How 5G will improve the creative industries

Mobile UK

BUILDING MOBILE BRITAIN

Why should we care about 5G?

In 2017, the creative industries added **£11.5 million** to the UK every hour.

£30 million has been allocated to look at how 5G can create opportunities in the creative industries.

5G will benefit our economy and society.

It will be better at doing the things that 4G does already, but significantly it will offer faster and more reliable mobile internet.

It will also do things that 4G cannot. It has the potential to change the ways in which we learn, how we communicate and how we do our jobs through the simultaneous and seamless connection of our digital devices.

But because it is often described using technical jargon, many people are unaware of how 5G will enhance their life.

This pamphlet explains the benefits of 5G using examples and language that anyone can understand.

It is one of eight pamphlets that look at the impact of 5G. The topics included in these pamphlets are:

- How 5G will help healthcare
- How 5G will increase rural opportunities
- How 5G will support the emergency services
- How 5G will help councils
- How 5G will improve the home and the workplace
- How 5G will help the environment
- How 5G will advance the manufacturing industry
- How 5G will improve the creative industries

How will 5G improve the creative industries?

While 4G plays a major role already in how the creative industries operate, 5G digital connectivity will provide added capabilities in two key ways:

- **5G will transform media business models.** 5G-enabled technology will revolutionise how content is produced, distributed, and consumed, unlocking existing technology for wider audiences and enabling new applications that don't even exist yet.
- **Immersive experiences will become commonplace.** Augmented reality, virtual reality and use of artificial intelligence will bring content and audiences closer than ever before, enabling viewers to share and interact on a personal level.

5G networks are being gradually rolled out across the UK. As and when you have access to 5G connectivity will depend on where you live, your network provider and whether you have 5G-enabled devices.

If you have further questions about 5G, some of the most common questions have been answered on the final page

Uses of 5G in the creative industries

Case Study 1: Advancing the broadcast industry with new innovative solutions.

5G-enabled technology will allow the broadcast industry to deliver high-quality, direct to consumer content at the touch of a button and use new innovation channels to further enhance the viewer experience. In Liverpool, Live & Wild are testing the use of 5G to deliver fast-turnaround and live video content from extreme film locations, and in adverse weather conditions without compromising on high production values to support documentary film making. While a new app using 5G-enabled technology will be released alongside The Green Planet, allowing users to stream high-resolution 'holographic' video of Sir David Attenborough, as detailed graphics of exotic plants and animals adorn their surroundings.

Case Study 2: Next generation viewing for sporting events.

5G-enabled technology will enrich the in-stadia experience and open the potential for more enhanced remote live access. O2 are currently part of a project that will look to provide live multi-angle HD video streams to offering interactive content direct to devices in stadia and audiences at home, regardless of location.[1]

[1] https://news.o2.co.uk/2021/01/13/5g-reimagining-live-sports/
[2] https://uk5g.org/discover/testbeds-and-trials/5g-festival/
[3] https://www.5gradar.com/features/10-ways-5g-will-revolutionize-broadcasting
[4] https://www.vodafone.com/news/technology/esl-mobile-gamers-winners-5g-esports-2019

Case Study 3: Immersive entertainment.

Using cutting-edge, immersive platforms that leverage high bandwidth and ultra-low latency 5G technology, audiences and artists will connect seamlessly, whether that is across continents, driving new experiences at home or amplifying the live encounter in a major venue[2]. At a Hollywood premier after party for Star Wars: The Rise of Skywalker guests were able to interact with Sith troopers in real-time. The actors playing the troopers were working from a remote location 15 miles away.[3]

Case Study 4: Revolutionising the future of mobile gaming.

With response times as low as five milliseconds, in-game action will be even smoother with no delay between a player's input and the game's response. Also, with 5G's greater reliability this will hold true, even with higher numbers of players. Professional gamers are already reaping the benefits of 5G, last year Vodafone used their 5G network in Italy to live stream the grand finale of an e-sport competition at Milan Games Week.[4]

Case Study 5: Live broadcasting via remote production.

5G networks will allow broadcasters to send footage back to base within minutes, opening up more coverage opportunities and reducing the number of staff 'in the field' normally required for a live broadcast. In 2018, EE and BT Sport delivered a live, two-way broadcast over 5G from Wembley Stadium to London's ExCeL Exhibition Centre of the EE Wembley Cup 2018 Final. They plan to use this approach going forward to increase the coverage available to viewers, with more matches and faster highlights.

The statistics

Esports is the world's fastest growing competitive sport. While there is clearly a delineation between traditional esports and casual gamers, mobile gaming is the largest segment, claiming nearly half of global games market revenues in 2019 at $68.5 billion.[5]

It is predicted that when 5G goes mainstream, mobile journalism will dominate the news as reporters utilise the technology to broadcast even more instant on the ground reports.

74 per cent of sports leaders believe 5G will help meet rising fan expectations.[6]

[5] https://www.vodafone.com/news/technology/esl-mobile-gamers-winners-5g-esports-2019
[6] https://www.wired.co.uk/article/vodafone-5g-sport

Frequently Asked Questions

1. How do I get access to 5G?

Firstly, you need a 5G signal in your area (just as you need a 4G signal to get 4G now). Secondly, you need a device that can receive 5G signal - some 5G-enabled smartphones are available now, with more coming onto the market.

2. Does 5G pose a danger to your health?

5G uses radio waves - as does 4G, 3G etc. - which have been found safe in numerous studies when used within guidelines. Public health organisations around the world support this conclusion.

3. Does 5G mean more masts and antennae?

Some new infrastructure will be needed to connect more remote communities to the 5G network. But existing masts will be adapted for 5G wherever possible. If new sites are needed, relevant planning rules will apply to them being built.

4. Is 5G bad for wildlife?

No. Despite many false claims, wildlife has not been found to be negatively affected by 5G.

5. Will 5G offer an alternative to broadband?

4G and 5G can both provide mobile home broadband connections. However, while 5G will offer potentially near gigabit capable speeds in the future, currently UK 5G mobile networks don't provide the same capacity or offer speeds as fast as 'full fibre' for home broadband.

Source: Mobile UK - **www.mobileuk.org**

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