

CASE STUDY

LiveTube: Streaming News the Moment It Breaks

Broadcasting Publicly Sourced Content With Journalistic Standards

LiveTube's platform democratizes live news by putting the power of media capture into the hands of millions of smartphone users worldwide. By integrating Wowza Streaming Engine and AI capabilities into a full-scale broadcast system, LiveTube allows eyewitnesses to stream live events directly from the LiveTube app to a newsroom for instant review and distribution.



CHALLENGES

- Wanted a softwarebased solution flexible enough to be deployed in any environment for unparalleled control.
- Needed customizable video technology that could integrate with proprietary software and Al technology.
- Required a partner that could effectively handle large volumes of live streamed content, including the ability to quickly transcode, loop snippets of live video before streaming, and simulcast.

SOLUTIONS

Wowza Streaming Engine

> a customizable media server software for deploying video on premises, behind a firewall, or entirely offline.

OUTCOMES

- Leveraged Wowza
 Streaming Engine to
 build a live streaming
 newsroom hosted in
 their existing cloud
 infrastructure.
- Developed the world's first curated social live video network by combining Wowza's flexible, feature-rich technology with artificial intelligence (AI) capabilities and human oversight.
- Gained the ability to transcode high volumes of content into multiple streams, loop streaming snippets, and reliably simulcast to a wide range of platforms.

1,000
LiveTube producers by the end of 2022

Proadcasting news in LANGUAGES GLOBALLY

6 billion+
smartphone users
worldwide

Transcending Traditional Journalism Roadblocks

Traditional journalism faces financial and logistical challenges. Cable and satellite broadcast models are cost-prohibitive, and trained journalists can't always be on site the moment news breaks. Sven Herold, CEO of LiveTube, regularly encountered these limitations as a prior journalist and saw an opportunity to create a platform that was at once cost effective and reactive to unpredictable events. The lynchpin to this idea? Smartphones.



"A volcano can erupt at any second," Herold says. "Unless an event is planned, it's impossible to ensure that a journalist will be present. We take advantage of the saturation of smartphones at the scene of breaking news by empowering anyone with one to stream live content."

When this hypothetical volcano erupts, individuals access the LiveTube app and stream directly to producers who determine what's newsworthy and monitor the streams via a cloud-based newsroom. Of course, the work that goes into monitoring and sharing this content is more complex than it sounds.

Live Streaming for Accuracy and Integrity

Unlike a social media platform where individuals can upload fake or misleading content on a whim, LiveTube built a secure system that allows validation and verification of user-submitted content via location tracking, image data, user descriptions, and more.

"Live streaming prevents fraud, abuse of content, and 'fake news' by ensuring the security and validity of the content," Herold notes, "LiveTube users, who are all email and mobile verified, stream live occurrences with their exact device location, which are both difficult to manipulate. Our producers can see the incoming live images, hear the sound, and communicate with the user. Before making a decision to broadcast the story, they validate the content with the help of our Al system and public sources. The content is not stored on the user's phone, giving us full content and distribution control."

Live streaming is a cornerstone of their business model — ensuring reliable news collection and distribution. That's where Wowza comes in. LiveTube uses Wowza Streaming Engine as part of their custom build to accommodate a very complex, high-volume workflow. Herold knew he could count on the reliability and scale of Wowza's products and chose Wowza Streaming Engine because he could deploy it in his existing cloud environment.

When a user taps GO LIVE on LiveTube, the app sends an HLS live stream into their system. LiveTube's own news Al system filters the content by combining available news signals with information from the incoming stream. If it passes the initial automatic checks, then an alert is sent to all available producers. The first producer to accept the stream connects with the user in a cloud-based newsroom, validates the content, and, when approved, monitors and curates the stream while communicating with the user.

Once a stream is selected for broadcast, Wowza Streaming Engine transcodes it and makes several different versions — including renditions with and without watermarking, subtitles, and lower thirds, as well as a recording that loops until the producer goes live. Wowza Streaming Engine then simulcasts the live stream across social media platforms, to LiveTube's own platform, to their smartphone app, and to media organizations worldwide.

Ensuring Media Safety and Standards

Every live story is actively monitored and curated by a producer in the newsroom. They can alter the title, description, hashtags, and other key information, as well as a lower third, captions, and a news ticker attached as additional information for viewers.

LiveTube operates with an intentional 30 second latency to give producers a chance to add information and cut streams if needed. This mitigates widespread streaming of graphic imagery and dissuades streamers from taking unnecessary risks to capture content. Reliance on Wowza Streaming Engine's recorded loop provides this essential window of time.



"I believe in content, and that content is worth something," Herold says of the value individuals provide to his company. LiveTube compensates streamers appropriately for the content they provide. This symbiotic relationship between eager citizen and news application speaks to the fairness and personal integrity LiveTube brings to the table.

A Quality News Platform Like No Other

"Live streaming was obviously key from the beginning," Herold notes, adding that scalability, flexibility, speed, and reliability were important elements that led him to build with Wowza.

Most notably, he needed something that could be deployed anywhere, simulcast to a wide range of platforms, and worked with LiveTube's unique CDN and AI algorithm. Wowza Streaming Engine checked all their boxes and was the only streaming solution capable of integrating seamlessly with his custom build.

"There was no alternative" Herold says of their Wowza solution, "because when it came to our specific needs, only Wowza could deliver."

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