Bitmovin and Globo

Setting new quality standards in 4K.
Brazilian soap operas and original series
have never been more stunning.

BITMOVIN

GLOBO

When it comes to content scale and audience reach, Globo is at par with Hollywood and the big US broadcasters.

3,000

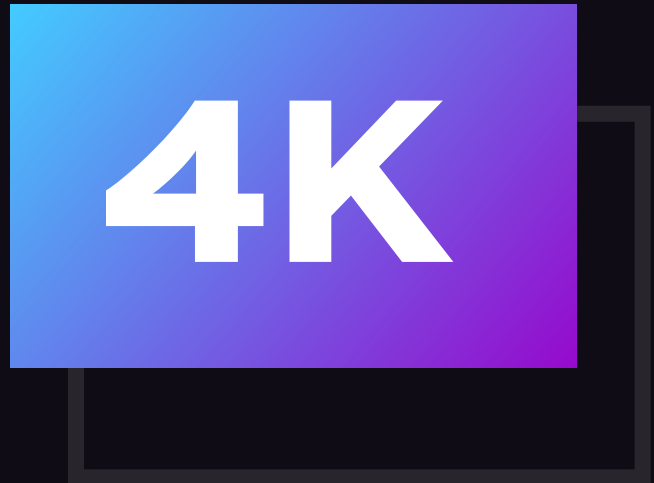hours of entertainment content produced anually by Globo compared to →

600

movies created in the US every year

The viewership numbers are equally impressive. Forty-nine million Brazilians watch the daily, one-hour newscast. By comparison, 33 million viewers tuned in for the Oscars telecast in the U.S. Globo's Digital Hub is in no way inferior. It attracts eight in ten Brazilians with internet access. The Digital Hub is made up of a variety of content categories, from news, sports, and entertainment to live events such as the Olympics, Carnival and the FIFA World Cup. Beyond digital content distribution, Globo's Digital Hub serves as a strategic technology provider and technical support for Globo's businesses.

Globo Standard of Quality

This ties right back into the overarching "Globo Standard of Quality" that the company is known for. The optimal viewing experience consists of award-winning content, delivered in stunning visual quality. To deliver on that standard, Globo was one of the first mainstream broadcasters outside of the US to offer content in 4K, adopting it as a new standard across its platforms and devices. It has already produced more than two hundred hours of 4K content (including HDR) with over a thousand hours of encoding output with its soap operas and original series.

The early adoption of 4K is even more impressive for Globo as Brazil is ranking 79th on the list of countries by Internet connection speed. In order to deliver high-quality video, operators cannot just work with higher bitrates but rather have to find the optimal encoder that achieves both quality, speed, and cost-efficiency at the same time.

In the past, 4K encoding was accomplished with on-premises hardware encoders. As the next update cycle of the appliances was fast approaching, Igor Macaubas, Head of Online Video Platform, and Lucas Stephanou, Video Platform Product Owner at Globo, decided to conduct a thorough evaluation of vendors, including Bitmovin, a cloud-based streaming video technology company.

> **We are not willing to compromise the visual integrity of our content and we hold ourselves to strict perception-quality standards. Bitmovin's renowned 3-Pass Encoding exceeded our expectations and ensures that high perceptual quality can still be delivered while streaming at optimal bandwidth levels.**

Lucas Stephanou
Video Platform Product Owner, Globo

Partnership

Globo handles a massive VOD library of over a million titles, and with 12 variants in their HEVC bitrate stack — encoding demands are high. Bitmovin's cloud encoding service gave Globo the capability to encode a 90-minute video asset in 14 minutes across the entire HEVC ladder. This is a realtime factor of 6.4 times, which resulted in a quantifiable impact on time-to-market. Globo saw the business need for fast turnaround time in encodes and chose Bitmovin as the clear front runner in this regard. Considering Globo produces over 3,000 hours of entertainment content per year, this was no small feat.

Bitmovin's 3-Pass Encoding algorithm analyzes the elements of a video three different times to optimize intra-frame and inter-frame compression. The process compensates and optimizes motion, spatial and temporal compression for quality control all while minimizing bitrates. Globo assured the visual elements their media is comprised of were not degraded in the encoding process, and the Bitmovin encoder showed the best results across the board.

This process did not come without caveats, especially in regards to the overall speed of encoding. Although Bitmovin's transcoding process far outperformed the competitors, the fact it was deployed in the cloud increased overall turnaround time. Globo realized that even with fast upload speeds of 10Gb/sec, uploading large uncompressed or intermediary file formats to the cloud was time-consuming. In these types of scenarios, we often see the benefits of a hybrid on-prem and cloud-based transcoding workflow wherein a smaller mezzanine file is uploaded to the cloud for transcoding.

14
minutes

Bitmovin Encoding
90 minute
video asset

"As equally important to speed, are Globo's visual quality standards", Lucas Stephanou, Globo's Video Platform Product Owner pointed out. "We are not willing to compromise the visual integrity of our content and we hold ourselves to strict perception-quality standards. Bitmovin's renowned 3-Pass Encoding exceeded our expectations and is ensuring that high perceptual quality can still be delivered while streaming at optimal bandwidth levels."

> **Our 3-Pass Encoding proved to be the right encoding mode. It ensured high perceptual quality could still be delivered while streaming at optimal bandwidth levels.**

Stefan Lederer
CEO, Bitmovin

" Globo is known to set quality standards. We want our viewers to experience our great content in stunning video quality. Our 4K workflows have been relying on hardware encoders, but we wanted to test the power of the cloud and conducted a thorough vendor evaluation based on video quality. Bitmovin's encoding quality and speed convinced us across the board. And, since using Bitmovin's cloud encoding service, we are spending a fraction of the cost by bringing our capital cost down without spending more on operational cost. "

Igor Macaubas
Head of Online Video Platform, Globo

About Bitmovin

Bitmovin is a leading provider of video infrastructure for online media companies around the world. The company has been at the forefront of all major developments in online video – from building the world's first commercial adaptive streaming player to deploying the first software-defined encoding service that runs on any cloud provider or in a data centre. Bitmovin works with media companies across the globe to build innovative video products.

Bitmovin has been a first mover in almost every significant development in online video, including building and deploying the world's first commercial adaptive streaming (MPEG-DASH/HLS) HTML5 Player. Bitmovin customers collectively deliver several billion videos to consumers every day.

To find out more, please visit www.bitmovin.com

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