



SENTIO Artificial Intelligence uses machine learning based on targeted human input to identify the most relevant information with unprecedented speed and accuracy. SENTIO delivers a ranked population which allows users the ability to prioritize their review to zero-in on the most relevant information faster than any other tool on the market.

### **The SENTIO Method (CAL)**

SENTIO Continuous Active Learning method is analogous to a music streaming service “choosing” which songs a user will enjoy based on their previous song selections. Users review and tag a small portion of the data set which is used to train SENTIO prediction engine (a mathematical model) to order data from most to least (likely to be) relevant. A model is built for each tag. With each new document tagged, the model becomes more accurate for each tag. After a model reaches a certain quality measure, the model can be applied to the entire data set.

SENTIO sits between Processing and Review in the traditional eDiscovery workflow and relies on the text so it can handle all types of data, including email and office files.

SENTIO can seamlessly integrate additional data on a rolling basis during the training of the model. This is because the SENTIO prediction engine ranks the entire information set together, rather than a limited number of randomly selected documents. New documents added to the population simply join the ongoing ranking process. After the model is set, it can be applied to any additional documents to generate further results.

### **The Traditional Method (TAR)**

In traditional Technology Assisted Review (TAR), a group of documents is manually reviewed and portions of the data are designated as a “Training Set” and an “Evaluation Set.” The Training Set is used to create a model that is then applied to each document in the Evaluation Set. The calculated responsive/non-responsive value is compared to the manually reviewed value to determine Precision, Recall, and F1 scores. This process is often cumbersome and time-consuming and the predicted results are only as good as the randomly Training Set.



## **SENTIO vesus Other Technologies**

SENTIO's CAL method works on-demand. Regardless of the number of documents to review, the number of tags, or the number of reviewers, as soon as a document is classified, SENTIO updates the model. The model is then automatically applied to all documents and returns a new most likely relevant document for the reviewer—all in real-time.

SENTIO uses a classification algorithm combined with a ranking algorithm to provide a more accurate population with less required training. Classification algorithms build a mathematical model which explicitly splits documents into positive/negative with confidence scores. Ranking algorithms order documents by relevance but don't tell you when to stop.

Relativity Assisted Review, "RAR" is based on Content Analyst which is a TAR solution. CAL is better than TAR (see section above).

Brainspace uses Latent Semantic Indexing (LSI) as a concept search or topic clustering tool. This differs from both TAR and CAL in that it is unsupervised learning. TAR and CAL use supervised learning which means they learn from examples and build a mathematical model to identify what is similar from what is not. LSI is a mathematical method used to determine the relationship between terms and concepts in content, looking for synonyms and related terms only. For example, if you searched for "Classic Cars", the engine would expect to find words relating to that subject as well, such as "collectors", "automobile", "car auctions," etc. It is called unsupervised learning because, unlike TAR and CAL's supervised learning, there are no correct answers and there are no examples to compare against. In unsupervised learning, the algorithm is left to its own devices to discover and present related content based on the structure in the data. The clustering algorithm simply groups documents by concepts before a review begins.

Recommind (now owned by OpenText) is a CAL tool, but it operates in batches instead of on-demand. Compared to Recommind, SENTIO has a shorter feedback cycle and uninterrupted review. Reviewers can review continuously without explicitly requesting a new batch.

Catalyst is a CAL tool however its methods are unknown. They have not filed any patents nor published anything about their classification process.



SENTIO Difference	SENTIO Advantage
SENTIO gives you a more accurate population with less training required	The team finds relevant documents more quickly, with fewer total documents to review and the end result is more efficient review
SENTIO requires no manual batching - SENTIO assigns a unique document to each reviewer	Less steps for team, Less potential confusion.
SENTIO works with documents written in many languages ( <i>including English, Spanish, German, Chinese, Japanese, Korean and Russian.</i> ) ... this includes documents that contain different languages within one document.	Flexibility, less reason to use translators before or during review. This also reduces steps in the process and the overall cost of discovery.
SENTIO uses a classification algorithm combined with a ranking algorithm which gives you a more accurate population with less training required.	Faster and more accurate at the same time enabling the review teams to focus their efforts on the most important documents sooner.
SENTIO is able to be deployed as a stand-alone product, behind-your-firewall or integrated into Relativity.	Flexibility, Lower cost and less intrusive. Use SENTIO as you need, without the major capital investment
SENTIO can work as the data population grows over time. New documents can be added at any time and will simply join in the ranking process. If added later after the training is finished, the previously trained model could be applied to the new documents to generate the categorized output.	Flexibility. SENTIO allows you to start sooner and get results faster - even if the all of the data isn't there at the beginning of a matter
SENTIO has ReviewerQC which can measure document review performance by utilizing our CAL models to identify the accuracy and effectiveness of reviewers during a review. ReviewerQC can make an assessment of each of the reviewers by mathematically comparing the reviewers' work to each other, and to the collective, to determine the quality of the reviewers' performance. This can also identify documents that may have been miscoded by reviewers.	More accurate Reviewers means less QC time is required by the legal team. Cut down on mistakes and fix the ones you have before they become catastrophic.
SentioAI determines tagging accuracy using its QC capabilities and provides recommendations for correctly retagging documents and/or changing reviewers. Other CAL tool fail if reviewers are not consistent in their tagging. Only SENTIO can detect when reviewers are doing a bad job.	SentioAI works even if reviewers do a poor job reviewing documents. No other product on the market can do this.