GROWTH! How to connect languages and transform commerce for the DSM ICT 2015 – Lisbon 21.10.2015



Software that reads the way you do

The opportunities that multilingual data analytics can offer to e-commerce in the Digital Single Market.

Francesco Adolfo DANZA

European Digital Single Market



315 million Europeans

use the Internet

every day



A Digital Single Market

can create up to

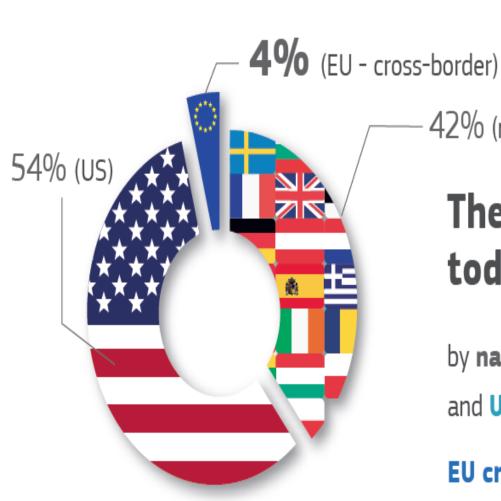
€415 billion in additional growth,

hundreds of thousands of new jobs,

and a vibrant knowledge-based society

European Digital Single Market





42% (national - 28 Member States)

The Digital Market today is made up

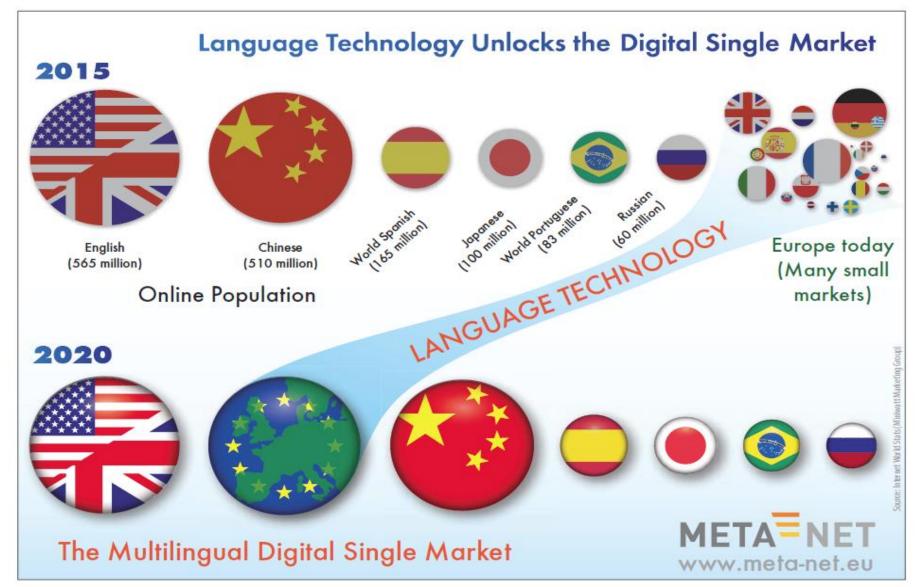
by **national** online services (42%)

and **US-based** online services (54%)

EU cross-border online services represent only 4%

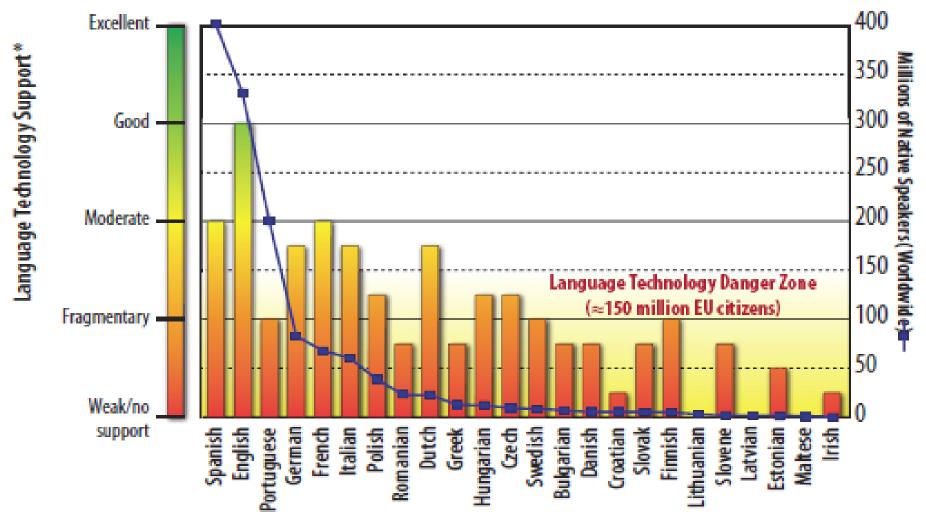
The Multilingual Digital Single Market (SYSTEM





Language Tecnology Support





^{*} Figures based on the META-NET study "Europe's Languages in the Digital Age" (2011/2012). Technology support has improved for some languages since this study was completed.

Who we are



Our enabling technology Language processing

Overcome language ambiguities and understand real mining

Same
Word,
Different
Meanings

Press: push or the news media?

Different Words,
Same
Meaning

Buy or purchase?

Different Words, Related Meaning

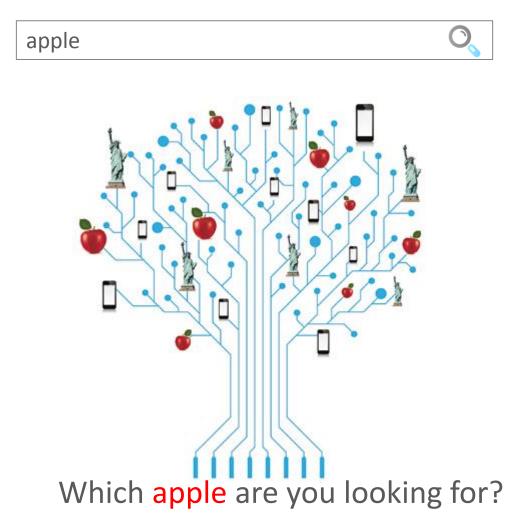
Hollywood or the U.S. film industry?



What makes us unique



Deep linguistic analysis of words to understand context.



What makes us unique



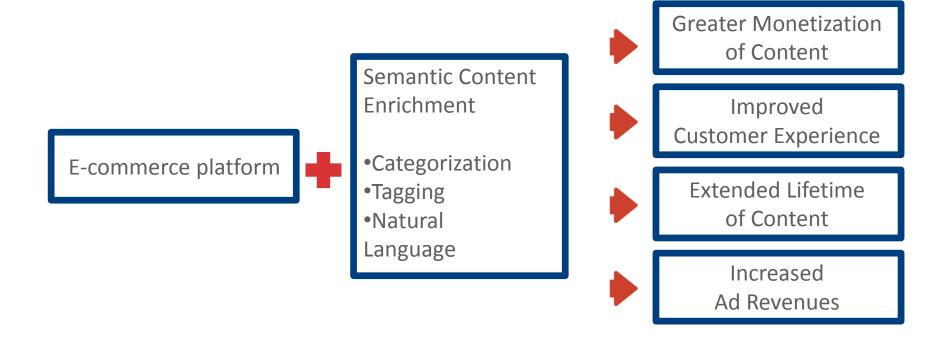
Deep linguistic analysis of words to understand context.

Morphological analysis	word forms	Apple, apple tree
Grammatical analysis	parts of speech	"There are 40 rows in the table." (noun)
		"She rows 5 times a week." (verb)
Logical analysis	word relationships	"The GM car I bought, to replace my Chrysler, stinks."
Semantic analysis	word context	"I used chicken broth for my soup stock."
		"I have 10,000 apples in stock."
		"I bought 10,000 shares of stock in Apple."

E-commerce opportunity



Expert System improves content and advertising targeting by leveraging semantic understanding, natural language processing and sentiment analysis



E-commerce Opportunity: Natural Language Search



Current search cannot locate any products related to a question written in Natural Language



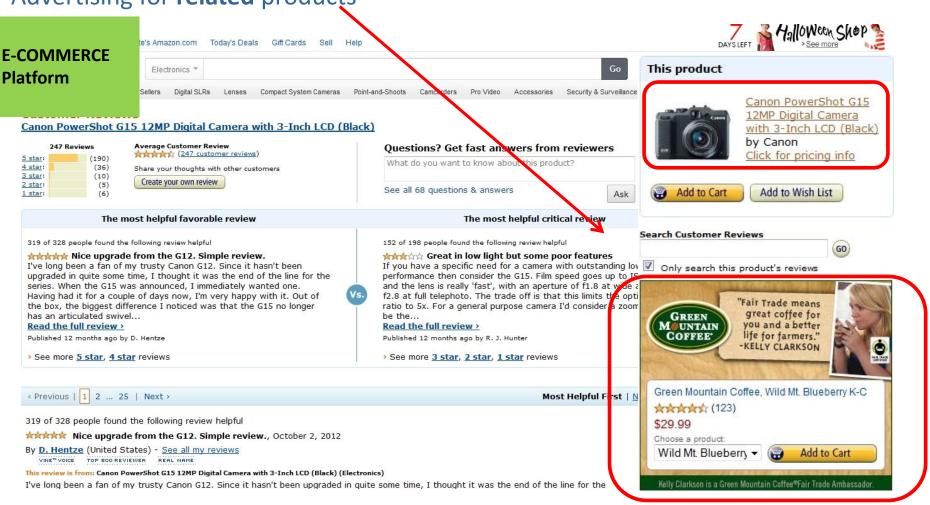
\$4 94 used (53 offers)

E-commerce Opportunity: Semantic Analysis



What's Missing?

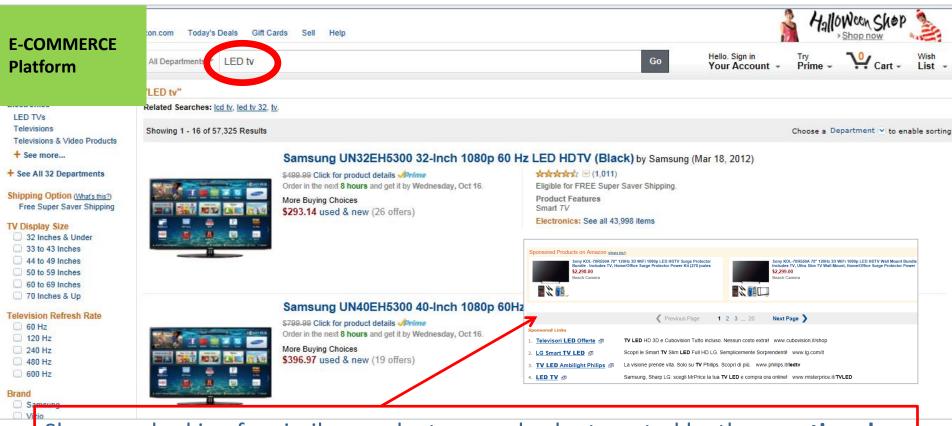
- •More sorting options to select most relevant reviews based on the customer profile
- Advertising for related products



E-commerce Opportunity: Semantic Enrichment



Cogito can leverage **emotional intelligence** of text to better target e-commerce platform shoppers with **relevant reviews and targeted, relevant advertising**



Shoppers looking for similar products may also be targeted by the **emotional affinity of a product (pleasure, family, entertainment, etc.)**

E-commerce Opportunity: Cogito benefits



Provide rich hosted tagging and categorization solution

Standard formats and easy integration with third-party applications

More comprehensive set of data to drive retargeting etc.

High speed and infinite scalability

Higher revenue per user also on Long Tail items

Higher revenue per user also on Long Tail items

Profile the Audience

- Activate more effective and detailed audiences by enriching their profiles
- Understand the meanings, the motivations and the emotions arising from their conversations and the content they read



Interest **Profiles**





behaviours. Interest and behaviours change daily. They are expressed online



Consumption.

Off-line behaviours are collected via **CRM** and **matched** with online profiles & **inventory data**



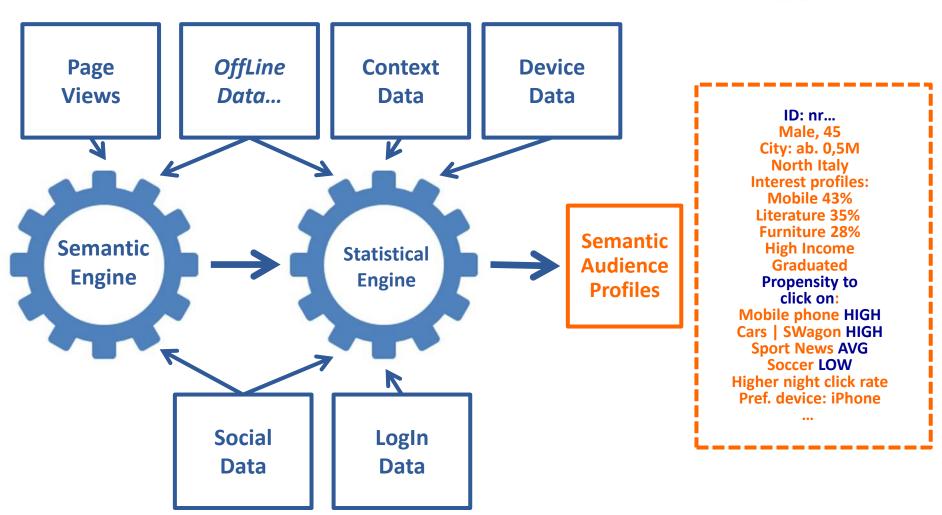
Contact.

ADX gives TouchPoints (on-& offline) owners the dynamic interests of their viewers to activate the proper campaign

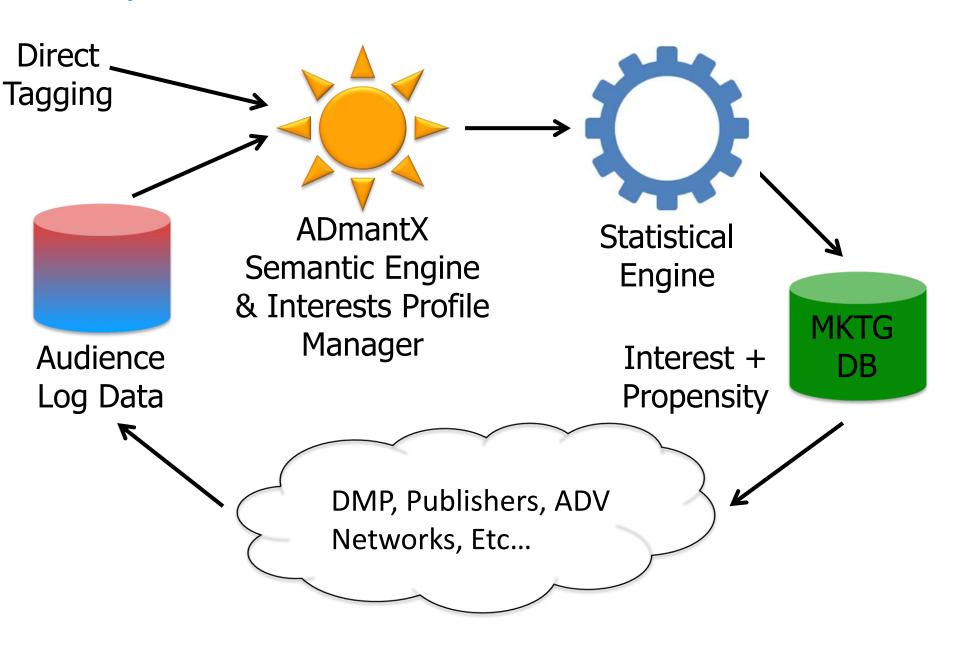
- 1) ADX knows the online dynamic interests of the audience
- 2) These are linked to off-line consumers' behaviours
- 3) The ADX SmartEngine connects users' profiles to the proper inventory items

ADX Profiling



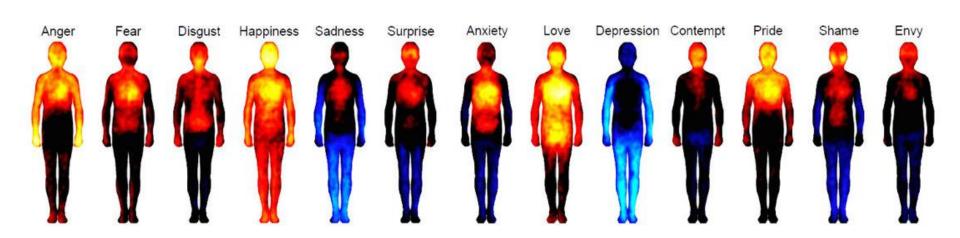


The Operational Flow



Emotions in digital Content SYSTEM SEMANTIC INTELLIGENCE

From **mobile conversations** in Social Networks to **online news**, ADmantX discovers feelings, motivations and sentiments expressed by the authors, and that have a **direct effect** on the audience



Get in Contact





Francesco Adolfo Danza, R & D



fadanza@expertsystem.com



twitter.com/Expert_System



www.expertsystem.com



www.linkedin.com/company/expert-system