



# Extracting **insights** from unstructured content

Mindwave AI | Beyond imagination

## Mindwave AI: Beyond Imagination

The Mindwave AI Platform consists of a set of algorithms for extracting valuable insights from unstructured content such as news or journal articles, videos, social media, books, and podcasts. It also has a set of multimedia APIs and cognitive services that use the extracted knowledge to power intelligent applications. Mindwave AI tries to understand natural language just as humans do, using a compact but flexible conceptual model for representing knowledge, which is then mapped to a structured data model and then physically instantiated.

All components of Mindwave AI- the conceptual framework, the semantic algorithms, the data model, and the APIs- are 100% proprietary.

Mindwave AI can understand any piece of language, short or long, written or spoken. However, its true value lies in its ability to synthesize a large collection of related documents into meaningful 'knowledge capsules', which are appropriately structured, linked, tagged, classified, indexed, and sorted by relevance.

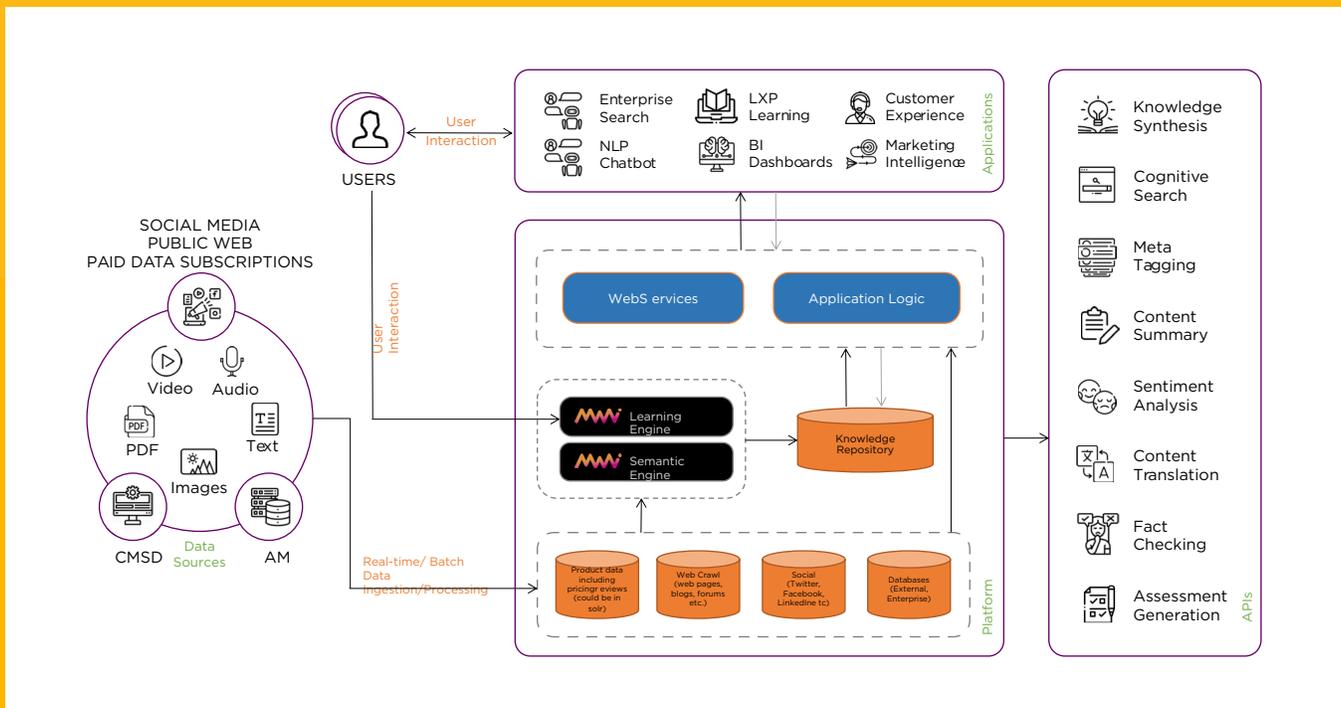
The synthesized knowledge can be perceived as the fusion of a book's 'table of contents', reflecting all the important material in the documents with navigational links and annotations. These navigational links and annotations allow either a sequential perusal of interesting nuggets of information on the topics or a content-driven exploration akin to web browsing sessions. The semantic system, not the human user, bears the cognitive burden of the knowledge-seeking journey.

## Closing the gap between Man and Machine

Artificial intelligence (AI) promises to transform the media industry and impacting everything from content creation to customer experience. Artificial intelligence is tied to machine learning and natural language processing to 'educate' the application to 'think' like a human. Machine learning relies on large data sets and complex 'training' instructions for sentiment analysis and to provide cognitive services. One of the greatest challenges of machine learning is to understand the context of human speech and text to provide suitably robust sentiment analysis and cognitive services.

An important feature of the Mindwave AI platform is the modeling of user sessions as conversational exchange- users learn from the knowledge embodied in the Mindwave applications. The Mindwave platform itself learns from the user's actions, enabling richer and more engaging subsequent sessions for the users. This feature is inherited by all Mindwave applications to improve consumer experience.

### Components of Mindwave AI Platform.



## NEXT-GEN APPLICATIONS OF MINDWAVE AI

Applications built on MindWave use a common set of core modules to ingest data and extract knowledge, but any of the modules can be configured or enhanced with domain-specific metadata such as a specialized dictionary of terms.

The MindWave AI platform offers the following services:

- **Audio/Video Translator:** Extracts a transcript from any audio/video input using artificial intelligence and translates into the desired language
- **Content Tagging:** Extracts and processes the transcript of the input file and labels segments using artificial intelligence for quick access to relevant concepts
- **Content Summarization:** After the extraction of a transcript, semantic understanding is created and stored in knowledge structures, which follow the ranking of statements as per their importance (counts instances of 'keywords' to provide easy access to key topics)
- **Sentiment Analysis:** Categorizes input media under sentiment type (+ve, -ve, or neutral) based on semantic understanding created using artificial intelligence
- **Cognitive Search and Chat:** After processing and analysis of all data using natural language processing, storage of the semantic understanding in knowledge structures is completed, after which search results are then displayed based on relevance as determined by advanced ranking algorithms, making this an intelligent and cognitive search

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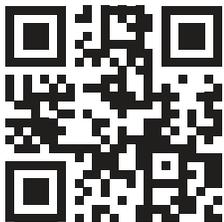
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