

European Language Technology: Where do we stand?

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Exciting Times



- Google's Knowlede graph semantic search, Apple Siri, IBM Watson, Nuance's acquisitions, the of translation technology
- gave a push to research
- changed the perception of language technology in enlightened IT
- □ and create a demand for our graduates
- □ The European LT community keeps growing

The LT community now has



- Recognized challenges for LT in Europe
- A vision
- An ambitious plan with a roadmap



Major Challenges



- Preserving the European cultural and linguistic diversity in the united information and knowledge society
- Securing at affordable costs the free flow of information and thought across language boundaries in the resulting single information space
- Providing each language community with the most advanced technologies for communication, information and knowledge management so that maintaining their mother tongue does not turn into a disadvantage

Our Vision



- We view LT is a key enabling technology such as network technology, database technology or web technology
- LT is playing an essential role in shaping the next generation of IT
- Human language functionalities will be an integral part of future IT

LT as a Key Enabling Technology



- LT will overcome communication barriers
 - between people and technology,
 - between people speaking different languages
- And LT will unleash the full power of IT
 - for managing and better utilizing humankind's accumulated knowledge,
 - for producing, managing and accessing creative content,
 - for effectively mastering and exploiting the neverending explosion of newly created information.





Three Lines of Action



META-VISION: Building a community with a shared vision and strategic research agenda

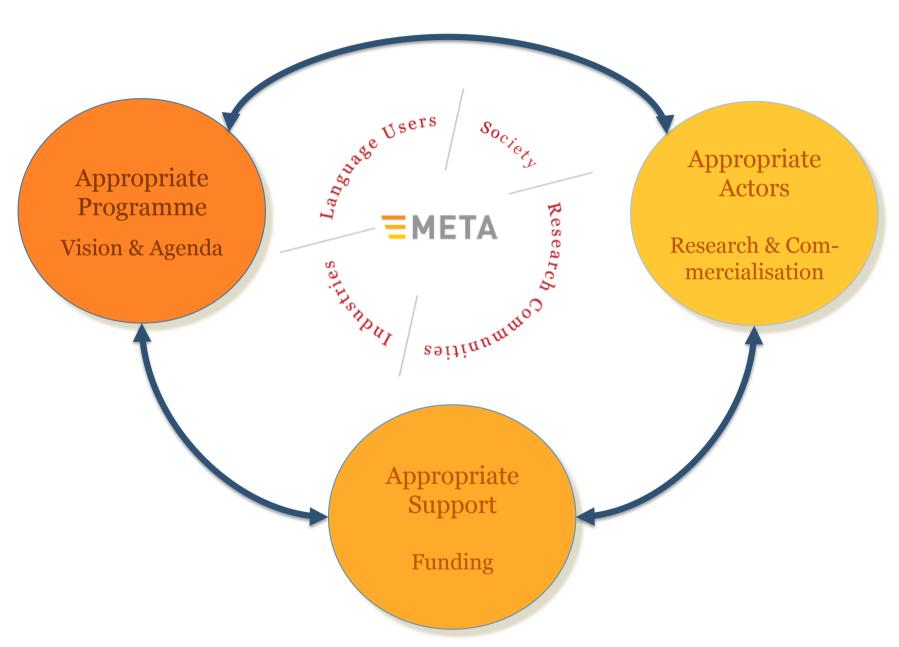
META-SHARE: Building an open resource exchange infrastructure

META-RESEARCH: Building bridges to neighbouring technology fields



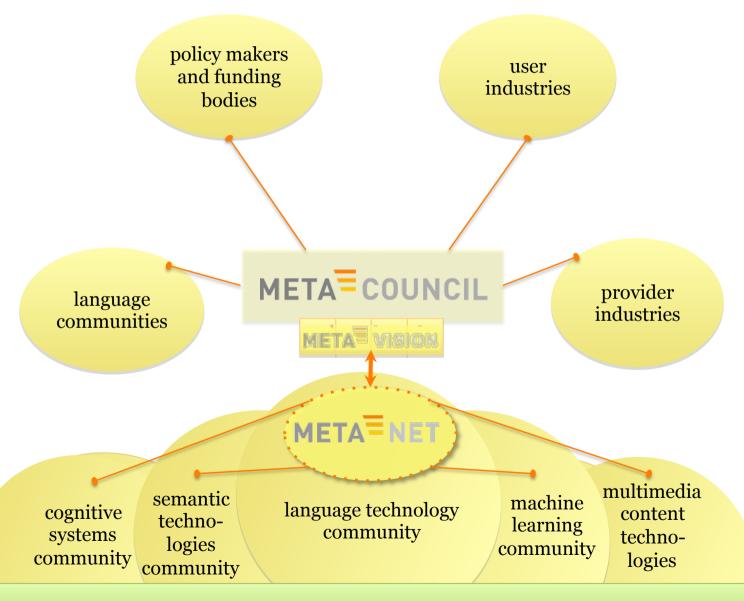








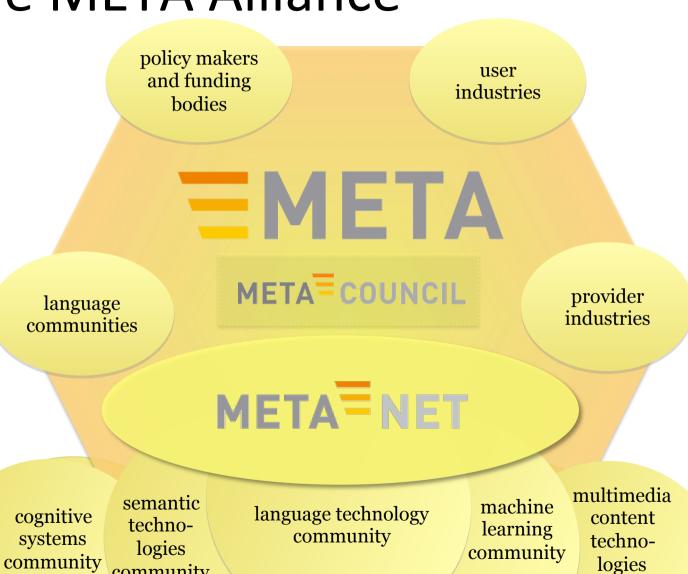
The META model of LT Community Building



The META model of LT Community Building

The META Alliance

community



The META model of LT Community Building





policy makers and funding bodies



user industries



language communities





CESAR tame METANETAU

META NORD

cognitive systems community

semantic technologies community

language technology community

machine learning community

multimedia content technologies

provider industries



The META model of LT Community Building

Gathering and Promotion



- Vision Groups: theMETAnk, 9 meetings (ca. 100 members, >50% industry)
- META Technology Council: two meetings
- META-FORUM 2010 Brussels,
- META-FORUM 2011 Budapest
- META-FORUM 2012 Brussels



More Meetings



- META-NET Network Meeting 2011 in Berlin
- □ Presentations at more than 30 large conferences and trade fairs and numerous smaller meetings: Informing more than 3,000 people at numerous events about META-NET
- Presentations to EC Officials, European Parliament, EPP Group on Future Internet
- □ Presence on social media: Facebook, LinkedIn, discussion forum.



META-NET at the LREC EU Village





Growth of the Network



- META-NET: 60 partners in 34 countries; three PSP partner projects.
- Collaboration agreements with other initiatives such as CLARIN and EFNIL
- Collaboration agreements more than 40 other projects
- META 600+ members



SurveyLanguage White Papers



■ Language Whitepaper Series: 30 volumes, publication by Springer (very high interest even before publication by various stakeholders in multiple countries).



META-VISION: A Powerful Process



- Work of three Vision Groups (9 meetings; ca. 100 members)
- ☐ Three vision reports (of the three vision papers)
- META Technology Council with four meetings
- A vision paper "The Future European Multilingual Information Society"
- □ The Strategic Research Agenda
- □ A **roadmap** showing the stages and milestones of the research agenda

META-SHARE: Achievements



- META-SHARE software v1.0 and v1.1 released (Fall 2011)
- META-SHARE software v2.0 released as open source (Spring 2012)
- □ 13 repositories with more than 1,300 language resources
- META-SHARE sustainability model is in the works

META-RESEARCH in four areas



- Bringing more Semantics into Translation
- Optimising the Division of Labour in Hybrid MT
- Exploiting the Context for Translation
- Empirical Base for Machine Translation

META-RESEARCH in four areas



- more than 50 publications
- bridges to other fields: Machine Learning, Linguistics, Multimedia (esp. Image Processing), Knowledge Technologies, Speech, Semantic Web and W3C
- initiative on connecting treebanks

The Procedure

communication



Roadmap

Strategic Research Agenda

Visions

communication to policy makers communication in the funding bodies, public wider LT community and among other stakeholders within META-NET (META-VISION)

> 2010 2011 2012



