

#### FutureTech - Consumer Device Experience

Trends and predictions • Future of BBC iPlayer • What does good UX design look like? • Security on devices • Personalisation and addressable TV • The landscape, the user and the technology • Conversational media

#### **Consumer Device Experience Summary Report**



This is just a summary of the second FutureTech report, focusing on the Consumer Device Experience, and intended for non-members. As a DTG member you can read this report in full, along with many more each year. Through our round tables and steering groups you can also be part of shaping the future of TV. So, take your seat at the centre of UK digital TV and join the DTG today.

#### Trends and predictions

# The consumer device experience

Despite the rising number of online-video-capable devices in the average UK household (currently 11.2 excluding handsets), the TV remains the most-used for content consumption by a significant margin. Therefore, Smart TVs are the focus for content delivery investment and for OTT services and advertising in the UK.

- Smart home will overtake smart phones as the largest global consumer tech segment by 2021, and it's already the largest in the UK.
- Smart speakers took smart home technology to the masses, but the average pricepoint is low. Research shows the greatest reason consumers gave for purchasing smart home technology was that 'it would be fun'.
- The rise of voice control (some 20% of consumers are using smart speakers to control their TVs) will transform the way users access, consume and buy content. Smart displays are the future as consumers upgrade existing smart speakers.

### BBC iPlayer Keeping an 'i' on the future

With the issue of the licence fee making headline news, and alternative access models being mooted, the future of the BBC iPlayer has never been more topical, and it's clear the BBC has big plans for the UK's second largest VOD platform.

- 2019 saw a significant evolution of iPlayer. Bolstered by an increased content catalogue, including entire box sets, it exceeded 4bn streaming requests for the first time. December 2019 was its best-ever month with 447m streaming requests.
- The BBC has launched ACT (Automated Certification Tool) to help partners and manufacturers navigate the certification process more efficiently and effectively, to future proof the platform.
- While work on content, personalisation and user experience
  continues, the BBC is working hard on changing perceptions of
  iPlayer, particularly with younger audiences, to drive uptake. This
  includes making iPlayer the home of live sports and events like
  Glastonbury, creating a separate safe space for kids, and driving
  existing linear viewers to iPlayer to create a seamless viewing
  experience.

#### The user experience

## What does good UX design look like?

Putting the user at the centre of any design process is paramount. Getting the User Experience (UX) right is the difference between success and failure, and fundamentally underpins the personalised experience. Good UX design depends on four things: the device, the user, the content and the context.

- Combining these variables to create, and work through, scenarios is UX design in a nutshell. It takes time to make the complex simple.
- But it's worth investing that time. Research shows that an issue addressed in the design phase will cost 10 times the amount if addressed during development. If it's not picked up until the product is live it could be up to 100 times more expensive to fix.
- And the results speak for themselves. Research by Forbes shows that strategic UX has the potential to raise conversion rates by 400%. And every \$1 invested in UX can result in a return of between \$2 and \$100.

### Security on devices Security screen

As TVs increasingly become the hub of a connected home, the digital threat they pose to personal data and security becomes an ever-more important issue. The question is, 'are you watching your TV, or is your TV watching you'?

- TVs are no longer just for consuming content, and the more interfaces they have, the greater the threat. So, while those posed by individual TV components may be lower level, together there is a massive potential for information about your lifestyle to be accessed from your home network.
- TVs hold secrets, such as your Wi-Fi code.
   If that can be accessed, then so can your network, and potentially, sensitive data, banking information, control of your connected home etc.
- In response, UK Government has announced new legislation, based on the EN 303 645 standard for IoT devices, coming into force this year. It moves the onus of responsibility back towards the manufacturers and providers and away from the user, with key implications for the industry.

### Personalisation and addressable TV The personal touch

TV is no longer confined to families sitting down to watch the same thing on the same TV, it has moved to individual consumption on individual devices. But are current algorithms too simplistic, leaving us in a content 'bubble' and what are the barriers to progress?

- The boom in OTT platforms and the sheer amount of content now available means consumers increasingly need help in finding and discovering content – and they are willing to pay for it. Personalisation is the future of TV, helping viewers enjoy content, reducing churn for platforms and helping content creators to both identify and build audiences.
- There are challenges with personalisation. For example, it is
  a difficult balance to make personalisation more granular without
  feeling invasive. And how do we use suggestive algorithms to avoid
  the 'content bubble' created by a predictive model? But getting it right
  creates fantastic opportunities for the viewer, and the provider.
- A set of robust collaborative guidelines will be needed across the industry to ensure future success. That means convening the right players to build a system with core capabilities, putting competitive issues aside.

#### Future devices and OTT

# The landscape, the user and the technology

Devices aren't changing – the systems and software behind them are. The overarching trend is that we are likely to see new features and consolidation of existing platforms rather than new devices. That said, there are five key trend areas every stakeholder should be tracking.

- **Distribution:** To compete within the marketplace, reducing bandwidth offers huge savings for distributing all content.
- Storage: To cope with downloads for consumption 'on-the-go', mobile devices will have to continue to increase in logical size, whilst physically decreasing and streamlining.
- Custom Devices: Hardware used to reflect the brand in the home, but increasingly software has to sell your brand for you. The two key players, Google and Apple, have come up with different ways of doing it...
- Connected Devices: Content has to be centralised, with universal search functionality across platforms to make the user experience as seamless as possible.
- Data: Content owners are moving to platforms that offer them
  the most information about their users, how they behave and
  what they are watching, and IP-based playback and devices offer
  greater granularity than traditional methods.

### Conversational media Look who's talking

TV voice search and control is becoming incredibly sophisticated, and as adoption increases and keeps pace with that sophistication, it has the potential to radically change the way content is accessed and, by extension, served up.

- The first step in the voice control journey is pure
   asset search looking for a specific piece of content e.g.
   "EastEnders". Next is command and control e.g. "Skip
   forward four minutes" an unexpected development for
   the industry and functionality that didn't exist when voice
   control first launched. It now accounts for 40%-50% of
   voice traffic.
- Where it gets interesting is contextual control. This
  moves into a more conversational space, where users
  start talking to their TVs rather than commanding them.
  Multi-turn then becomes a genuine conversation where
  the device responds with questions and clarification
  about your needs e.g. "Will Smith", "Do you want to watch
  Will Smith movies or listen to his music?", "Movies".
- For the consumer, conversation combined with discovery provides a simple experience across an increasingly complex collection of offers and services. But the benefits aren't only on the consumer side. Voice has a clear and obvious impact for providers. Voice users:
  - Consume more content than those that don't use voice.
  - Search far more often an average of 36 times per month compared with twice a month using text search.
  - Churn far less than those that don't use voice

     less than 1% compared with an industry
     average of about 9%.
  - Buy more VOD content than non-users, spending more money.

As a DTG member you can read this report and many more each year, in full.

Join the DTG today.

#### Get involved

The DTG is in a unique position to help UK digital TV deal with challenges and make the most of opportunities. Our experts work collaboratively with the wider industry across work streams to turn innovative technology into new platforms and services. Our shared goal is to maintain the highest standards and ensure the best viewing experience across devices.

If you would like to be actively involved with any of the DTG Working Groups, please visit **dtg.org.uk/working-groups** or get in touch below.

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