# Chat, tap, talk: trends to transform your digital customer experience

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# BT's Research & Development

£2.8bn

spent on R&D over the last five years

2<sup>nd</sup>

largest investor in R&D in the fixed line telecoms sector over past ten years 3rd

largest investor in R&D in the UK over past ten years

4,900

patents in our portfolio

13,000

Scientists employed worldwide

£520m

invested in R&D in 2016/17

30+

direct university research relationships

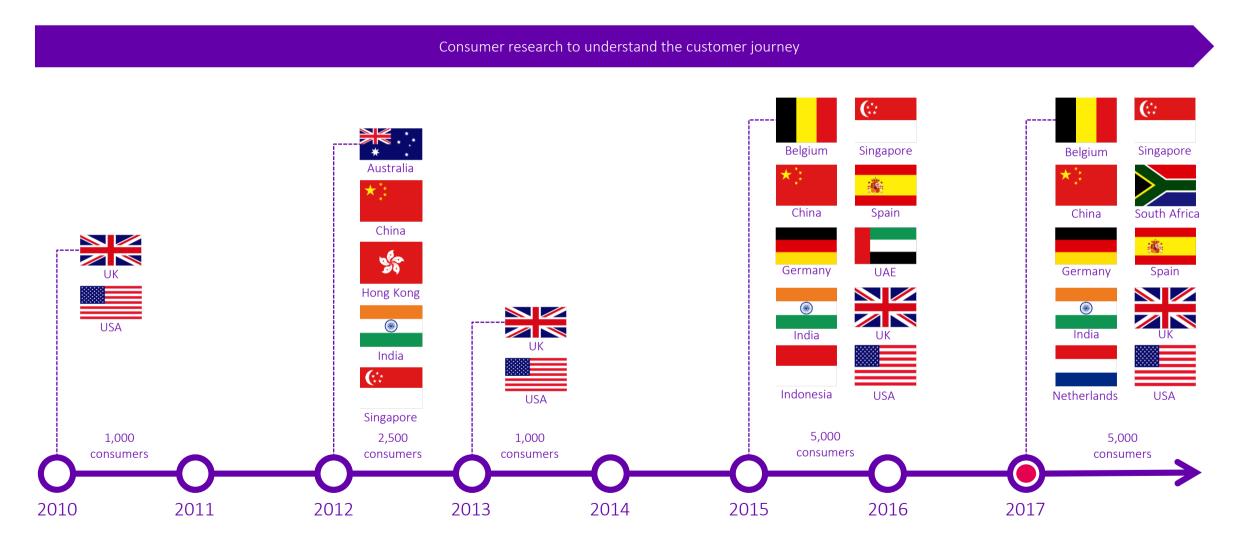
4th

highest number of patents filed with European Patent Office of UK-based companies



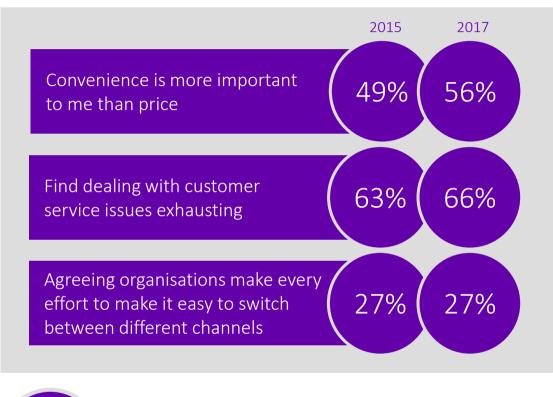


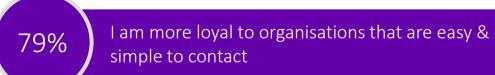
## Timeline - 7 years of trend data explaining the rise of the global Digital Customer

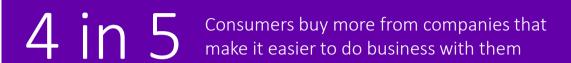




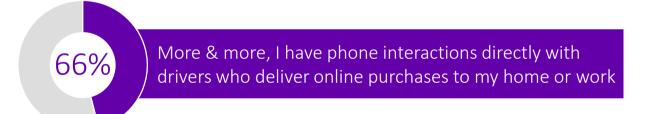
#### Seeking simplicity: digital customers want easy journeys











Rate as excellent the digital experience (website, by App, smart watch, social media, chatbot, etc) you are given by large multi-national organisations



#### Smartphones are becoming more important in digital experience

Used in the last 6 months	2015		2017
Android smartphone	57%	1	59%
iPhone	26%	1	31%
Home PC/Lap-top	80%	1	63%
Android tablet	30%	1	28%
iPad	27%	1	23%
Apps on your smart phone which link to your location	34%	1	52%

46% have used chat on smartphone to contact orgs.

Currently use a smartphone App of an organisation to contact that org.

21%

Often or sometimes...



Agreeing they would like...

62%

58%







If organisations had the data/information that I give them in one place (eg via their website) available in another (eg shop, smartphone App or call centre)



#### **Omni-channel shifts human channels towards complexity**









# **Context drives channel behaviours**

	Visionary.	Utilitarian.	Customer in crisis.
	You are looking to improve your lifestyle by the purchase of a product or service e.g. moving house or booking a holiday. You're in a positive and motivated state of mind, and willing to invest time. You may even enjoy the experience	terms of your time, you're not	There is a crisis and you need a solution to a problem with a product or service e.g. reporting a fault or getting advice. You might be frustrated, angry or worried.
Allow me to explore, research and get advice using a wide range of resources e.g. online, webchat, face to face/in-store advice	40%	19%	23%
Make the transaction fast and easy e.g. an App, online self-service technology	24%	52%	21%
Give me immediate and straightforward access to a well-trained employee e.g. someone to talk to on the phone or face to face who can sort my problem	30%	23%	52%

#### Phone is still popular: a key part of digital strategy

84%

Have phoned a call centre in the last 6 months (86% in 2015)

Experience problems getting customer service with....

85%

Apps of orgs.

Websites of orgs.

92%



Agents put me on hold as they don't know what to say (72%, 2015)

61% I have known more about the product or service than the agent in the call centre (56%, 2015)

Would help you
like it

I could share my screen so the agent can help you

I h

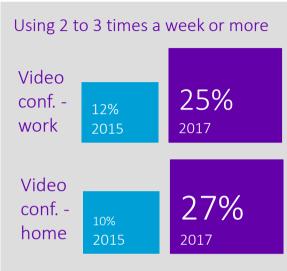
I could choose to be routed back to the same advisor I spoke to previously

87%

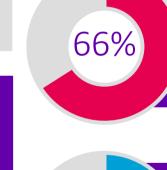


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#### Seeing is believing: video can transform the customer experience



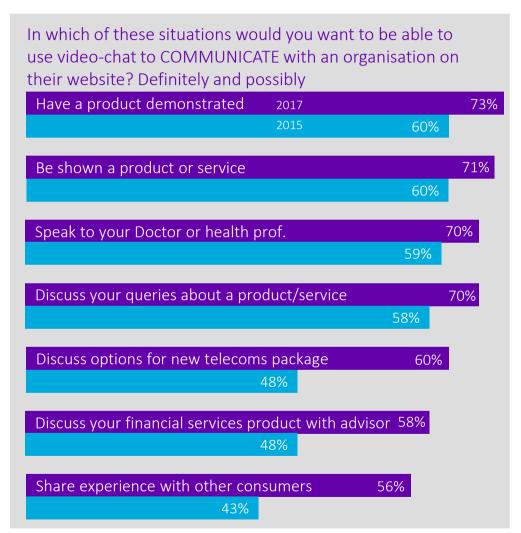




If pop-up webchat and video chat interactions are available on all web pages and Apps









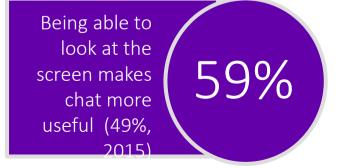
#### Chat is where it's at

58% Issues can be resolved on chat without referring me to e-mail, a shop or a contact centre

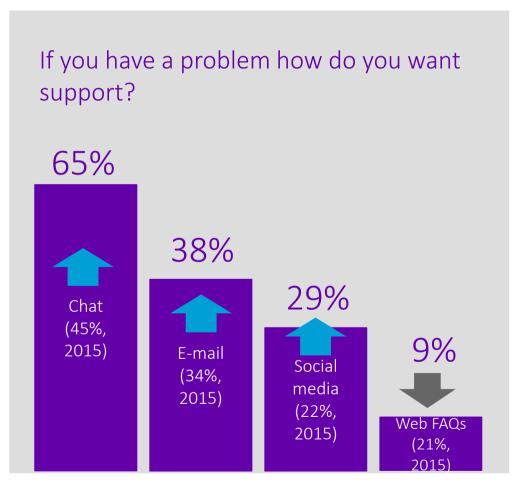
50% The option to chat makes me more likely to use the organisation again / talk favourably about them

58% I get a quicker / more instant response with chat than when I email or call the contact centre

48% I get frustrated when chat is not available



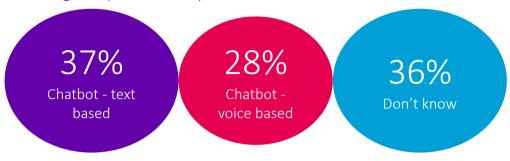


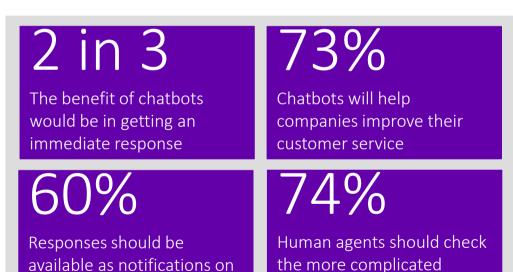




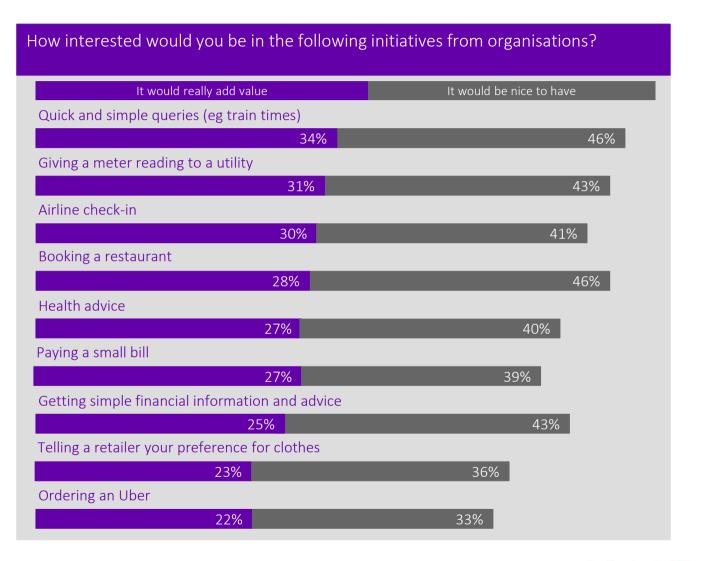
## Chatbots have appeal – but with 'checks and balances' from human agents

A Chatbot (a computer program which conducts a conversation via voice e.g. Siri or text methods eg messenger using artificial intelligence). Which do you think would be most effective?"





responses of chatbots





my smartphone

# Chat is where it's at: are chatbots "IVR for digital"?

#### Challenges:

Works for simple queries – effectively steering the customer through the "known knowns", i.e. GIGO.

More difficult for complaints/complexity - if we get angry, we tend to tell long, rambling stories which are hard to parse.

Sarcasm tends to throw algorithms: e.g. "Thanks, @TrainCo for my free sauna this morning"; "It was so good to see that your maintenance department hadn't spoiled things by making unnecessary repairs"; "I would have cheerfully strangled them".

Limited ability to parse emotional context - YET!





# Botman + SuperAgent: Augmented Intelligence.

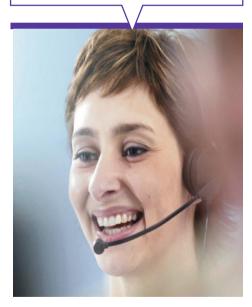
Sally the "Swiss Army Knife" advisor

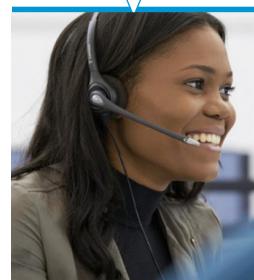
Paula the trouble shooter

Natalie the negotiator

Tony the techie

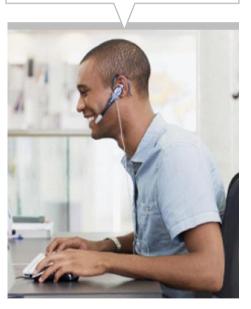
Chris the crowdsourced advisor











**Trainers\*** 

**Explainers\*** 

**Sustainers\*** 



#### One step ahead: consumers are impressed by proactive service

I like it when organisations notice I have been having difficulty with a website/completing an order and contact me directly to try and help

70%

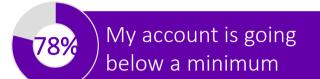
Personalisation of pages depending on the preferences, behaviours, location and device being used by the customer

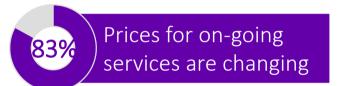
Like organisations using the internet to monitor the condition of products and services you use

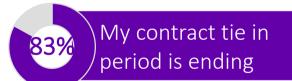
Open to sharing my location automatically with companies using GPS if it means I get good offers or better customer service 57% 45% 2015 2017

Open to sharing your social media profile with your bank/ supermarket/utility provider so they had better information about you and can give you better customer service 48% 30% 2015 2017

I would like a notification when...











# Thank You

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# Housing Technology Conference

Digital customer experience Innovations

Phil Newton Innovation consultant – Customer experience BT



# **Customer Experience Programme Digital Transformation....**



- Look at new Digital channels to support our customers – and how we support them.
- Al, Chatbots, Virtual assistants, Async messaging.
- Drive engagement on Digital channels.
- Personalised Video, Wraps, Contact Engine
- Provide new capabilities to our agents to resolve customer issues
- Remote Video support
- Provide supporting tools to agents
- Sat-nav for agents, Content Sharing



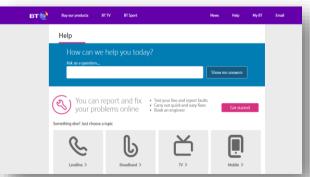
#### New digital channels

**Al**Virtual Assistant
Chatbots

#### Chatbots are not new but with recent breakthroughs in AI and increasing R&D investment from big players the crowded market is evolving fast

- It seems like everyone is an "Al" or "chatbot" company the market is expanding to include the good and the mediocre plenty of companies are promoting a "bot" as an add on to their other services without it being there core capability often they are resellers
- NLU "plug ins" / cherry picking the best NLP while most companies still have their own proprietary Natural Language Understanding many will now build bots or provide a bot building platform that can utilise multiple NLU models from 3<sup>rd</sup> parties e.g. IBM Watson, Dialogflow (Google.) This provides flexibility to ensure solutions can evolve as more investment is made in R&D
- Zero coding bot builder tools many now offer "drag and drop" builder tools to enable CX experts without coding experience to replicate key workflows with the bot
- Multiple pricing models available cost per bot vs. cost per resolution, consultancy fees, NLP licensing big variations in total price
- Alexa and Google assistant integration increasingly companies are supporting voice assistants either by adding voice to text processing in front of their current platform or by building bespoke skills or actions
- Linear workflows vs non-linear multi intent conversations a limited number of companies are now able to offer more sophisticated non-linear conversations. Not all use cases require this but in more complex scenarios it creates a more natural interaction
- Bots and advisors in harmony sometimes a human is better. Handoff interfaces have improved with many bots learning from the best advisors and providing recommendations and support
- Supervised learning and feedback vs unsupervised ML/ deep learning Although most companies claim to use machine learning, the majority use basic supervised learning using customer and advisor feedback to improve over time.











Digital engagement...



#### **Proposition**

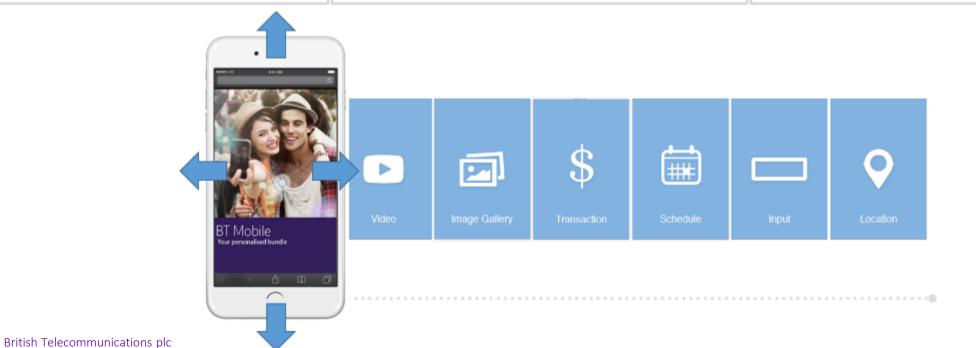
- Wraps are the modern micro-app experience for the mobile Web.
- They provide superior mobile engagement and offer rich, interactive experience without the need for full native apps
- They are Inherently omni-channel (SMS, email, social feeds, messaging, Web embed, ads)
- Great engagement drives conversion
- Connects with back-end systems to enable advanced user interaction and transactions

#### **Opportunity**

- Wraps can be used following a conversation with a customer where the agent selects the products/services discussed and on the fly generates a personalised mico-site which the customer can walk away with. This would work well in an EE shop environment.
- A Wrap can also be auto generated following a customer order, billing cycle or upcoming engineer appointment. This would be an ideal delivery mechanism for welcome to service messages,

#### **Status**

Deployed





New capabilities...



#### **Proposition**

- Sightcall offers a simpler Customer Experience to deliver as See what I see experience to the customer.
- Very quickly allow the customer to share the smartphone camera to understand a home network/setup problem.
- Agent can take screen shots, annotate a video image, co-browse

#### **Opportunity**

- The Sightcall technology has been deployed by Verizon in the US to support their Fios (fibre) product.
- The opportunity is to give an innovative customer experience to home Network and home setup issues.
- Allowing an agent to see what the customer sees can significantly reduce the time it takes to solve a problem and potentially reduce the need for costly engineer visits.

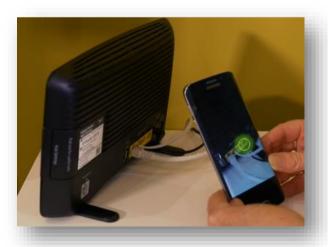
#### **Status**

Deployed across BT



British Teleco...







#### Supporting tools...



#### **Proposition**

- Lightico allows advisors to quickly establish a session with a customer either through a text or email
- The link sent through opens up a browser session where content can be pushed live to the customer.
- Images, videos, contract, e-signatures can all be pushed directly through to the customer
- Both parties a permanent record of the session and copies of any documents signed.

British Telecommunications plc 2017

#### **Opportunity**

- Within BT and EE signing T&C's and contract signatures can be a long drawn out phone conversation with advisors having to read out a standard script.
- The Lighico solution reduces call handling times by putting the content in front of the customer to read through whilst the advisor progresses the order.
- The Contract signature provides a much improved customer experience and secure method to record customer sign-off
- The contect push of images and videos is also a very helpful tool in sales conversions.

#### Status

In trial across BT and EE

