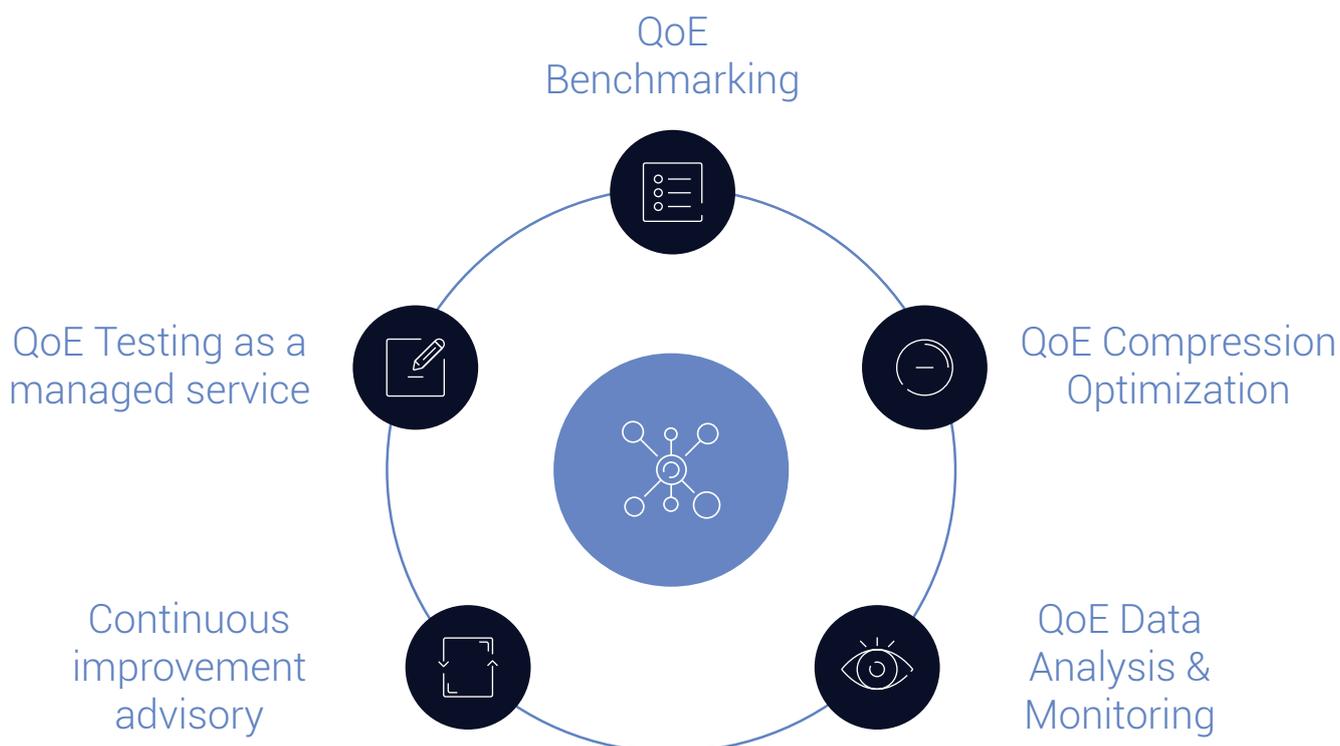


NTT DATA VQoE

A plug-and-play suite of solutions to improve the video quality of streaming and distribution chains



Marked by continued growth and increased competition, 2021 was a year of both consolidation and change for the OTT industry. Competition has become increasingly fiercer, with established providers and newcomers alike bidding for the viewers' attention and experimenting with new monetization models.

Analyzing the market from a user engagement and video quality perspective is becoming critical for Media and Broadcasting players to keep their customers engaged and loyal to their subscriptions on OTT Video-On-Demand platforms.

In this context, Content & Distributor providers need to prioritize their quality of experience

and quality of service if they want to stay ahead of the game. NTT DATA VQoE (Video Quality of Experience) represents an advanced end-to-end suite of solutions and services that support Media & Video-related clients to improve the quality of experience for the end customers and push the boundaries of their own entertaining experiences to capitalize on viewers' attention.

NTT DATA VQoE is a plug-and-play suite of solutions that collects, analyze and integrates large amounts of data across the video chain to offer the most complete and efficient video quality end-to-end solution that keeps viewers tuned in.

Key Features

Uniqueness

The only solution in the market covering all the video value chain with five state-of-the-art solutions that result in cost efficiency, quality improvements, and engaged viewers.

Quality

All the most innovative technologies gathered in one solution backed up by technical expertise at the service of concrete business objectives.

Plug-and-Play

All its solutions and services are turnkey. Clients can easily use the tool and add-on capabilities according to their business needs.

Efficiency

Achievement of tangible results and ROI within a short period of time thanks to the certificated improvement of video quality effectiveness and overall viewer satisfaction levels.

Flexibility

The solution can be adapted and scalable to clients' needs and enables automated tests of services over various devices and networks.



// Keep viewers engaged, everywhere you stream. Improve the video quality during all the streaming and distribution chain, with the best-in-class VQoE partner. Analyze, test, optimize and control your contents in real-time across the video chains through a unique turnkey solution.



VQoE Benchmarking

For all video streaming providers is important to know their own performance in comparison to their competitors in terms of quality to step up and improve the delivery of video content. In particular, it is important to identify situations of poor quality of experience for end-users such as slow download and rebuffering in a predictive manner to avoid end-customers disappointment.

The solution

Video Quality of Experience (VQoE) Benchmarking helps clients to understand how they perform on the key quality KPIs in comparison to other competitors in the streaming space. NTT DATA provides a subscription service to get insights and predict flaws in the user experience for proactive management. Through a diagnostic and monitoring platform, NTT DATA results are the basis for establishing improvement targets and a roadmap to achieve the best Video Quality of Experience.

Benefits

- Comprehension of the positioning of video streaming providers in comparison to competitors from a technical quality perspective
- Ready-made insights of key pain points and improvement opportunities to enhance QoE
- A two-decades-proven methodology distilled in actionable KPIs & metrics

Features



NTT DATA Quality of Experience Index, aiming to measure playback fluency, streaming robustness, and end-user perceived quality



Automated collection of QoE data from different sources and locations



Benchmarking campaigns of critical QoE KPIs on devices, titles, platforms, etc.

Why NTT DATA?

As a consultancy firm, NTT DATA can leverage a unique methodology, skills, and tools to provide a specific analysis addressing the highlighted flaws that affect the quality experience for end-users independently from which part of the chain is generating the flaws.

Get a total overview of your rivals' streaming and build your competitive advantage with us.





VQoE Testing as a managed service

About 60% of video streaming providers are not able to see or hear the video as it is seen by the end-users in terms of perceived quality which has a direct impact on the amount of actionable data, they have about their own QoS and QoE. This prevents providers from being able to pre-empt bugs, not visible during testing phases, which end up reaching the end-user and affecting their experience.

Benefits

- Streamline QA work by saving time
- Detection of problems to take corrective measures in time
- Collection of network traces and device logs to identify the root cause of incidents in a quick manner
- Reduction of errors and customers' claims thanks to real and remote testing

The solution

Within VQoE, NTT DATA offers an end-to-end OTT/IPTV video streaming testing and QA automation service tailored to the needs of each client, integrating Agile and DevOps methodology in a coordinated way with development processes to anticipate potential errors in real environments.

Why NTT DATA?

NTT DATA has a team of +200 professionals with experience in QA and Testing, which contributes to the leadership for successfully implementing test automation. Our central Video Testing Lab located in Spain is flexible enough to set up testing procedures in branch offices or at the customer's premises which keeps costs low with respect to the market.

Features



NTT DATA's own robot, VEOTEST



Flexibility to gather all needed data: what is shown on the screen, the traces of the LAN packets, the performance of the STB (CPU, Memory), and any other monitoring data from home devices.



Remote operation that allows hybrid way of working



NTT DATA's own laboratory with lines to the operators under testing. A branch of the laboratory is set up in each country to ensure access to the operator's lines





VQoE Compression Optimization

Media customers spend millions to operate and maintain their systems for the preparation and distribution of video content. Therefore, optimization in the compression process, before packaging the media contents for distribution, is key to reducing OPEX while also achieving improvements without refactoring their systems.

The solution

VQoE Compression Optimization consists of a specific analysis for the compression phase to evaluate the as-is situation with respect to established metrics. The output of the analysis contributes to effectively addressing issues and planning specific improvements. Moreover, NTT DATA hardware & software solutions can be leveraged to improve compression optimization and configurations of the content workflow chain.

Benefits

- Up to 50% bandwidth allocation reduction without sacrificing perceived quality
- Video chain costs minimization
- Enhanced quality of experience for viewers
- No hardware or specific knowledge is required for clients to use the solution

Features



Real-time assessment of video quality

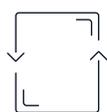


Define the right configuration of the compression parametrization



Why NTT DATA?

Thanks to NTT DATA's experience as a solution owner and to our high skills in the field of video compression systems, we are able to keep costs low and our own specific hardware for compression optimization to solve customers' problems.



VQoE Continuous improvement advisory



Opportunities to reduce costs in the media value chain are always sought and welcomed by customers. At the same time, such kind of activities requires time, effort and an effective approach, which media customers cannot always source internally. A holistic approach, provided by an Advisory Provider, for the analysis of the E2E video chain to highlight potential flaws and optimization, can be an added value for media customers.

The solution

An E2E advisory service at all stages of the process, providing real value to customers thanks to the use of an integrated set of methodology, tools, and skills, tailored for Video domains. Our capabilities and expertise in the media fields allow us to cover from Business Strategy to Service Design down to IT & Technology Consultancy, bringing the right solution(s) to the clients' needs & landscape.

Benefits

- Optimization of the E2E media supply chain to save time, money, and efforts, having a better end-users experience
- Alignment with the best practise for monitoring the E2E media value chain and early identification of potential issues
- Capability to develop specific solutions to fix main issues in the media value chain

Features



Orchestration of heterogeneous stakeholder discussions to find root causes and solutions



Deep dive into the client's monitoring data to push continuous improvement



Fast answer to customers' complaints through the identification of quick wins to be leveraged in a step-by-step implementation of the solution

Why NTT DATA?

As a consultancy firm, NTT DATA can provide an E2E analysis to address the identified issues from real-time problem detection and propose improvement solutions in accordance with customer needs and business objectives. We can anticipate and provide solutions that can improve customers' efficiency and positively impact the viewers' experience.



VQoE Data Analysis & Monitoring

Media companies need to implement systems (probes and metrics) to measure & monitor end users' quality of experience to attract and retain their customers by providing an excellent product/service/content in an automated way.

The solution

VQoE Data Analysis & Monitoring integrates AI Data Analytics and AIOps to enable proactive decision-making and end-to-end management of information systems, technologies, and data-driven business processes. The solution allows the automated monitoring of end users' quality of experience in relation to objective metrics and issues.

Benefits

- Flexibility to integrate with clients' data sources such as telemetries taken from DataWareHouse or Data Lake
- Customisable to address specific needs and use cases
- Provision of additional and tailored insights coming from deep expertise & knowledge of video domains, for continuous improvement

Features



All testing measurements are connected to a universal timestamp allowing cross-data checking with other QoS/QoE monitoring systems



The time-series data is easily available to the clients, and include timestamp



Big Data and AI analysis of monitoring information from NTT DATA own solution (e.g., VeoTest) and client's monitoring data

Why NTT DATA?

Thanks to the successful work with top players within the Media and Broadcasting sector, NTT DATA's experience and knowledge as a consultancy firm allows the effective installation of probes, data collection, and analysis to identify issues and solve issues in a timely manner to deliver the best experience to end-users.





NTT DATA – a part of NTT Group– is a trusted global innovator of IT and business services headquartered in Tokyo. We help clients transform through consulting, industry solutions, business process services, IT modernization and managed services. NTT DATA enables clients, as well as society, to move confidently into the digital future. We are committed to our clients' long-term success and combine global reach with local client attention to serve them in over 50 countries.

For more information

To find out more about how NTT DATA can help your business visit: benelux.nttdata.com/industries/telecoms/media

Contact us

<https://it.nttdata.com/contact-our-media-experts>