Telkomsel’s New OTT Service is a Major Hit With Sports Fans

 usando Harmonic’s Video SaaS solution, Telkomsel’s MaxStream successfully delivered live video to over half a million concurrent viewers during the 2018 Soccer World Championship.

The Challenge

As Indonesia’s leading mobile network operator, Telkomsel, has been delivering mobile digital services and solutions to customers across the country for over 20 years. The operator has consistently demonstrated a deep commitment to technology innovation, recently completing a 5G trial on its mobile network.

Telkomsel’s next technology strategy was to launch an OTT service called MAXstream, which would be available as an iOS and Android app to customers across Indonesia. The biggest challenges Telkomsel faced with launching MAXstream were ensuring scalability and superior video quality – both being critical success factors in an OTT environment.

Telkomsel needed a video solution to bring agility to its operations, making it possible to quickly launch new channels, including live sports events, while providing viewers with a high Quality of Experience (QoE).

“Using Harmonic’s Video SaaS solution, Telkomsel could quickly launch new channels for its MAXstream OTT service, including live sports events, while also providing viewers with a high QoE.”

Crispin P. Tristram, Head of digital lifestyle at Telkomsel

"In the OTT environment, agility and scalability are critical. VOS360 Video SaaS made it possible to launch additional channels in a matter of hours. And since channel expansion is ongoing at Telkomsel, we know that Harmonic’s solution will continue to play a key role in helping us meet the growing demand for more video on every screen."

Telkomsel, Indonesia’s most popular mobile network operator, needed to launch an OTT service fast that is scalable and provides superior video quality without building a technical platform.

Solution:

Using Harmonic’s VOS®360 Video SaaS, EyeQ content-aware encoding technology, Telkomsel could quickly launch new channels for its MAXstream OTT service, including live sports events, while also providing viewers with a high QoE.

Use Cases:

- Video Streaming
- Live Sports events
- Fast OTT Channel Origination

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Case Study

AT A GLANCE

| Challenge: |
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| Solution: |
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| Use Cases: |
| Video Streaming |
| Live Sports events |
| Fast OTT Channel Origination |
The Solution

Telkomsel's new MAXstream OTT service is powered by Harmonic’s VOS®360 Video SaaS. Harmonic’s VOS360 solution provides exceptional scalability and flexibility for the operator, enabling the delivery of high-quality streaming content, including live sports events, to a rapidly growing subscriber base. Thanks to Harmonic’s VOS360 solution, Telkomsel was able to launch its new OTT service quickly.

VOS360 Video SaaS is based on a pay-as-you-grow business model featuring built-in scalability and elasticity on public cloud infrastructure, making it easy for Telkomsel to add live and VOD content to its MAXstream offering. Telkomsel is using Harmonic’s EyeQ™ content-aware encoding technology with VOS360 Video SaaS to increase bandwidth efficiency while maintaining high QoE during peaks in viewership.

Harmonic’s VOS360 Video SaaS is integrated with user experience technology from Accedo. Accedo enhanced the existing MAXstream app with new features and content, specifically live linear channels and live events, which involved organizing the acquisition of Indonesian and international TV channels, building the video player for the live content and delivering a user experience that was both engaging yet simple to navigate for consumers.

The Workflow

Harmonic’s solution for Telkomsel was made of several pieces. The first component is teleport as a service, where Harmonic was able to ingest all of the signals via satellite and deliver them over IP to the cloud. The second piece consists of Harmonic’s VOS360 SaaS solution, which handles everything for the MAXstream service, from IP ingest to delivery. By maintaining and monitoring the service 24/7/365, Harmonic’s team of experts ensures content always streams smoothly and securely with the highest possible video quality.

During the encoding phase, Harmonic’s EyeQ content-aware encoding solution is used to improve QoE and reduce bandwidth consumption by up to 50 percent leveraging artificial intelligence-based technology.

After content has been encoded by EyeQ, it is delivered by VOS360 SaaS via Akamai’s CDN to Accedo’s user experience engine, which enables viewers to enjoy compelling live and VOD content on any device with an iOS or Android operating system. Digital rights management was enabled using DRMtoday from castLabs.
4 PILLARS OF SUCCESS FOR TELKOMSEL MAXSTREAM

**SPEED**
Using a Video SaaS, Telkomsel launched MAXstream with a fast time-to-market.

**SCALABILITY**
VOS360 SaaS is highly scalable, enabling Telkomsel to support 4 million subscribers within 30 days.

**SIMPLICITY**
With a managed SaaS, there’s no hardware or software infrastructure for Telkomsel to manage and maintain.

**ELASTICITY**
The usage-based pricing model in VOS360 SaaS ensures that Telkomsel only pays for what they use. There are no hidden charges or surprises.

**The Result**
Telkomsel’s MAXstream OTT service has been a resounding success. Currently, there are about 2.8 million active users engaging with the content, 70 percent of which are engaging with sports content on an intermittent basis.

During the 2018 premiere soccer tournament in Russia, VOS360 Video SaaS enabled Telkomsel to successfully serve 550,000 concurrent viewers and achieve excellent QoE. Since then, MAXstream continues to be popular for watching sports events, such as the English Premier League, Spanish La Liga, and French Ligue 1 soccer.

Channel expansion is ongoing at Telkomsel, and Harmonic’s Video SaaS solution will continue to play a key role in helping the operator meet the growing demand for more video on every screen, providing the simplicity, flexibility and rapid-time-to-market approach that OTT service delivery requires.
## FAST FACTS

| Telkomsel has 193 Million Mobile subscribers in Indonesia | Efficient development cycle from concept to live transmission, including teleport service, Castlabs DRM integration, Akamai delivery setup, Accedo app testing | Service delivered without any hardware or software installed on customer premises |
| New OTT service provides 21 live OTT channels | E2E SaaS OTT service from downlink to delivery (SD & HD mixed) | Teleport-as-a-service managed live ingest and delivery to VOS360 as opex service cost |
| New OTT service grew to 4M OTT subscribers in less than 4 weeks | All 64 matches from the soccer world championship delivered via OTT by Telkomsel for Indonesian market | CDN included with Akamai plus additional services to support Edge IP Binding and API caching |