It's Showtime!

Innovation explodes across every workflow as technology emerges from the pandemic.

Where are you in this accelerated evolution?

DIVERSITY & INCLUSION
In the office, behind the camera, and on the screen, diversity is crucial

SECURITY
Remote productions create new security concerns, with assets under siege

SMART CONTENT
Artificial intelligence and machine learning are being applied in new, exciting ways

NEW WORKFLOWS
The cloud is delivering on its promise, powering the future of productions

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ADVANCING COMMUNICATION-ENABLING TECHNOLOGIES

The pandemic has proven it's not just the deaf and hard-of-hearing who need accessible solutions

ABSTRACT: As our lives were constrained in the physical space due to the pandemic, communication became increasingly digital. The need for accessibility in these live, virtual settings has never been greater. Language technologies, such as speech recognition and machine translation, enable more connections worldwide, offering equal participation for everyone.

By Juan Mario Agudelo, VP, Broadcast, Media, AppTek

Among its many impacts, the pandemic disrupted communication for all of us. To compensate, we adopted new daily routines, and the new modus operandi for service, educational and medical industries is online or hybrid, with many companies having made the switch to the cloud permanently. Even the very fabric of our society has changed and will continue to change and adapt to modern conditions for the foreseeable future.

The new rules of the game have forced us to find new ways to communicate and coexist with other members of our local communities, including our families, friends, work colleagues, and special interest groups. A lot of this communication now happens in virtual settings in support of much-needed personal connections, or to serve core business functions that were once relegated to the conference call, or the conference room meeting space.

It's said that technology democratizes society, and if we're to learn anything from this global crisis that has, often bitterly, consumed so much time from our

personal and professional lives, it's that we must find solutions and create positive outcomes to the new problems that have sprung up as a result of this condition.

One of the main things that became apparent during the crisis is the need for increased support in place of the visual cues we'd grown accustomed to throughout our lives. As virtual workflows and workspaces were rapidly forced upon everyone, tools were needed to facilitate online communication, and help counterbalance the negative effects of isolation, which include fatigue and the inability to focus for extended periods of time.

The rapid onset of the pandemic forced society to adapt. Development and rollout of accessibility tools in the market were pushed forward rapidly, with most major conferencing platforms now offering in-house or third-party live captioning capabilities within a year of the first lockdown announcement.

Live captions boost both engagement and accessibility. These tools are meant to help remote workers, be it to maintain a record of the many virtual conversations they've had, serve as a study guide, or to better communicate in a language other than their mother tongue. More importantly, they lower the bar of accessibility so that deaf and hard-of-hearing (HOH) individuals are able to benefit. Today, the number of deaf and HOH people worldwide is estimated to be larger than the Unites States, while in the U.S. alone more than 35,000,000 people (13 percent of the population) reports some degree of hearing trouble.

Application programming interface (API) integrations allow for multiple speech-to-text outputs in online conferencing platforms. One can now book professional captioners to provide live captioning with a short delay during a Zoom call. And in settings where professional, live captioning services are not available, or the quality requirement is less crucial, automated solutions are also available. The benefit of AI-enabled streaming automatic speech recognition (ASR) technology for captioning lies in its ability to quickly scale to meet the growing need in instances where people-managed captioning services are not available, while also offering large cost efficiencies.

The quality of the ASR technology powering the captioned text is critical, with key components being the accuracy of the transcription for a given language (including managing regional accents and dialects, as well as custom terminology); the speed (or latency) of when a word is spoken to the time it appears on screen; and its ability to identify speaker changes for a given meeting.

One of the solutions in the market today is SyncWords Live Powered by AppTek, which offers

> **TODAY, THERE'S NO EXCUSE** for a lack of accessibility or inclusivity, because it's not just the deaf and hard-of-hearing that need accessible solutions anymore.

users the possibility to add live captions to their meetings or conference calls via a professional captioner or ASR output. Now you can make conference calls with your team simply. Nobody has to worry about taking time with searchable captions made available after the meeting via transcript, in case you missed a point in a conversation or wanted to review it further. You can order automated ASR captions minutes before your meeting starts, or if you have time and some leeway in your budget, you can schedule your meeting in advance via the SyncWords platform, with the help of a professional captioner.

SyncWords Live Powered by AppTek also integrates machine translation (MT) technology, to automatically translation your captions in as many languages as the setting requires, thus truly offering a personalized experience to your meeting participants. The platform offers a unique enterprise experience, allowing for oversight of accounts and monitoring of hours. It's rights-managed, customizable, and captions can be launched within a minute of scheduling an event.

Today, there's no excuse for a lack of accessibility or inclusivity, because it's not just the deaf and hard-of-hearing who need accessible solutions anymore. We all do. As our lives have become more constrained within the physical space, communication is becoming increasingly digital.

ASR and MT technologies are becoming the enabler in the dawn of a fully online and connected society. ⊞

Juan Mario Agudelo is VP of broadcast and media at AppTek. With more than 13 years of experience as a sales and marketing executive helping pioneer the closed captioning and space, he has actively participated in an industry that has quickly moved from steno, to re-speak, to ASR. juan@apptek.com @apptek_mclean

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