Technical Manager 2003



Enterprise Data Services





























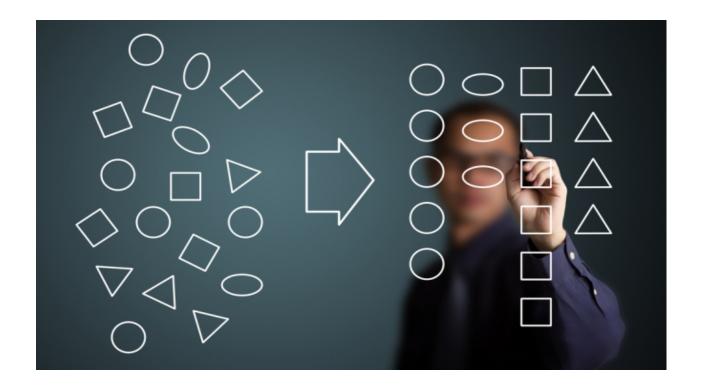








Our Mission



To make data accessible on demand



We collect a lot of data

220m

rows of data selected for processing through our warehouses every day

450bn

rows of data in our data stores

55bn

rows of data refined into our extreme performance Enterprise Data Cloud



Keeping it simple

Simplify access and timeliness of insight that matters



Simplicity

We have stripped away complexity and harnessed the power of the cloud to achieve:

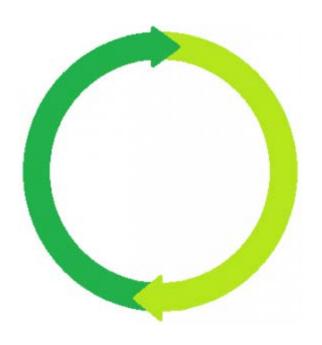
- Near real time data (e.g. marketing effectiveness can now be seen within minutes)
- Reduction in average query times from hours to minutes to seconds
- Up to 90% of queries are self-served by end users



We provide the means for the business to make decisions

Data to Insight

- Gather
- Measure
- Consolidate
- Report
- Analyse and Augment

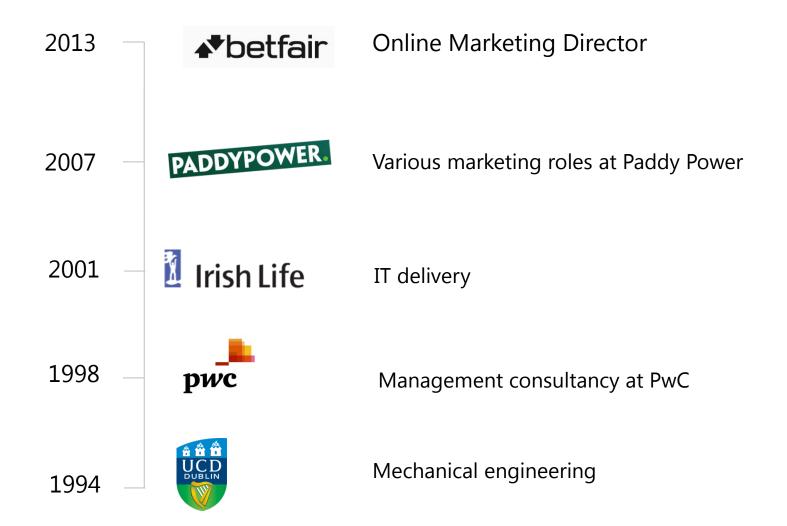


Insight to Action

- Set Strategy / Targets
- Implement
- Action New Process
- Correct Strategy
- Cycle



About Me – Johnny Devitt





Sportsbook enables our Marketing to compete



- Exchange marketing is tough & complex for promotions
- Sportsbook enables marketing on a level playing field



Sportsbook promotions & product features are the platform for "Go to market"



Our Marketing is competing responsibly, effectively and we are scaling efficiently



Competing is doing the basics brilliantly



CPA

Activation volume

Customer Segmentation

Customer Tenure Multi Product Usage Multi Platform Usage

What is setting Betfair apart in marketing?



What is setting Betfair apart in Marketing?

- Our marketing is enhanced by our tech & data capability
- Our people know what excellent looks like



Our technical & data capabilities enable our marketing to be iterated quickly & fail fast

Data
Management
for Marketing

Digital Media
Buying
Capabilities

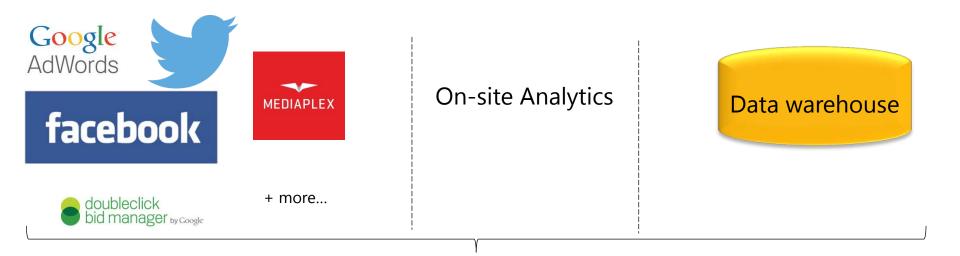
Tech for scaling marketing automation

How are these capabilities activated?



How does Data Management enable fast commercial decision making in Betfair?

- Digital Landscape is dispersed, spend running in multiple locations
- Acquisition happening in shorter bursts closer to events
- Scaling up/down spend is key & depends on cost per acquisition (CPA)
- Conversion optimisation is important in order to reduce CPAs



Our marketing dashboards now link our multiple big data sources and make the data actionable within minutes



Display Media Buying, we are media neutral and audience positive

We get performance by:

Focusing on 3rd
Party media
buying

Iterating segmentation of lookalikes

Yesterday

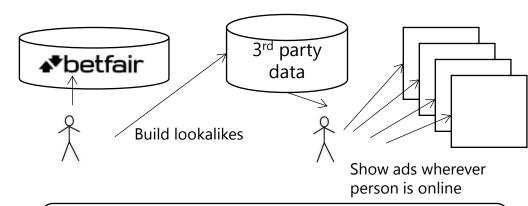
- Target based on demographics
- Buy media in websites
- Wastage high as audience relevance low

MailOnline **theguardian**

- Lots of ads wasted to wrong target
- Reach limited to site

Today

- Find lookalikes of customers
- Use 3rd Party data (cookies) to find lookalikes
- Target users wherever they are online



- Far more relevant audience
- Reach larger as can be anywhere online

How does Data Management enable CRM automation and decision making in Betfair

Example Half time Cash Out campaign

- Challenge: "Run a cash out for profit SMS campaign to cash out positive profitable bets at half time on a Saturday"
- Realisation by technology that marketing effectively needs access to all the data all the time → Enable our marketing tools access and action our data securely

Half time whistle blows

Campaign kicks in & 3 minutes later last SMS delivered

Match Kicks off

- Some customers cashed out for the profit → Happy customers
- Portion recycled for second half



Our team's heritage understands Exchange customers, our newer team knows what excellent looks like in digital and paid social marketing



















We've brought in experience that has proven delivery capability
We know what excellent looks like
Team is indexed with gambling and financial services bias



Summary

Our tech is enabling our marketing to perform better

- We can track our digital spend effectively
- We don't talk about big data; we have it actionable for business
- Enabling our tools to access our data is changing how we think of campaigns

Our People have the right experience

- Our Marketing team can operate at pace
- We know what excellent looks like
- We are prepared to fail fast





Breon Corcoran CEO

Competing in a crowded market













- Increasingly difficult to win through marketing alone
- Product differentiation is key for acquisition & retention

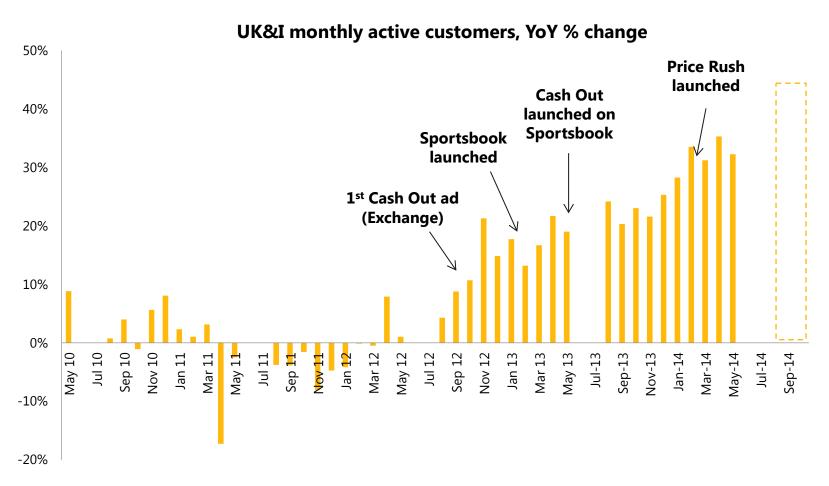
Competing on product is not trivial

We are well placed:

- Efficient in-house development capability
- Not encumbered by retail considerations
- Brand heritage of innovation & differentiation
- Evidence that we can develop products that resonate with customers and dictate the industry agenda

We believe that Product is one of Betfair's competitive advantages

Combination of product & marketing investment is working



Note: June & July removed in all years due to impact of football tournaments





OSIA.