



Akamai

Experience the Edge

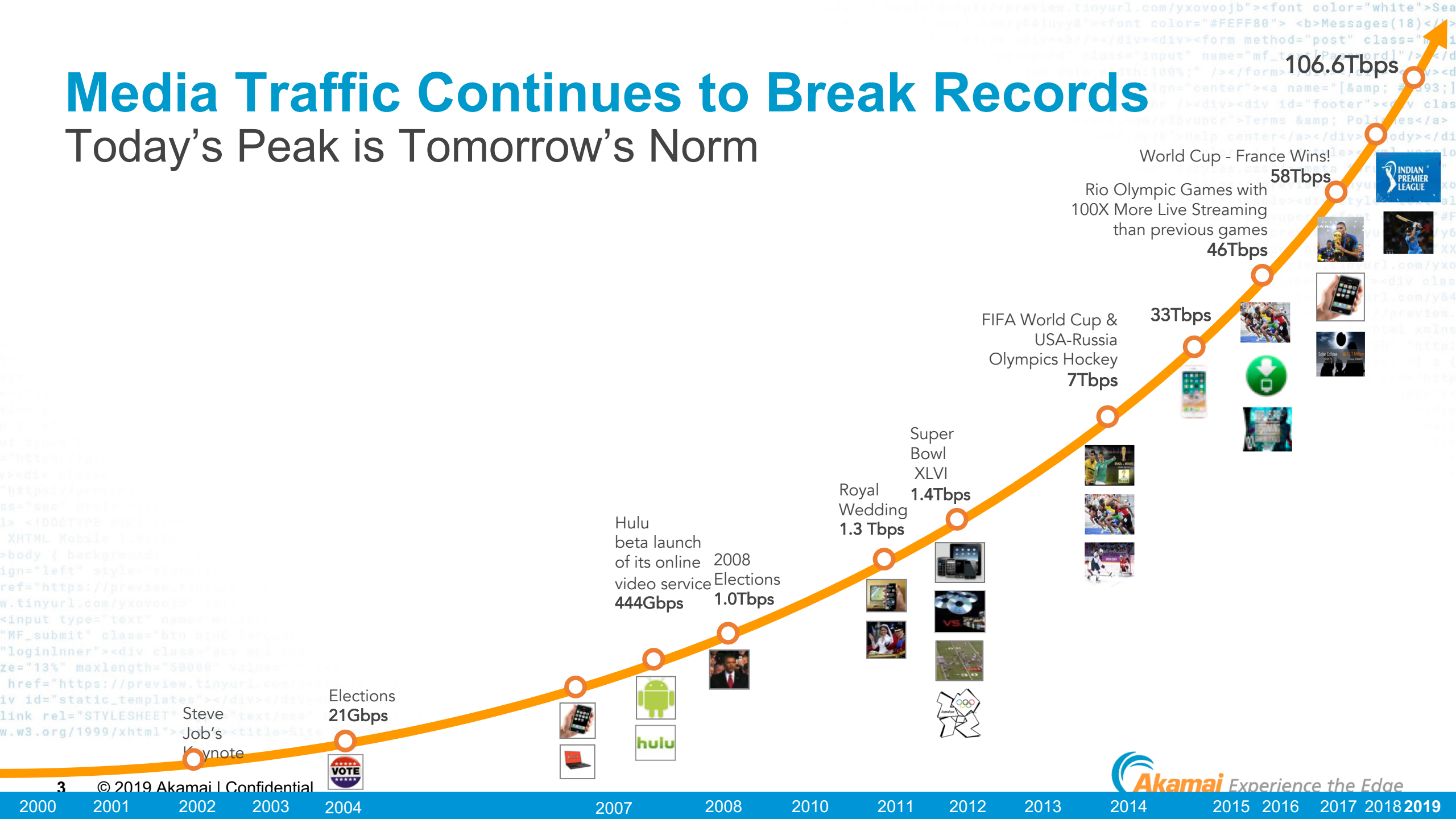


Adaptive Media Delivery

Deliver high-quality online video
securely to growing online audiences

Media Traffic Continues to Break Records

Today's Peak is Tomorrow's Norm



Poor Quality Reduces Viewer Engagement

Scientific research* shows poor video quality **negatively** affects your brand and business.

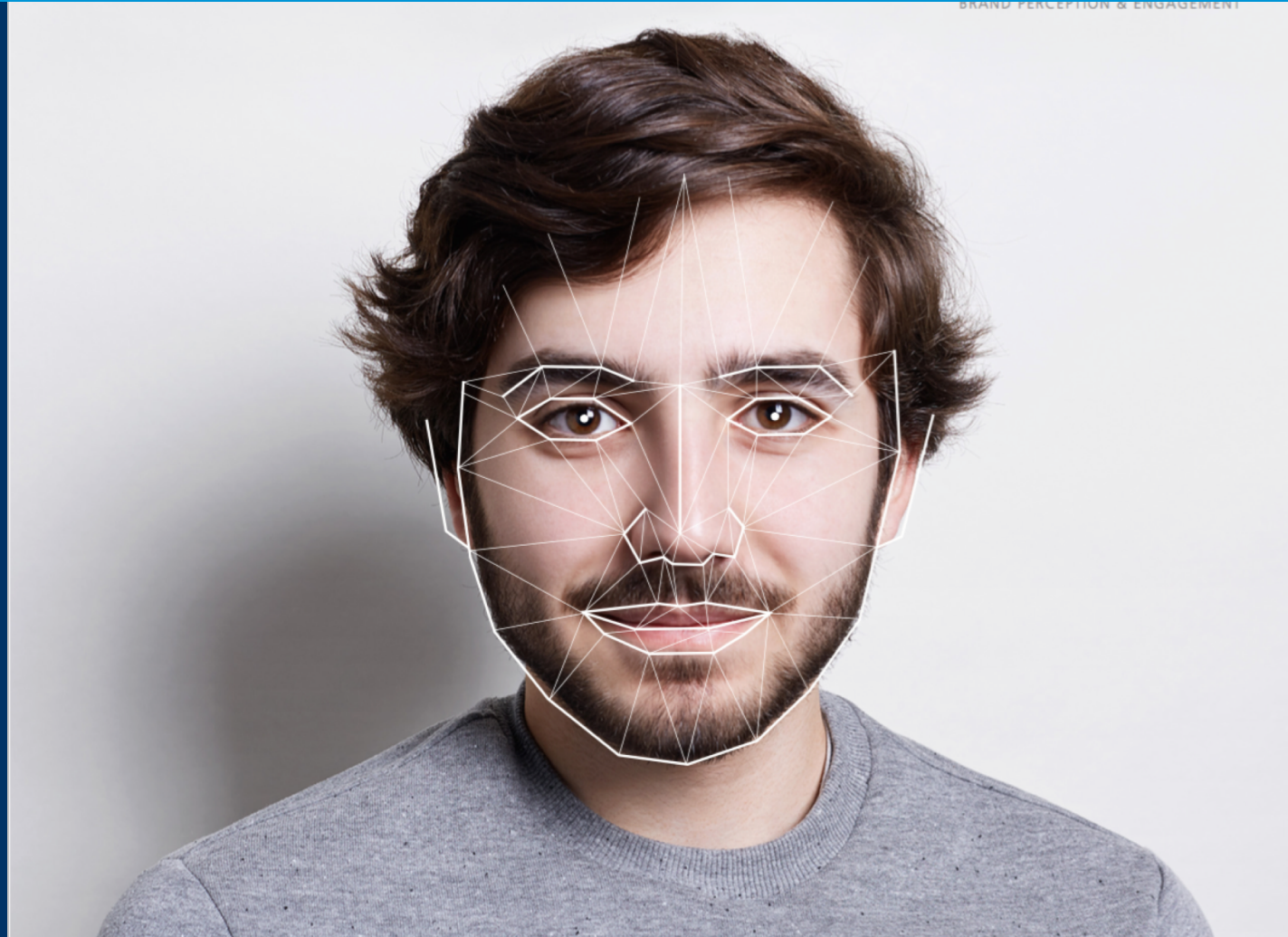
Viewers had the following
reaction when they experienced
buffering and low-quality streams

↓ **20%**
Engagement

↓ **14%**
Happiness

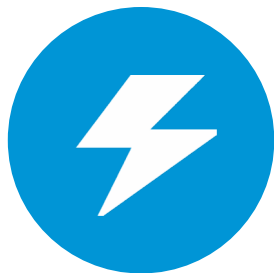
↓ **8%**
Focus

Results from a research study sponsored by Akamai and conducted by Sensum, a market research and biometrics software firm.



Factors that Impact Quality

Delivery & Playback



Ingest, Encode, Repackaging

Reliable workflows ensures quality downstream



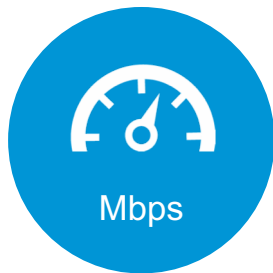
Startup Delays

At 2 seconds viewers begin to abandon



Re-buffering

Each re-buffering event reduces viewer engagement an average of 14 minutes*



Bitrate

Bitrate shifts can increase abandonment rates by > 4X*



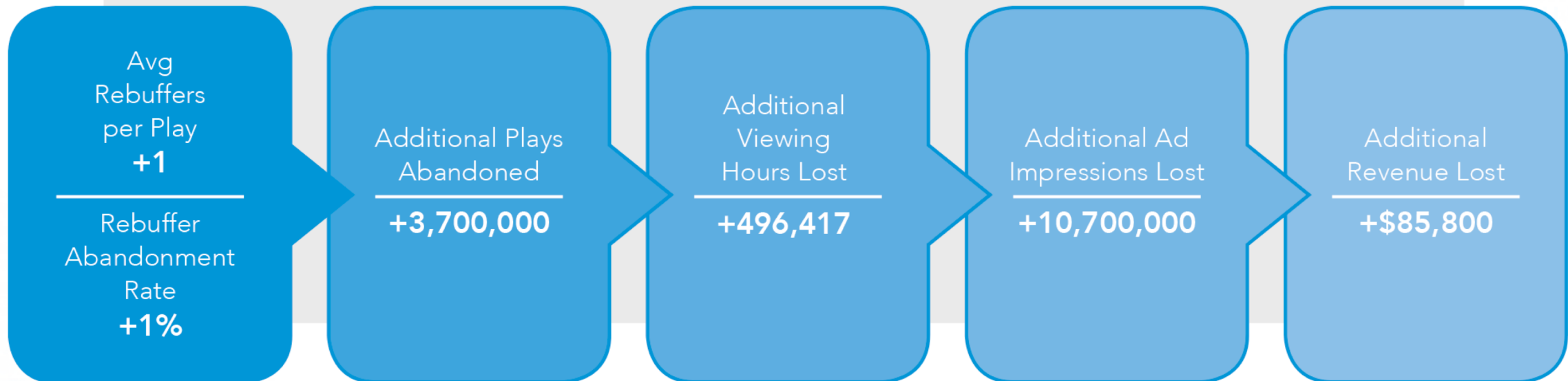
Monitoring

Proactive monitoring and incident prevention ensure high uptime

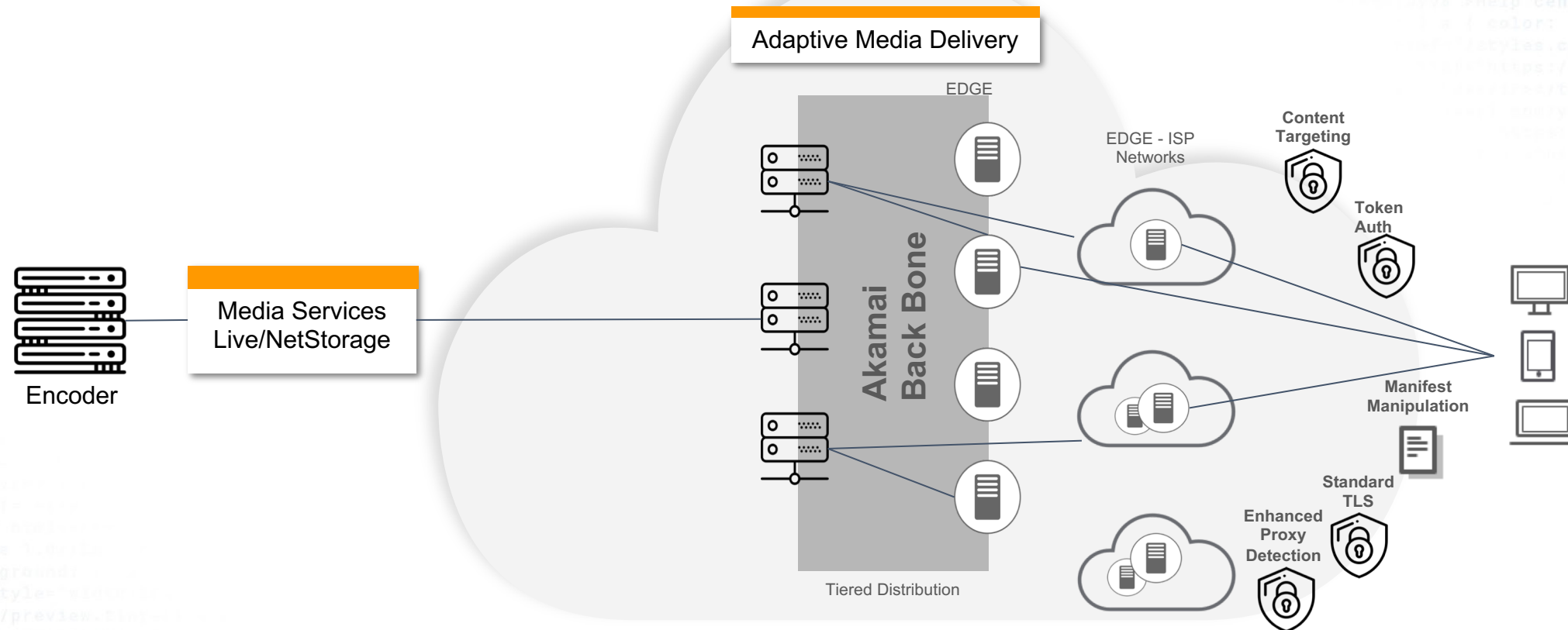
Source: Akamai, How Quality and Performance Drive User Engagement

The Financial Implications of Poor Video Quality

What is the revenue impact of an instance of rebuffering
on a U.S. network that had **370,000,000** plays (6/15/2017 to 6/15/2018)?



Adaptive Media Delivery

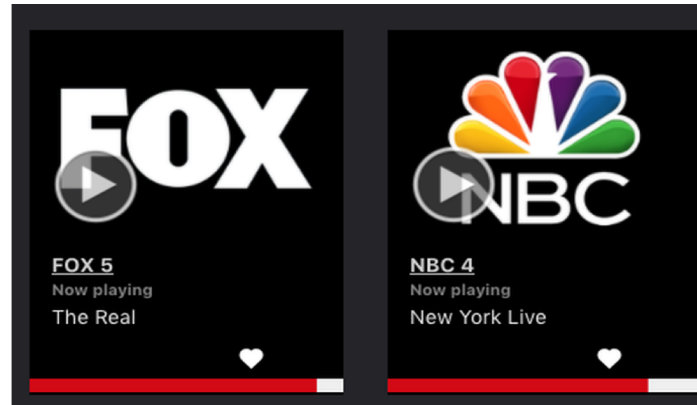


Adaptive Media Delivery is optimized for Adaptive Bitrate streaming to provide a high quality viewing experience across the broad variety of network types - fixed or mobile - at varying connection speeds.

- Benefits
- Capacity and Scale
 - Reliability: 100% SLA
 - Optimized video playback quality & performance
 - Secure communications and premium content

Support for All Major Streaming Use Cases

Ensure high-quality streaming to viewers anytime, anywhere on any device



Live Streaming

Live streaming refers to online streaming media simultaneously recorded and broadcast in real time to the viewer

Live Linear or Simulcast

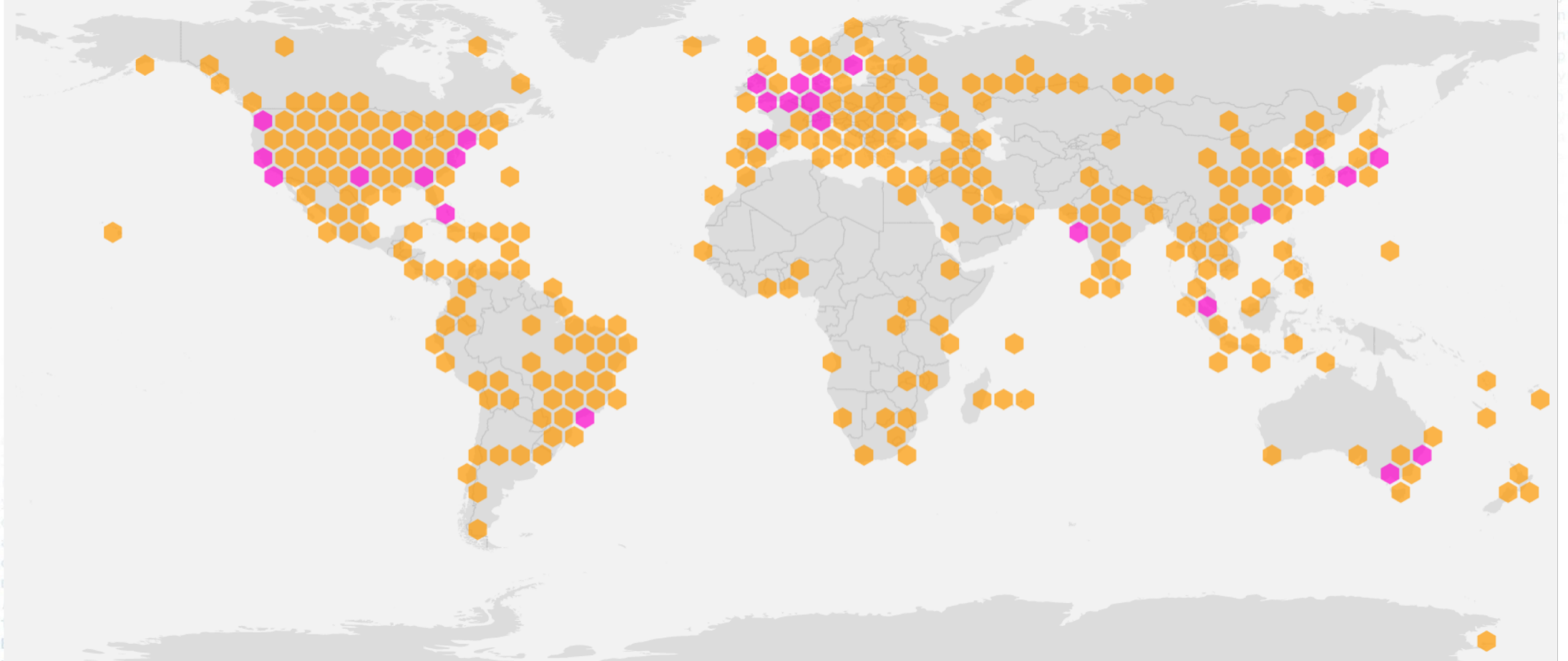
Video streaming that has been programmed to start and end at a pre-scheduled time.

“Passive” viewing experience, meaning viewers don’t “search and click”, programming is sent viewer’s way

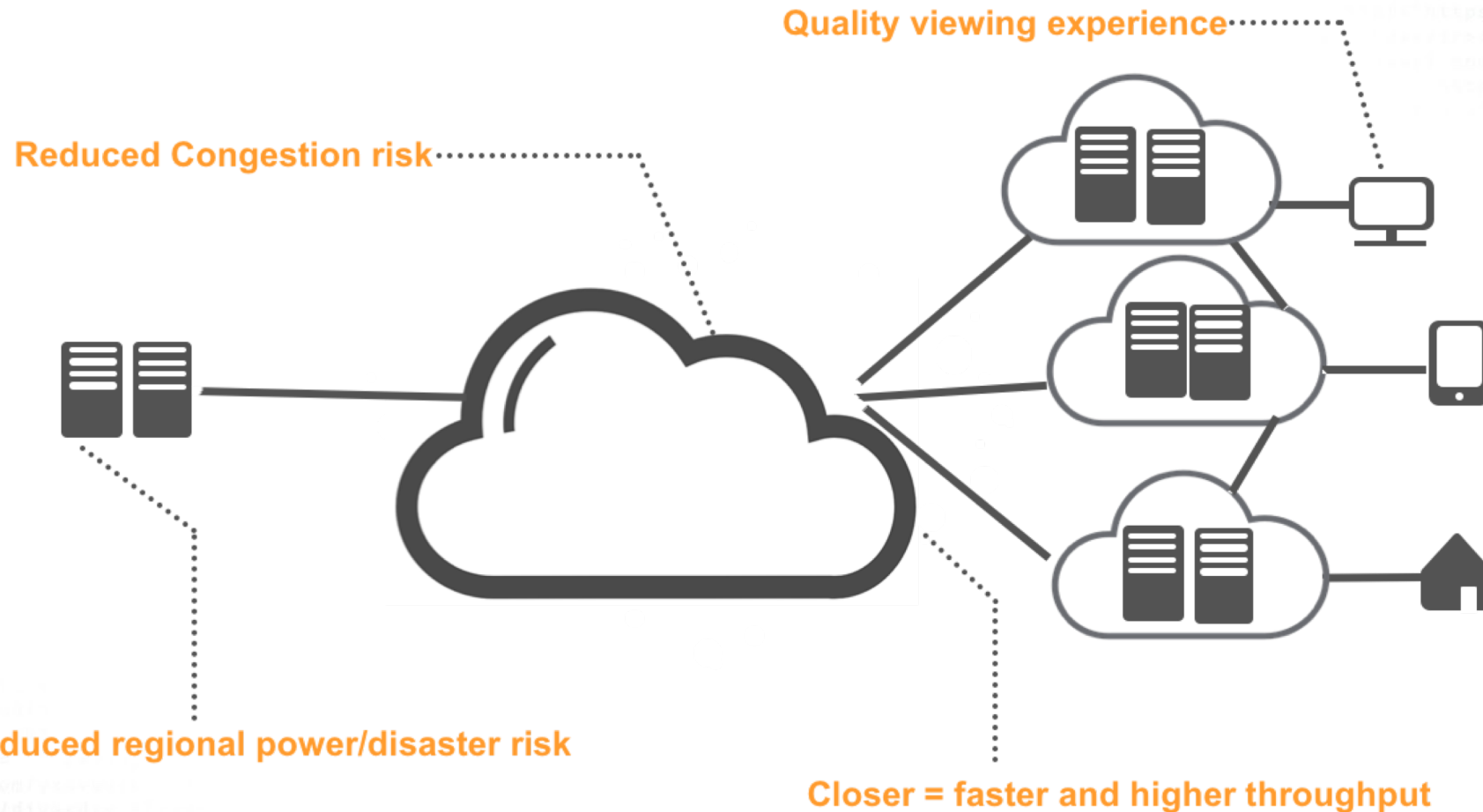
Video On Demand

Video on demand (VoD) allows users to select and watch video content of their choice. Users have a catalog of available videos to choose from.

The Akamai Intelligent Edge Platform



Advantages of Akamai's Distributed Architectures



Akamai's Approach to Content Security

Provide a robust content protection solution to prevent content piracy, unauthorized access & maximize monetization opportunities

WATERMARKING

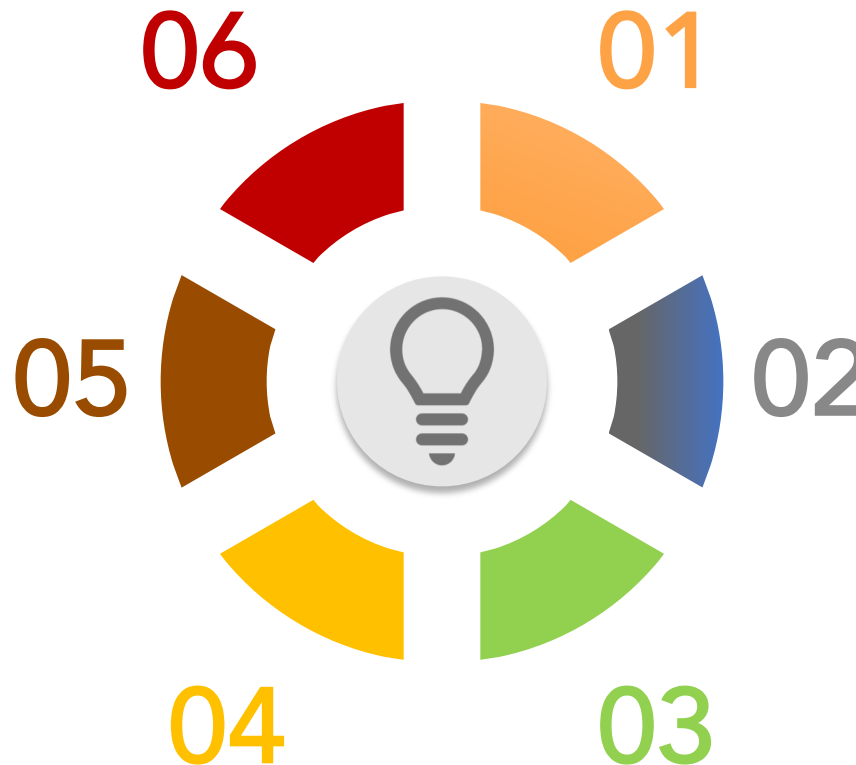
Adding unique, imperceptible markers to determine the source of a content leak

ACCESS REVOCATION

Programmatic way to revoke access to tokens in real time blocking illegit users

GEO/VPN PROXY RESTRICTION

Protect content access from unauthorized regions, devices, VPN/Proxy Services



USER AUTHENTICATION

User authentication using tokens to prevent unauthorized link sharing

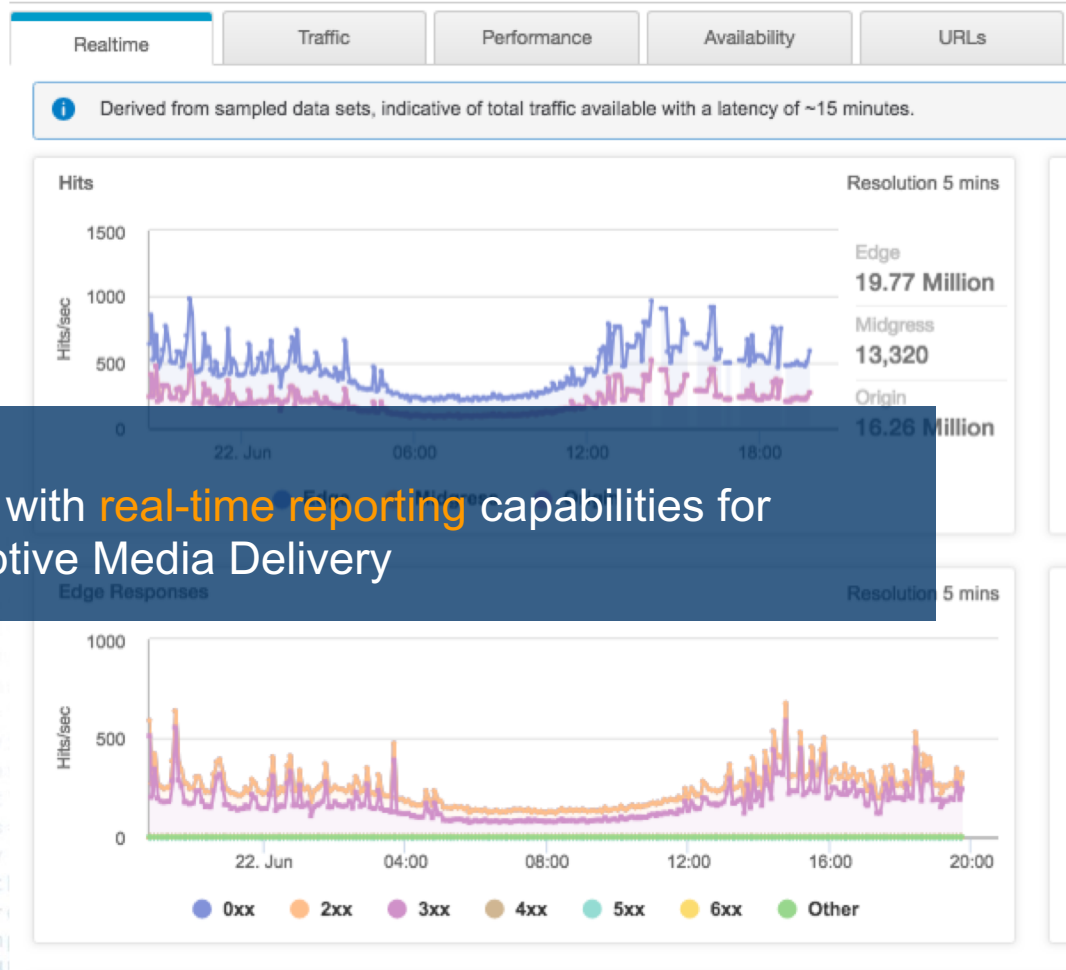
MEDIA ENCRYPTION

Securing video delivery by using AES 128 encryption standard

SECURE COMMUNICATION

Last mile content delivery over HTTPS using Transport Layer Security (TLS)

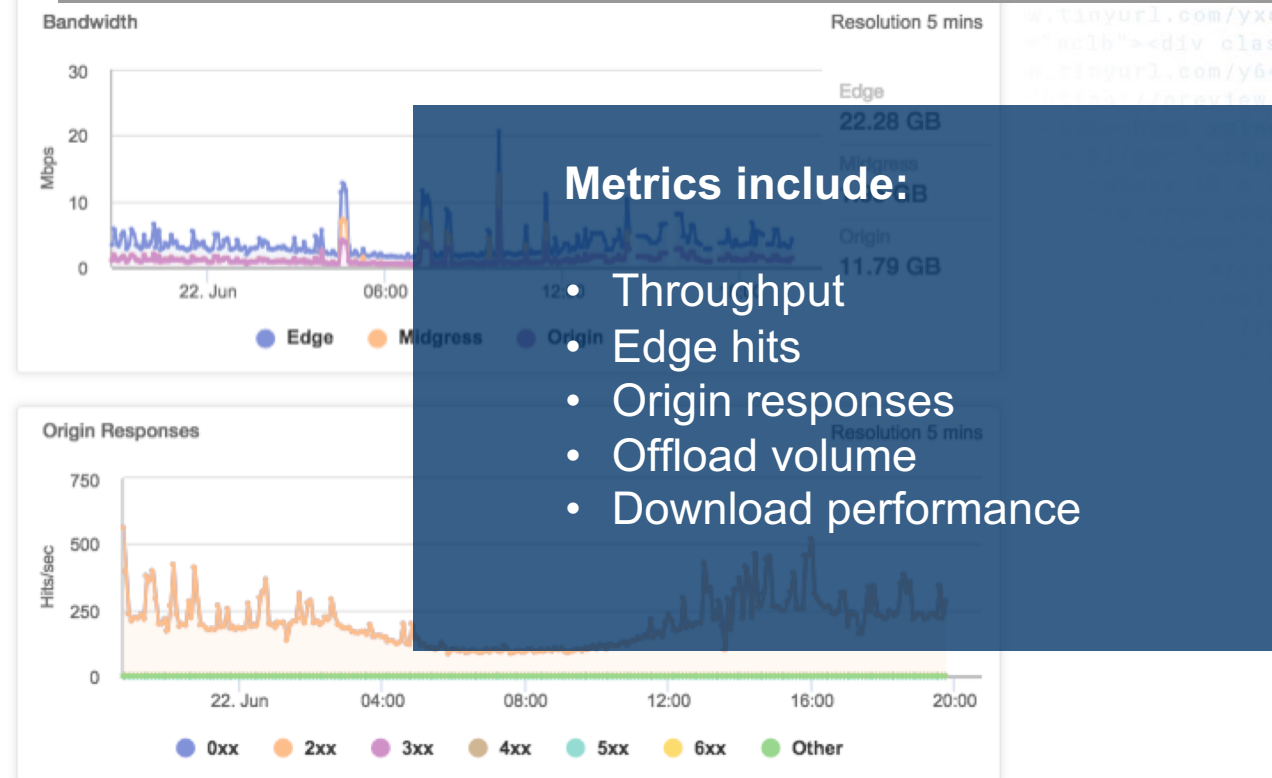
Media Reports



Server-side insights into delivery performance for operational excellence and unparalleled viewing experiences.

Metrics include:

- Throughput
- Edge hits
- Origin responses
- Offload volume
- Download performance



Adaptive Media Delivery Features

SCALE/PERFORMANCE

- Akamai Intelligent Edge Platform
- 100% Uptime SLA
- Site Failover
- Advanced Cache Control
- Tiered Distribution
- Adaptive Bitrate Streaming
- Quick Retry
- HTTP/3 Support
- HTTP/2 Support
- IPV6
- Purge and Fast Metadata Activation

SECURITY

- Standard TLS
- Enhanced TLS*
- Access Control
- Cloud Origin Authentication
- Enhanced Proxy Detection*
- Media Encryption*
- Protocol Downgrade
- Watermarking Support*
- Access Revocation*
- Content Targeting*

OTHER

- Manifest Personalization*
- Dynamic Ad Insertion*
- China CDN*
- Cloud Interconnects*
- Edge IP Binding*
- Media Reports
- Akamai Control Center
- Event Center
- Open APIs
- Beta Channel
- 3rd Party Origin Support

*Product Option

The background of the slide is a photograph of an office environment. In the foreground, a woman in a purple shirt is leaning over a desk, looking at a computer monitor. A man in a blue shirt is sitting at the desk, also looking at the monitor. On the desk, there is a computer monitor, a keyboard, a mouse, a telephone, and various papers and office supplies. In the background, another man in a white shirt is sitting in a chair, looking at a tablet. The office has a modern feel with a patterned rug and a bookshelf in the background.

Reasons why Media customers choose Akamai

Quality
Scale

Reliability

Breadth of solutions

Knowledge

Focus

Cricket World Cup

2019 Record Breaking Event

India vs New Zealand

July 10, 2019

25.3 M

Peak Concurrent Viewers

35% increase over IPL final (18.6M) in May 2019

A New World Record!

hotstar



ITV

Akamai enables ITV to meet consumer expectations with the Akamai Intelligent Edge

“In terms of scale, our go-to-partner is Akamai.”

Thomas Thomas
Controller of Delivery, ITV

ITV partners with Akamai to:

- *Provide unparalleled performance and capacity to deliver the largest online events*
- *Block VPN traffic during large sporting events*
- *Secure sites and apps*



NBC Sports

NBC Sports partners with Akamai to deliver large scale sporting events to online audiences at the highest quality

“When we look at Akamai, we look at an extension of our team. Akamai has always proven to deliver, time and time again”

Eric Black
CTO, NBC Sports Digital & Playmaker Media

NBC Sports partners with Akamai to:

- *Distribute online video at scale with the highest quality*
- *Handle live event monitoring and support*



Thank You

