

CASE STUDY

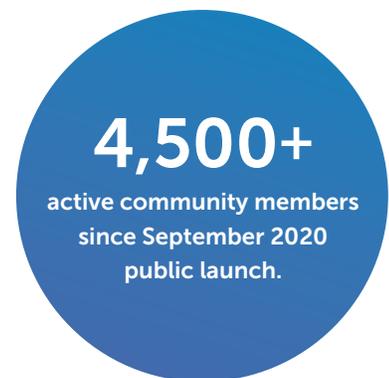
MixPose: AI-Powered Live Streaming for Interactive Fitness



Providing Immersive and Personalized Yoga Experiences at Scale

To overcome the constraints of [COVID-19](#), the founders of [MixPose](#) designed an interactive streaming platform that combines the very best aspects of in-person and [digital fitness](#). Instructors and users benefit from an engaging format boosted with AI capabilities and high-definition (HD) video.

CHALLENGES	SOLUTIONS	OUTCOMES
<p>Needed low-latency, high-quality video delivery to create a fully immersive end-user experience.</p> <p>Sought to reach yogis on every device and connection speed with a scalable, adaptive format.</p> <p>Wanted to enhance the live streaming format with artificial intelligence (AI) and advanced customization.</p>	 Wowza Streaming Engine  Wowza CDN	<p>Achieved HD 720p streaming in a dynamic, two-way format.</p> <p>Leveraged Wowza's technology to deliver adaptive bitrate streams to users on any device.</p> <p>Developed a robust, feature-rich application with automated pose-tracking, the ability for instructors to manage more students, and options for end users to personalize their experience.</p>



Connecting Fitness Communities During a Global Pandemic

It used to be that fitness buffs stuck at home had two choices: watch a static exercise class on a high-quality platform like YouTube Live or participate in an [interactive experience](#) streamed over a bare-bones conferencing tool like Zoom. There was always a trade-off between two-way engagement and HD video.

Thanks to MixPose, this is no longer the case.

The live streaming fitness app delivers HD video in a highly interactive format. End users benefit from near real-time feedback from instructors, not to mention the community-like feeling of a studio environment. Plus, instructors are able to host these virtual yoga classes from anywhere.

But the flexibility doesn't stop there. Participants can elect to join a public class with yogis across the world or create a private group with only their friends and the instructor. For those reluctant to practice yoga among any onlookers at all, there's also an option to make the two-way feature private so that only the instructor can view their stream.

"Up until now, immersive interactive fitness was a niche space with needs that were not serviced by any existing solutions," remarks MixPose Co-Founder Sarah Han. "Wowza enabled us to finely customize our [live stream](#) offering to be a glove fit for the unique needs of our user base"

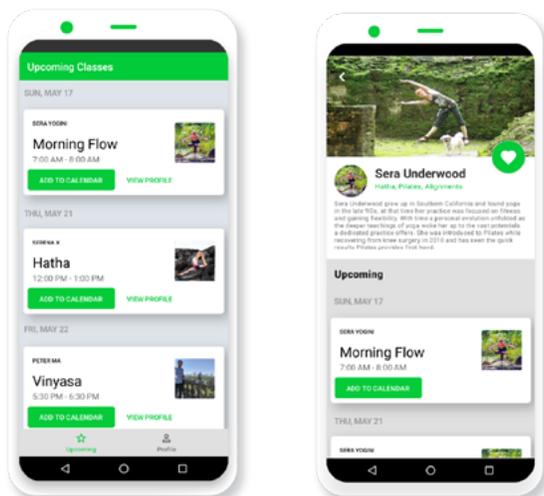
This, in turn, has made yoga significantly more accessible to those who may not have otherwise joined in — whether because they couldn't find their desired class locally or were overwhelmed by the prospects of attending an in-person session.

Adapting to Reach Yogis on Every Device

Today's viewers are accessing content across a multitude of devices and internet speeds. MixPose needed a way to reach yogis on mobile phones, smart TVs, laptops, and tablets.

Peter Ma, MixPose co-founder and primary programmer, explains: "Not all of our users have the same bandwidth — so we needed our streaming content to automatically adjust depending on the end-client connectivity."

By relying on [Wowza Streaming Engine](#) to deliver [adaptive bitrate streaming](#), MixPose achieves just that. Participants can access the app via iOS, Android, smart TVs, or the web. No matter how end users choose to tune in, the highest quality stream possible will play back — with minimal buffering. And thanks to the platform's Chromecast integration, participants also have the freedom to increase video resolution on demand.



"Our decision to use Wowza goes back to our focus on delivering the highest quality content possible," says Ma. "We actually didn't consider other options. Wowza came highly recommended and the product documentation made it easy to get started. We needed a bit of help here and there, but the support team was incredibly responsive. It was obvious to us that we had found the solution we needed."

By combining the interactivity of a small group class with the video and audio quality of a one-way broadcast, the MixPose built a viable alternative to traditional yoga studios. They also enlisted the help of the [Wowza Content Delivery Network \(CDN\)](#) to ensure high-speed video delivery on a global scale. But why stop there?



Architecting an Experience that Surpasses the In-Studio Experience

Unlike recorded classes and one-way streams, MixPose ensures that users get the same dynamic instruction and feedback that first lured them into a yoga studio — and then some.

"As our class sizes continue to grow, we know it will become increasingly challenging for instructors to personally engage with each student," says Han. "Using AI to support instructors to optimize the class experience will be integral as we grow."

More specifically, the fitness app uses AI to detect postures and advise users on methods for improving their form. This enables a continuous feedback loop between the instructor, students, and the platform's advanced pose-tracking capabilities.

The COVID-19 outbreak has demonstrated just how essential [interactive video](#) technologies are to business continuity. But by embracing this change and building their streaming infrastructure with Wowza, MixPose is transforming the fitness landscape forever.

To learn more about how others are using Wowza streaming technology, visit [wowza.com](https://www.wowza.com).