

 **iabm** Seminar

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interra
systems

Streaming Media

Ensuring Accurate, Reliable and Quantifiable QoE for OTT Services

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
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MENA OTT market is getting crowded



Subscriber Attrition

The market is flooding with new OTT providers¹³. Whether offered by a top tier content owner (such as ) or a regional startup, consumers have more options than ever from where to source their online video. And with most OTT providers embracing the subscription video-on-demand (S-VOD) business model, it's also easier than ever for consumers to disconnect...permanently.

Source: Limelight Network Survey

How to keep subscribers?

How to generate loyalty??

How to reduce attrition???

Obvious answer: Have compelling, differentiated, interesting content

Is this enough ?

Lets look at what the analysts say

The pricing, data analytics, and **video quality will determine** the OTT market leader in the next five years.

Source: Frost n Sullivan

Going beyond content, **a high-quality experience** is an important driver of premium.

Source: IPSOS Report

The interesting concept to monitor is not strictly the **QoS, but the QoE** perceived by the customer.

Source: ETSIT UPM

What really affects us as users (a.k.a QoE space of user perception) is the true **end to end video streaming quality**, from the content source all the way to the device, and, therefore, single function testing is not sufficient to assess QoE due to the impact that each part of the service delivery chain (e.g. CDN, network, device) has on end user perceived quality

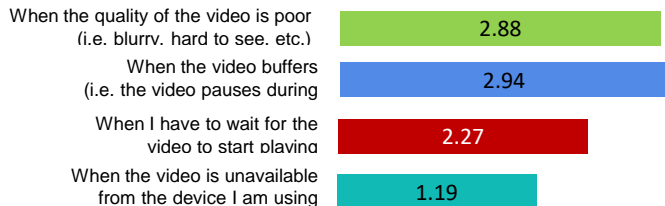
Source: Info Vista

When it comes to identifying the key factors that determine the success or failure of an OTT service, **video quality and the quality of the viewing experience** together are of prime importance. In a crowded OTT environment, providers of services are seeking to identify the best way to differentiate their offerings, including via Quality of Experience.

Source: Digital TV & Intraway Survey

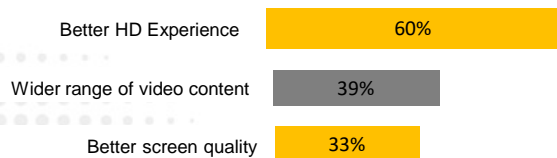
What do the consumer surveys say?

What is the most frustrating aspect of watching online video?



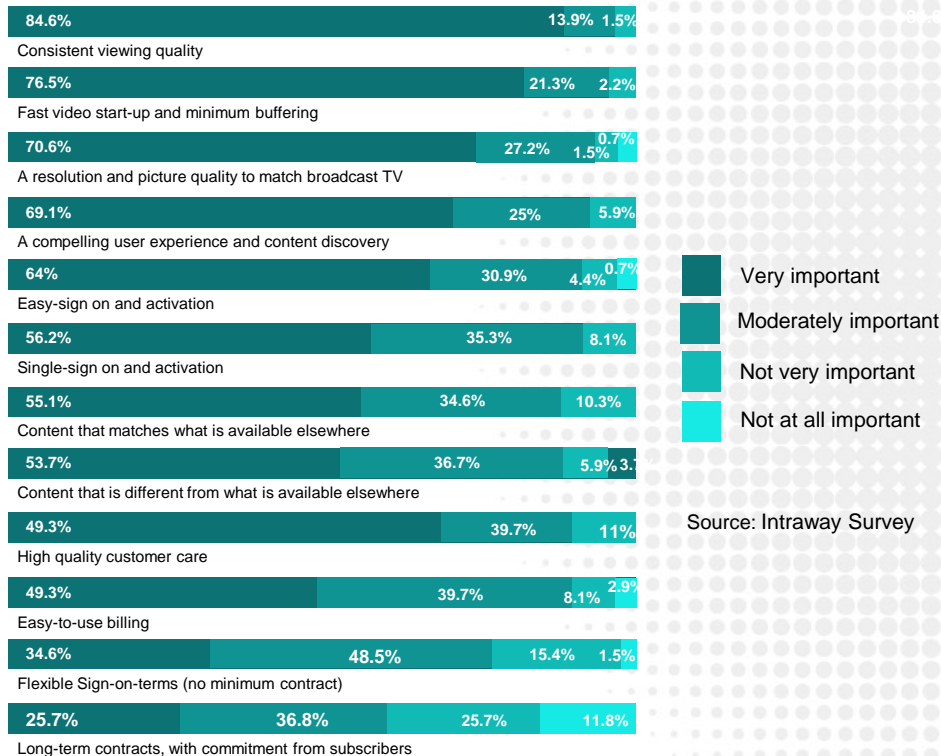
Source: Limelight Network Survey

Share of customer demands for online video platforms (% of MENA respondents, 2016)



Source: EY MENA Region Report

How important are the following factors in delivering a successful OTT TV service?



Source: Intraway Survey



How to keep subscribers?

How to generate loyalty??

How to reduce attrition???

Obvious answer: Have compelling, interesting content

Not so obvious, often ignored but very important answer

Focus on service aspects

Enhance Quality of experience

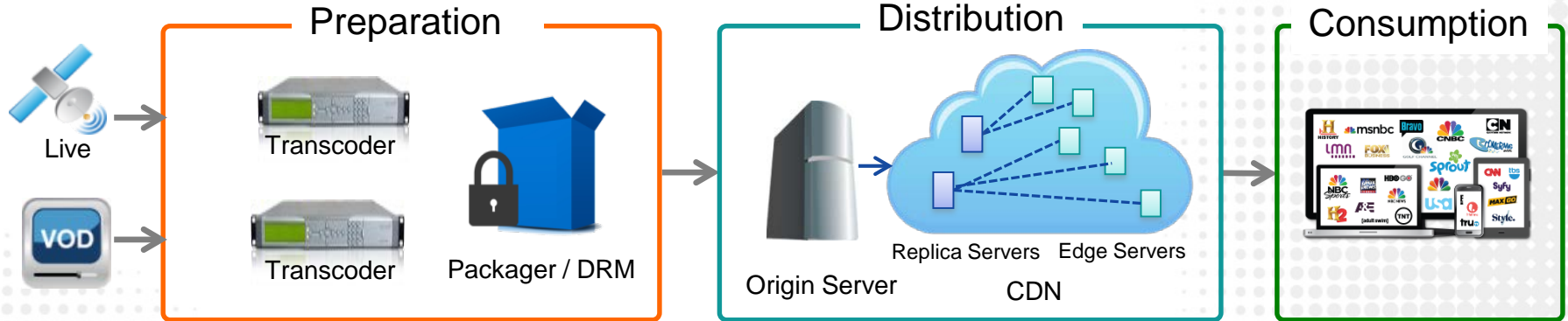
Improve video delivery performance



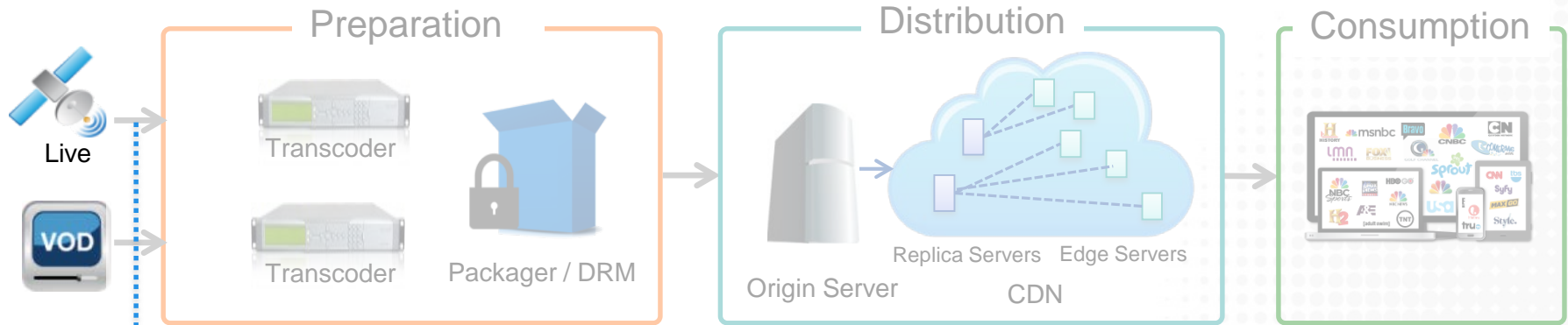
Ensuring superior QOE

The Where, The Why and The How...

Streaming Media Workflow



Live & VOD content acquisition

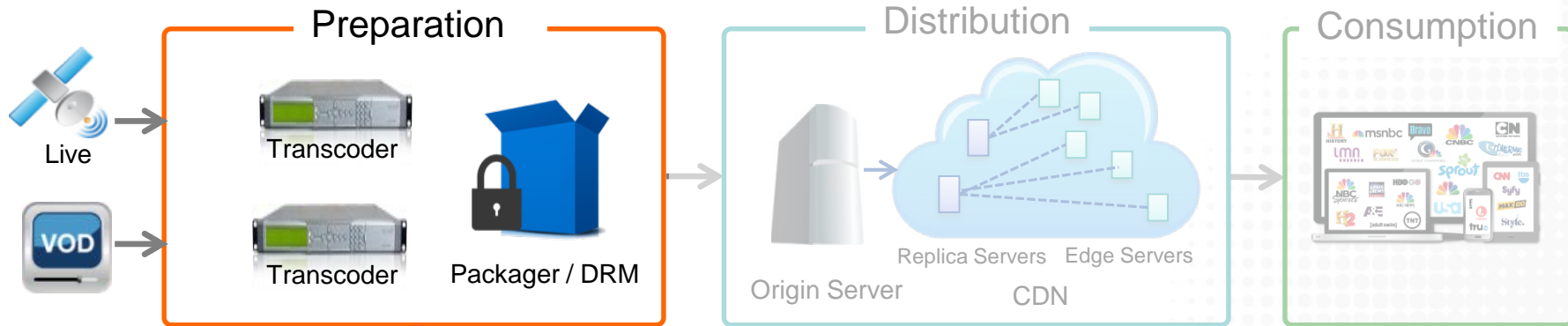


Monitor Live & VOD Content at source

- ❖ **Live**
 - ❖ Check Audio-video quality
 - ❖ Check for Closed Captions , subtitling etc.
 - ❖ Verify that the content plays without any errors
- ❖ **VOD**
 - ❖ Baseband quality checks, artifacts, metadata
 - ❖ Meet corporate guidelines for format and quality
 - ❖ QC at delivery stages is impractical, inefficient

It's critical to detect & troubleshoot AV issues prior to creating ABR assets

Content Preparation

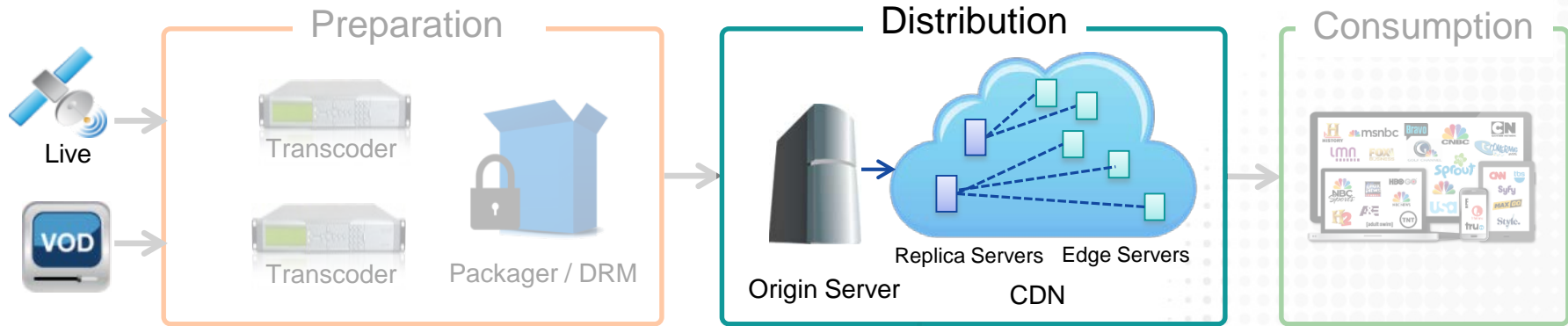


Checks during content preparation

- ❖ Check for EBP alignment
- ❖ ABR compliance: bit rate consistency, first frame consistency, synchronization etc
- ❖ Metadata consistency across variants

Problems not addressed here carry through the delivery chain

Content Distribution

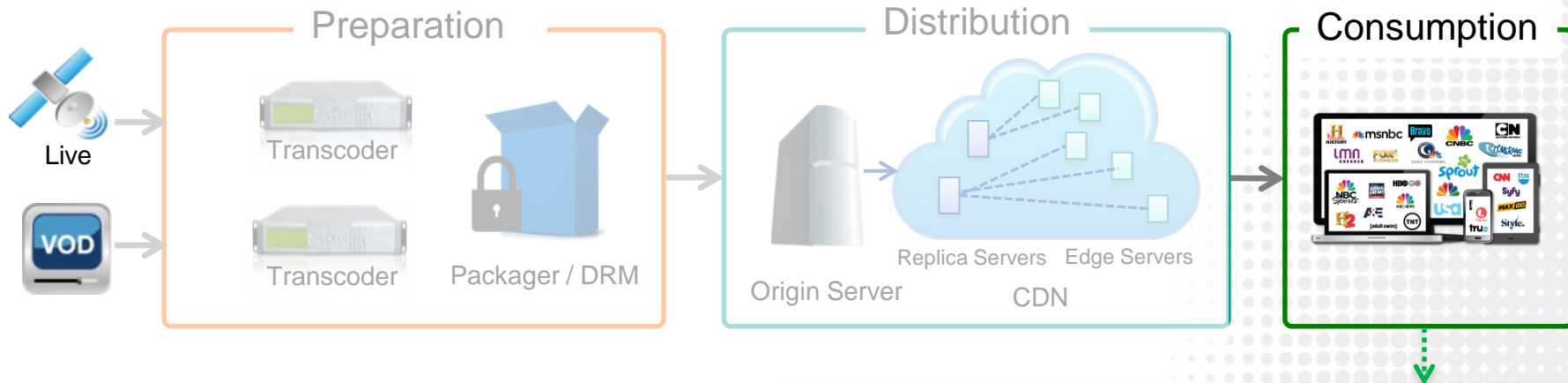


Proactive and Passive Monitoring

- ❖ Content Availability, Manifest Validation
- ❖ HTTP checks – download time, latency etc.
- ❖ Error alerts for each stream in real time
- ❖ DRM support – Without this you are only addressing QoS issues

Thorough ABR and QoE impacting checks at the delivery stage for best of breed system

Content Consumption



Information about real user experience on client devices

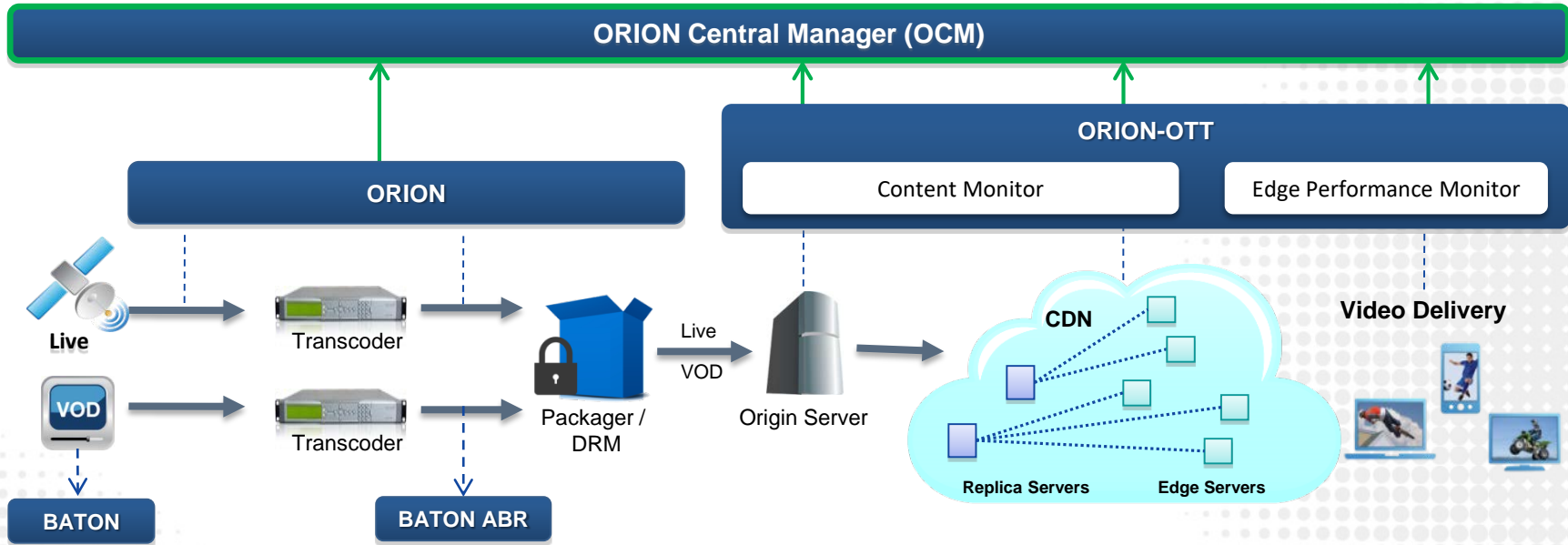
Real time monitoring of active sessions

- ❖ User session analytics
- ❖ Video performance metrics: Join time, buffer ratio, interruptions, play failures etc
- ❖ Performance across region, CDN, ISP combinations
- ❖ Enhanced business intelligence

Guidelines for flawless OTT QoE

- QC and monitor content at all stages – Content acquisition, preparation, distribution & consumption
- Perform comprehensive audio and video quality checks
- Parameterized to align with different monitoring needs at different stages
- Proactive and passive monitoring at various stages
- Customizable alerts, reports and troubleshooting tools
- Scalability and flexibility to suit various workflow needs
- Centralized management that provides visibility into the entire workflow
- Enables quick discovery and isolation of issues at various stages
- Flexibility of deployment on cloud, on premises etc

Interra Solutions – ORION Central Manager



Unified platform for centralized management, flexibility, cost efficiency

- ✓ Centralized Status and data analytics from various points in the workflow
- ✓ Quick error isolation and troubleshoot
- ✓ Compare feeds/programs across multiple points
- ✓ Compare DPI cue messages across multiple points

Interra Systems Value Propositions

- End to End QC and Monitoring products for Linear and OTT workflows
- Software-centric, High performance solutions driven by multi-core, multi CPU architecture
- Industry Proven products, audio, video quality checks
- Cloud Enabled, Virtualization-ready, DRM support
- Customer is our partner ethic







Intelligent Video Insights for Higher Monetization. **Any Platform. Any Device.**

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