

# META=NET

## Priority Theme 1: Translation in the Cloud

Andrejs Vasiljevs

Tilde, Latvia  
andrejs@tilde.com



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# Vision: Applications needed by EU citizens and businesses



- ❑ Europe-wide social and business networking in native language
- ❑ Mobile and internet services in native language for e-Commerce, education, travel, entertainment, etc.
- ❑ eGovernment reaching all linguistic groups and enabling political discussion across borders
- ❑ Unlimited TV/movie cross-language subtitling/interpretation
- ❑ Ever present Personal Interpreter
- ❑ Translingual Spaces: dedicated locations for ambient interpretation

# Vision: Services for the EU Society and Citizens

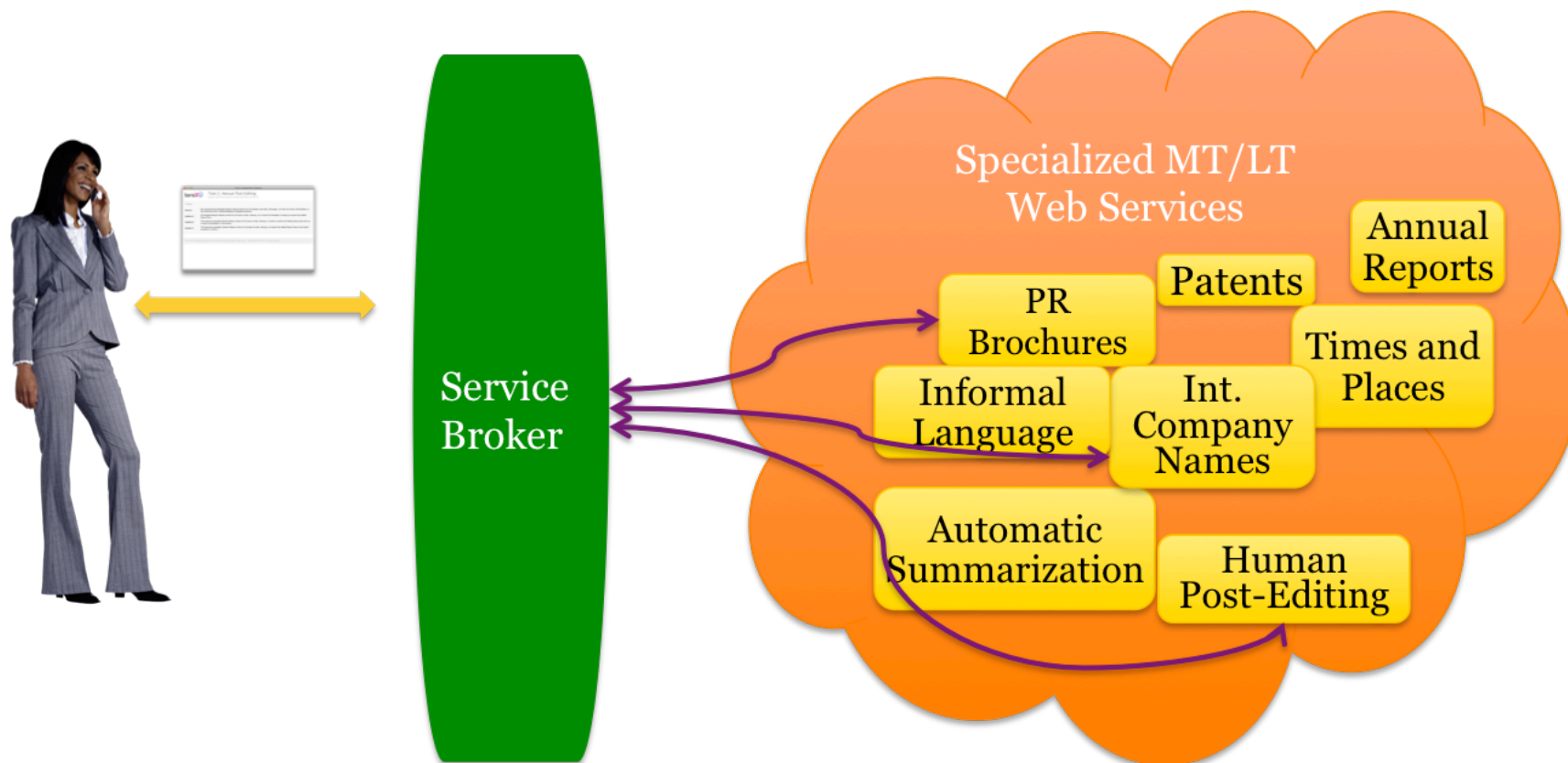
- ❑ A ubiquitous online platform combining automatic translation, language checking, post-editing, as well as human creativity and quality assurance
  - for generic and special-purpose services
  - free for small volume use and for high-volume baseline quality
  - involve providers of computer supported HQ human translation
  - business opportunities for a wide range of service and technology providers
- ❑ Assured privacy, confidentiality and security provided by trusted service centers
- ❑ Quality upscale models: instant quality upgrades
- ❑ Domain and Task specialization

# Vision: Services for the EU Society and Citizens



- ❑ Ubiquitous translation services for a full range of quality levels, fast, affordable
- ❑ Covers written and spoken language from formal language to chats and social networking
- ❑ Multi-media multi-language content delivery
- ❑ On mobiles, tablets, PCs, etc.

# A Translation Cloud Scenario



- ❑ Breaking language barriers facilitating job opportunities, mobility, social cohesion and regional parity
- ❑ Business opportunities  
*Global market of language services 25 bln EUR, 2011*
- ❑ Regaining global technological leadership in translation technologies
- ❑ Enabling access to the rich multilingual European culture
- ❑ Improved LT for under-resourced European languages (cf. META-NET Language White Papers)
- ❑ Enabler of cross-lingual “knowledge management” and advanced technologies like cross-lingual content analytics, IE, summarization, sentiment analysis

# Current State of the Art in Research

- ❑ Open-source MT Toolkits (e.g., Moses)
  - Maturing and scaling to reach the requirements of massive production use
  - No general interoperability with LT tools (e.g., parsers, NE recognisers, etc.)
  - Confidence estimation (let alone quality estimation) is an open issue
- ❑ Growing availability of multilingual data
  - Available for many languages, yet in a few domains only
  - META-SHARE contribution
- ❑ Experimental prototypes for AV media translation
  - Typically re-speaking scenarios (involving human translators)
- ❑ Support of online media very limited
- ❑ Promising research results from FP7 and ICT-PSP projects
  - Fragmentation, sustainability, scalability issues

# Novel Research and Targeted Breakthroughs

- ❑ Overcoming obstacles for high quality
- ❑ Quality assessment models and new automatic metrics (task and application oriented)
- ❑ Computer-supported creative (human) translation/authoring
- ❑ Semantic translation paradigm by including linked data, ontologies, semantic and inference models into MT
- ❑ Inclusion of specialized analysis, generation and transfer models (register, style, situation)
- ❑ Improvement of speech recognition/analysis (specifically for MT and MT environments)



# Organisation of Research and Innovation

- ❑ Large cooperating projects
  - Sharing infrastructures: resources, evaluation
- ❑ Smaller projects – providing building blocks
  - National languages (resources, technologies)
  - Component technologies
- ❑ Combined funding (EC, national, private)
- ❑ Inclusion of industry and translation professionals in the entire research and innovation process
- ❑ Solving legal hurdles on using data for research
- ❑ Connection to CEF
- ❑ Infrastructural support (selected areas)
  - Resources, evaluation suites, organisation of challenges

# Q/A

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**Thank you**

andrejs@tilde.com

**office@meta-net.eu**

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