



CCSBS SURVEY 2025

TIMED TEXT

ACROSS MEDIA & ENTERTAINMENT



About this survey

This survey was developed by the CCSUBS forum to better understand the state and sentiment of the media and entertainment industry when it comes to timed text (captions, subtitles, forced narrative, etc.).

17 individuals responded to the survey, which was conducted online during the summer of 2025. The respondents self-identified as professionals from across the media and entertainment industry, with job responsibilities covering

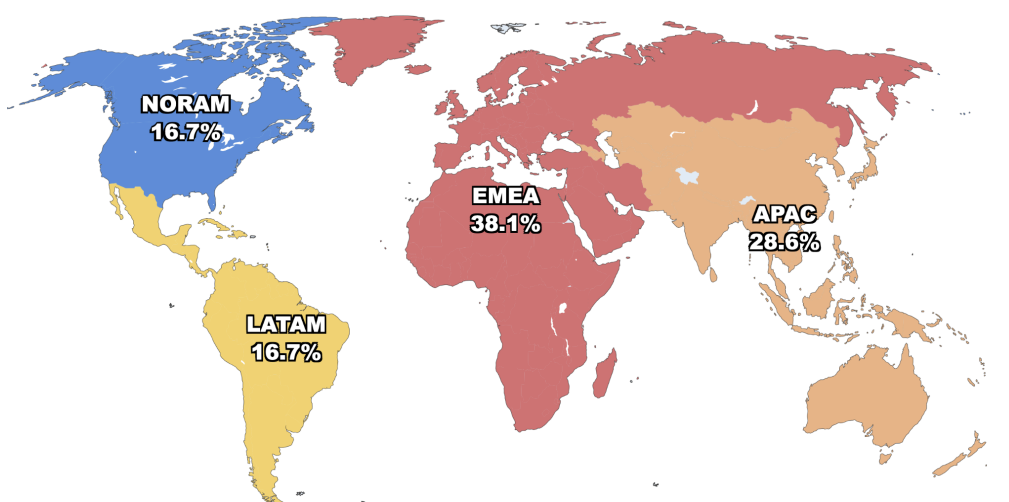
leadership (director of engineering, product managers, etc.) as well as individual contributor roles (software developer, subtitler, etc.).

Respondent Organization Types



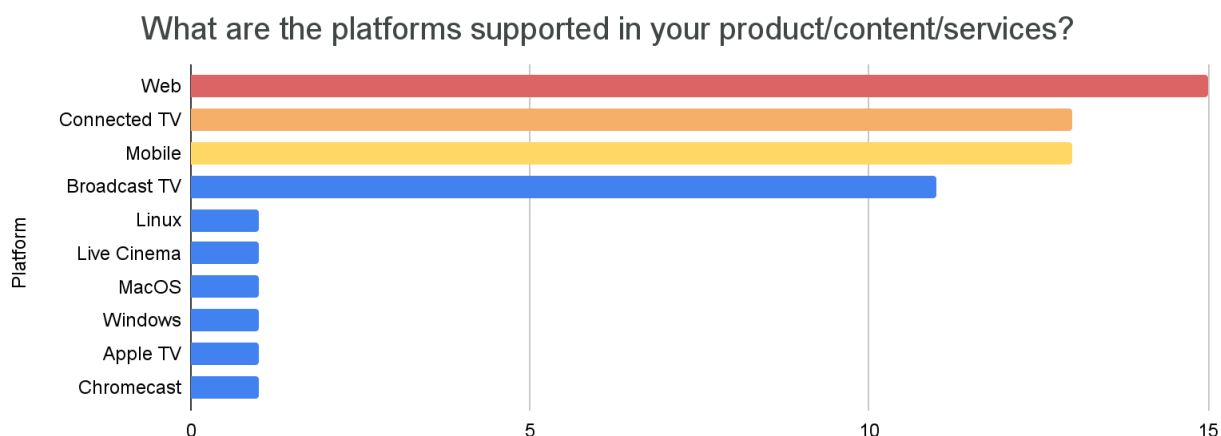
- Service provider
- Content producer
- Content distributor
- Public service broadcaster
- QC & Correction automation tool
- Subtitle/Ad/Dubbing software supplier

The respondents reported operating in all regions of the world, with a majority in EMEA.



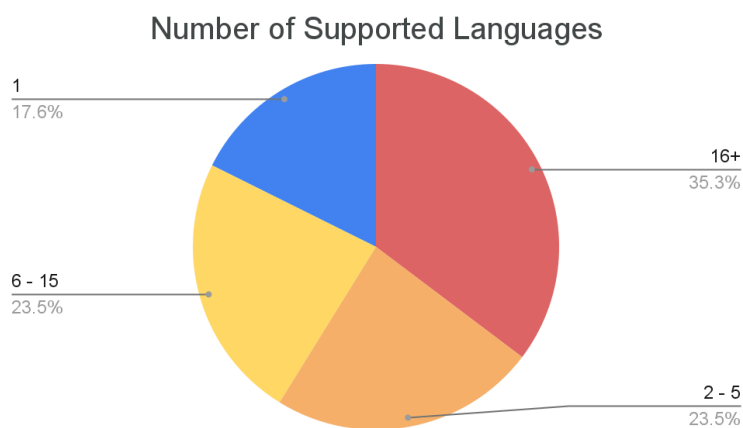
Platform coverage

Taken together, the respondents' operations target a wide range of platforms, from traditional Broadcast TV to Live Cinema.



Language coverage

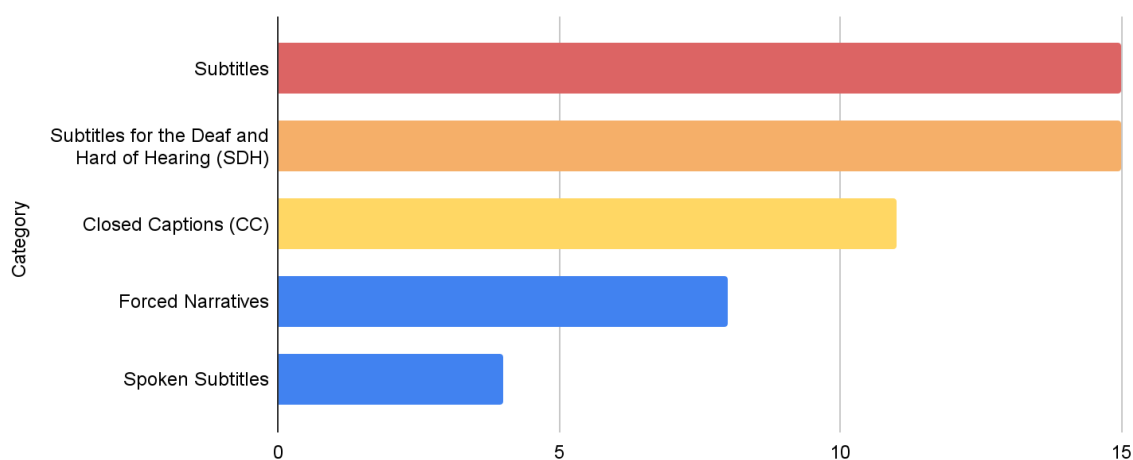
While a few respondents indicated that their products/content/services focused on a single language, the majority supported more than one language. These languages covered a wide range of scripts, including latin, cyrillic, arabic, indic, and chinese. In the case of latin-based languages, they also included regional variants, including en-US, en-GB and en-AU for English; es-MX and es-ES for Spanish; pt-BR for Portuguese; or fr-FR for French.



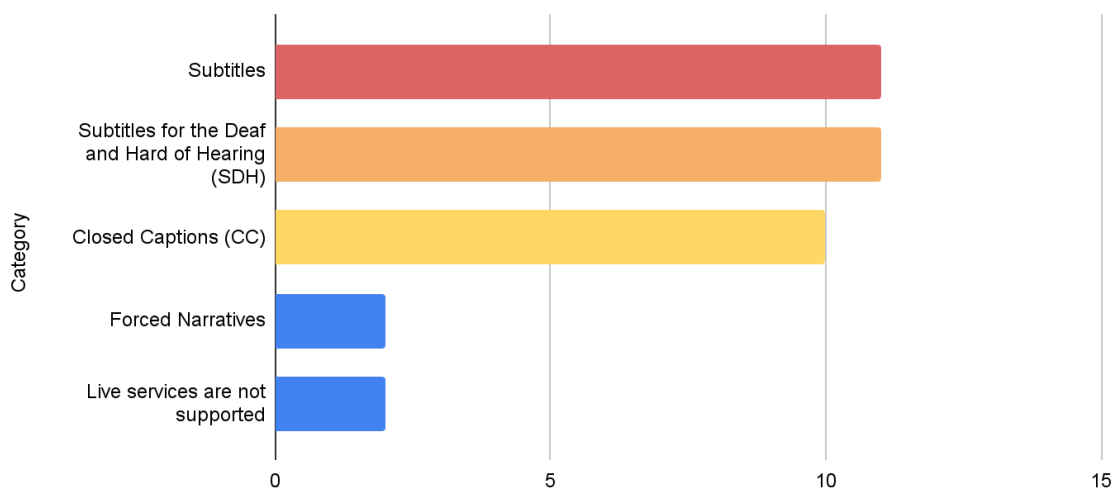
Live & on-demand services

The vast majority of respondents reported support for both on-demand and live services, with a small minority reporting support for on-demand services only. While closed captions, subtitles, SDH and forced narrative timed text were reported to be supported in both on-demand and live services, spoken subtitles were mentioned only in the context of on-demand services.

In On-Demand cases, do your products/content/services provide the following subtitle/caption categories?



In Live cases, do your products/content/services provide the following subtitle/caption categories?

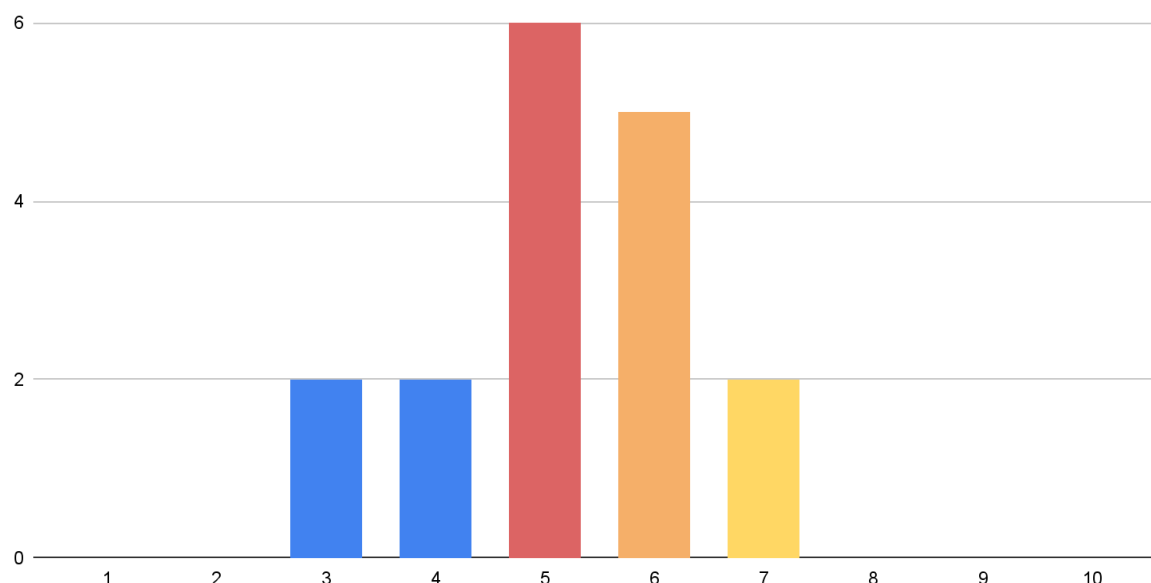


Satisfaction report and future opportunities

The respondents' satisfaction with the state of the ecosystem was middling, with dissatisfaction originating from both technical and non-technical challenges:

- **Non-technical challenges.** Four general categories were highlighted: varying expectations around quality; operational and scaling issues; cost and affordability; and industry acceptance of captions beyond the regulatory requirements.
- **Technical challenges.** Issues around formats, language support, legacy support, compatibility and standardization were generally reported. For example, respondents cited the lack of good TTML examples; challenges with achieving consistent rendering and presentation; and, specifically in the case of live services, challenges around synchronization.

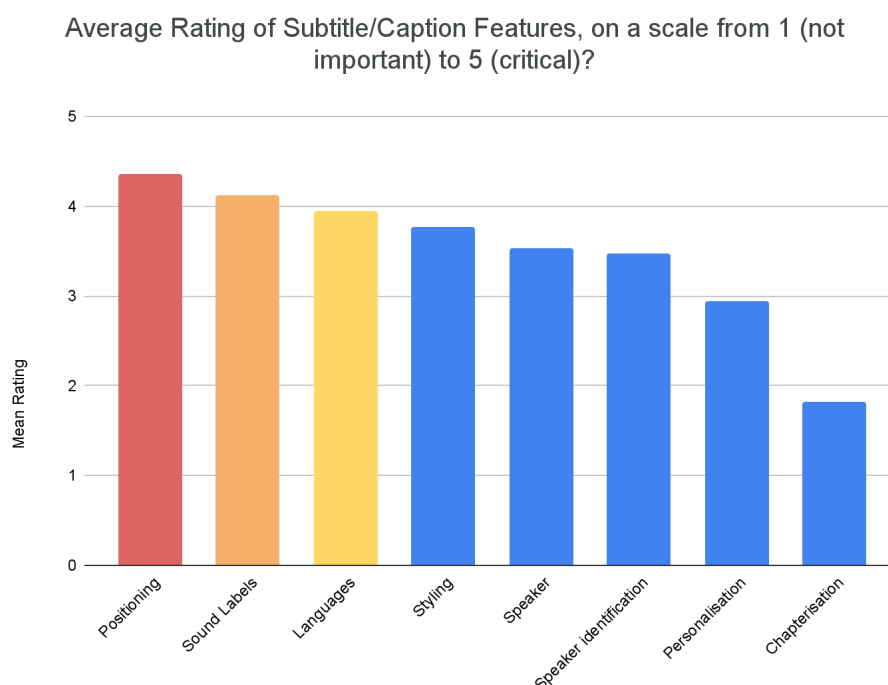
How satisfied are you with the state of the industry around captions and subtitles, on a scale from 1 (very dissatisfied) to 10 (very satisfied)?



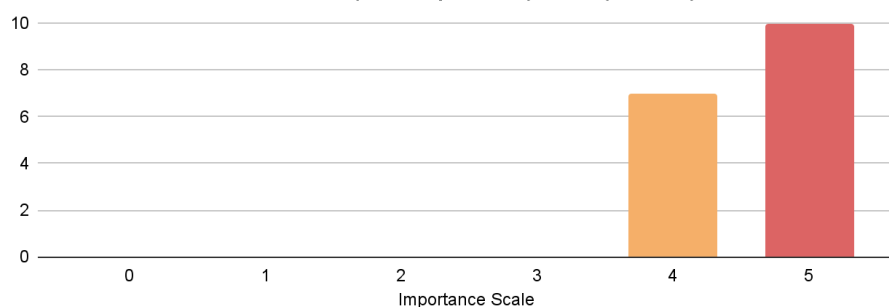
Respondents nevertheless saw opportunities ahead, with a growing market and the transition to AI production, which promises to address the ever-increasing volume of content and diversity of languages without compromising consumer quality and authoring costs. Technically, the respondents see an opportunity to standardize on a single format around IMSC.

Technical feature desirability

The respondents were asked to rate the relative importance of a selection of technical features. On the one hand of the spectrum, low-latency emerged as the most important feature, especially in the context of live services, followed by text positioning, in the context of both live and on-demand services. On the other hand of the spectrum, chapterization was identified as the least important feature.

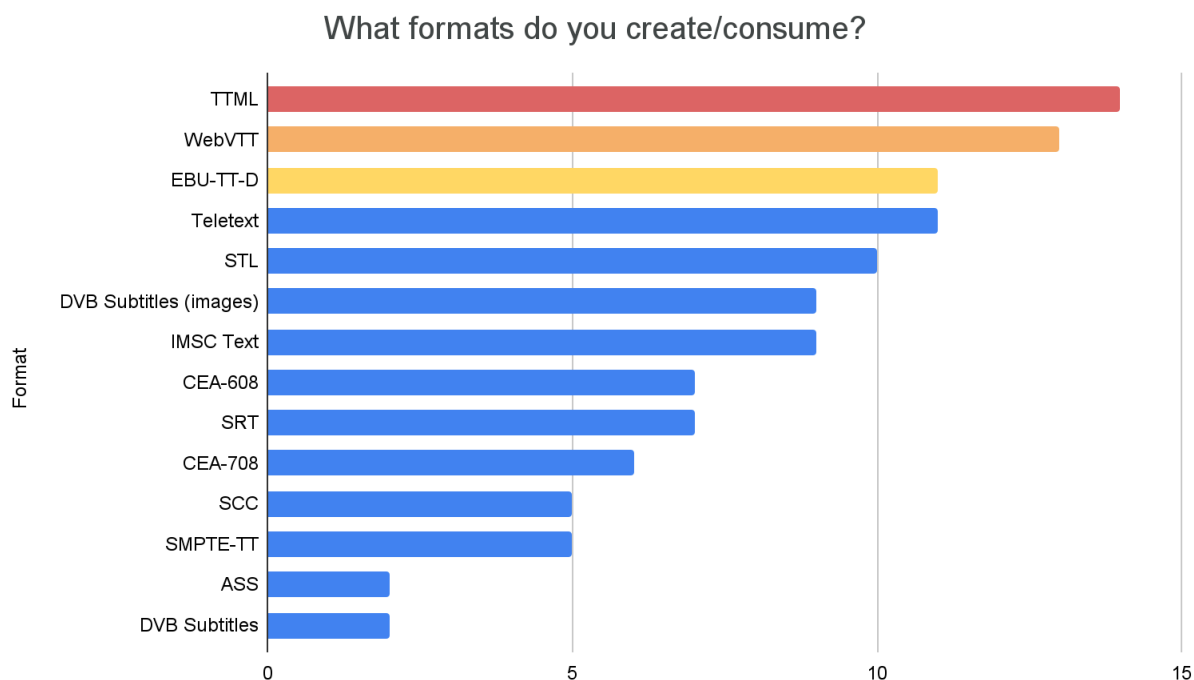


For Live cases, how important do you consider caption latency compared to the audio/video in your product/services/equipment, on a scale from 1 (not important) to 5 (critical)?



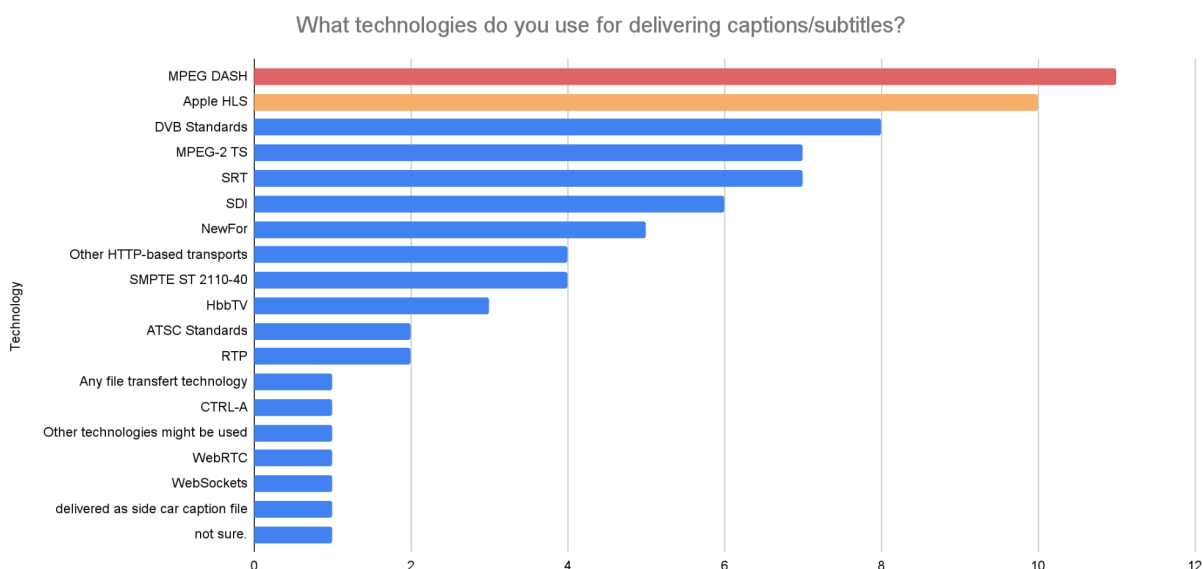
Format Adoption

Respondents reported support for both legacy formats (e.g. CEA-608/CEA-708, SCC, DVB Subtitles) as well as more modern formats (variants of TTML such as IMSC, SMPTE-TT; or WebVTT). Some formats, such as SSA or ASS, had only niche support. For brevity, the chart below omits formats mentioned by only one respondent.



Delivery Methods

The survey highlighted a wide diversity in the mechanisms used to deliver timed text, with several alternatives for both emission (DASH, HLS, DVB, etc.) as well as contribution (SDI, SRT, etc.). Note that, in the case of SMPTE ST 2110, support for Ancillary (ANC) Data (SMPTE ST 2110-40) was reported, but not for TTML transport (SMPTE ST 2110-43).



About CCSUBS

CCSUBS is an open forum that brings together technical stakeholders from the video streaming ecosystem to bring great end-to-end captions and subtitles experiences worldwide based on existing industry standards. More info at <https://www.ccsubs.org>.