



# Ingenious



BT New Ideas – Helping to embed a culture of Innovation

Steve Healey, Head of BT New Ideas

 @BTideasman



# A bit about me....

Live in Manchester, UK

BT 15 Years

Head of New Ideas Scheme since  
2005

Prior: Incubator activities in BT,  
start up companies.



# BT Group

BT is one of the world's leading communications services companies, serving the needs of customers in the UK and more than 170 countries worldwide.

## FTSE top 15 ranking

Revenue: £24bn

Free Cashflow £5bn

Employees: ~100,000

At least 1% of post-tax profits go to good causes

£472m invested in global research and development in 2015/16

**Our purpose: To use the power of communications to make a better world**

Consumer

EE

Global Services

Business & Public Sector



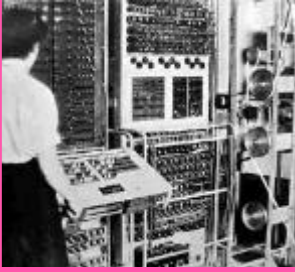









Wholesale and Ventures

Openreach

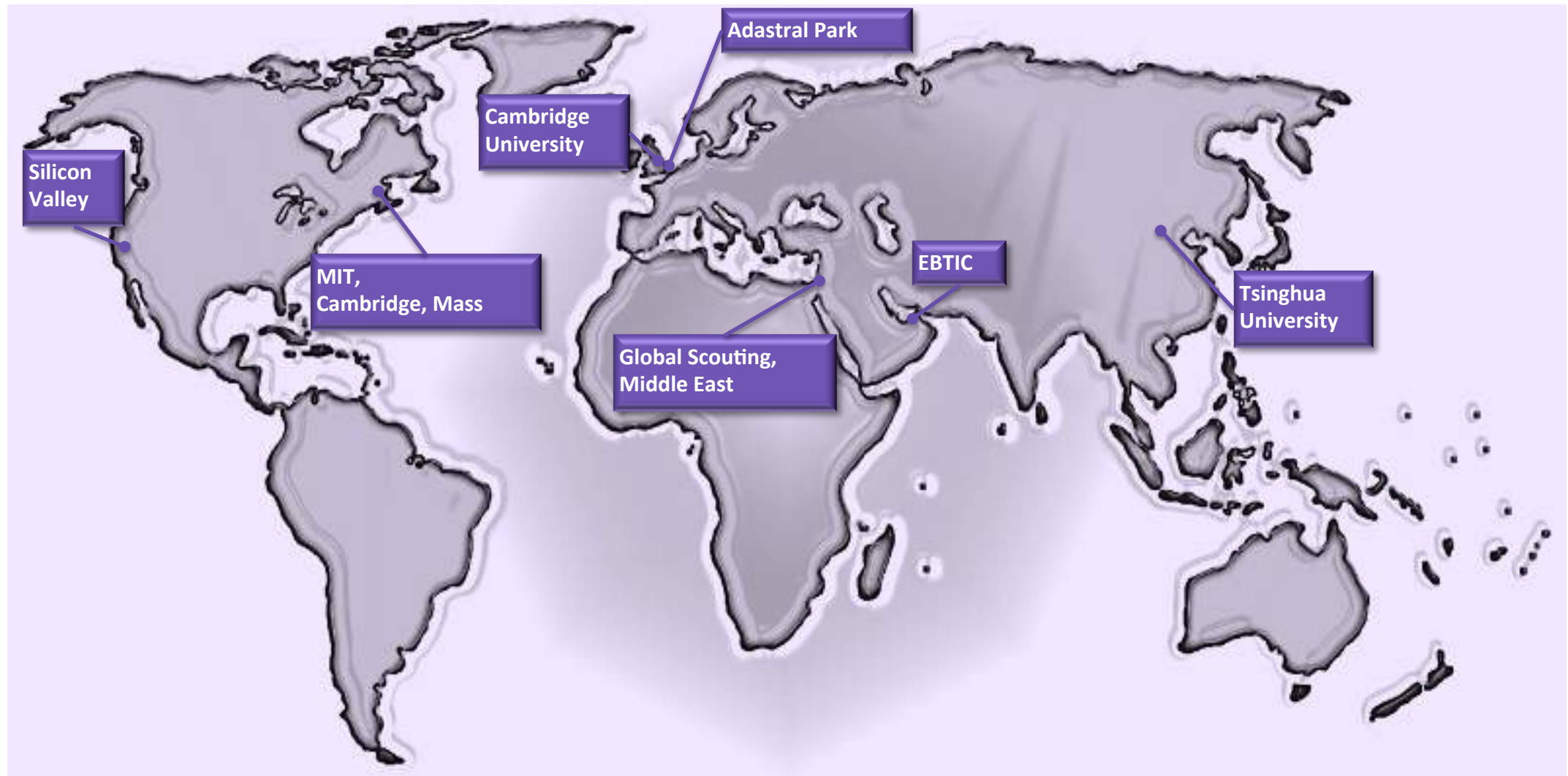
Technology, Service &  
Operations (TSO)



# Many world first achievements

<b>1846</b>  Electric Telegraph Company	<b>1926</b>  Two-way transatlantic telephone call by radio	<b>1943</b>  Programmable computer: Colossus	<b>1962</b>  Telephone call via satellite	<b>1968</b>  Digital telephone exchange	<b>1980</b>  Purpose-designed optical fibre submarine cable
<b>1984</b>  140Mbps single-mode optical fibre link	<b>1989</b>  Satellite telephone system: Skyphone	<b>1999</b>  GPRS live data call over a mobile network	<b>2013</b>  World's first G.fast trial	<b>2014</b>  3Tbps optical fibre link in the core network	<b>2015</b>  200Gbps data secured by Quantum cryptography

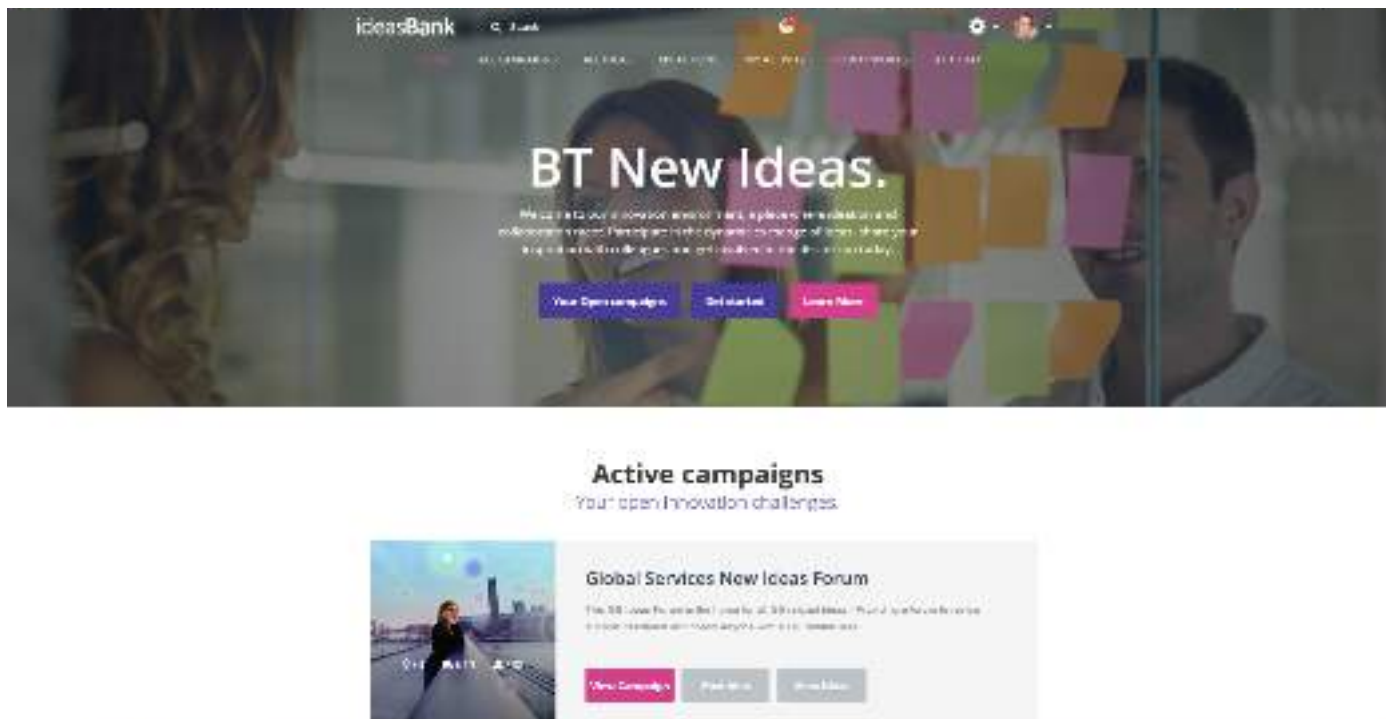
# Innovation scouting, university partners and cutting edge innovation globally



# BT New Ideas Scheme

Tracking of Business impact – Activities to justify  
and defend our program

# BT New Ideas Scheme



- Budget for Comms, Platform etc
- Business units hold budget to develop ideas/projects
- Best ideas get pitched to the right people
  - Help to fine tune ideas

- Global scheme set up in 2005
  - ideas from 24 countries
- Targeted challenges
  - (95 to date)
- Three “open” Challenges to all:
  - Improving Customer Experience
  - Growth Opportunities
  - How we work
- Support Innovation activities, Hackathons and specific calls to action
- Challenge team SLAs for quality and throughput
  - Hackathons
  - Innovation sharing days
  - Pitch day/Dragons’ Den/ Shark Tank



# Innovating every day with BT New Ideas





## **Embedding a culture of innovation**

Employee participation 12% - 11,000 submitters

1,400 subject matter expert evaluators

ROI for every \$1 spent - \$70 returned

\$845,000 paid in cash awards over 10 years

Reputation badges and e-cards saying thanks



## Fast and Effective down streaming

New revenues \$6.75m (15/16)

Actual cost savings \$21.45m (15/16)

Cost avoidance \$10.47m (15/16)

Average 45 days at evaluation

Average 220 days at adoption

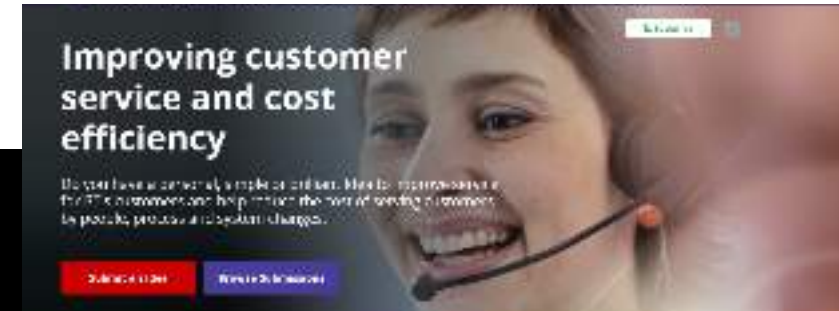
# Typical call to action in BT



# Our challenge activities & measures



# Activity types in BT



# Dragons' Den (Shark Tank) – collect, review and pitch

## What kind of ideas we were looking for?

- ▶ This Dragons' Den campaign is the first of three we are running in 16/17. Focused on one of BT's 2020 ambitions - to **help 10m people overcome social disadvantage**.
- ▶ Looking for ideas on how to do this, starting with helping the people who are most disconnected and vulnerable in our towns and cities. Funding available for the right pitch.
- ▶ 46 Ideas captured over 6 weeks, 304 votes cast and 1,054 people engaged
- ▶ 6 Ideas pitched to the Dragons at the actual TV studios in London in Sep
- ▶ All gained support from the Dragons' and are moving forward



# Hackathons – collect, group, develop & trial

## Virtual Reality for BT and EE – Live campaign

- ▶ We are seeking **personal**, **simple** and **brilliant** ideas for how to use virtual reality for either a new product or service for customers, or for use internally to save costs and/or improve our customers experience.
  - Virtual Reality can mean different things to different people, so for this campaign, we specified we are looking for - 360 video ideas, true virtual reality(VR) environments and augmented reality(AR) too.
  - The top rated ideas will be taken forward into a Hothouse with BT, EE and Samsung in November
  - Ideas will be brought to life
  - So far 40 ideas from the 85 submitted have been selected

## Houston Hackathon

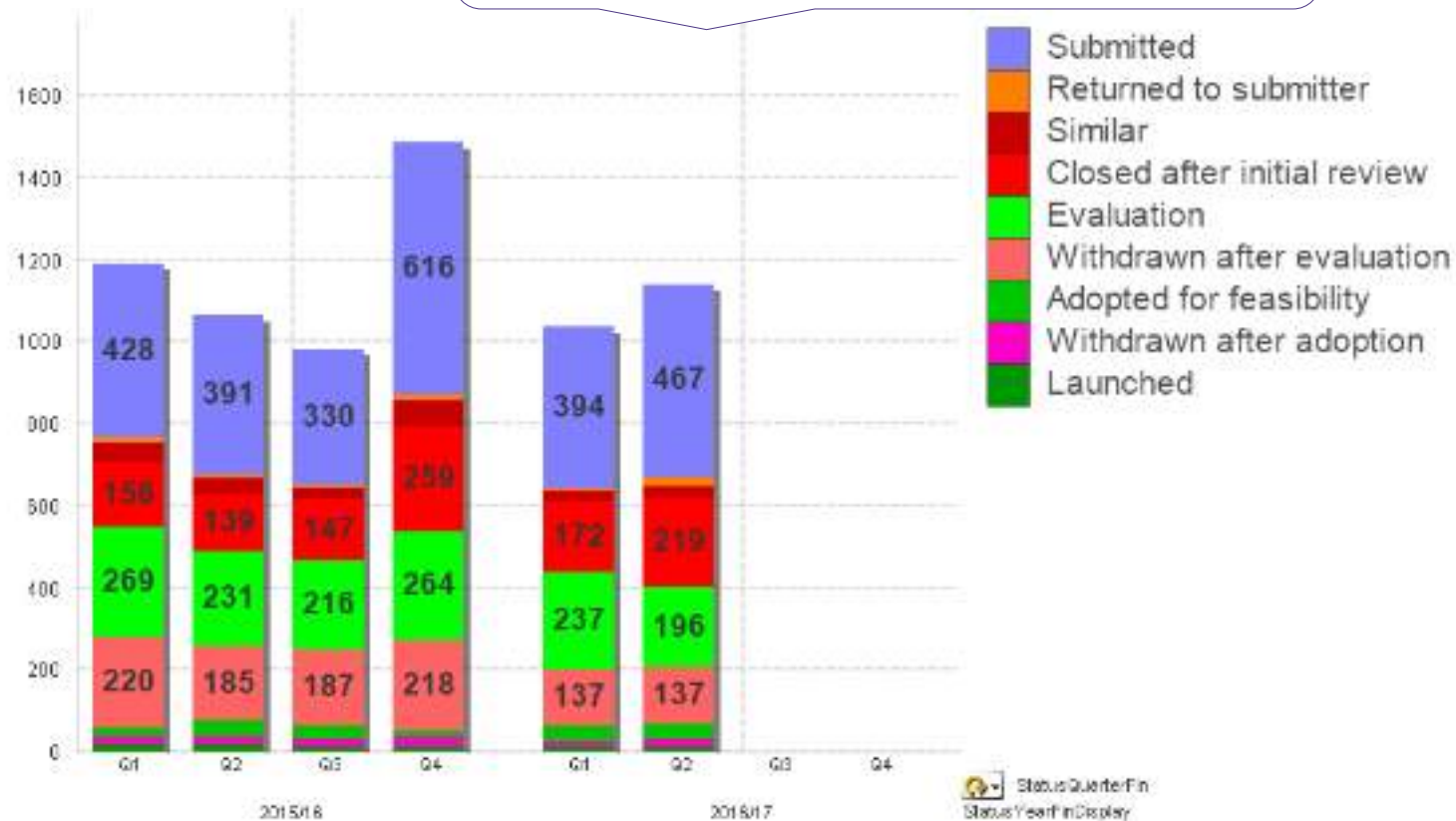
- ▶ Aim was to help improve customer experience by giving the customer unified, accurate and timely news of service problems.
- ▶ Hackathon took place 5<sup>th</sup> – 7<sup>th</sup> July. Outcome 18 ideas grouped into 7 projects.

# Success criteria/measures



# Activity 15/16 vs 16/17

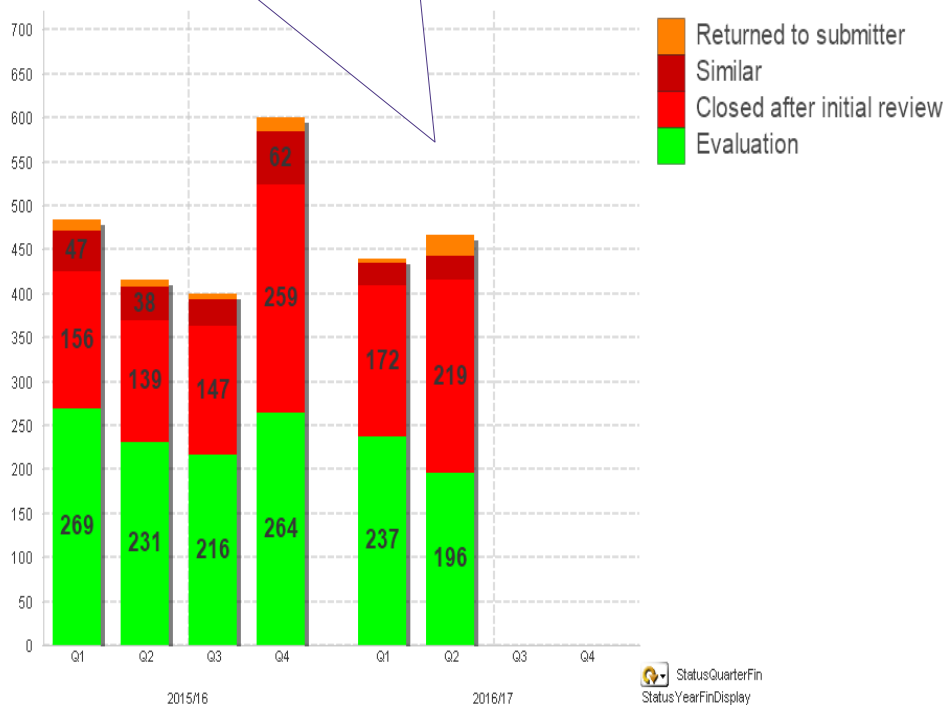
- Q2 – 1138 status changes



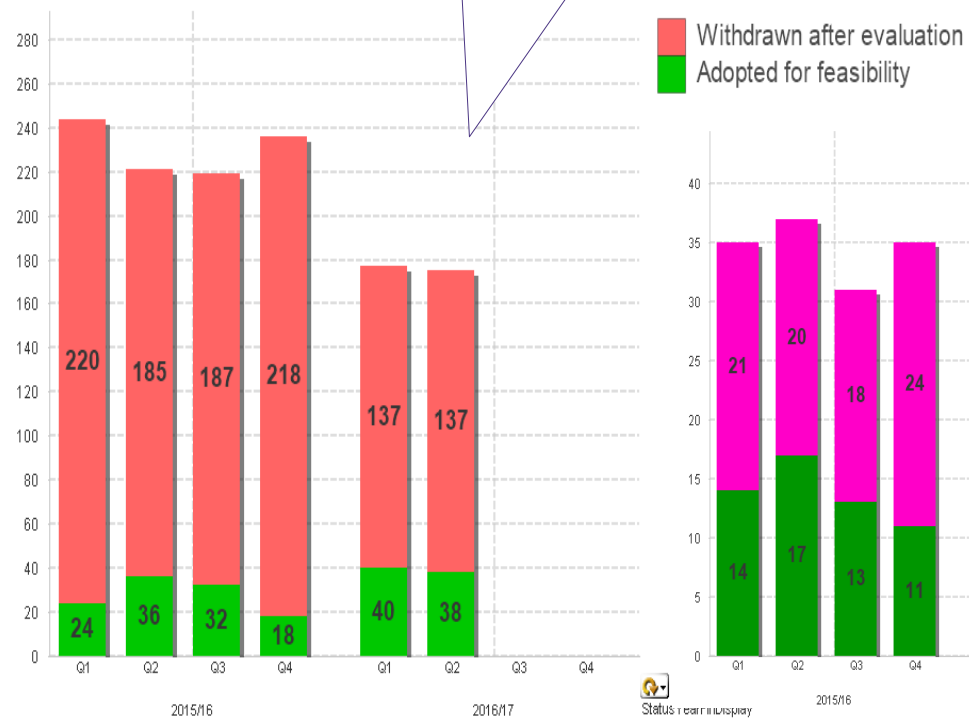


# Activity 15/16 vs 16/17

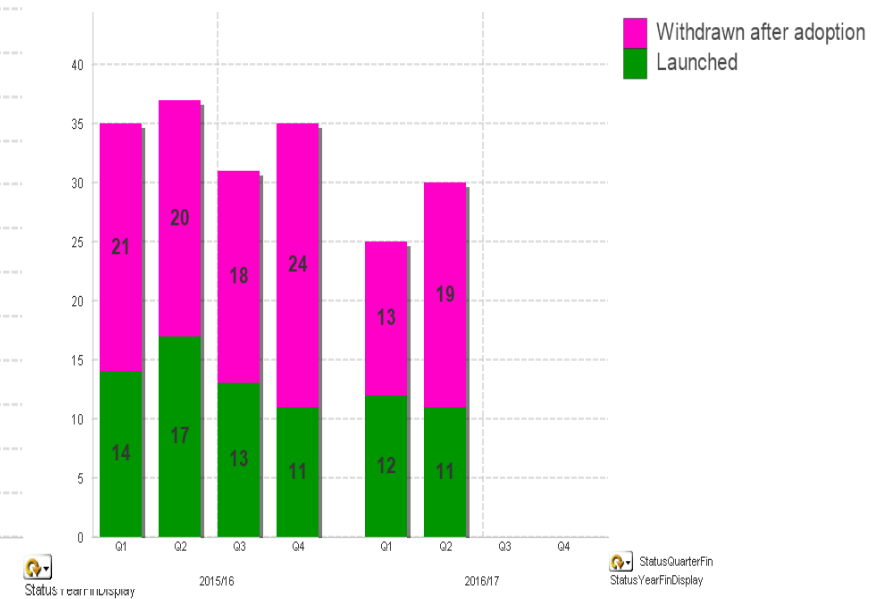
- Pre-screen activity in Q2**
- Closed 47.00%
  - Evaluation 42.06%
  - Similar 5.79%
  - Returned 5.15%



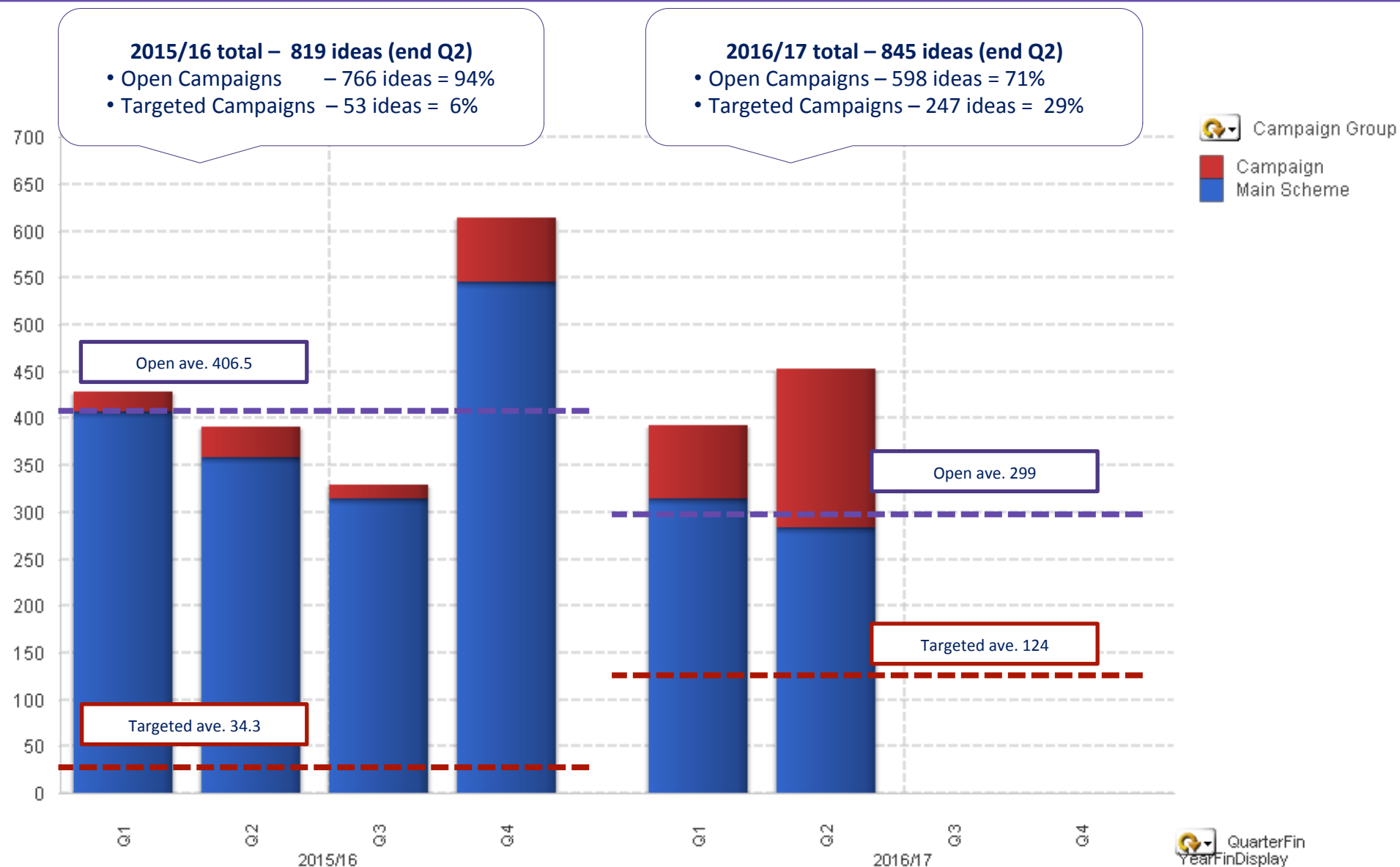
- Evaluation activity in Q2**
- Adoptions: 21.71%
  - Withdrawn: 78.29%



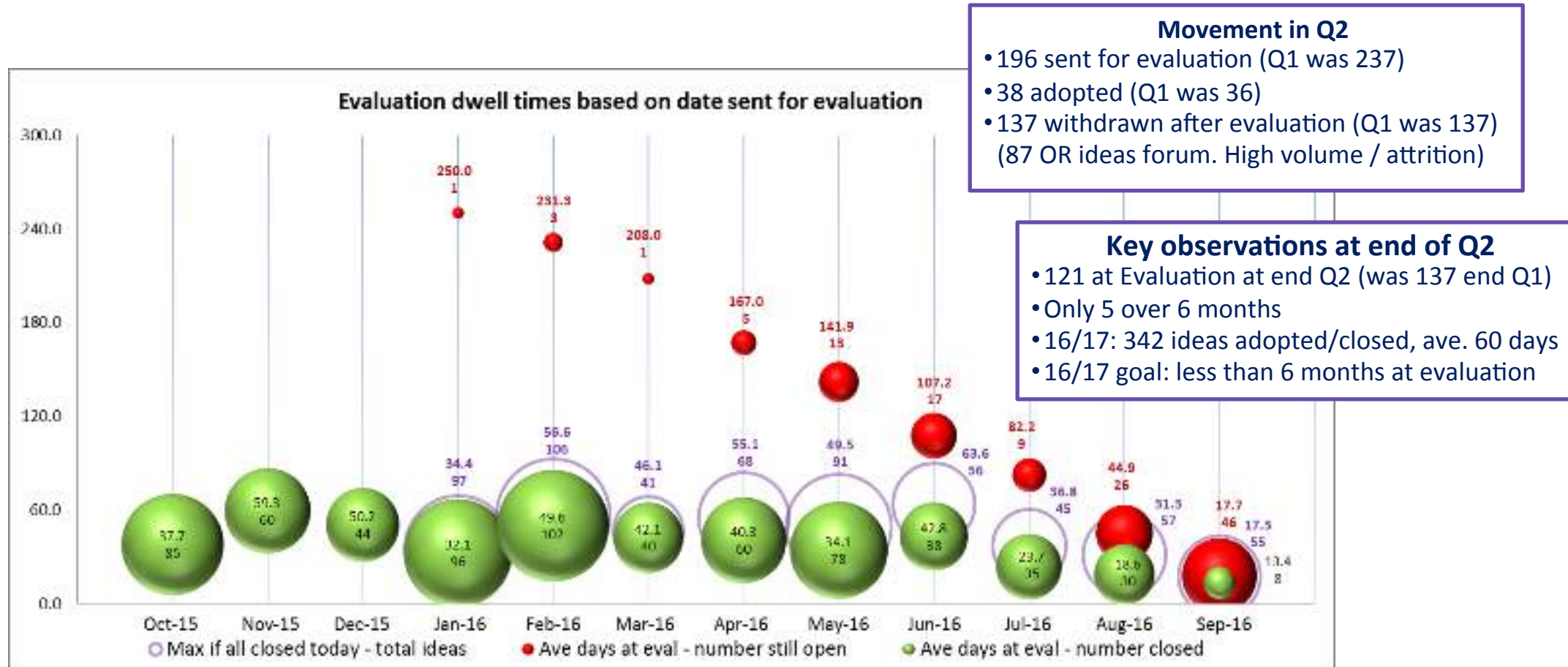
- Adoptions progressed to launch or withdrawal in Q2**
- Launches: 36.67%
  - Withdrawn: 63.33%



# Open vs targeted – 71% - 94% Open



# Evaluation cycle times

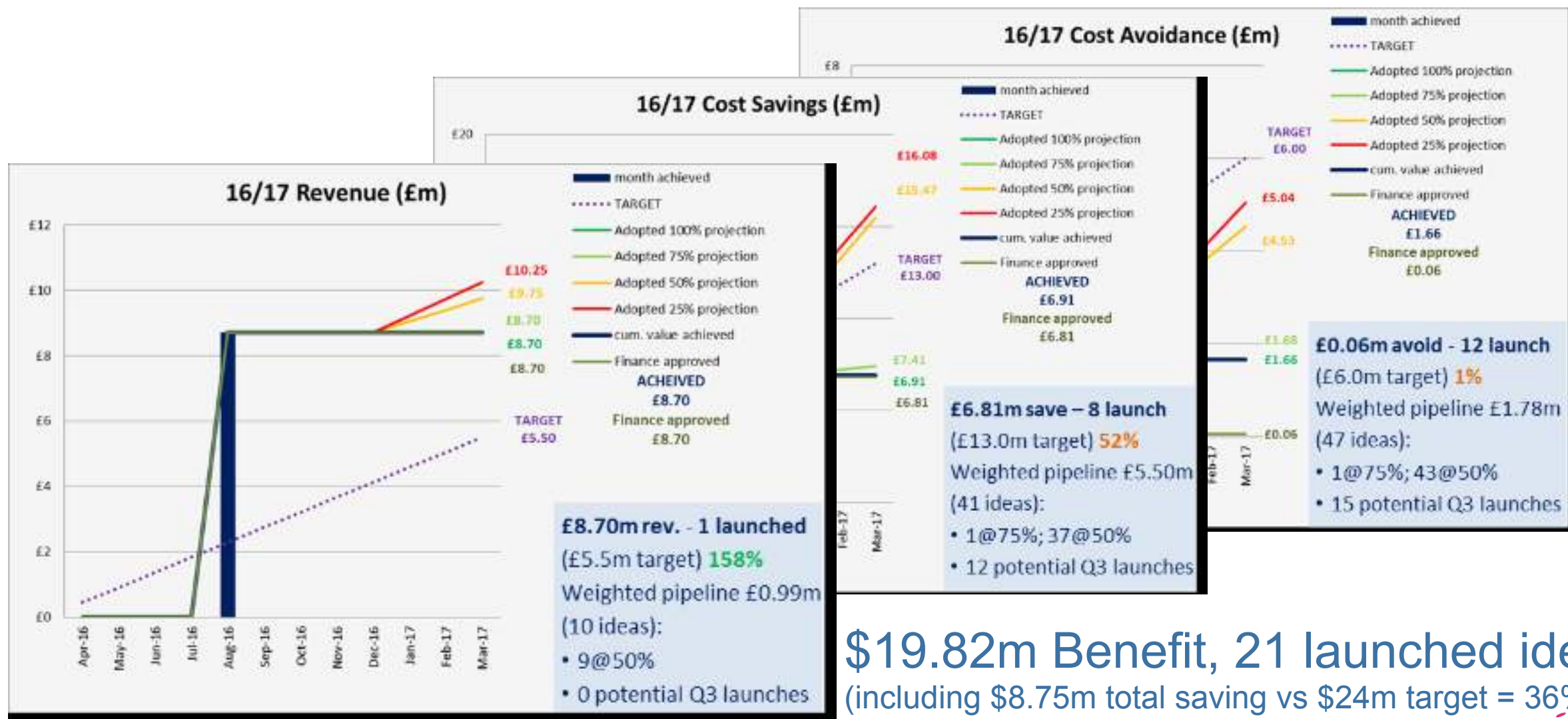


**Green bubbles:**  
 Closed ideas,  
 Low position is good,  
 Size is number closed.

**Red bubbles:**  
 Open ideas,  
 High position is bad,  
 Smaller the better.

**Purple bubbles:**  
 The average days at evaluation if  
 all ideas closed today. Once all  
 closed, this is set in stone.

# Business impact – Target vs Actual



**\$19.82m Benefit, 21 launched ideas**  
(including \$8.75m total saving vs \$24m target = 36%)

# Tracking our Business units

Submissions league (end Q2 compared)	15/16 end Q2	16/17 end Q2	15/16 number	15/16 value	16/17 number	16/17 value	Rewards Central (number of people)	Cash awards (no. of awards)
Openreach	411	311	16	£6.29m	15	£6.84m	£3,287 (25)	£20,506 (6 ideas)
BT TSO	135	200	2	£1.92m	2	£8.72m	£1,200 (46)	£0
BT Consumer	86	83	4	£0.12m	3	£0.01m	£713 (26)	£0
BT Business	113	76	7	£9.08m	1	£0.00m	£192 (16)	£0
BT Global Services	37	48	1	£0.50m	0	£0.00m	£204 (11)	£0
BT Group	27	93	1	£0.01m	0	£0.00m	£124 (10)	£0
BT Wholesale	10	17	0	£0.00m	0	£0.00m	£45 (2)	£0
EE	0	17	-	-	0	£0.00m	£0	£0
<b>Total</b>	<b>819</b>	<b>845</b>	<b>31</b>	<b>£17.92m</b>	<b>21</b>	<b>£15.57m</b>	<b>£5,765 (136 people)</b>	<b>£20,506 (7 people)</b>

Engagement

Launches

Awards



# Annual retrospective – Original vs Actual impact

Idea Ref	Idea Summary	MFU Owner	MFU Finance Lead	Original Impact	Revised impact	Evidence
<a href="#"><u>D19328</u></a>	Creation of work Flow Management System – outcome: 100% reduction in data errors. Offload analysis task time: 30 minutes to 6 seconds	Paul Weir	Alastair Maitland-Tong	£1.47m	£1.2m	Initially had Evaluation valuation– then shared data gathered after tracking with Rob Fuller and Alastair to validate (Feb 15).  Alastair has subsequently confirmed £400k annualised impact 27 <sup>th</sup> April 15. (£1.2m 3 Years)
<a href="#"><u>19224</u></a>	An idea around improving how we provide service for broadcast Links from Sporting Stadiums around the country for Customers including BT Sport, BSkyB & BBC	Neil Huggins - Senior Product Manager	Finance Lead information was not available at first – validation underway	£1.49m (contribution figure).	£2.28m (3y Cum net cash flow)	Received the relevant Business case extract from Neil on the 2 <sup>nd</sup> Sept 2015.  Revisited with Neil who has confirmed EBIT is the line he supports and that this was a TSO investment  Andrea Bancroft SFM involved in this project and confirmed that TSO look at Cash flow line and confirmed the full 3 year impact – Case approved in finance (Managed Cabinets) by Mark Smith & Howard Watson (then AGIP MD)
<a href="#"><u>D20263</u></a>	An idea to reduce the number of damaged/ unusable travelling Ladders used in all Telephone Exchange.	Glen Barford	Anne Curtis & Richard Archer named in approved safety case	£1.71m	£22.5k Trial results	Jon Cox supplied original case that was agreed @Openreach Safety Steering Group  Nick Harper (Openreach finance) only able to validate/ signoff trial results from 15 sites, 5000 exchanges and 7000 travelling ladders exist – only way to revalidate is to send out survey to all mobile testers – Openreach don't see value in doing this – expensive exercise.

Encourage participation & Celebrate successes

# How we encourage participation

- ▶ Employees want to change the business for the better
- ▶ Secure funding or resources for ideas – Pitch days, Shark Tank
- ▶ Encouragement awards - Credit loaded on Pre-paid Visa card
- ▶ Spot prizes in focussed challenges – Smartphone/tablets, books, experience days
- ▶ Ideas brought to life and trialled – 3D printing, Innovation days & Hackathons
- ▶ Tax free cash awards in monthly pay – Based on actual business impact
- ▶ Help our customers with challenges – e.g. Oxfam see issue first hand
- ▶ **New** - Referral scheme! – Idea submitters “Ambassadors” refer a colleague
- ▶ **Next** – Crowd funding trial – improving employee experience

# Innovation in action – Process Improvement

**BT Today**  
Page last updated:  
Thu 22 Sep 2016 10:35 GMT

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**Queue engine accelerates service delivery**  
Published on 22 Sep 2016 10:35 GMT

Adrian Wallis taught himself new computer code from scratch. To help engineers complete orders more quickly.

And it's won him a big cash award from the BT New Ideas scheme.

He was part of a team in Penarth who took private health appointments for Gwentech engineers to fit and test new services for businesses.

"When I joined the team, I found the old process was complex," he says. "So I decided to look into other options."

"I'd done a bit of programming before, but I had to learn the local software code from scratch to build the engine. Then I got a colleague to help, and with great results."

His Queue Engine gets rid of manual checking. It pulls information from a number of queues on the COSMOS system. Then it analyses the data and works out which jobs can be prioritised.

**Useful links**

- [BT New Ideas scheme](#)

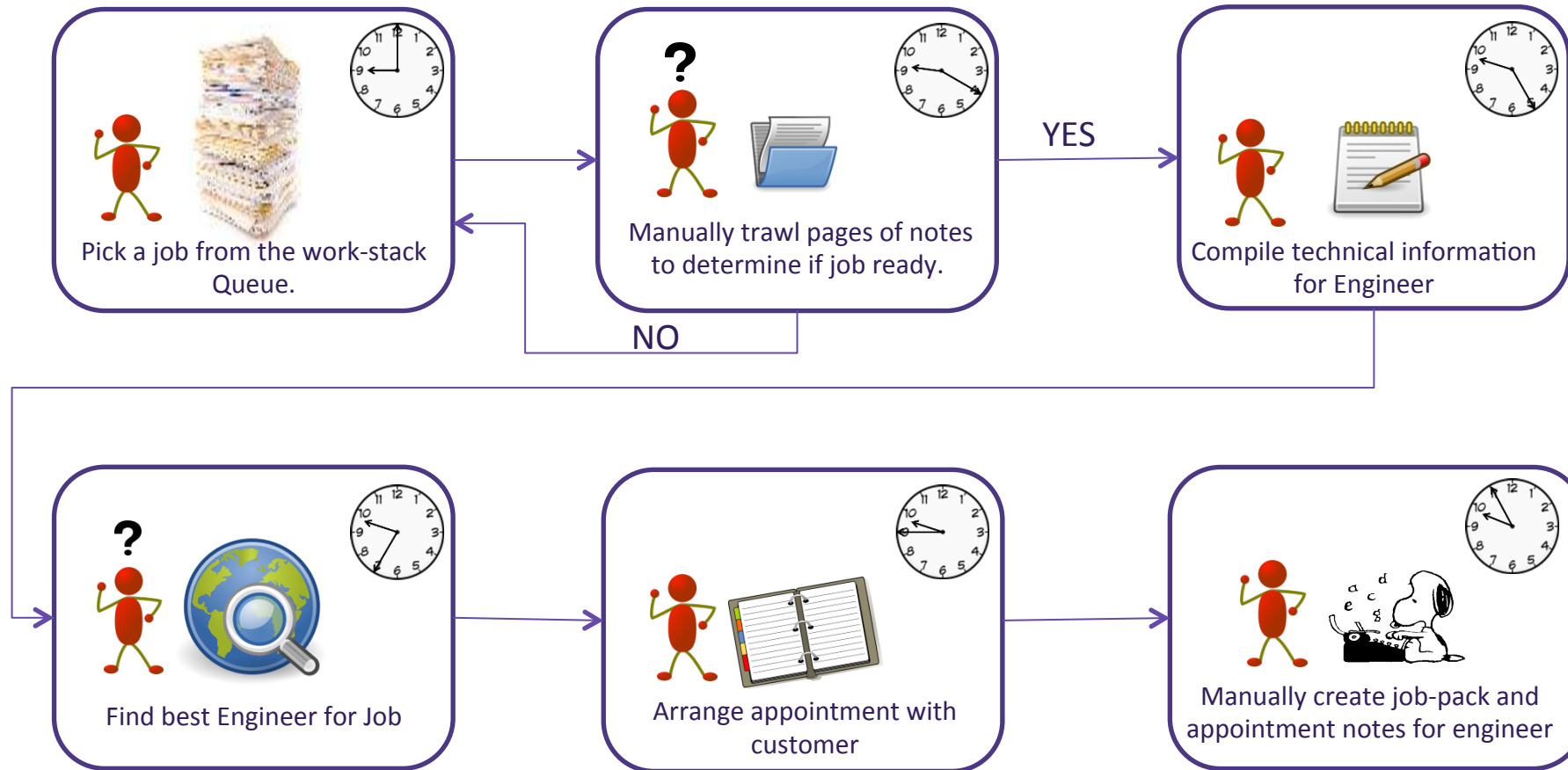
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- Downwash targets for 2016 with air filter
- New process puts out the middle man

**EXCEPTIONALLY STYLISH. TREMENDOUSLY AFFORDABLE.**

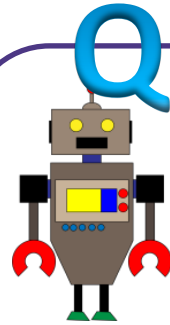
- ▶ Queue Engine gets rid of manual checking from an installation process. The idea pulls information from a number of work queues, analyses the data and works out which jobs can be prioritised.
- ▶ Annualised impact \$950k
- ▶ Cash award approved and paid. This idea has reached the final of the IdeasUK – Idea of the year competition being held in Cardiff Nov' 16.

# Manual process before automation – 55 minutes

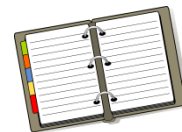




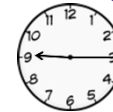
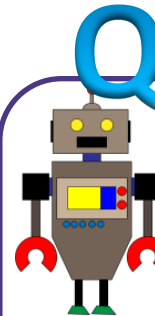
# Process after automation – 15 minutes



Automation assesses whole work-stack queue and presents fluid jobs in priority order to agents.  
Automates compilation of technical notes and selects best engineer for the job, skills, location etc.



Arrange appointment with customer



Automatically creates job-pack and appointment notes for engineer

# New Product development: Saved \$1.7 in Capex, Sped up time to market



- ▶ BT Business Russell Costello submitted an idea that introduced a new commercial model that allowed BT to provide audio conferencing service into Brazil and other Latam countries.
- ▶ It was suggested that BT use infrastructure located in the UK rather than investing in and deploying new infrastructure into the Latam region. This initiative saved BT spend of \$1.7m in Capex.
- ▶ Revenue forecasts for audio conferencing within the region are currently being set which are expected to be:
  - **16/17 – \$ 0.90m**
  - **17/18 – \$ 1.35m**

# BT New Ideas – KPI's

		06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	Total	Commentary
Main Scheme idea submissions	launched (submit in year, launch any year)	25 (0.96%)	24 (1.22%)	31 (1.55%)	37 (2.85%)	33 (2.56%)	54 (3.42%)	48 (3.92%)	42 (2.70%)	38 (2.47%)	24 (1.48%)	6 (1.00%)	385	pipeline of adopted ideas
	adopted - still in development	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	2 (0.16%)	5 (0.32%)	18 (1.17%)	35 (2.15%)	20 (3.34%)	80	chased / escalated monthly
	at evaluation - still live	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	7 (0.43%)	92 (15.4%)	99	
	withdrawn after adoption	26 (1.00%)	18 (0.91%)	23 (1.24%)	14 (1.08%)	28 (2.17%)	31 (1.96%)	22 (1.80%)	25 (1.61%)	46 (2.99%)	25 (1.54%)	8 (1.34%)	277	
	withdrawn after evaluation	617 (23.8%)	248 (12.6%)	302 (16.7%)	246 (19.0%)	356 (27.6%)	585 (37.1%)	404 (33.0%)	523 (33.7%)	563 (36.6%)	750 (46.1%)	184 (30.8%)	5305	
	duplicate at pre-screen	429 (16.5%)	463 (23.5%)	470 (25.4%)	300 (23.1%)	240 (18.6%)	373 (23.6%)	238 (19.5%)	335 (21.6%)	355 (23.1%)	172 (10.6%)	43 (7.19%)	3589	
	Closed after initial review / local impact	1500 (57.8%)	1216 (61.7%)	1027 (55.4%)	701 (54.0%)	634 (49.1%)	535 (33.9%)	509 (41.6%)	624 (40.2%)	519 (33.7%)	613 (37.7%)	211 (35.3%)	9005	
	<b>Main scheme idea submissions</b>	<b>2597</b>	<b>1968</b>	<b>1853</b>	<b>1298</b>	<b>1291</b>	<b>1578</b>	<b>1223</b>	<b>1554</b>	<b>1539</b>	<b>1626</b>	<b>598</b>	<b>18176</b>	
Campaigns	Number of new campaigns	7	8	9	5	12	9	5	15	11	9	5	81	
	Number of campaign submissions	191	494	571	403	866	623	165	485	522	137	247	4457	
Total ideas	<b>Total number of ideas (main scheme + campaigns)</b>	<b>2788</b>	<b>2462</b>	<b>2424</b>	<b>1701</b>	<b>2157</b>	<b>2201</b>	<b>1388</b>	<b>2039</b>	<b>2061</b>	<b>1763</b>	<b>845</b>	<b>22633</b>	
	Ideas per day	7.64	6.75	6.64	4.66	5.91	6.01	3.80	5.59	5.65	4.82	4.62		
Cycle time for adopted ideas (main scheme)	Adopted & launched - ave. days from submit to adopt	155	187	150	209	248	283	289	174	91	75	39		
	Adopted & launched - ave. days from adopt to launch	288	204	212	189	192	159	168	170	198	82	34		
	Launched - total cycle time ave. from submit to launch	444	391	362	398	440	442	458	344	290	157	73		
Value created / return on investment	revenue generated £m	£40.82	£2.50	£6.65	£3.55	£1.10	£15.02	£0.70	£6.81	£25.00	£5.20	£8.70	£75.23	
	actual cost savings £m	£2.31	£7.14	£13.35	£10.56	£8.47	£10.33	£14.26	£12.86	£15.45	£16.51	£6.81	£118.05	
	cost avoidance £m	£1.17	£0.52	£1.33	£6.14	£9.45	£3.13	£7.36	£6.43	£5.55	£8.06	£0.06	£49.20	
	<b>total value £m</b>	<b>£44.30</b>	<b>£10.16</b>	<b>£21.33</b>	<b>£20.25</b>	<b>£19.02</b>	<b>£28.48</b>	<b>£22.32</b>	<b>£26.10</b>	<b>£46.00</b>	<b>£29.77</b>	<b>£15.57</b>	<b>£283.30</b>	
	Cost of the scheme £k	£220	£250	£260	£260	£260	£150	£185	£161	£150	£150	£150	£2,196	inc. software, staff, points pre 14/15
	Return On Investment (for every £1 spent)	£188.51	£30.98	£60.60	£64.49	£66.74	£146.05	£73.18	£100.77	£197.85	£148.85	£88.47	£98.32	98 X ROI
	Cash and points awards £k	£15	£78	£92	£54	£25	£45	£120	£98	£83	£50	£26	£686	Points and cash paid by LoBs
Value created by LoB £m	BT Business									£0.73	£0.17	£0.01	£0.91	
	BT Consumer									£0.00	£0.00	£0.00	£0.00	
	BT Global Services	£30.70	£0.30	£0.80	£0.10	£0.45	£0.00	£0.02	£0.86	£0.67	£0.01	£0.00	£33.91	
	BT Group	£0.05	£0.02	£0.05	£0.03	£0.00	£0.00	£0.00	£5.40	£25.02	£1.92	£8.72	£41.21	
	BT TSO	£0.00	£1.74	£0.14	£4.60	£9.63	£6.85	£9.81	£3.16	£7.36	£10.66	£0.00	£53.95	
	BT Wholesale	£13	£0.07	£1	£0.20	£0.00	£0.05	£2.00	£0.12	£0.55	£0.50	£0.00	£17.06	
	Openreach	£0	£7.51	£19.51	£14.34	£8.21	£21.27	£7.72	£13.52	£11.41	£16.51	£6.84	£127.33	
	(BT Retail)	£0.25	£0.53	£0.08	£0.98	£0.73	£0.32	£2.77	£3.04	£0.25	£0.00	£0.00	£8.94	
Employee engagement (ideas / submitters / engagement %)	BT Business (9,749 people)								171/116/1.4%	197/96/1.17%	76/54/0.55%	10.35%		Note: Fluctuations in directory feed produce different user base capable of submission year on year - refer to dividend/rebate spreadsheet for month by month engagement
	BT Consumer (7,767 people)								199/149/2.2%	177/119/1.71%	83/58/0.78%	23.90%		
	BT Global Services (17,640 BT people)	226/181/0.78%	193/130/0.56%	142/93/0.40%	96/78/0.34%	59/44/0.19%	142/80/0.32%	142/47/0.3%	86/64/0.4%	94/79/0.40%	48/35/0.20%	9.52%		
	BT Group (12,107 BT people)	102/60/1.42%	141/60/1.42%	64/49/1.16%	64/35/0.83%	22/14/0.34%	26/21/0.38%	44/33/0.4%	69/46/0.5%	103/87/0.9%	100/83/0.72%	93/46/0.38%	5.81%	
	BT TSO (12,024 BT people)	-	-	-	-	-	-	295/210/1.2%	582/395/2.7%	439/303/2.4%	339/206/1.68%	200/114/0.95%	18.86%	
	BT Wholesale (3,865 BT people)	170/113/5.07%	67/42/1.88%	63/43/1.93%	48/32/1.43%	80/22/1.09%	81/29/1.32%	20/14/0.7%	25/21/1.1%	19/15/1.0%	19/14/1.07%	17/12/0.31%	19.10%	
	Openreach (32,319 BT people)	697/540/1.69%	578/463/1.45%	903/649/2.04%	611/487/1.53%	917/705/2.07%	872/634/1.89%	639/495/1.6%	936/677/2.1%	1003/691/2.1%	837/566/1.76%	311/238/0.74%	13.37%	
	BT Innovate & Design (21,881 old figure)	370/211/2.02%	338/230/2.20%	408/246/2.35%	279/185/1.77%	366/230/2.24%	466/279/1.28%	-	-	-	-	-	-	
	BT Operate (26,772 old figure)	312/259/1.66%	310/231/1.48%	329/240/1.54%	317/250/1.60%	238/185/1.17%	153/125/0.47%	-	-	-	-	-	-	
	BT Retail (15,903 old figure)	920/664/2.24%	511/369/1.25%	581/405/1.37%	391/275/0.93%	289/214/0.72%	354/247/0.81%	228/160/1.0%	341/255/1.6%	-	-	-	-	
	<b>Submitter engagement - all BT (95,471)</b>	<b>1.30%</b>	<b>1.40%</b>	<b>1.50%</b>	<b>1.20%</b>	<b>1.18%</b>	<b>1.44%</b>	<b>1.05%</b>	<b>1.60%</b>	<b>1.59%</b>	<b>1.27%</b>	<b>0.60%</b>	<b>11.78%</b>	new unique submitters
Countries														
	Countries submitting ideas	13	11	12	13	12	13	9	12	22	22	22	22	

