eMAM – now powered and driven by AI

Within DAM/MAM environments, using unstructured data when tagging assets, has always made it challenging to search and find relevant content. The increase in supply and demand for video has made it even more challenging to provide vital and searchable metadata to allow individuals to find valued videos as well as meaningful information about what is found on individual frames. The labor-intensive nature of tagging media has strained operational budgets, and far too often, has left media poorly tagged. In today's organizations where video is mission critical, poor tagging limits the usefulness of content.

Machine learning, a type of artificial intelligence (AI), uses inductive reasoning, not model building. The computer is shown a large number of results, only some of which are linked to a positive outcome. The challenge is to find certain conditions that occur more frequently when the outcome is positive. This becomes the first model. With more and more data, the model improves, until the system can uncover certain conditions that are usually associated with the outcome. While the human brain tries to find good rational explanations behind events, computers use brute force computing to find the best correlations. A single processor has very little power, but the incredible storage and processing power available, coupled with training by humans, makes AI incredibly powerful.

Increased computing power and improved technology have led to high profile successes in AI. From voice assistant smart phone apps to smart driving cars, AI has now proven its value. A Narrative Science survey found last year that 38% of enterprises are already using AI, which will grow to 62% by 2018, to automate their semi-sophisticated redundant tasks. IDC estimated that the AI market will grow from $8 billion in 2016 to more than $47 billion in 2020. Leveraging AI, the next wave of IT innovations has the potential to revolutionize our everyday lives.

With recently improved AI models and increased investments in technology and infrastructure, leading solutions are now able to provide meaningful metadata for video content. Organizations now have a range of commercially available systems, which continue to improve over time.

AI inside eMAM

eMAM, one of the leading Media Asset Management software systems, is committed to giving the latest and best tools to its users. With the release of its newest version 5.0, eMAM now directly taps AI to provide metadata. The eMAM web portal uses panels (widgets) so users can build their own workspace, based on their preferences, needs, and system permissions. Some or all of the assets can be tagged by AI. eMAM 5.0 has new insights and transcript widgets to display the results.

Insights widget: AI search results for videos, including people, objects, landmarks, are automatically detected and tagged with an option to train the system.
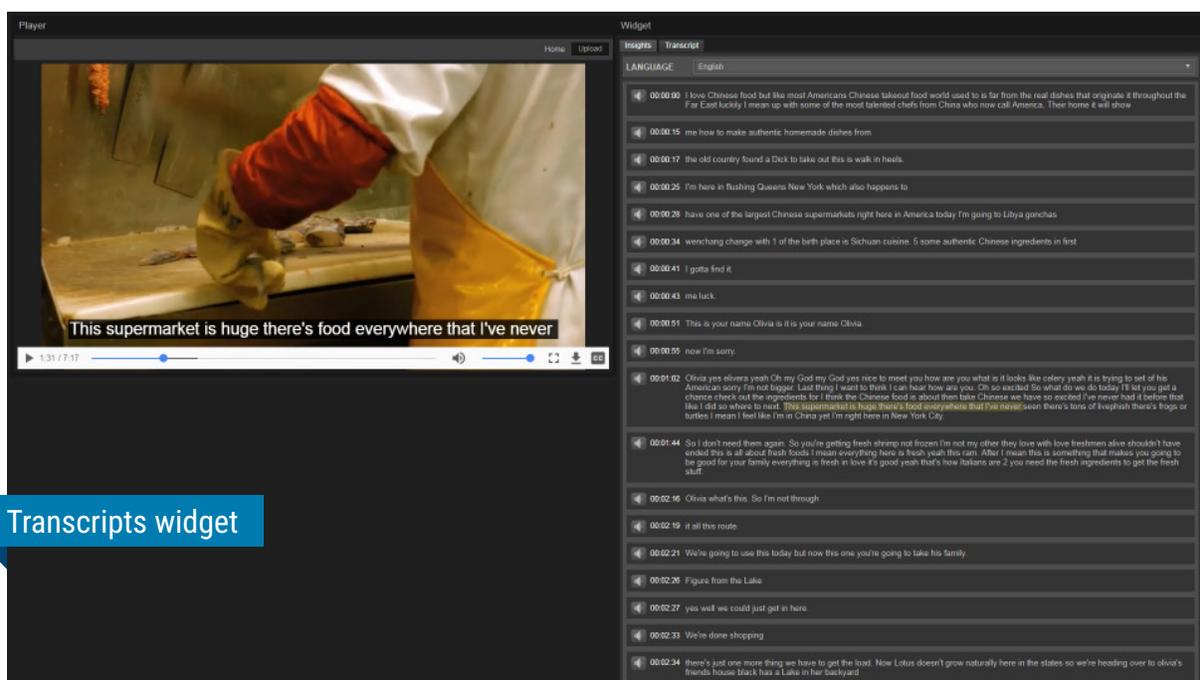
- **Face recognition:** Automatically identifies presence of individuals (including celebrities), based on a video library of known faces and tags

- **Object recognition:** Automatically identifies multiple objects within a video (humans, cars, animals etc.)

- **Logo recognition:** Automatically identifies specific companies based on their logo and brand imagery

- **Language Translation:** Translates text from one language to another

- **Speech Sentiment analysis:** Determines the attitudes, opinions and emotions expressed by the speaker in parts of the video and then labels them into neutral, positive and negative sentiments
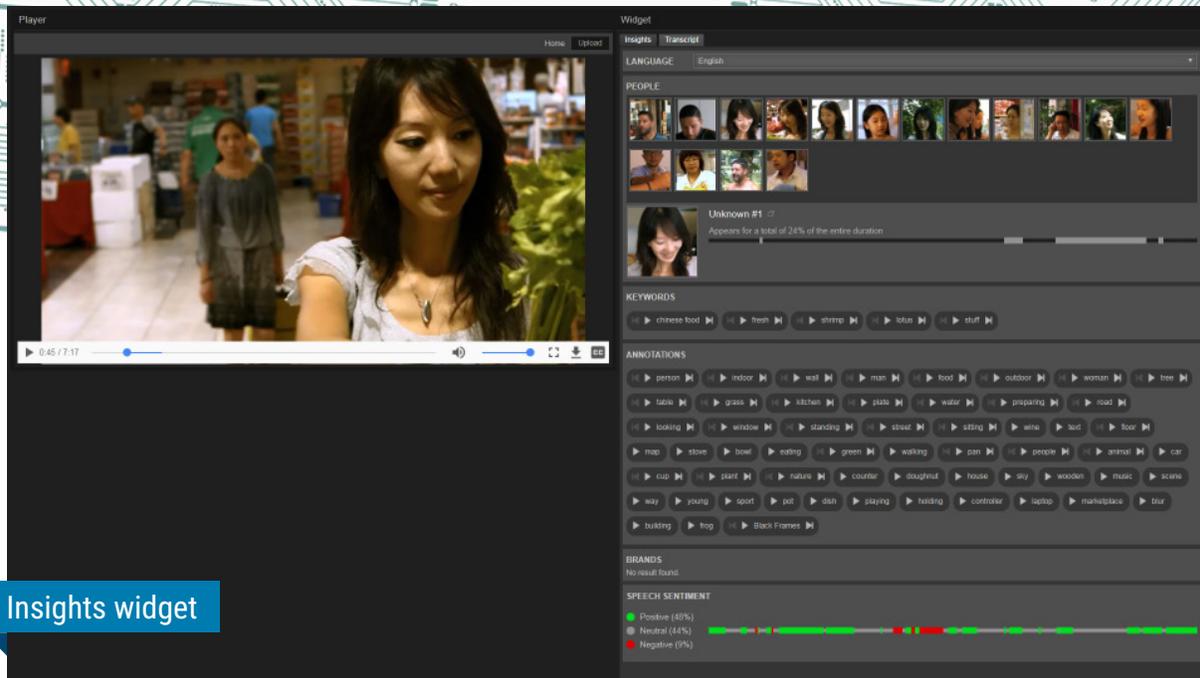
Insights widget

Transcripts widget: Utilizing this widget, words spoken in a video or audio file are extracted as text. Users can also see text and subtitles displayed in frames of the video.

- **Speech-to-text:** Converts spoken words into readable text

- **Visual Text Recognition/OCR:** Recognizes printed or written text characters during the video

- **Language Translation:** Translates texts from one language to another

Transcripts widget