

Revolutionizing
Captioning at
the DTG Summit



**CASE STUDY** 



## Situation

The Digital TV Group (DTG), the organisation at the centre of the UK TV ecosystem, hosts an annual Summit 'TV: The Bigger Picture' as part of its extensive work programmes and events schedule in the digital TV and streaming space. During the COVID pandemic in 2020 when attempting to ensure their event was accessible for the Deaf and hard of hearing, DTG faced a significant challenge in using a competitor's automated captions for their first virtual Summit. The automated captions were riddled with inaccuracies and even inappropriate language, leading to a tarnished experience and numerous apologies to attendees.

In 2023, determined to maintain the accessibility of their event, DTG approached Al-Media to provide live captioning for the DTG Summit. For this event, Al-Media delivered human captioning through our Ai-Live service, which was a success.

Fast forward to 2024 and with a key Summit theme focusing on Al—its opportunities, benefits, productivity enhancements, and futuristic potential—DTG sought to explore Al's capabilities. Al-Media saw the opportunity to showcase the spectacular advances that had been made in automatic captions and proposed using our LEXI automated captioning solution paired with a LEXI Viewer for the DTG Summit.

For the first time in February 2024, Al-Media was able to unveil groundbreaking data showcasing the superiority of its Al captioning product, LEXI, over traditional human workflows. Not only can LEXI provide accuracy on par with human captioners – but at a fraction of the cost. This milestone further solidifies Al-Media's position as the foremost Al technology leader in live and recorded captioning workflow solutions. To their credit, DTG recognised the opportunity and supported the proposed LEXI solution, and planning commenced.



## Solution

Al-Media used the simple and efficient preparation and execution strategy required to ensure the success of the LEXI / LEXI Viewer solution at the DTG Summit.

# **Easy Setup**

The technical setup for the event using the LEXI + LEXI viewer combination is straightforward.

- The LEXI Viewer caption decoder is connected to the video input via SDI video or XLR audio only input.
- 2. A LEXI instance is created for the event
- A display mode is selected from the 4 modes available with LEXI Viewer. In this instance DTG chose to use the Full Screen Mode for caption display at the DTG Summit.
- Start and stop live LEXI automatic captions with the click of button – either using the remote control or a button on the front panel of the LEXI Viewer.

# LEXI + LEXI Viewer = Winning Combination For Live Events

Effortlessly display captions at live events with the powerful combination of LEXI and LEXI Viewer. Powered by AI, LEXI offers unmatched accuracy and advanced features that rival human captions, all at a fraction of the cost. It seamlessly integrates with LEXI Viewer, the premier HD-SDI captioning device for event presentations.

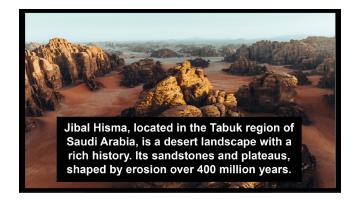
This combination ensures captions are clear and easy to read, while keeping your video content fully visible. With four display options to choose from, you can select the mode that best suits your needs. Plus, access our Al-powered LEXI automatic captions with a single click.

# **LEXI Viewer Display Modes**

### **Full Screen Mode**

- >>It's a pleasure to meet you both. You've built a remarkable home here.
- >>Thank you.
- >>The architectural style of this house is incredible. Could you tell us about the design?
- >>It's inspired by the Scandinavian longhouse style. That was the look we aimed for.
- >>I love the color scheme and the overall design. Everything about it is exceptional. I particularly appreciate the choice of materials.
- >>I'm glad you noticed. The materials we used, like wood and stone, are traditional to this style, ensuring it not only looks authentic but also feels warm and inviting.

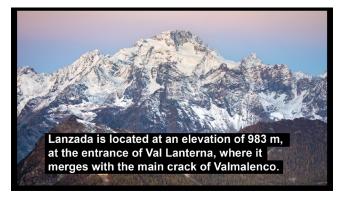
## **Background Image Mode**



#### Scaler Mode

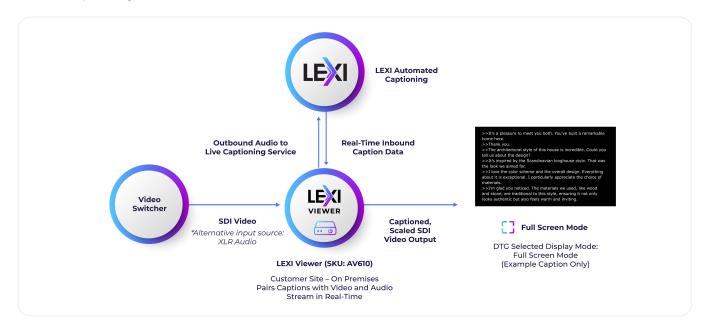


## **Background Image Mode**



# **Live Captioning Workflow**

The live captioning workflow utilised for the event is shown below:



# Simplifying Captioning with Next Gen Solutions

The day before the event, our Tech Sales team collaborated with the venue's AV team to install and connect the LEXI Viewer, ensuring the captions were running smoothly.

To maximize accuracy, our coordination team developed a Topic Model based on the event's website and speaker program, ensuring correct identification of speaker names and key terminology.

The venue was equipped with two screens on either side of the stage, displaying LEXI captions in full-screen mode, enhancing visibility and engagement for all attendees.

Additionally, Al-Media set up an exhibition stand outside the auditorium, complete with a microphone, screen, and LEXI Viewer. This allowed delegates to interact with and experience the LEXI solution firsthand, demonstrating its capabilities in real-time.

# What Is A Topic Model?

A Topic Model is a specialized framework used to improve the accuracy and relevance of automated captions by analyzing and understanding the specific context, vocabulary, and key topics related to an event.

## It typically involves:

- Context Analysis: Reviewing event materials such as websites, agendas, and speaker bios to identify common themes, jargon, and key phrases.
- Vocabulary Enhancement: Incorporating names, industry-specific terminology, and frequently used words to ensure they are correctly recognized and transcribed.
- Customization: Tailoring the captioning algorithm to prioritize and accurately render important information relevant to the event.
- Continuous Learning: Updating the model with new data and feedback to improve future captioning accuracy.



## **Results**

Throughout the day, Al-Media delivered 6.25 hours of high-quality captioning, receiving numerous compliments regarding the accuracy and reliability of the captions. The LEXI system operated autonomously, eliminating the need for constant monitoring and management, which is typically required with human captioners. This efficiency saved considerable behind-the-scenes effort, allowing the team to focus on other critical event tasks.

Feedback from DTG's leadership and attendees was overwhelmingly positive:



My faith in Al-generated captions has been restored.

Will Parsons

DTG Summit - Marketing Director

I was keeping an eye on the captioning on the day and it was spot on...

Alexia Sciplino

Head of Member Engagement

& Development

During his closing speech, Richard Lindsay-Davies, CEO of DTG, acknowledged the exceptional quality of the captions, highlighting the success and reliability of the LEXI Viewer. He praised the seamless integration and the positive impact it had on the event's overall experience.

## **Key Outcomes**



### STATE OF THE ART WORKFLOW

Efficient captioning workflow designed to deliver best in class results and be easy to implement



### **SUPERB CAPTIONS**

High quality, reliable and high accuracy captions



### **INCREASED EFFICIENCY**

Autonomous operation – no need for constant monitoring



### **ELEVATED EVENT**

Increased engagement and accessibility of the event

## Conclusion

Al-Media's implementation of the LEXI Viewer at the DTG Summit not only restored confidence in automated captions but also showcased the potential of Al-powered captioning in enhancing event accessibility and engagement. The seamless operation and high accuracy of the captions reflected the advancements in Al technology, aligning perfectly with the Summit's theme of exploring the future of Al.

This successful deployment underscores
Al-Media's commitment to innovation and
excellence in live event captioning and
DTG's commitment to providing an accessible
and engaging event.





### **ABOUT THE DTG**

The Digital Television Group (DTG) is an independent Research and Technology Organisation (RTO) established by industry in 1995. For more than 25 years it has been central to driving digital TV innovation in the UK. From driving the digital TV switchover to making interactive TV happen, rolling out on-demand TV, and introducing HDTV and UHD TV.

DTG works with the best of industry on the future of television – embracing the convergence of content and networks to efficiently deliver video to all screens, across all devices, in all formats.

DTG delivers evidence-based technical research, demonstrators, trials and test-bed projects in the fields of digital television, digital switchover, spectrum coexistence, 5G broadcast, streaming and IP switchover for government and Ofcom.

Their working groups bring together members from all the critical sectors in digital media technology to work closely with our expert technical teams on the burning issues and horizon scanning. This includes publishing the D-Book each year, the universally deployed technical design and test requirements of UK digital terrestrial television distribution and reception.

For more information visit the **DTG website** 

