

**Transition or radical reinvention?**

**The role of HbbTV in television of the future.**

**Richard Lindsay-Davies**  
**Chief Executive Officer**



**THE CENTRE OF  
UK DIGITAL TV**



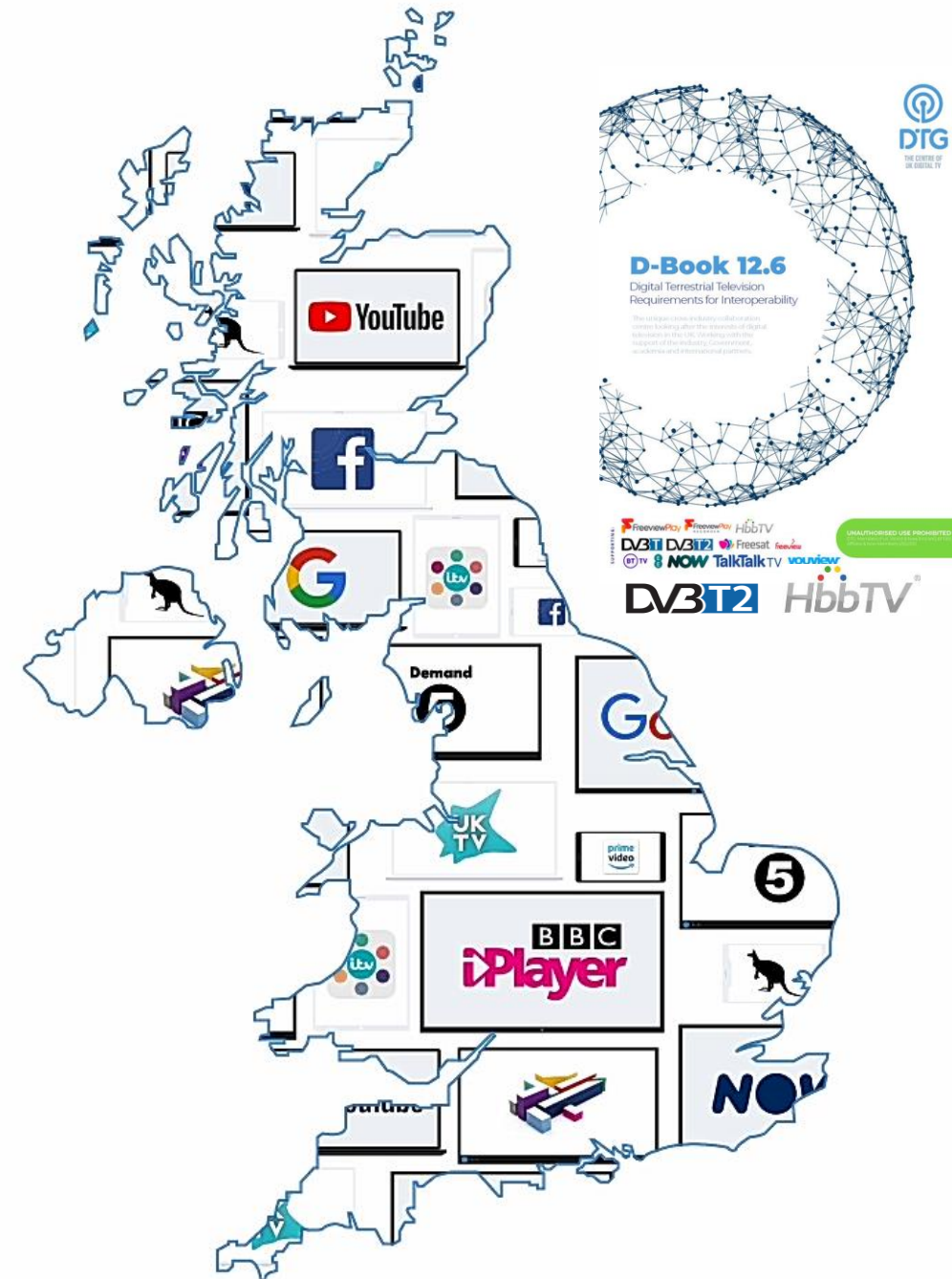
## WHAT DO WE DO?

### We **COLLABORATE** with the industry

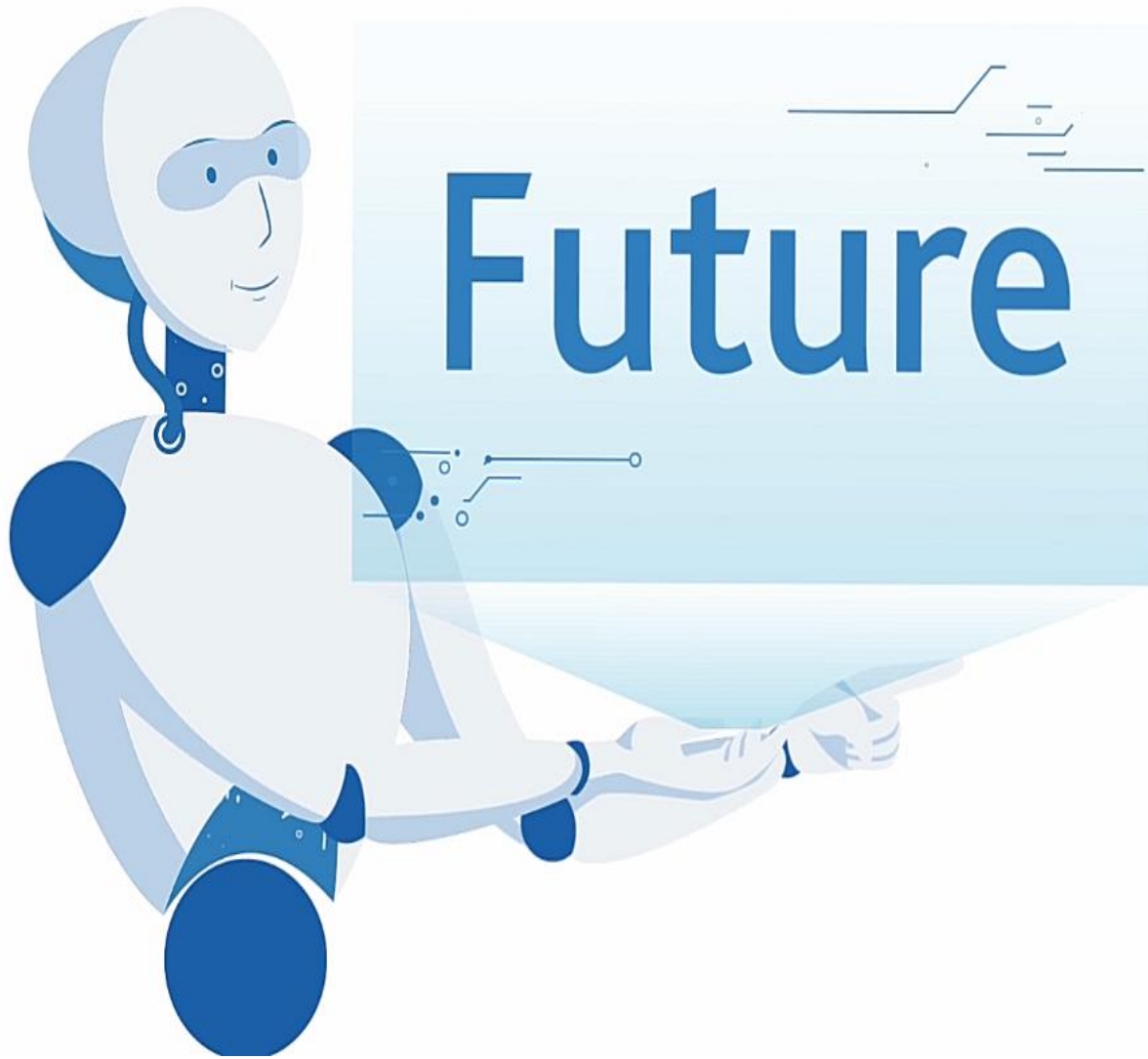
Since 1995, we have been central to the distribution of TV in the UK – digital TV, interactive TV, the digital TV switchover, on-demand TV, HDTV and UHD TV.

We give our members the unique opportunity to collaborate with the wider industry network (including technical experts) during the roundtables and working groups that we host. We also host regular plugfests for testing and our annual summit that celebrates landmarks in progress and anticipates what is to come.

Our universally-deployed standard (D-Book) mandated HbbTV for the first time in the 2021 edition.







## WHAT DO WE DO?

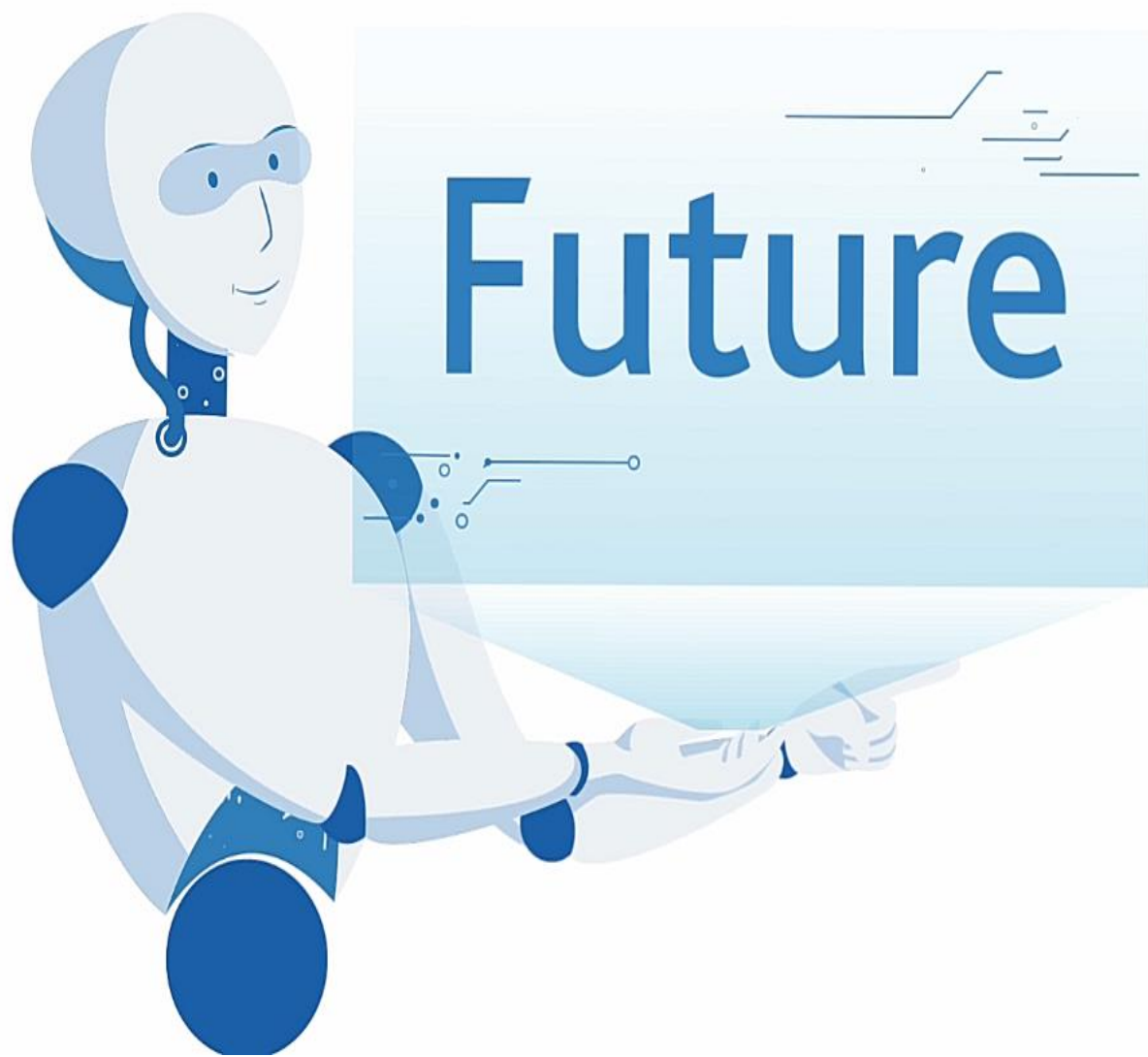
**We enable **INDUSTRY** to **INNOVATE****

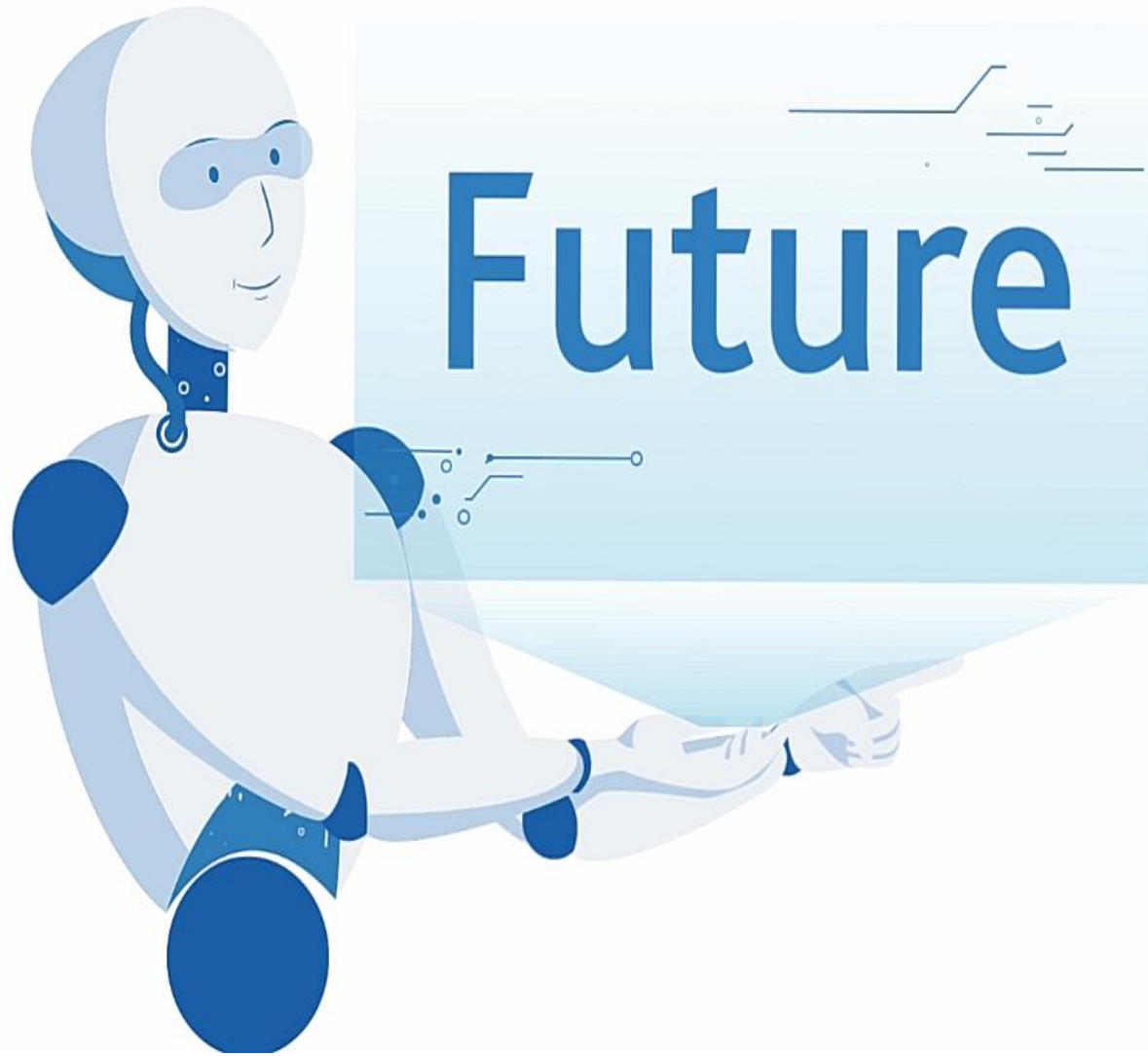
We work towards the future of television – embracing the convergence of content and networks to efficiently deliver video to all screens, in all formats.

The media industry is incredibly competitive, and will become more so as we transition towards IP-delivered television and the host of new players that will bring. We ensure our members stay ahead of the competition by keeping abreast of new models, new tech and new intelligence so they are prepared to take first mover advantage in emerging technologies like personalisation, AI, cyber security, and more.

**CONSENSUS BUILDING.**

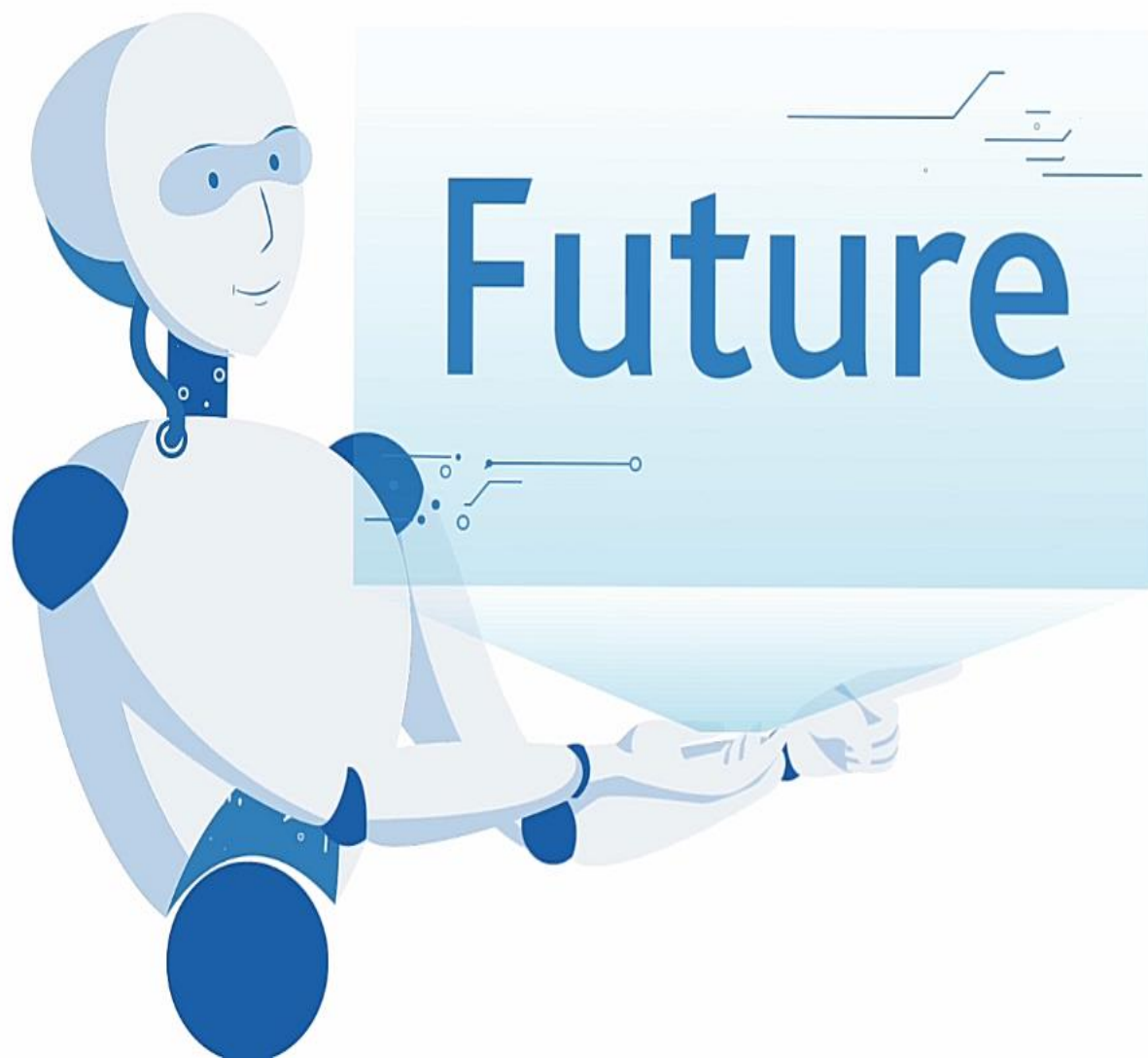
**DEMOCRATIC.**





AN UTTER METAVERSE?

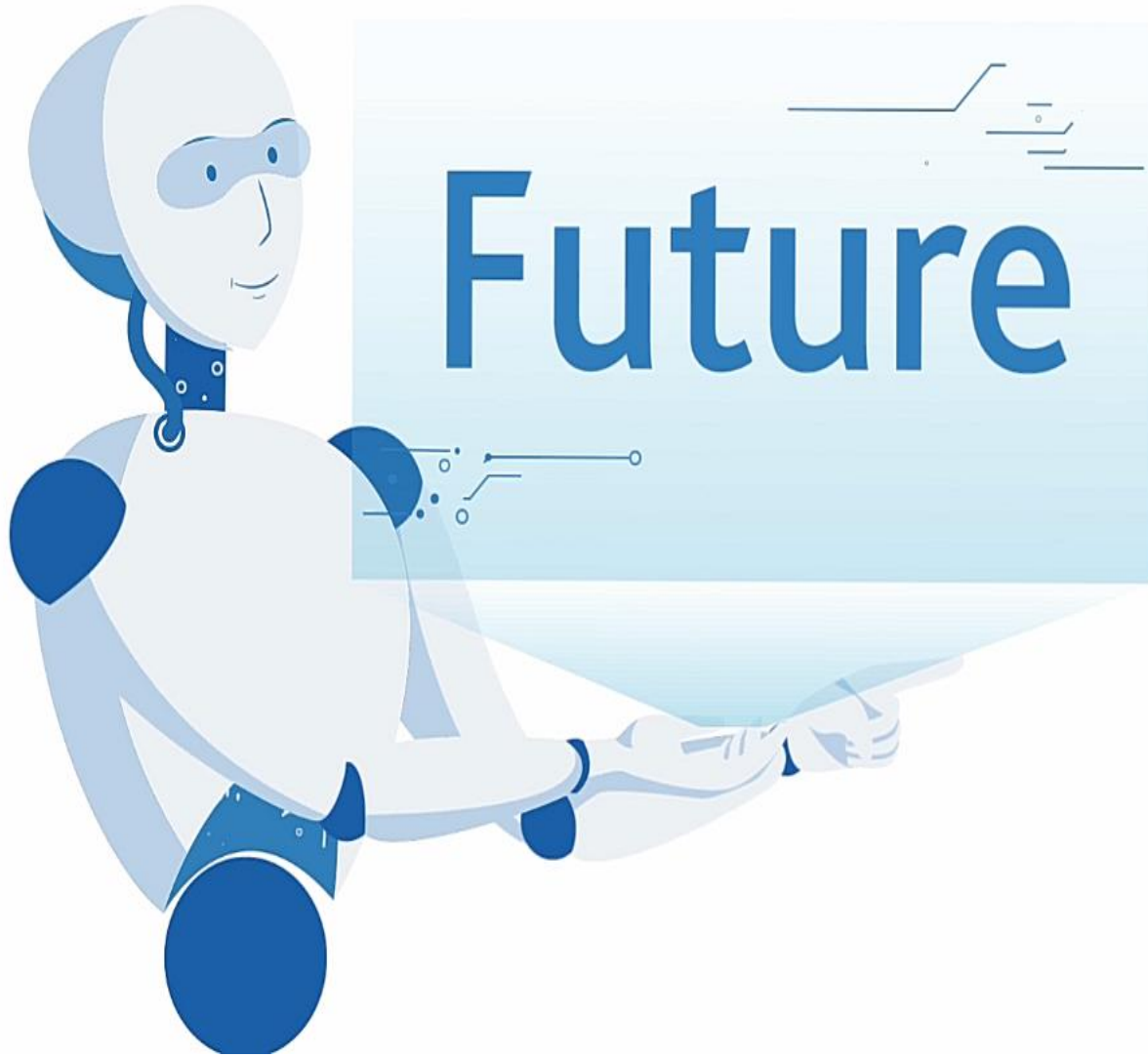




SAME?





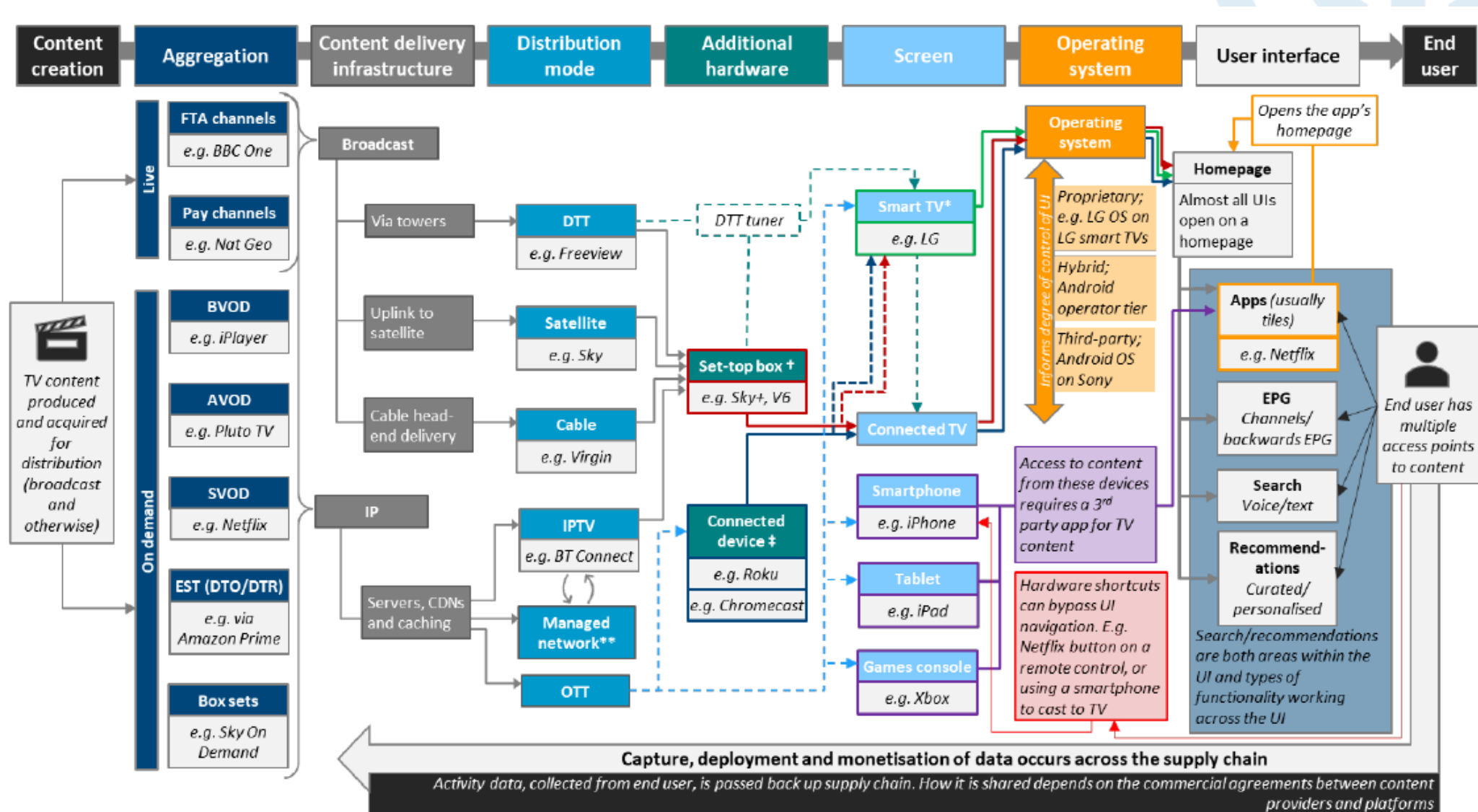


MIDDLE? aka EVERYTHING





# An increasingly complex TV ecosystem





# WAVES OF CHANGE



8TH JULY 2021, [WWW.DTGSUMMIT2021.INTELLIGO.EVENTS/](http://WWW.DTGSUMMIT2021.INTELLIGO.EVENTS/)

DTG **SUMMIT** 2021



# WAVES OF CHANGE

KEYNOTE WITH:

JOHN SIMMONS



THE LEARNINGS OF THE ULTRA VIOLET PROJECT...



1. WALLED GARDEN



2. LARGE WALLED GARDEN



4. A PERSONAL WEB BROWSER

DTG SUMMIT 2021

THE FUTURE? IT'S LIKE SHOWING THE WIZARD OF OZ ON US TV!



THE BUSINESS MODELS DID NOT FIT!

STANDARDS HAVE HELD THE TECH INDUSTRY TOGETHER

IT'S A STRATEGIC INFLECTION POINT!

STANDARDS WILL ALLOW INDUSTRIES TO PROGRESS



OVER-LAPPING WORLDS CREATE NEW THINGS

PHONE TECH

WEB TECH

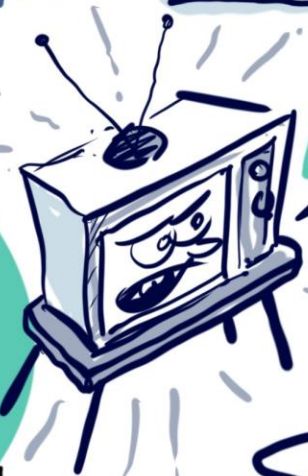
ENTERTAINMENT



EXPONENTIAL GROWTH

SIGNIFICANT INNOVATION CREATES A FUTURE THAT'S QUITE DIFFERENT TO THE ORIGINAL INNOVATION...

WORK WITH THE TECH GIANTS & GUIDE THEM...





# WAVES OF CHANGE

## USER EXPERIENCE PANEL

DTG SUMMIT 2021

WE STILL USE TV CONTROLS

AND WE WANT SIMPLE INTERFACES THAT ARE INTUITIVE

INCREDIBLE COMPLEXITY BEHIND THE SCENES

YOU WANT SOMETHING NEW? OR NEW TO YOU?

SMART TECH WITH EDITORIAL CONTROL...

LIVEILLUSTRATION.CO.UK

GRAPHIC RECORDING, EVENT VISUALISATION & ILLUSTRATION

90'S ERA ANALOGUE CONTENT SEARCH...

ALL DIFFERENT

IS THIS GOOD  
YEAH WHY NOT

HOW DO WE GET RANDOM SERENDIPITY BACK?

HOW CAN WE BUILD SERENDIPITY INTO A RECOMMENDATION ENGINE...

I'M STEVE YOUR VIRTUAL VIDEO SHOP GUY WHO'S SEEN EVERYTHING

BLOCK BUSTER

SEEN IT  
SEEN IT  
SEEN IT

NEEDS TO BE EASY!!

TV GUIDE...

PEOPLE WANT TO SWITCH FROM TV TO STREAM

AND THEY WANT FREE VIEWING CONTENT!!

OR JUST TELL ME WHAT TO WATCH!

HUMAN EDITORIAL TOUCH UNMATCHED

VIDEO SHOP

THE SAME

PICK UP PROFILES  
PERSONALISATION

TARGETED ADS...

IS MY PHONE SPYING ON ME?

\*CREEP FACTOR IN ADVERTISING...  
BAD FOR BRANDS...

COMPLEX HUGE CHOICE

WE NEED.....  
\*WELL STRUCTURED INTUITIVE CHOICE...

VIEWERS VOICE



# WAVES OF CHANGE

AUDIENCES ARE USED TO HIGH QUALITY HIGH END PRODUCTION.



# NEXT GEN MEDIA



Looks GOOD in 8k!

DTG SUMMIT 2021

STANDARDISATION  
USEFUL INTER-OPERABLE STANDARDS

ALLOW INNOVATION & A BASIS FOR NEW TECHNOLOGIES.

SOME DON'T USE STANDARDS SO THEY MAY MONETISE TECH...



RE...DUC...ING LAT...EN...CY

NEW CODECS & FORMATS

PERSONALISATION IN THE CREATIVE ACCESSIBILITY PROCESS...

MANY IN THE UK EXPERIENCE:

SIGHTLOSS  
DEMENTIA  
AUTISM  
& HEARING

WITHOUT THE BLIZZARD OF OPTIONS

TOO MANY SETTINGS!

SHRINK



SQUEEZE & COMPRESS

SMALLIFY

HOME TECH EXCEEDED PRODUCTION CAPABILITIES

WE CAN NOW KEEP UP!

BANDWIDTH CONTROL VS. QUALITY...

GAMING TECH IS HAVING A BIG IMPACT



REALLY BIG COMPUTER



FOCUS ON THE STORY...

VARY the MIX BASED ON CONTEXT!

THE HOPE IS PEOPLE WON'T EVEN KNOW THEY ARE USING THE TECH...



WAVES OF CHANGE

NEW DISTRIBUTION

DTG SUMMIT 2021



NOT AVAILABLE UNTIL 2030



PEOPLE EXPECT  
HIGH VOLUME  
HIGH QUALITY  
WITH HUGE DATA



VS. THE QUALITY OF EXPERIENCE



LOW LATENCY HLS...

IT TAKES 10 YEARS TO CREATE THIS TECH

LANDLINES WILL BE TURNED OFF...



IT'S GOING TO BE ALL



SLURP!



FLIP TO PHONE!!

HARD WIRED TO FIBRE



HAVING MORE THAN ONE FRAMEWORK IS GOOD



BATTLE FOR BANDWIDTH  
THE INDUSTRY NOT READY FOR BIG DISRUPTION

LIVEILLUSTRATION.CO.UK

GRAPHIC RECORDING, EVENT VISUALISATION & ILLUSTRATION



WAVES OF CHANGE

# SUSTAINABILITY

DTG SUMMIT 2021



1 HR of STREAM TV IS THE SAME AS BOILING A KETTLE 3 TIMES...

CARBON NEUTRAL



NET ZERO



REMOTE STUDIOS ARE A STEP FORWARD...

SUPPLY CHAIN IS THE TV INDUSTRIES LARGEST SOURCE OF EMISSIONS

+2°C

IT'S GETTING HOT!



VIDEO SHOULD NOT COST THE EARTH

TELEVISION IS A HUGE CONTRIBUTOR TO CARBON

CLOUD NATIVE SYSTEMS MEAN LOWER TRANSFER RATES WHICH MEAN LOWER ENERGY DEMANDS... 6x LOWER ENERGY...



REDUCE CARBON ON SET...

+ FOCUS ON ENVIRONMENTAL QUALITIES OF CONTENT

ELECTRICITY IS ONE OF OUR PRIMARY IMPACTS



80% CAN COME FROM ENERGY EFFICIENCY...





# Standards Standards Standards...

**Different approaches to setting standards:**

**Open standards enable competitive and innovative industry structures to emerge**

**Proprietary standards**

**Government-promoted standards**

**Open standards set through voluntary participation in industry bodies**

**Creating open, competitive markets**

**Balancing interests of participants in the standard-setting process**

**Cow path to open standards**



# Why Why Why... 'DTG IP Manifesto' Points

## Key Agreed 'IP Manifesto' Points

1. Ensure a better future TV experience
2. Ensure a consistent and reliable User Experience
3. Preserve the value of the horizontal TV market
4. Establish a framework to share IP traffic intelligence
5. Ensure true end-to-end quick service start and low latency
6. Enable Scalability
7. Create common device-agnostic applications



## Destination 203x

### **FUTURE**

**We must take the best from the digital TV model that serves all homes today into a potentially all-online future:**

**WHAT** consumers' insatiable innovation appetites need in one of the region's largest CE markets

**WHY** we must satisfy the Government prerequisites; consumer protection, media universality, sustainability

**HOW** to balance market globalisation and meet national market needs, and meet common technical standardisation need the global CE sector

**HbbTV and DVB remain central to our thinking as we face the dilemma of how (maintaining all of the above) we transition, through and to a controlled reinvention of television.**

**LEAVING NO ONE BEHIND**





THE CENTRE OF  
UK DIGITAL TV

# Thank you

For further information see below or email:  
[richard@dtg.org.uk](mailto:richard@dtg.org.uk)

@theDTG



Linked 

/the-dtg