

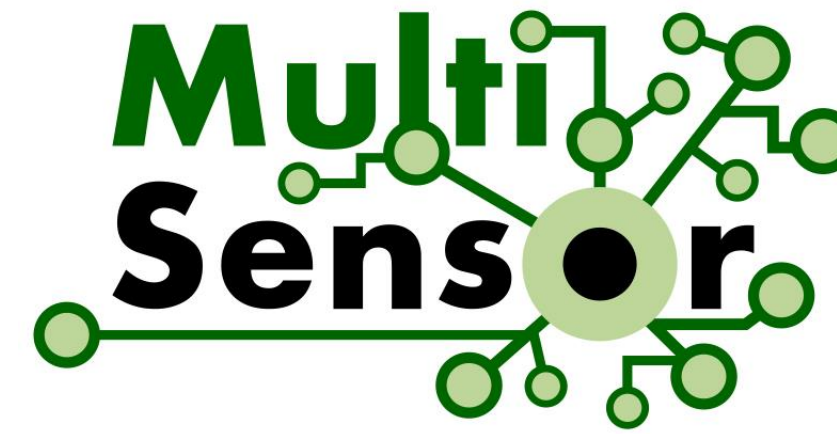


MULTISENSOR

Mining and Understanding of multilingual content for Intelligent Sentiment
Enriched context and Social Oriented interpretation

<http://www.multisensorproject.eu/>

Contacts: Stefanos Vrochidis (stefanos@iti.gr), Ioannis Kompatsiaris (ikom@iti.gr)



Overview

MULTISENSOR envisages:

⇒ Multidimensional Content Integration by considering the following dimensions:

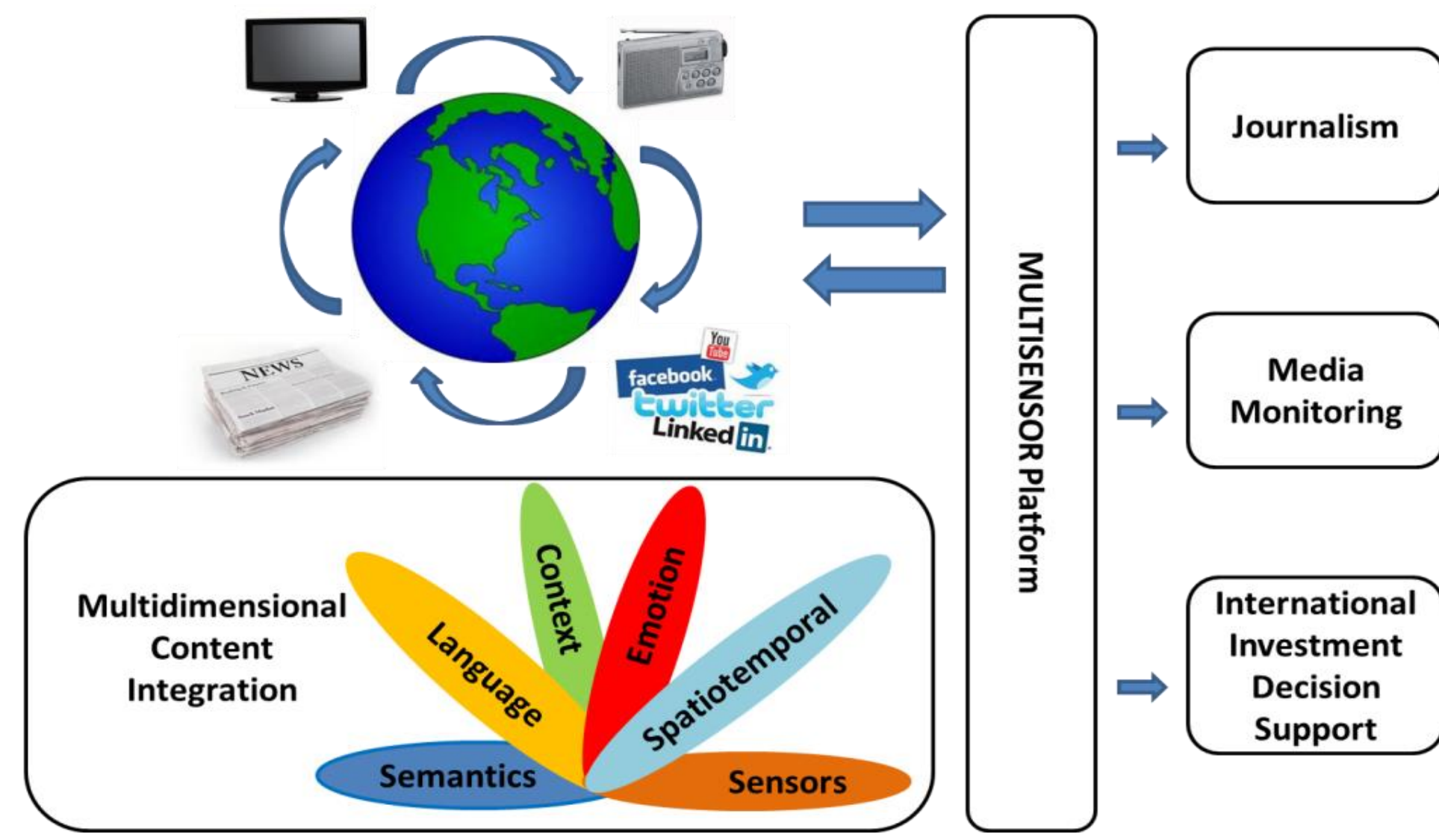
- Language, multimedia, semantics, context, emotion, time & location

⇒ Development of a platform for content integration from several sources

Challenges

⇒ Data are multimodal, unstructured and contain duplicate/complementary information

⇒ Vast amount of user generated content (social media, blogs)



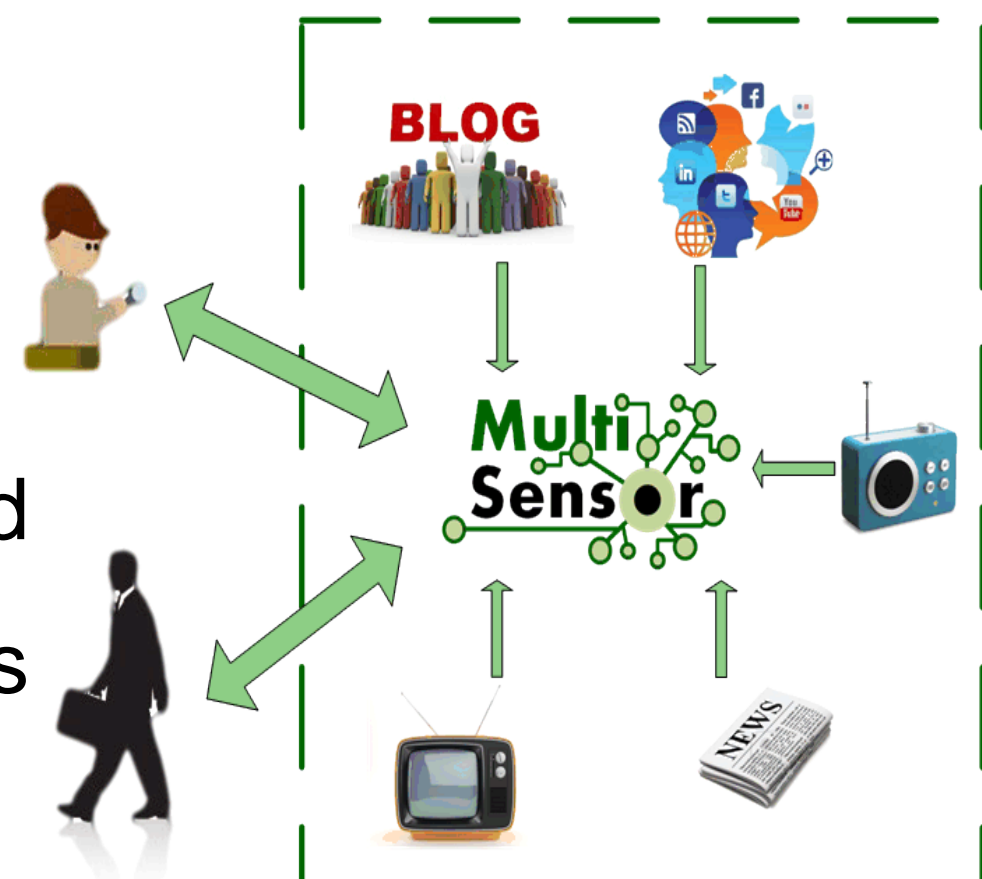
Use Cases

Use Case 1

Users

⇒ Journalists

Support in analysis, retrieval and summarisation of heterogeneous and multilingual information

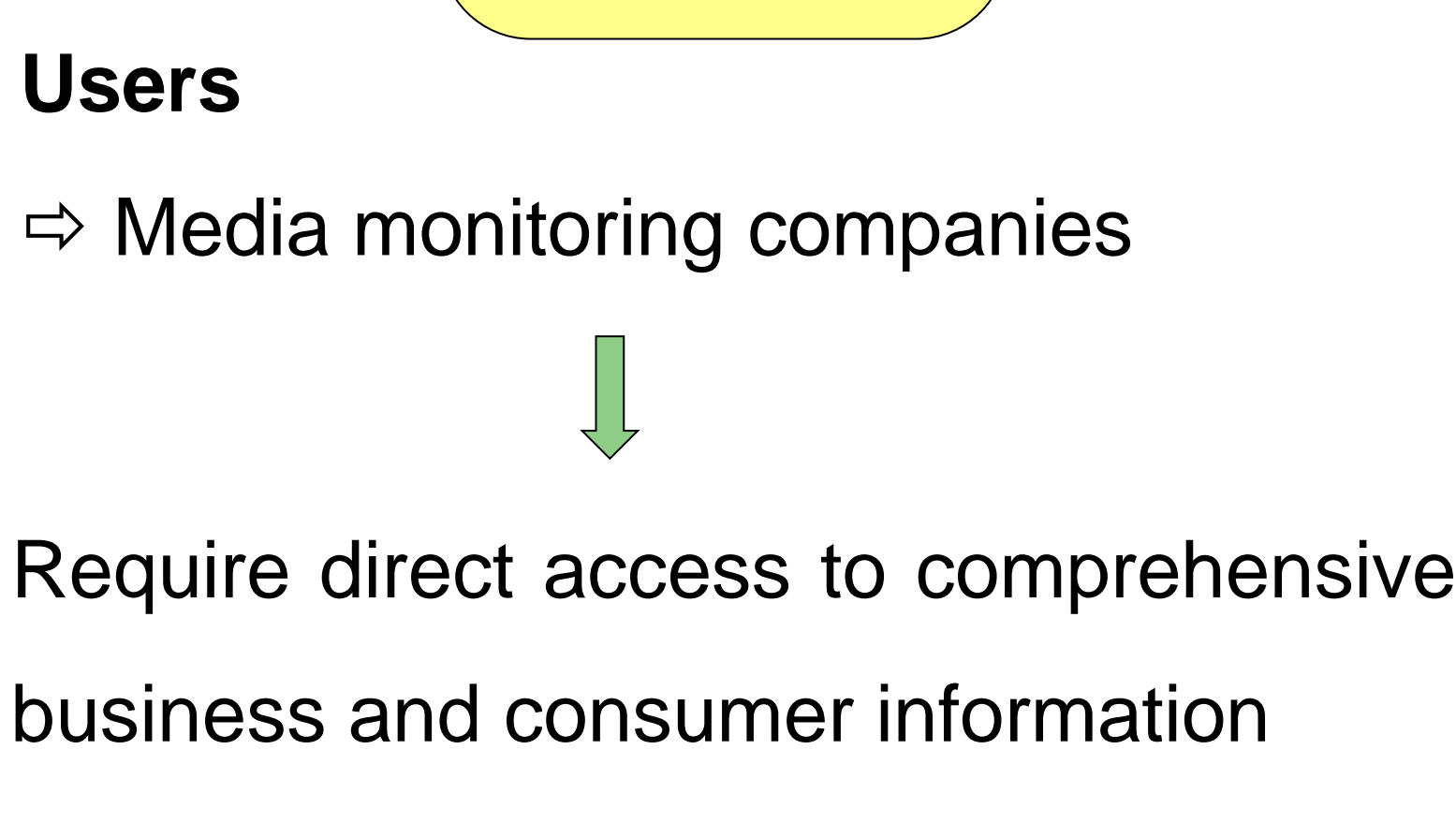


Use Case 2

Users

⇒ Media monitoring companies

Require direct access to comprehensive business and consumer information

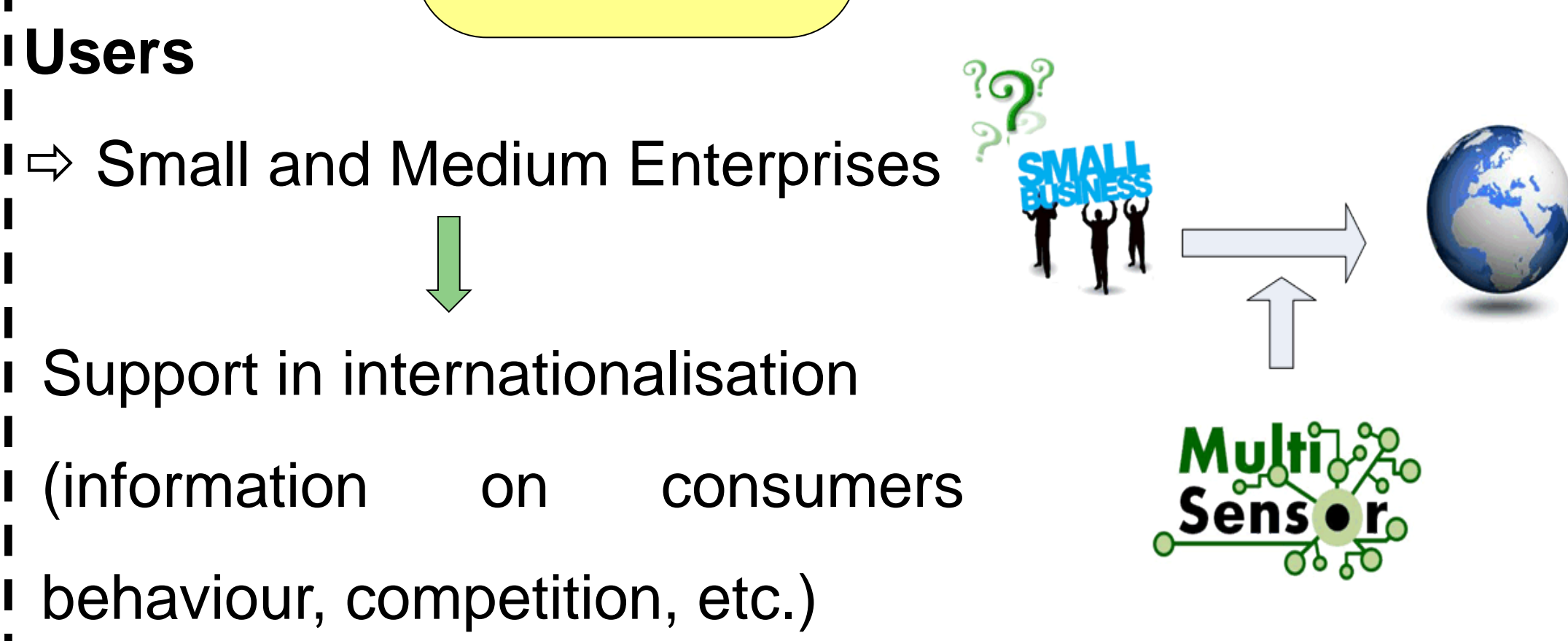


Use Case 3

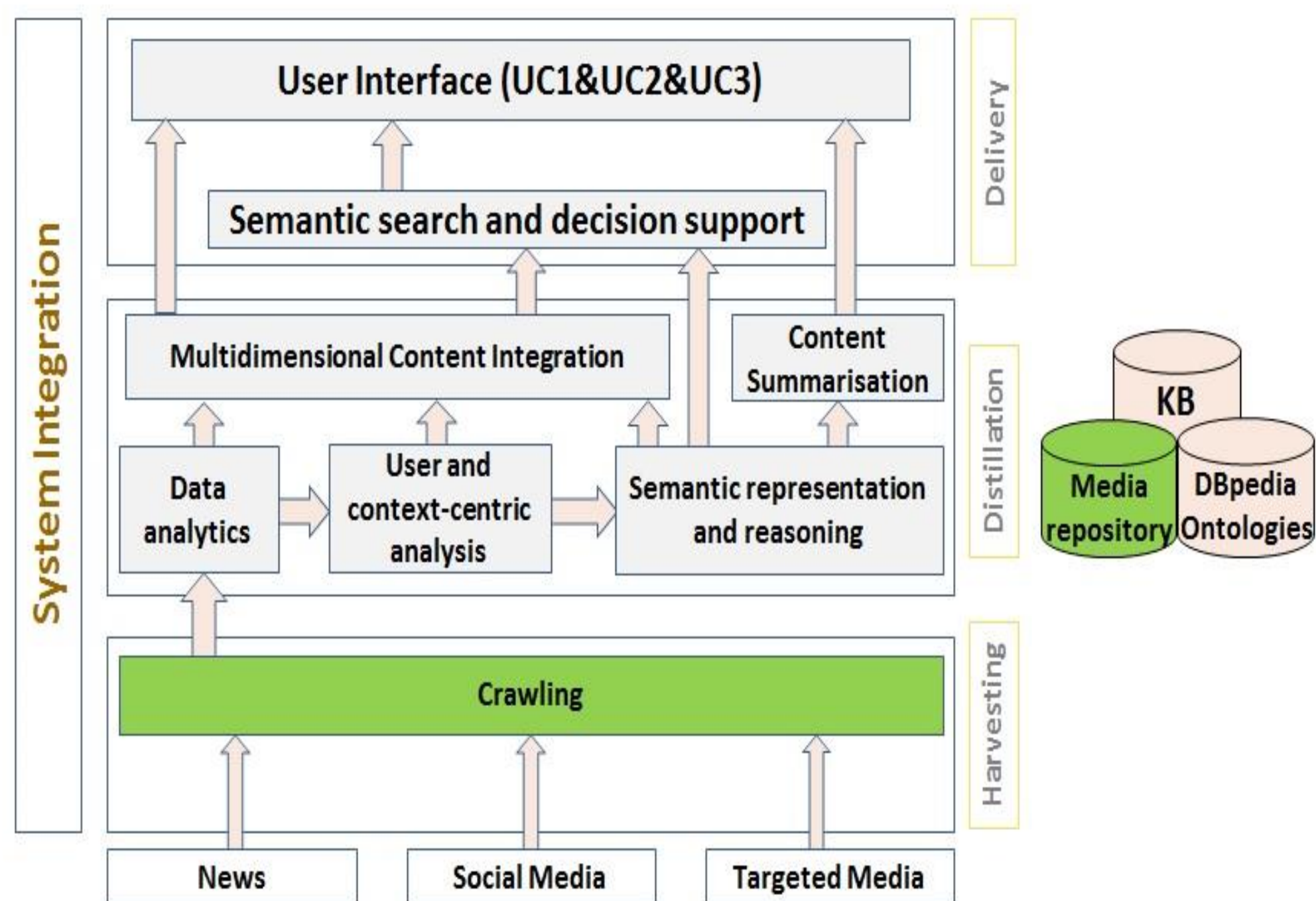
Users

⇒ Small and Medium Enterprises

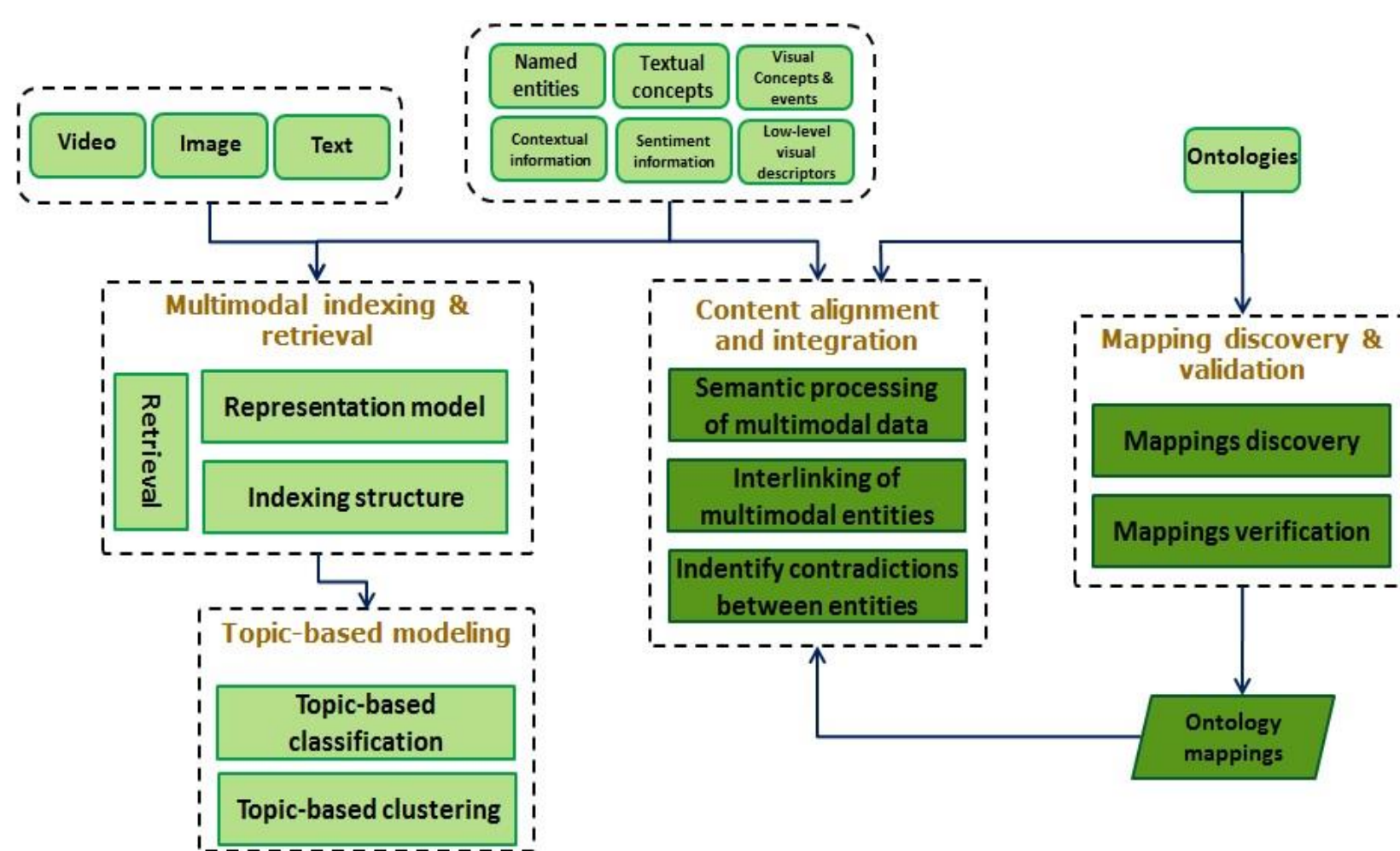
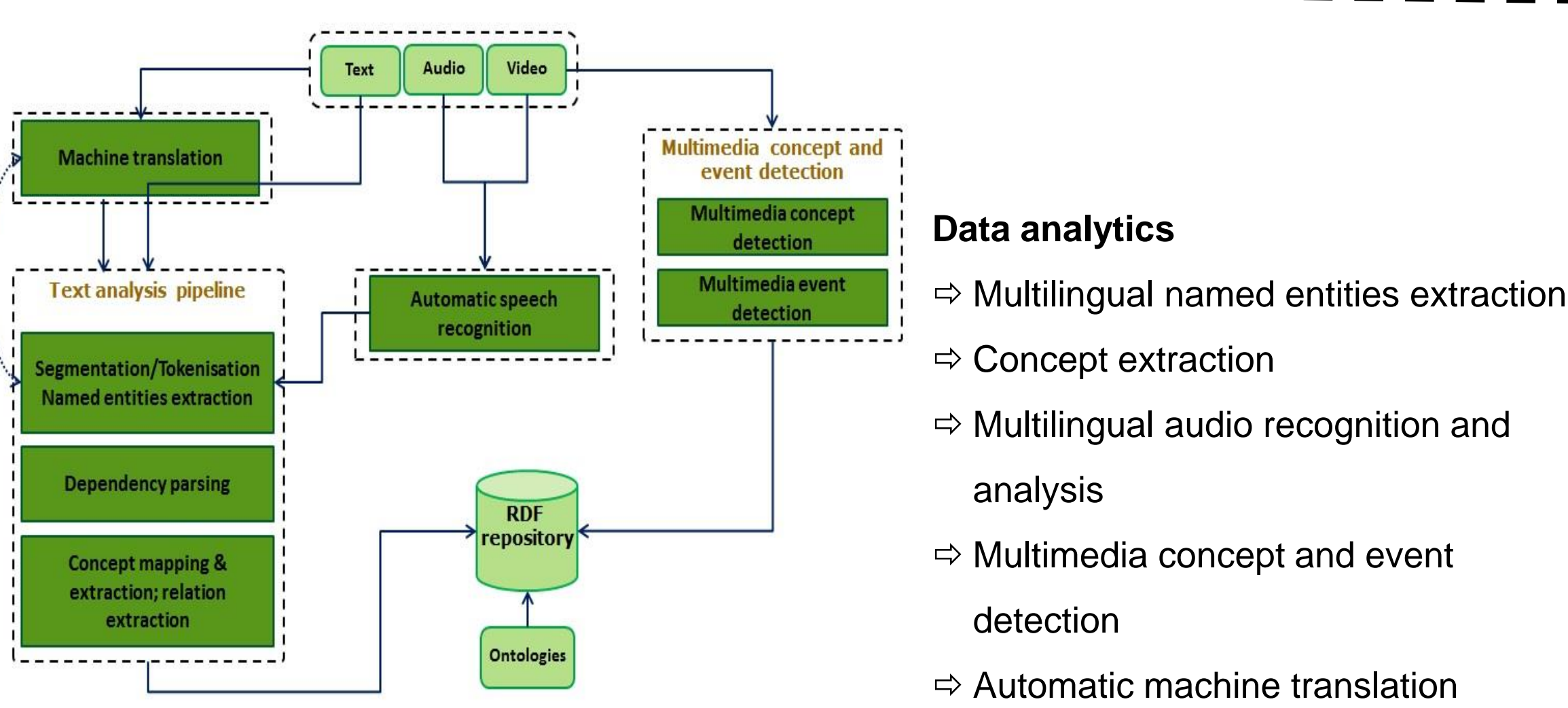
Support in internationalisation (information on consumers behaviour, competition, etc.)



Multimodal data analytics framework

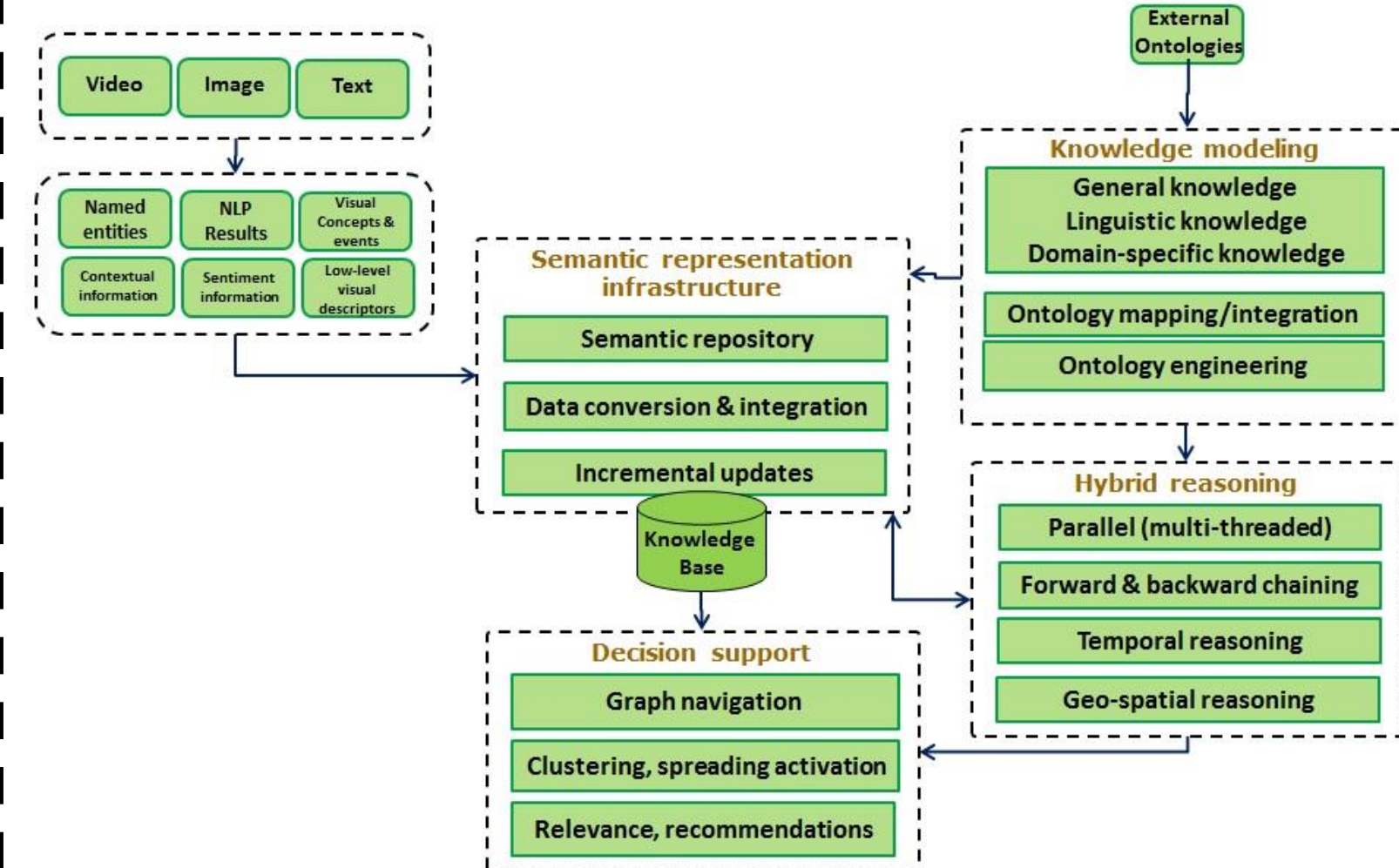


MULTISENSOR framework



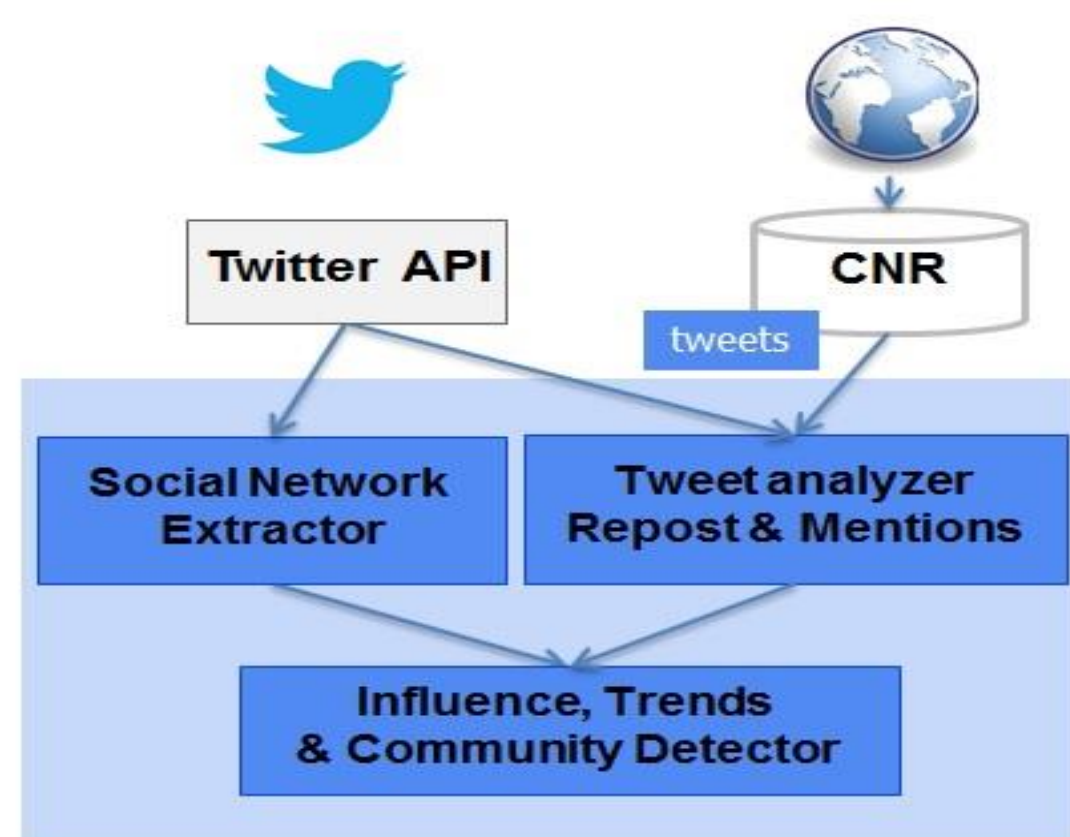
Multidimensional content integration

- ⇒ Multimodal indexing / retrieval
- ⇒ Category-based classification
- ⇒ Topic-event detection



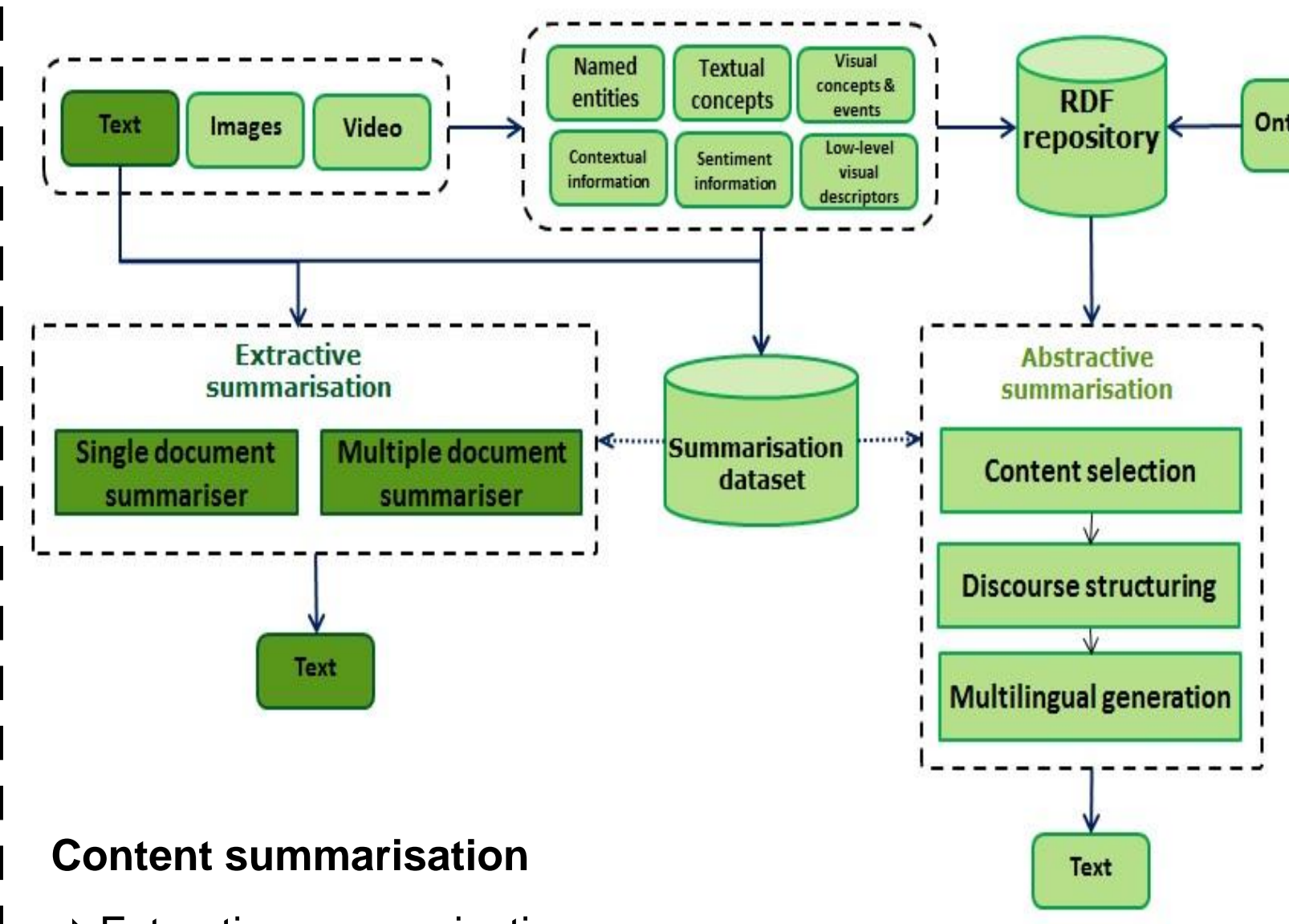
Semantic representation and reasoning

- ⇒ Semantic representation
- ⇒ Ontology / content alignment
- ⇒ Hybrid reasoning and decision support



User and context-centric analysis

- ⇒ Contextual features extraction
- ⇒ Polarity and sentiment extraction
- ⇒ Contributor analysis



Content summarisation

- ⇒ Extractive summarisation
- ⇒ Abstractive summarisation

Impact / Outcome

Impact

- ⇒ Strong participation of private-sector players (mainly SMEs)
- ⇒ Facilitate production of reliable information
- ⇒ Facilitate companies decision for investments in unstable ground
- ⇒ Improve European position in multilingual digital market

Outcome

- ⇒ MULTISENSOR platform
- ⇒ Modules and services for several tasks (machine translation, sentiment extraction, multimodal indexing, decision support, etc.)
- ⇒ Open-source, free and commercial modules

