

THEME 02

Interactive elements in movies and series

MEDIA

UBIQUITOUS
COMPUTING

INTERACTIVE MEDIA

Currently, interactive elements in movies, series or TV shows mean little more than simultaneously playing a quiz on your phone, chatting with others or voting for your favorite artist. However, innovations around interactive content are taking place, which could radically transform the way we consume movies and series and, as such, enable completely new user experiences.

Our observations

- Netflix wants to [invest](#) more in interactive storytelling. In a keynote presentation earlier this year, the streaming service's VP of product noted *Bandersnatch* was a huge hit around the world and said Netflix is "doubling down" on interactive series. *Bandersnatch* is a spinoff episode from dystopian tech series *Black Mirror* and an example of an interactive "choose-your-own-adventure", in which consumers are required to make choices for certain characters to advance the story. It is the first time a streaming platform has experimented with the format. It required [a lot of heavy lifting](#) from writers, directors and took over two years to get from the idea to the screen. Netflix needed to work closely together with the writers and directors of *Black Mirror* to develop the required technology to support the interactive narrative.
- Hulu is currently the most active SVOD (i.e. "streaming video on demand") player in VR and has put some serious effort into creating an interactive VR environment. With the Hulu VR app, users can watch movies with friends, choose their virtual surroundings (e.g. the beach or a haunted house) or watch concerts from Live Nation "[on stage](#)". But more importantly, the company is producing a significant number of original VR series such as [Door No. 1](#). This choose-your-own-adventure comedy makes the user the protagonist of the show and the actors speak directly into the VR camera to engage the viewer in the narrative.
- During its yearly hardware [event](#), Amazon announced a long list of new smart devices. Besides minor revisions of existing smart devices, it included all types of new wearables such as a smart ring, smart glasses, and earbuds. With these wearables, Amazon wants Alexa to always be around us and assist us in all our daily endeavors.



Connecting the dots

Interactive VR movies and series are one of the innovations that could radically transform SVOD content. Last year, after the launch of his VR-project [Carne y Arena](#), director Alejandro Iñárritu stated he approached VR movies as a completely new art, incomparable to traditional film. Viewers of [Carne y Arena](#) are allowed to experience one movie scene from different angles by walking around. This aspect of VR film limits certain cinematic techniques, in terms of storytelling (e.g. providing clues in the “right” order), but also cinematographically (e.g. providing specific perspectives), but it also enables new ones. For example, to confuse the spectator, a crime scene might contain contradictory clues on the murderer, depending on the angle and where you look in the room. In VR, every viewer will experience his or own journey through that crime scene. Nevertheless, the downsides of VR remain significant. First of all, you need a certain amount of physical space for viewers to enjoy these experiences (e.g. enabling them to actually walk around the crime scene) and this limits the scaling options for most VR projects. Furthermore, there’s a significant chicken-and-egg problem between hardware and content that limits VR projects to a niche market; pricy headsets and poor user experience limits adoption and this, in turn, limits the development of high-quality content that would trigger the masses to buy the hardware. Not surprisingly, competitors such as Netflix have adopted a wait-and-see strategy regarding VR movies and series.

Nevertheless, Netflix is the industry-leading player in a different innovation around interactive content: interactive storytelling. As we have [written](#) before, *Bandersnatch* could set the trend for embedded content interfaces, which would be advantageous to Netflix as it would allow for all kinds of functionalities to be integrated into content (e.g. shoppable content, social voting, and game-like features such as puzzles). However, according to [Matthew Ball](#) of [Redef](#), one current disadvantage of interactive storytelling is the stop-and-go interaction with the consumer. The user experience is continuously interrupted, so the participant has some time to make a choice, often binary and usually executed through a simple device such as the remote control. The induced friction might make us feel we are more in control but could also result in a loss of immersivity. A solution might be to simply reduce this friction as much as possible by using new technology, e.g. using speech instead of a remote control or applying automated interaction based on emotion detection through facial recognition or biometric sensors.

This latter application brings us to another set of innovation opportunities. A different strategic path for content innovation would be to integrate smart home devices, wearables or sensorized merchandise into the viewer experience. This could be referred to as a type of spatial interactivity whereby, in addition to interacting with the dominant screen in front of us (e.g. mobile, laptop, TV), we do so with our entire environment. We are increasingly surrounded by smart devices and wearables which are all able to communicate with each other and interact with us. Big screens will remain essential for work and entertainment. However, the “[computer](#)” is [disappearing](#) because digital technology is becoming omnipresent. Through intuitive interfaces such as voice interfaces or motion sensors we continuously communicate with computers without their clear visibility. The integration of ubiquitous computing into content production could lead to completely new user experiences. [In this article](#), Matthew Ball presents a list of ways different devices, sensors, and technologies could be used to generate new viewing experiences. During a horror movie, connected doorbells or phones could start ringing or smart speakers could play scary sounds from different rooms. Facial recognition could be used to include our face in the storyline and heartrate monitors or eye-tracking technology could be employed to scare us at appropriate (read: unexpected) times. For kids, creating interactive content through ubiquitous computing could establish a more natural balance between passively watching and actively playing. Sensorized merchandise such as puzzles, dolls or other toys could unlock unique experiences and engage kids to participate in the narrative. Wearables could enable more tactile interactivity with their surroundings and stimulate activity. Last, smart speakers and voice assistants could play sounds or songs, but also ask questions about a movie or guide kids through quests or educational tasks during the narrative. Looking ahead, *Bandersnatch* and comparable interactive content are promising. However, in terms of movies and series, it remains to be seen how much interactive and engaging elements are actually desired by consumers, and trial-and-error is presumably the only way forward. Ultimately, these new interactive formats could provide new meaningful, personalized and more intimate viewing experiences for consumers. For streaming platforms, they offer new ways to collect data, expand media universes with new services and products and engage consumers in unprecedented ways.

Implications

- **Big tech companies with streaming platforms such as Amazon and Apple are in the best position to create interactive content through ubiquitous computing as, from hardware to software, they control the entire stack necessary to produce such cross-device viewing experiences. But at the same, their attempts could cause some backlash from movie studios, as these technologically driven innovations could clash with strong views on the art of filmmaking. For example, when Netflix announced it would allow people to speed up series, directors and actors responded with fury, claiming Netflix was ruining the art of moviemaking.**
- **Interactive VR content could act as a gateway to the “metaverse”. When it comes to VR assets, Facebook is one of the industry leaders and its upcoming Facebook Horizon clearly shows the company has a strong ambition to create a metaverse. However, compared to competitors, Facebook is fairly weak in terms of intellectual property and might find it difficult to attract consumers (e.g. its previous VR environments all failed to do this). Disney, on the other hand, has built an impressive media empire. With respect to the metaverse, the possible synergy between its amusement parks, movie studios, and the direct-to-consumer streaming platform is promising. Moreover, with its amusement parks and merchandise, Disney has a long history of blending the virtual and physical. Also, regarding interactive content through ubiquitous computing, Disney has opportunities (e.g. toys and other merchandise). However, it doesn’t have the rich ecosystem of smart devices and voice assistants of big tech competitors, so it is completely dependent on others.**