

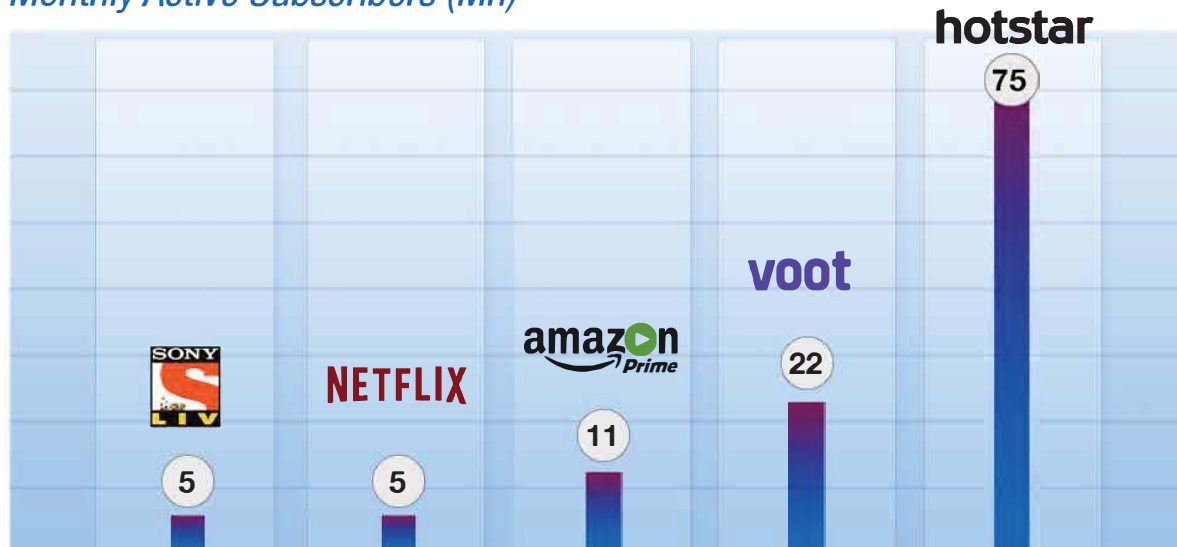
A Catwoman figure from the Batman franchise is shown from the chest up, holding a tablet. The tablet screen displays a grid of streaming service logos: Netflix, Amazon Instant Video, Vudu HD Movies, Dishworld Live International TV, Hulu Plus, Redbox Instant by Verizon, and PBS Kids. The background is a dark, starry space with a green nebula at the top.

Videos: The Future of Enhanced Watching

and its Impact on Entertainment & Advertising

Much is being written every day about the rise of streaming videos and their increasing popularity: be it home-grown Indian OTT platforms or global giants, everyone from Hotstar and Voot to Amazon Prime and Netflix are vying for eyeballs in a market that has seen data consumption explode thanks to the entry of Jio which, in turn, had a cascading downward effect on access rates for mobile subscribers across the country.

Monthly Active Subscribers (Mn)



Source: The Economic Times, India: January 5, 2018

However, while Netflix may be in the news, the fact is that its subscriber base remains a fraction of Hotstar's (5 mn vs 75 mn) going by this [report](#) in The Economic Times. And while streaming movies and TV shows to handheld devices is on the rise, conventional TV watching remains way ahead in India: in Q3 of 2017-18, the top three DTH platforms (Airtel, Dish and Videocon) accounted for [65.3 mn subscribers](#). A 2016 [estimate](#) conjectured that the pay-TV market in the country would reach \$14.5 bn in revenue by 2021 (compared to \$9.4 bn that year). And a [PWC report](#) puts India right up there with the cinema market projected to be the third largest in the world by 2021.

Related to these buoyant figures is the projected growth of the advertising industry: the annual [GroupM forecast](#) for 2018 pegged TV advertising at a 45%

share amongst all media with a 13% YOY growth rate; and, as video and digital continue to converge, the agency estimates a 30% growth in digital advertising while video advertising within digital will show a phenomenal 54% increase... and so, the world is rushing to India to cash in on a potential that can alter the declining fortunes of many filmmakers and video content companies globally.

So, all it seems is well in tinsel town. If you look at the present from the lens of the past, perhaps it is. But, if, as a futurist, you were to adopt an outside-in perspective and connect what seem to be diverse dots, the future – as a graffiti artist once scrawled – isn't what it used to be. Consider, therefore, some of these emerging, and disruptive, instances.

“ Sleep is our competition

Reed Hastings, CEO Netflix



It seems just a few years back, that Avatar was released as a landmark film - with its 3D technology and stunning CGI (Computer Generated Imagery) effects. And if the six Oscar nominations and three wins weren't satiating enough, James Cameron is working on a sequel that is expected in 2020. With this film, he hopes to completely revolutionize the movie-going experience by releasing Avatar 2 in a glasses-free 3D format—another first in film history!



Go ahead, rub your eyes in disbelief: those awkward, horribly plastic 3D glasses will soon be redundant as [entertainment meets engineering](#): Cameron's production company, Lightstorm Entertainment is working closely with tech company Christie Digital who have supplied Cameron with an RGB laser projection system, that is apparently the magic key to producing movies in 3D without requiring glasses when viewed.

Newer technologies, improved bandwidth (5G), [transhumanism](#), the increasing digital intervention in every aspect of our living... all these are altering the way we consume content.

Already, binge-watching is passé and has ceded ground to binge-racing with Reed Hastings, Netflix's CEO having famously declared: "[Sleep is our competition](#)". To combat the threat, movie theaters are constantly inventing ways to create an enhanced cinematic experience for audiences and a [JWT Intelligence report](#) highlighted how 'super-charged cinema' viewing amalgamated a food festival in which the relationship between cannibalism and cinema was driven home via several "cinematic bloods" to taste.

Wearable display gadgets, VR/AR/MR are buzzwords that will be around for years. Given this shifting paradigm, it's interesting to know how we will experience content in the future. In this report, we look at the impact of latest technological advancements and researches and how they can shape and change the way we access and view content in the future.



Hands free viewing /display-less viewing

Devices (cameras) have evolved from being smaller handhelds to hands-free smart glasses and smart contact lenses. Google is leaving behind the “wearable” concept for an eye camera, opting instead for an *optical implant*. If this sounds familiar, that’s because life is finally imitating art and ‘Mission: Impossible’ is now very possible. While this does lead to multiple and complex privacy and security issues, it also means that the viewer of an event becomes, simultaneously, the broadcaster of that experience as well. Until now, the primary purpose is recording but playing back the videos you record and re-viewing them through your eyes is just a few R&D steps away. Elsewhere, researchers are using fMRI (Functional Magnetic Resonance Imaging) and AI to *decode what a subject is seeing or imagining*.

As the accuracy of technology continues to improve, its potential applications are mind-boggling. Bringing AI and brain science together will open doors to new brain-machine interfaces. Inspired by this, Elon Musk is investing in a project called *Neuralink* which aims to fuse our brains together with computers. This revolutionary new approach to Human-Computer Interaction will allow us to access information through just our thoughts. Yes, this is closer to reality than you’d imagined.

To visualize the prospects of these shifts in technologies, imagine a future scenario wherein a person who desires entertainment in his spare time, accesses an online collection of movies - with his thoughts being transmitted through his Neuralink. He then starts watching the movie by closing his eyes - with his Google implants, immerses himself in it and also decides to stream it to his friends for a synchronized viewing session without even being in the same location.

How will we watch in the future?

Global / Interplanetary Watching

Several global events will be commonly viewed by the entire world as well by humans settled on other planets at the same time. Viewing events in the future will be completely unlike anything now. Think totally seamless and immersive!

No Language Barrier

Creating localized content to eliminate the language barrier will be a thing of the past. *Pilot*, a new language-translating earpiece, is a clever technology that can translate 15 languages in realtime. The future will definitely allow translation of any foreign language into native and that too sans device! Now, imagine the impact on Hollywood films dubbed and released in India: instead of being limited to a few Indian languages where box office sales are the only criterion, these blockbusters could be viewed in every one of the 22 official Indian languages, if not the total 1,652 tongues this country has (1961 census): a true cultural crossover will happen across geographies and communities

Immersive 360° Videos

360° productions are already changing *the way we watch videos in 2018*. They capture the essence of the place and provide the user with control of the viewing directions like a panorama. Combine the power of 360° videos and Google Implants and what do you get? You are at that place viewing it for yourself! So, a person watching the FIFA World Cup 2050 from his home in Kerala, will experience the match as though he is right inside the stadium, while listening to the commentary in his native Malayalam.



Immersive viewing: Importing the user into the world of your content

How will we watch in the future?

Connected Vision/Sharing Video Content

Another way of watching live events could be by sharing your vision. A person watching the match can share what he is viewing with a friend in Kerala through Neuralink.



Connected vision: Sharing your vision with others

Interactive Content

Scientists in Kyoto have invented *touchable holograms*. This could pave the way for videos that can be interacted with in a whole new way. For example, a student studying how the pendulum works, can swing the pendulum to see how it works or a child stroking a cat can feel its fur without it actually being there. Likewise, an online store selling a silk scarf can get a prospective customer to get the feel of the fabric without walking into a physical outlet and a paint brand can do likewise to get across the sheer smoothness of its walls during a commercial.

Personalization

The present sees a great amount of effort being spent on personalization. Netflix uses complex algorithms to recommend movies and series to users based on their viewing pattern. Research is already being done to *predict future video content* based on a still image. This, coupled with technology that understands a user's likes (data gathered from his favorite movies, his moods, his dreams, etc.), can actually create a movie. This could also mean that Netflix partners with Neuralink to create real-time personalized movies and eventually eliminating the thought: "I didn't like the ending of that movie!" Remember Jeffrey Archer's 'Twelve Red Herrings'? Only now, there could be as many alternate endings as you wish! Flexibility and personalization could extend to other videos as well. A person watching a live F1 car race could shuffle between viewing as a spectator or experiencing the race as if sitting beside the racer.



How can we create video content in the future?

Thought to action

Now even a thought can be downloaded as a script, *a dream forgotten can be recalled, accessed and made into a movie.*

Automated video making

The *video* of Obama delivering a speech he never gave is an example of automated video making of sorts, i.e., the stitching together of clips from various videos to create an entirely new one. *Deepfakes*, where actors' faces are mapped into videos with the help of AI, are instances of videos that are created and controlled by AI.

The show will go on... and we will all be IN it

The means we will have at our disposal to view content in the future are going to be gamechangers, playing with all of our human senses. We could employ our body gestures (such as blinking) to control our viewing and content accessing pattern. A typical dialogue at the dinner table could evolve from “Turn off your phone” to “Do not blink anymore”. Can such deep bodymind-technology interactions really be just in the future? Who knows!

But what we do know is that the way we entertain, the way brands will advertise will change. And fast!

Authors: [Divina Zacharia](#) and [Kalika Sharma](#)



The Institute of Customer Experience is a not-for-profit initiative by leading user experience company, Human Factors International Inc. Its mission includes the creation of best practices for delivering design solutions that will be used worldwide, sharing and exchange of information regarding the delivery of customer experience meant for a global customer base, and forecasts about the state of customer experience in the future.