



From monitoring global media to context-aware recommendation

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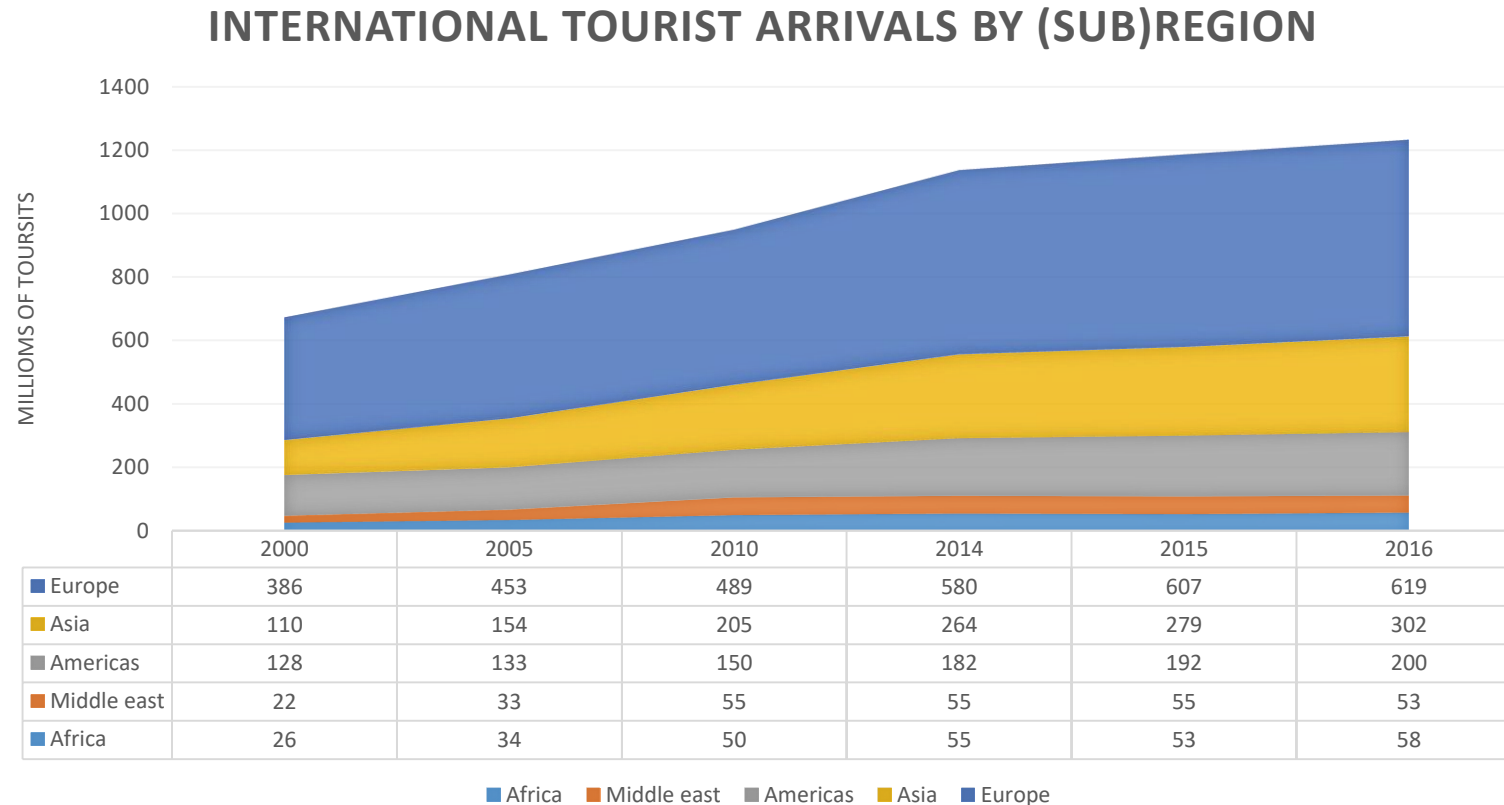
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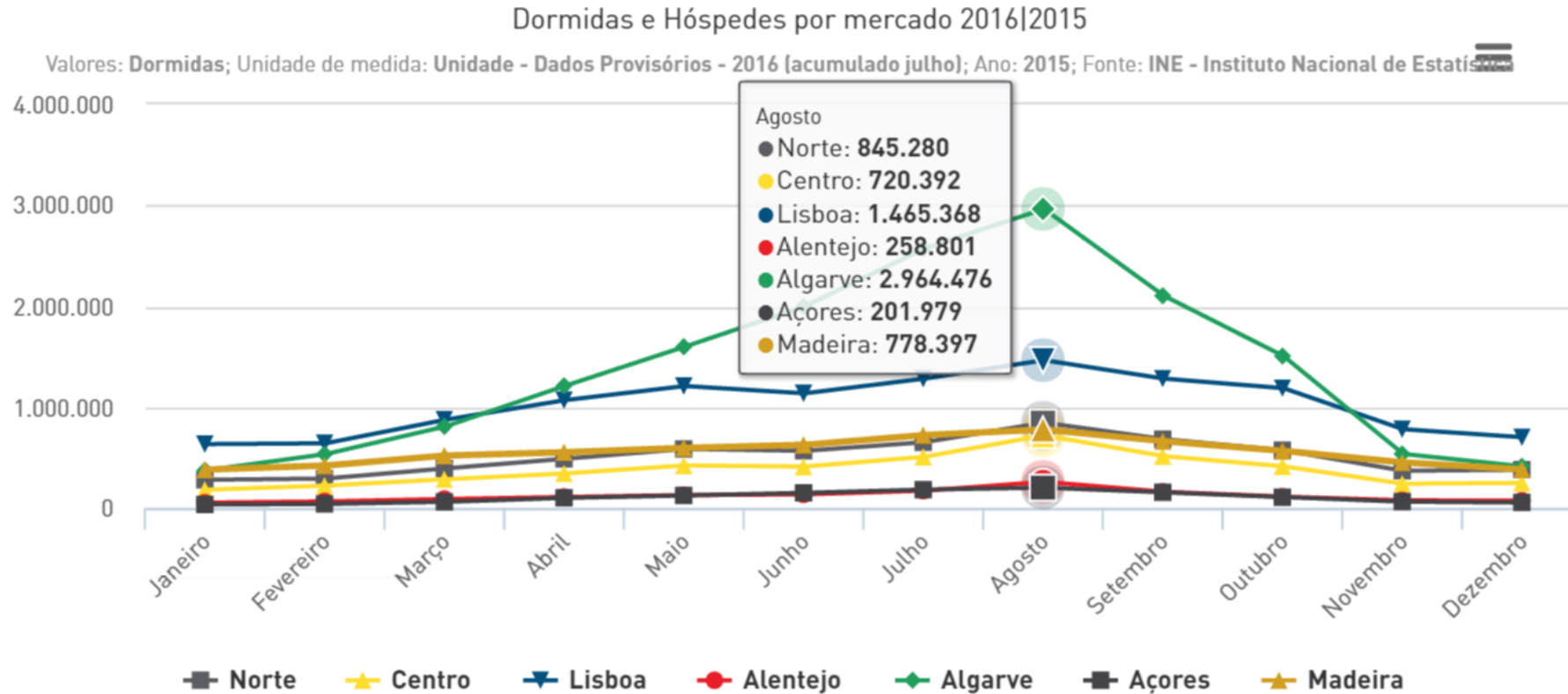
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Worldwide tourist arrivals

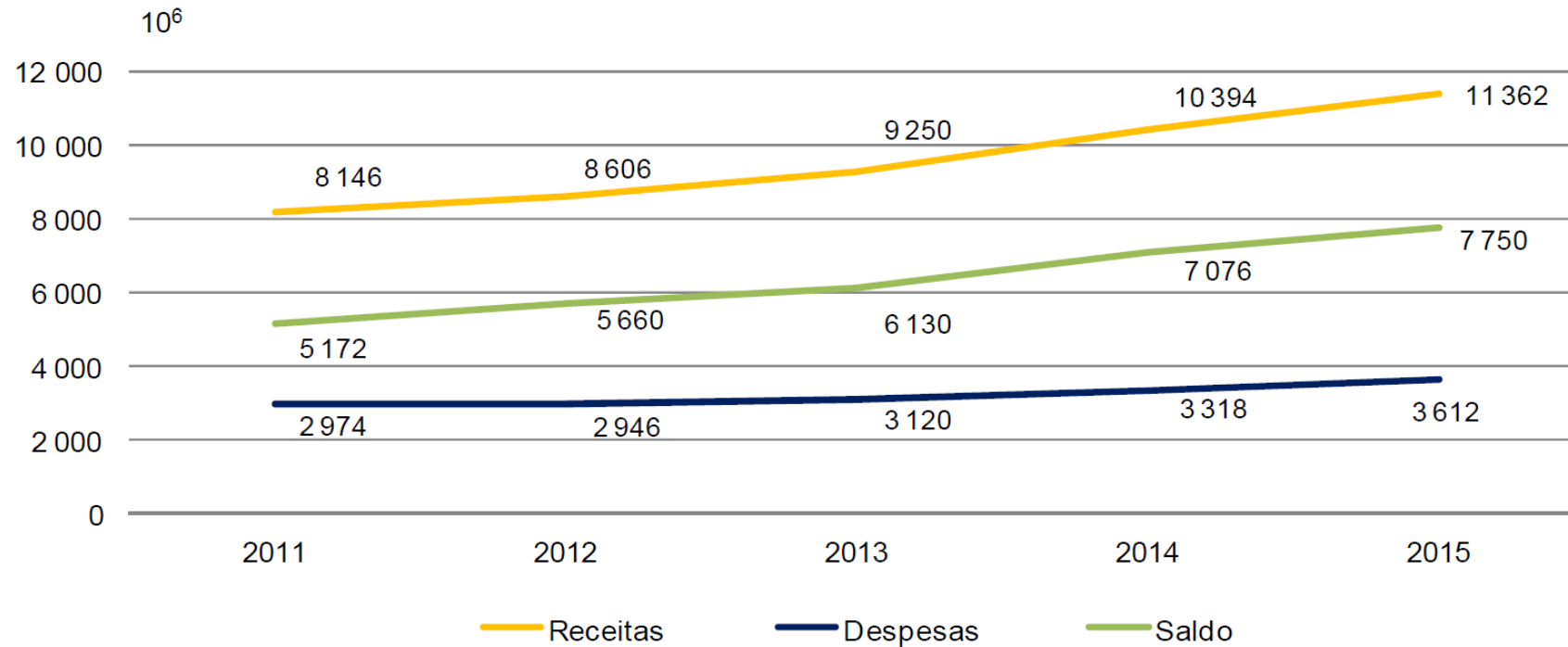


Going Local: Stays (Portugal)



In 2015 there was a total of 9 Million international visitors.

An 11 000 million euros market (Portugal)



Fonte: Banco de Portugal - Maio 2016

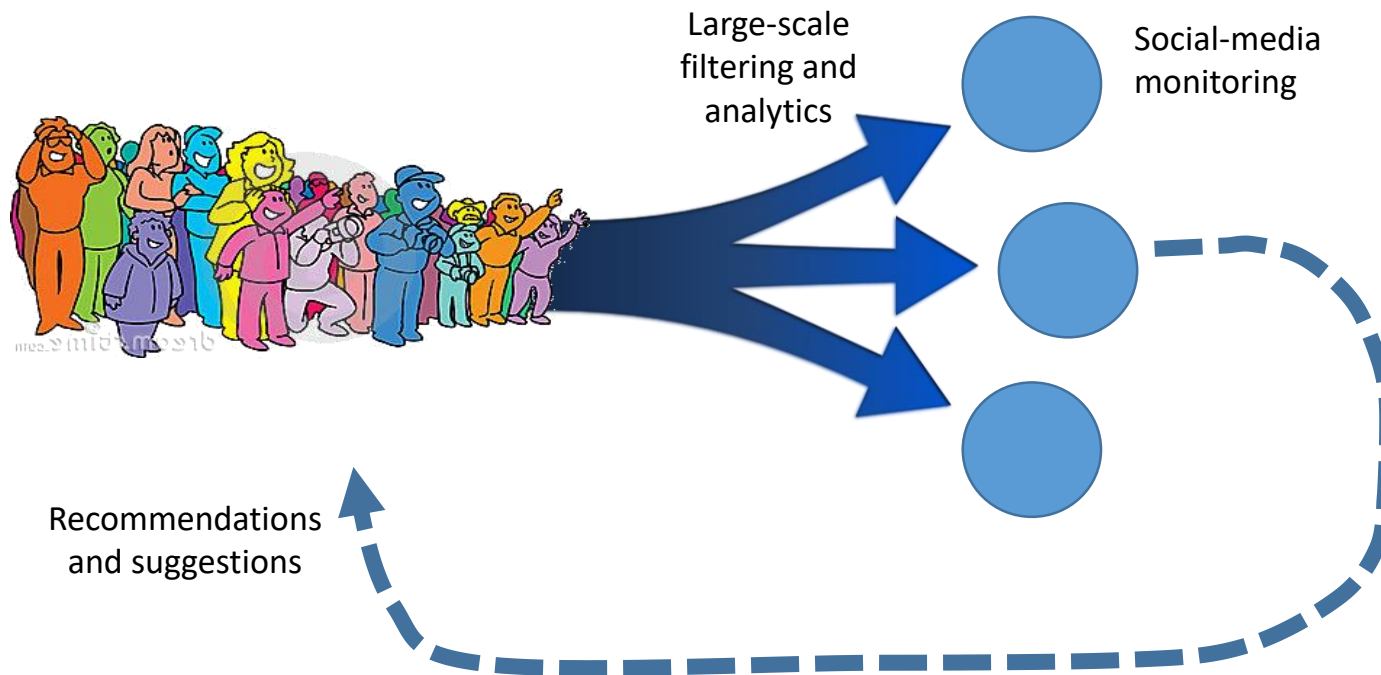
The GoLocal scenario



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GoLocal

The GoLocal step change

- Instead of focusing on the recommendation of the obvious places...
- GoLocal aims to use real-time Big Data information to discover events and compute recommendations on-the-fly to the passing tourist.



Building a tourism data crawler

- Sightseeing places (provided by AlticeLabs)
- Events from Lx Cultural Agenda (City Council)
- Pictures from Instagram and FlickrR about Lisbon
- Crawl from Twitter with Lisbon as seeds



GoLocal – Altice Labs Contribution

- Access to SAPO API
 - information about local events and Lisbon's event agenda
 - a list of points-of-interests for different cities in Portugal
- Roamers-in (tourist) near real time location
 - Signaling traces of RRC (Radio Resource Control) Measurement Reports events
 - Cell Tower Triangulation
 - Around 15 min processing delay
 - GDPR compliance
 - NDA
 - Anonymization



Research questions

- **Big Data Computing Infrastructures:** an evolution of existing Big Data platforms, addressing a series of research problems on providing efficient support for incremental iterative computations over large-scale real-time streams of data.
- **Learning with Big Data:** scalable, online and distributed learning algorithms, requiring only weak supervision signals, that will be fundamental to discover hidden trends in data and to model large-scale problems.
- **Stream Data Filtering and Analytics:** a scalable and distributed architecture for doing filtering, analysis, search, and inference on diverse, high-volume, and real-time information streams.

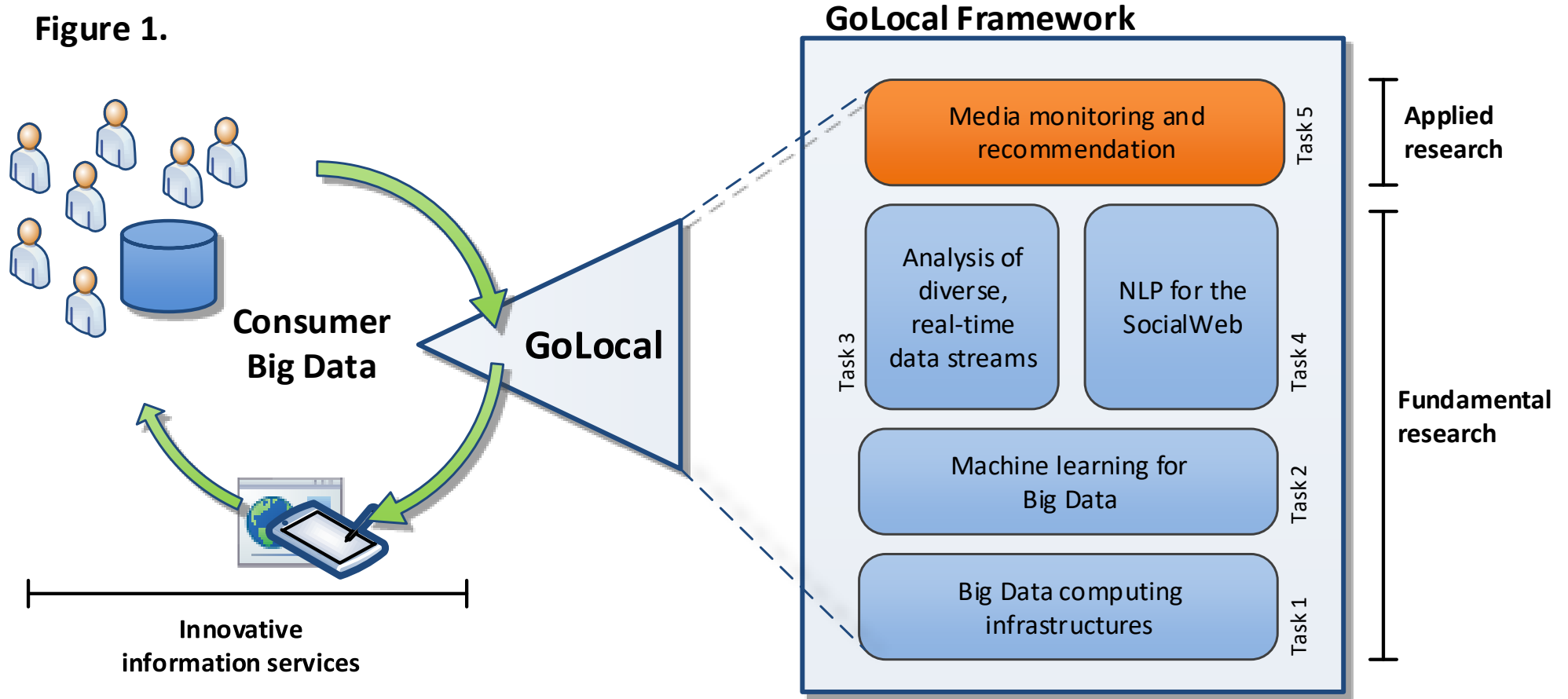
Long-term impact

- Our long-term vision aims at **making Big Data economically useful, by realizing the full potential of large-scale data analysis technologies in the design of innovative services.**
- The major outcome of this project will be an innovative solution to process real-time Big Data, together with **applications in tourism analytics.**



GoLocal framework

Figure 1.



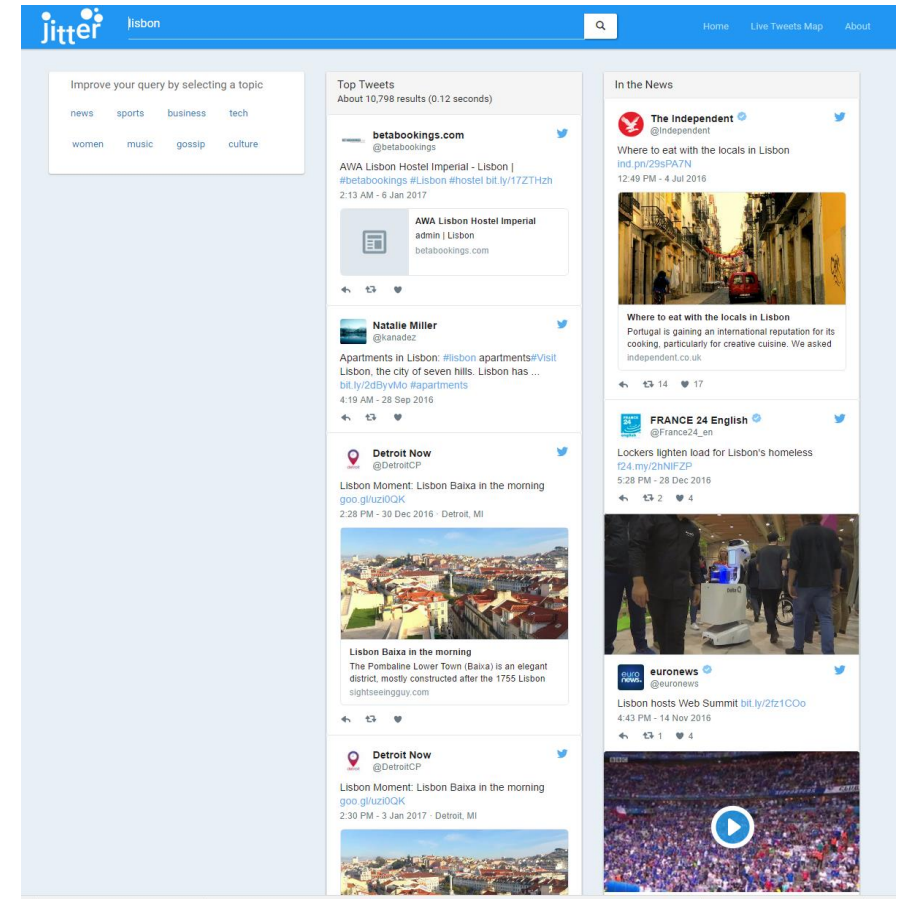
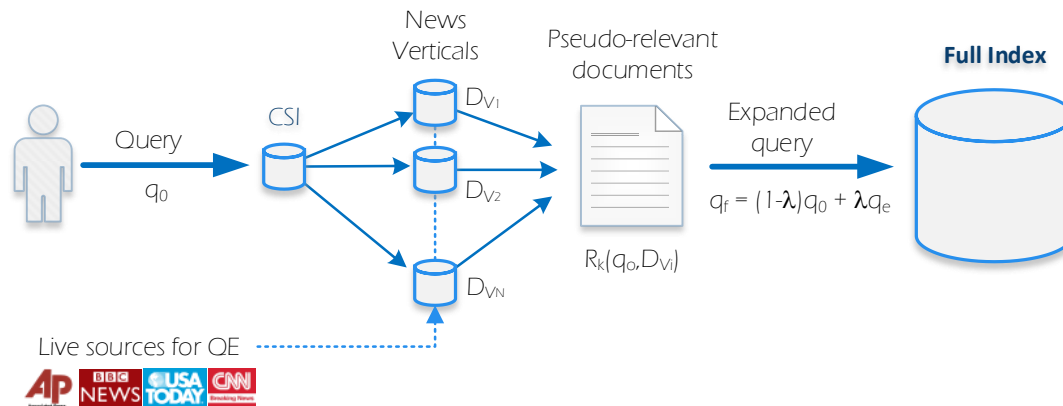
Demonstration pilots

- **Objective 1:** Advance **media monitoring technology** to track the popularity or reputation of entities on the Web.
 - Knowing the right attractiveness value of a particular venue (e.g., local businesses or tourism attractions) or event is a valuable information with many uses.
- **Objective 2:** Innovate **context-aware recommendation** by investigating new ways of inferring clues from the user context, and by compiling a set of items to recommend to groups of users.



Thanks!

Pilots – Monitoring



Pilot – Recommendation

