

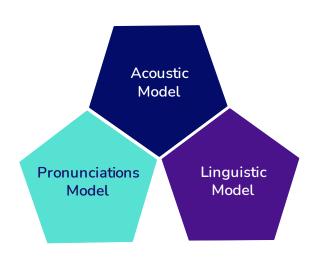
# **VITAC's Automatic Speech Recognition**

VITAC clients benefit from ordering captions and transcripts produced via a mature Automatic Speech Recognition (ASR) system with advanced capabilities. VITAC's ASR provides adaptable, affordable captioning and transcription technology, which in return ensures a reliable and consistent viewing experience as well as superior transcripts output. Trusting ASR technology is an investment in accessibility, compliance, and long-term growth for any industry.



## **Understanding Automatic Speech Recognition**

ASR solutions model the acoustic and linguistic properties of human speech, recognizing acoustic environments, content, and context. VITAC's robust acoustic model is trained to handle various acoustic environments, including background noise and echo. This acoustic model gives the ASR the ability to handle poor audio quality. Our pronunciation model is a series of phonemes and letters which correlate with words. VITAC's linguistic model is responsible for disambiguation and correct recognition of domain and context-specific terms and phrases.



#### **Choosing ASR for your captioning**

Media organizations can take advantage of VITAC's advanced ASR technology to make viewing experiences accessible and engaging for all TV viewers, while also remaining affordable.



Virtual meetings and events



**News and Broadcasting** 



Company gala and award shows



Keynote speakers and TED talks



Hybrid trainings, seminars, and lectures



#### **Key features**

- **Noise:** Our ASR was trained to handle noisy environments.
- **Profanity filters:** Option to censor profanity and offensive language.
- Scale: Solution built for high availability and automatic scaling.
- **Punctuation:** Advanced automatic punctuation and capitalization.
- Accents: Support for common accents and constant additions of new ones based on market adaptations.
- **Speaker change:** Identification of speaker change in real-time. Support for rapid changes and similar voice separation.
- **Homophones:** Distinction between similar sounding words.
- **Models:** Ability to choose between genres when placing an order.
- . Synchronization: Minimal delay and latency.
- Placement: Choose between several placements.
- **Secure:** End-to-end secure data connection.
- **Language:** English (US) in live and multiple other options for post-production content.

### VITAC's accuracy and flexibility promise

With a large transcription operation across the companies of the Verbit group, VITAC is uniquely positioned to provide accuracy, in-depth measurement, and continuous learning. VITAC customers can trust a superior automatic transcription engine with the option to add human preparation and in-session humans to support their preferred programs, events or meetings in live, or to increase accuracy in post-production.

(Add-on) **Human Control** Pro (Add-on) Human Prep **Custom Terminology** Language Models **Trainings Testing** 

Order a "human co-pilot" for control of the live ASR session in real-time

Professional data prep with custom research and preparation for sessions

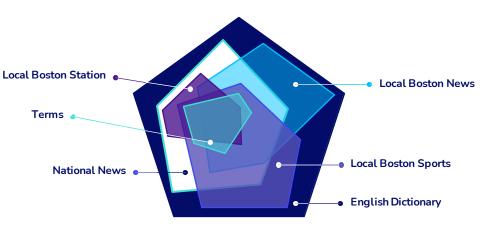
Upload up to 500 terms and other materials to improve ASR accuracy

Continuous training of language domains & dictionaries to improve quality

Random segments of the ASR's transcripts are chosen and sent for correction

Testing via measurements like Word Error Rate (WER), F1 scores and accents In live, the training of the domains is divided into genres and fetches in real-time, where the right terms for your session generate a superior quality output. In post-production, our domains and dictionaries are diverse and built upon a complex data structure designed by industry experts.

Let's take the example of the media vertical with local news stations in Boston, MA, and specifically, a sports program.



VITAC's base product is superior and out of the box because our language models are composed of an English Dictionary, a news domain, a local news domain, a local news and topic domain, the station's relevant terms, preparation for the client account, and is customized with terms for a particular program.

#### Domains are updated on a regular basis

Our professional data-prep team and our live elite teams are human experts. Captioners work 24/7, feeding the ASR with new terms from news content. Through the combined workforce of all companies in the Verbit Group, our knowledge and expertise in the business is unparalleled. VITAC allows businesses to invest in long-term growth using automatic captioning solutions.

### Our packaging is flexible

Customers can choose to use our base ASR product for some projects and add pre-session curation as well as in-session corrections by human experts to boost results, in addition to our world-class elite product of live human captioning. Any curated or boosted services will benefit future orders made within the product as our technology stack is well connected.



#### Learn more about ASR

Whether you use VITAC's base solution or our human-enhanced product, both offer the same level of quality customer support that is synonymous with the Verbit brand and its companies. VITAC' superior automatic captioning is a reliable and built for businesses who believe every word counts. VITAC is committed to supporting an increasingly diverse pool of clients and prospects concerned with meeting accessibility standards for different needs. Contact us to learn more.