NIELSEN CONSUMER NEUROSCIENCE

EXPLORING IMMERSIVE TECHNOLOGIES

Understanding Viewer Engagement in New Environments

THE CHALLENGE

In order to examine the power of new immersive content experiences to engage viewers, Nielsen and YuMe designed a study that sought to answer 3 main questions:

- How do consumers' nonconscious, emotional responses differ between content viewed in VR, 360-degree video, and 2D (flat-screen TV)?
- How do consumers deploy visual attention and use physical space differently in these next-gen environments relative to TV?
- 3. What are some early guidelines for crafting great creative in VR and 360-degree video environments?

THE SOLUTION

Participants ages 21-39 were recruited with a mix of ethnicities, level of education, and household income along with a willingness to participate in a VR experience. None of the participants had a history of motion sickness. All participants watched three clips (a helicopter flyover of Las Vegas, a character-based movie promo, and a tutorial) in one of the three randomly-assigned environments (360-dgree video, VR, or TV).

Across all environments, emotional engagement was measured by capturing moment-to-moment changes in heart rate and galvanic skin response using a biometric wristband.

Various eye tracking technologies were used to understand patterns of visual attention in these environments. In addition, participant movement during the 360-degree video and VR experiences was behaviorally coded and quantified.

THE RESULTS

It was found that content in VR is more emotionally engaging than content in other environments, eliciting a 27% higher emotional engagement than the TV experience. Engagement with VR content also peaks higher than TV and sustains engagement longer.

Content characteristics also influence engagement. Content that encourages exploration (through a more free-form, less plot-directed style) leads to higher levels of engagement in immersive environments.

We also found that emotional and behavioral (movement) engagement do not always go hand in hand, indicating that consumers can engage with content in many different ways. Key moments of each clip were analyzed at a second-by-second level to dig deeper into the drivers of engagement in each environment.

KEY TAKEAWAYS

In this study we learned that VR environments are meaningfully more engaging than 360-degree video or TV environments. However, viewers still show a high level of distraction, regardless of the environment, presenting new challenges and opportunities for content creators.

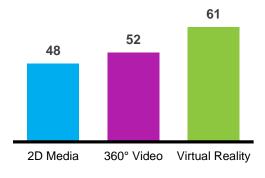
MEDIA CASE STUDY



So how can marketers engage with consumers successfully in this new world?

- Leverage exploration in immersive environments to more effectively connect with viewers.
- Balance the viewer freedom to explore content with the need to create a cohesive flow that directs attention to important moments and branding.
- Develop key moments to guide viewer consumption and comprehension of creative and branding.
- Embrace language (audio) as the new director in immersive environments, where what viewers see is not constrained by cameras that force a pan (as on TV).

Emotional Engagement



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