META-FORUM 2010

Language Technology in Practice:
Needs – Problems – Wishes

META-FORUM 2010: Challenges for Multilingual Europe
Brussels, Belgium, November 18, 2010

Schedule

META FORUM 2010

- **Intro** – Hanna Klimek (EC): "Report on an LT Industry Survey"

  1   Andrés Domínguez (Crossminder, Belgium)

  2   Moshe Wasserblat (NICE Systems, Israel)

  3   Paul Heisterkamp (Daimler AG, Germany)

  4   Anita Sempels (Wordbee SA, Luxembourg)

  5   Pavlos Koulouris (Ellinogermaniki Agogi, Greece)

  6   Judith Sastre (Inbenta, Spain)

  7   Anita Pincas (Univ. of London; Simplicity Computers Ltd., UK)

- **Closing** – Jochen Hummel (ESTeam Germany GmbH): "Introducing the Language Technology Business Association"

Hanna Klimek

Introduction

TOWARDS A BUSINESS FORUM FOR

LANGUAGE-TECHNOLOGY STAKEHOLDERS

Brussels, 18 November 2010

Hanna Klimek

Directorate-General for Information Society & Media
Unit E.1 "Language Technologies, Machine Translation"

Why a business forum for LT?

- language technologies must find their way into the evolving online economy

- exploitation of research results must be significantly enhanced

- technology transfer is a crucial issue

- 2011-2012 decisive years for the future of EU R&I policies & funding programmes

What is the target group?

- **vendors of LT products**, both text & speech

- **vendors of LT-enabled products**

  – enterprise search & content management

  – text & content analytics

  – interactive media…

- **providers of language services** (translation, localisation, tele-interpretation) with own LT capabilities

- **industrial forums,** professional associations…

mostly SMEs

The survey

- the goal is to identify priority areas for active dialogue & co-operation between European LT businesses

- nearly 60 responses so far from a wide range of companies, from 18 countries

  - 29 LT vendors

  - 15 LSP

  - 15 both

- encouraging feedback from the stakeholders

The outcomes in a nutshell

The most pressing problems:

- technology transfer & market uptake are too slow [44% negative, 30% undecided]

- gaps in terms of industry standards & open platforms [49% negative, 27% undecided]

- existing forums & associations do not represent the sector well [49% negative, 28% undecided]

- low visibility vis-à-vis policy makers & public agencies [55% negative, 23% undecided]

The outcomes in a nutshell

No clear picture concerning:

- EU-funded programmes in terms of topics, time scales & instruments

  – signal for us: there is room for improvement in communication & cooperation with the commercial LT sector

- availability of properly skilled staff

Next steps

- at the moment we are

  – gathering ideas & interested players

  – investigating both scope & operation

- 20-21 January 2011 (tbc), Luxembourg

  – working meeting

  – focused discussion:

    ▪ mandate & structure of the Forum

    ▪ roundtable on future EU actions

questions? ideas? suggestions?

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questionnaire:

http://cordis.europa.eu/fp7/ict/language-technologies/
business-platform_en.html

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Andrés Domínguez

Crossminder (Belgium)

CROSSMINDER©

CROSSMINDER

Manifold approach to language technology, from unstructured data into actionable information through **meaning**

Crossminder Semantic Engine:
Semantic tagging, text analytics, implication detector

Crossminder solves **ambiguity**, **multilinguality**

MORE SUPPORT ON NETWORKING

- **More hands-on support on networking**, specially between complementary organisations – informal meetings, more effective information flow – real needs to real technology throughout the EU
- **Less ivory tower projects**

EU-RELEVANT PROJECTS

- Use LT to help **solving societal issues in the EU**
- Use LT to support **EU competitiveness** in the world:
  - Facilitating access to/research of foreign markets
  - Securing intellectual rights (read China), security

Moshe Wasserblat

NICE Systems (Israel)

Multi-Channel Interaction Analytics

NICE®

Multi Channel Analysis

Text & Audio Analysis

Ongoing Monitoring

"A leading provider of solutions for capturing, and analyzing customer interactions across various communication channels including phone, e-mail, chat and social media"
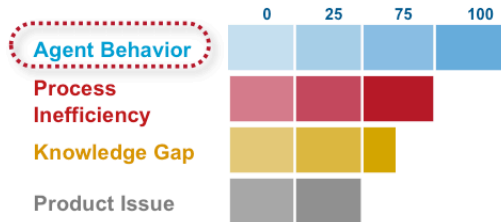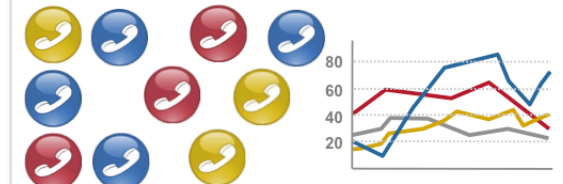
Actions

- Proactive Campaign
- Process Correction
- Coaching

Root Cause Analysis

	0	25	75	100
Agent Behavior				
Process Inefficiency				
Knowledge Gap				
Product Issue				

Categorization

80
60
40
20

Alert

R&D Challenges

- **Cross/Multi-channel human interaction information**

- **There is a need to process and analyze noisy human interaction texts, including automatically transcribed speech interactions**

- **Sparse resources for multi-lingual spontaneous human interactions**

- **The non-linear nature of human interaction text makes it much harder for automatic analysis**

- **Build general platform for supporting multi-languages**

Paul Heisterkamp

Daimler AG (Germany)

Some long term requirements for standard and speech vehicle HMI

- **Speech Recognition Technology**

  - Speech activation

  - Multi-party recognition

  - Social interaction monitoring, affect and emotion recognition and generation (TTS)

  - Less dependence on pre-defined dictionaries / grammars

- **Multilinguality**

  - Many languages, spoken and written

  - Language mix (polylinguality)

  - Language-independent contents (e.g. traffic information in non-RDS countries)

- **Dialogue**

  - Coordinated multimodality (e.g. deixis) in input and output (pointing Avatars)

  - More natural / flexible dialogue, e.g. to discuss alternatives using an argument structure

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Anita Sempels

Wordbee SA (Luxembourg)

WORDBEE
Moving translation teams online

- **The company**

  Luxembourg – 2008 - developed and owns all of its technology, including linguistic algorithms and text search technology

- **The product : Wordbee Translator**

  Internet platform – SaaS – Editor – Project Mngt – Real-time Tracking

- **Needs & wishes**

  Simplify the application process – Quick-moving projects – Business & entrepreneur oriented – free consulting & advice – transfer of knowhow

Pavlos Koulouris

Ellinogermaniki Agogi (Greece)

- R&D operating within a school, for more than 10 years
- Extensive experience in European and national research projects (~90 projects)
- Expertise in pedagogy, technology-enhance learning and educational innovation
  - Much work in the areas of science and language learning.
    - Personally: Background in linguistics, education, technology-enhance learning
- Interest in linking language technologies (LT) with learning. What we need:
  - LT can help us make educational e-content more accessible:
    - We are a core partner in large educational e-content initiatives: COSMOS, OpenScience Resources, Organic.Edunet, Natural Europe)
    - Standardised educational metadata, social tagging, learning designs; multilingual content
  - LT in/for language learning
    - LT tools could be exploited to enhance the learning experience of language learners
    - Worth exploring the development of teaching/learning scenarios involving the use of LT
    - Especially in the context of informal language learning (cf web users-explorers of LRs)
- Interested in joining projects in LT, acting mainly on the side of demand/users – but with a good understanding of your area of work. We can contribute:
  - Background, theoretical and design work (*mainly* pedagogical, *and* linguistic)
  - An excellent test bed with immediate access to large numbers of users (our school has more than 2,000 students and 150 teachers – and of course through our Euroepan projects, numerous working partnerships and networks).

Pavlos Koulouris, pkoulouris@ea.gr

Judith Sastre

Inbenta (Spain)

META·FORUM 2010

November 17./18. 2010

Hotel Le Plaza, Brussels. Belgium

- EXPERTISE AND SEMANTICS FOR SPECIFIC INDUSTRIES

  Semantic Search and Natural Language Processing

  Founded in 2005

  Based on SaaS (Software as a Service)

  Consultancy and services

  Natural Language Technology based on meaning: Lexical Functions

inbenta

Sentiment Analysis

Dialogue System

Automatic Summarization

Automatic Translation

Speech Processing

Judith Sastre
jsastre@inbenta.com

Anita Pincas

Simplicity Computers Ltd. (UK)

Adaptive Language & Technology for Seniors

Anita Pincas   A.Pincas@ioe.ac.uk   University of London, Institute of Education for the SME

Simplicity Computers Ltd.
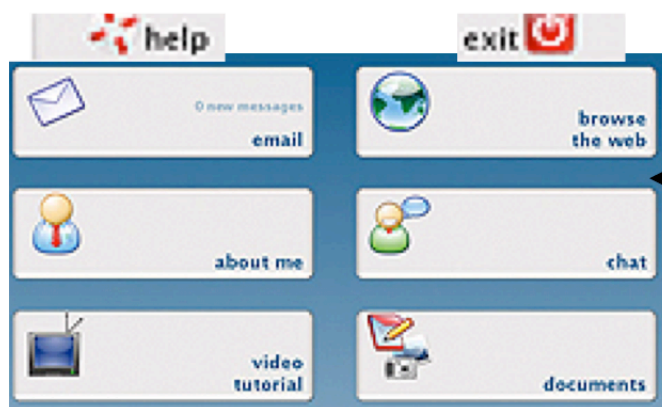
Existing computer

Touch screen buttons available.

User training videos.
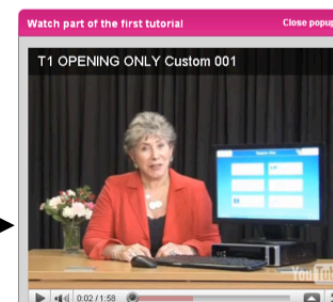
We offer the Simplicity computer and our expertise to projects with potential to develop and/or test digital adaptations for seniors, a growing computer user group. A few possible areas of development are listed here, but we are open to more suggestions.

Pick up a leaflet.

Some specific needs:

- Quantity of text – automate contractions or summaries
- Natural language – automate simplification of difficult texts
- Search, e.g., simplify engines to suit elders' needs
- Web 2.0, e.g., simplify applications
- Games, e.g., simplify instructions
- Special functionality for visual, hearing or motor problems
- Memory aids, e.g., automated or on-demand prompts

More innovative adaptive work should be in:

MT, HCI esp. gesture based computing, AR (augmented reality), e.g., for books, VR (visual recognition), e.g., images, objects, faces.

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Jochen Hummel

Introducing the LTBA

ltba

language technology business association

Introduction of ltba

Jochen Hummel

Brussels — Nov 18, 2010

very short history

- In summer Gudrun Magnusdottir (ESTeam), Feiyu Xu (Yocoy), and Hans Uzkoreit (DFKI) discussed how LT companies are lacking a representation to drive reputation and awareness
- Gudrun picked up the ball and passed it on to me
- On Sep 28 we had our founding dinner in Brussels

members & mission & vision

ltba

- SMEs with focus on language technology. Later also large corporations and companies with wider range.

- Form an active organization to create a strong industry image. Drive communication internally and externally to promote collaboration and business.

- Establish Language Technology as a recognized software product category.

status

- Name, logo, and branding have been created
- Official launch when ltba web site is ready
- Feature set of first two web releases is defined
- Implementation has started
- Work so far sponsored by ESTeam AB
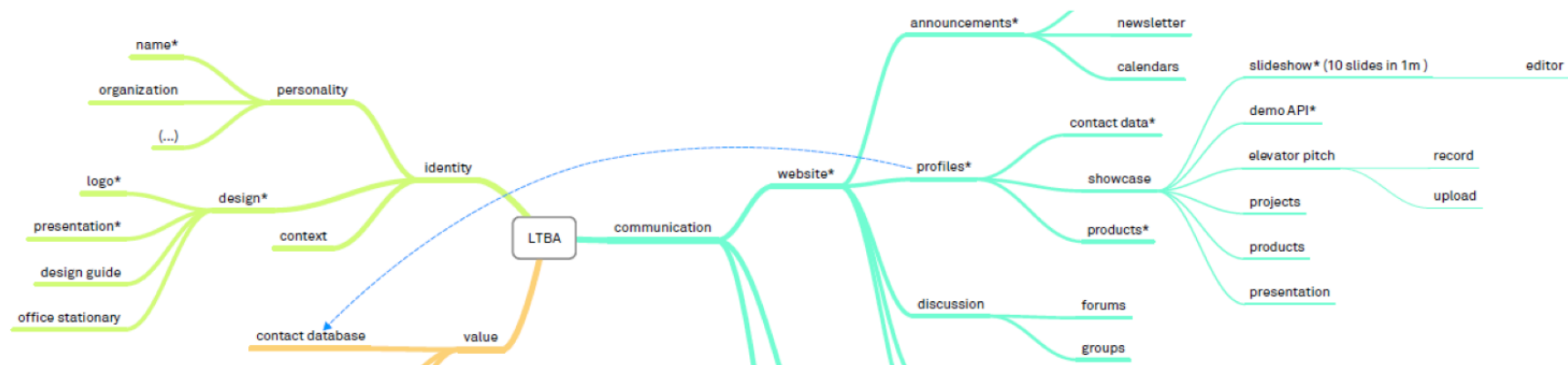
www.ltba.org (under construction)

- Customizable company and project profiles
- Standardized slideshows
- Elevator pitch
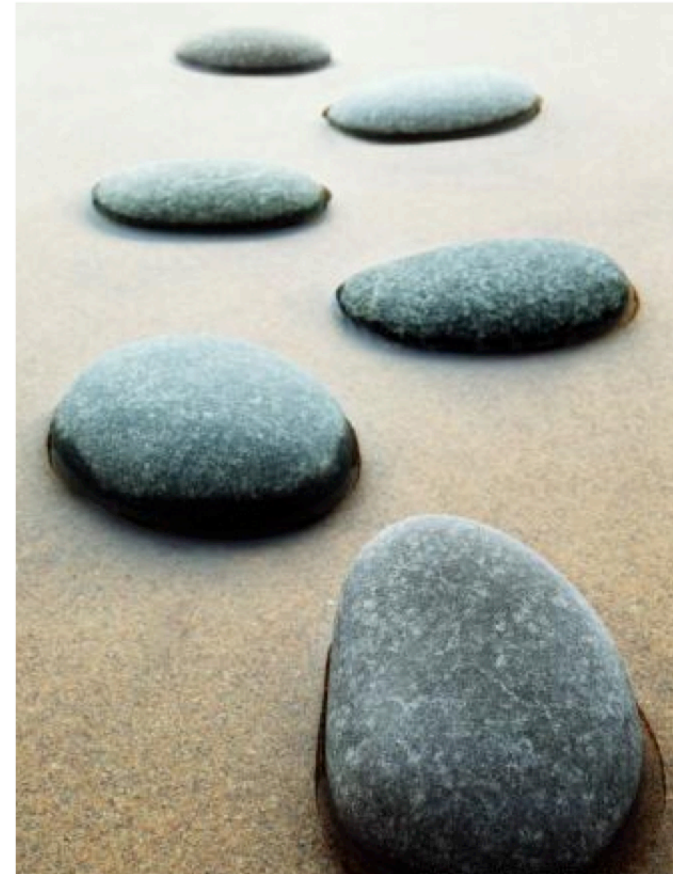- Product showcasing via web services
- Blog
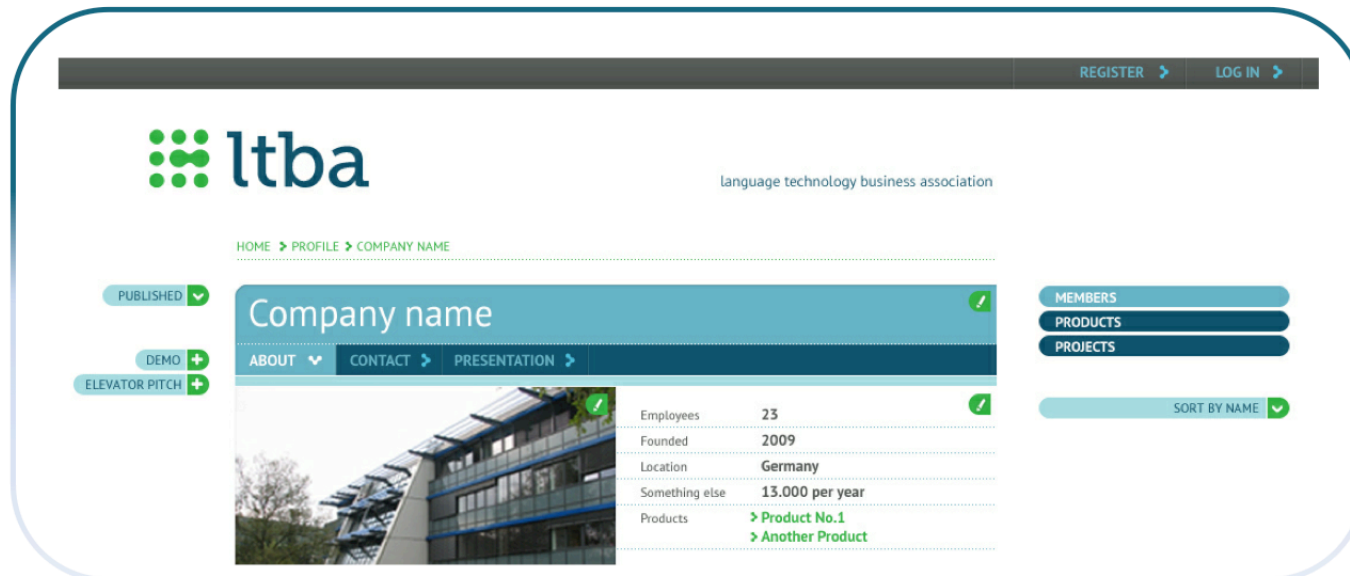
next steps

- Publish web site in Jan 2011
- Found non-profit organization
- Promote site and sign-up members
- Decide on and find funding
- Organize first member meeting
- Agree on future direction

Thank you!

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