TBS NEWS

TBS
Japan | 2020

Google
News Initiative

Innovation
Funding

TBS develops a virtual newscaster to more efficiently create digital video content and reach younger audiences

Tokyo Broadcasting System (TBS) Television, inc. was established in 1955 and is the core company of the TBS Group. It delivers news 24 hours a day through broadcast and online channels, including a full range of TBS News-branded social media.

OPPORTUNITY

TBS wanted to increase its output of native digital video news clips in a cost-effective way so it could better reach young news audiences. It saw an opportunity to develop an automated news reading system with a virtual newscaster so digital video production would be more efficient.

APPROACH

To create more digital-first video news content, TBS improved the technology behind its virtual newscaster, IRASUTO (a prototype of which was launched on the brand's owned and operated media in 2018), and developed a new automated voice system to create audio content.

Developing an automated voice system: An internal TBS team leveraged existing technologies to develop a voice synthesis system, which was designed to complement the virtual newscaster, IRASUTO (a CG figure used in lieu of a live presenter). Previously, a TBS reporter would record the audio for the CG presenter. But the new system uses automation to convert text-based news into audio, and then automatically compile and edit associated video content. Because the audio is based on real-life TBS presenters' voices, it sounds natural.

Redefining workflows: Prior to this project, workflows relied on many human resources. For example, the editor curated news content suited to IRASUTO's facial expression range, audio was recorded by a live newscaster, video content was combined with text to produce subtitles, then the completed video was checked by a different editor before being uploaded to YouTube. But the new system involves one journalist, who edits the news video, uses the automated voice system to add commentary (although, for very important stories they still use a person to read the script), then publishes it. The process is cost effective and significantly decreases production time.

Enhancing the user experience: The team also developed a cue sheet system called "Q!". This system uses voice synthesis data to grasp timing at the phoneme level — it adjusts to convey voice expressions and pauses. Even non-specialists can operate the program, greatly increasing the number of people who can perform editing. "Q!" also quickly converts news scripts into subtitles, and has greatly enhanced the user experience in sound-free environments, contributing to an increase in audience numbers.

Looking to the future: The TBS team would like the new automated system to be used not only by digital specialists but by all reporters, thereby deepening the potential for synergy with news and technology. The team would also like to develop entirely original news programs that feature the IRASUTO virtual newscaster.

IRASUTO virtual newscaster

RESULTS

Since using its updated virtual newscaster technology TBS has been able to **better engage young audiences**. Specifically, the brand has seen a large increase in the percentage of views by women in their 20s and 30s on the TBS YouTube and social media accounts.

LEARNINGS

Resist the uncanny valley: People can find it unsettling when visual simulations too closely resemble humans, but aren't totally realistic. TBS suggests that, when developing a virtual newscaster, it works better to develop a two-dimensional character with which audiences can easily connect, rather than to pursue realism.

Waste not, want not: If you create something that doesn't end up being published on your channel, look for other platforms where it might fit better. TBS created some stories that it wasn't able to broadcast on its YouTube channel for a variety of reasons. However, using subtitles, voice synthesis, and virtual newscasters, it was possible to leverage this unused content and present it on social media.

> **We want to reduce the burden on reporters, announcers, and other broadcast professionals working in the studio and on location.**