



Language Technologies for Europe:

A way to foster SME internationalisation

Alan Mas Soro (everis)
Teresa Forrelat (PIMEC)
Enric Staromiejski (everis)
Stefanos Vrochidis (CERTH)
I. Kompatsiaris (CERTH)





European Society Needs

- **Situation**

- ⇒ Financial Crisis

- ⇒ Unstable ground for (international) investments
 - ⇒ Unemployment
 - ⇒ Nervousness of people and politics

- **Ideas and strategies**

- ⇒ Internationalization of SMEs

- ⇒ A way out of the crisis
 - ⇒ International investments
 - ⇒ Reduce unemployment



European Society Needs

- **Blocking factors**

- ⇒ Language barriers

- ⇒ SMEs cannot easily understand regulation in other countries

- ⇒ Foreign market analysis and assessment is not easy

- ⇒ Cultural, political and geographical barriers

- ⇒ Generation of multilingual contradictory and unreliable news content

- ⇒ Multiple opinions of people on products

- ⇒ Different political opinions regarding market stability for each country

- **SME Internationalisation**

- ⇒ Requires time

- ⇒ Manual effort of experts

- ⇒ Is costly



What do the SMEs need?

- **Semi-automatic technologies for**
 - ⇒ Analysis and assessment of multilingual content
 - ⇒ Regulations
 - ⇒ Product information
 - ⇒ People opinions
 - ⇒ News articles
 - ⇒ Decision support
 - ⇒ Risk assessment
 - ⇒ Comparison of different markets



Is there a solution?

- **Language Technologies**

- ⇒ Automatic analysis of multilingual content

- ⇒ Machine translation

- ⇒ Multilingual summarization

- ⇒ Semantic analysis of multilingual content

- ⇒ Assessment of content reliability

- ⇒ Opinion mining

- ⇒ Context-aware analysis of multilingual content

- ⇒ Decision support for SME internationalisation

- ⇒ Semantic reasoning

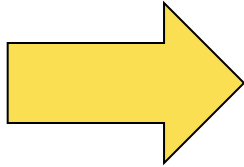
- ⇒ Clustering of multilingual content in the semantic dimension



Use Case: Industrial SME

I need to export but
I only speak
Spanish.

How do I do it?



I need to know country information:

- sector, product, regulations, consumptions habits, news...



To decide where to expand and minimize the risk of choosing a wrong market.



If I don't have LT:

- Difficult to understand multicultural and multilingual information
- Difficult to reach the potential market and understand consumption habits, product opinions

Can CAUSE:

- **Wrong market selection**
- **Waste of time**
- **High cost**

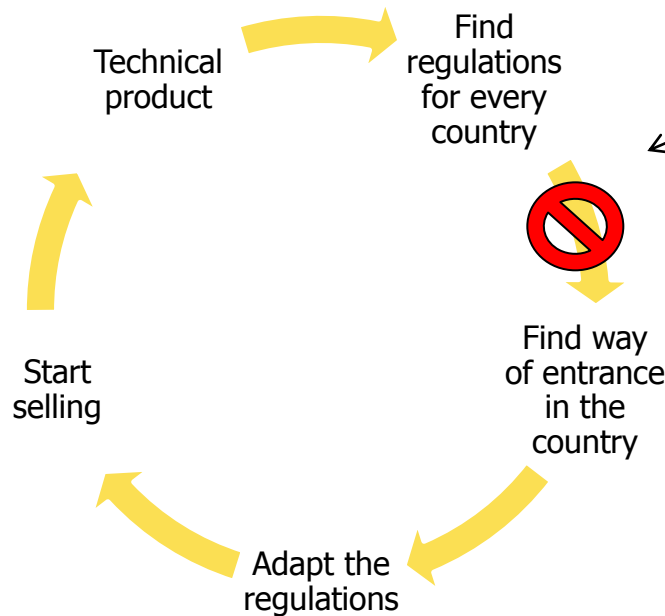
If I have LT:

- Low time and cost initial market assessments based on consumption habits and opinion mining
- Easy assessment of countries' political situation based on multilingual and multimedia news summarisation
- Easy identification of markets for targeted analysis based on semantic analysis empowered decision support and risk assessment
- Legal aspects translation and summarisation
- Better understanding of market and regulations using my native language



Use Case: Industrial SME

- Industrial Spanish company wants to export
- Number of workers: 10
- Billing: 2,5 millions
- Export: less than 5% of the total amount
- They barely speak any languages apart from their own (75% of managers and Spanish politicians do not speak English well).



If the CEO doesn't have LT support to understand the regulations, the process of expanding the company it will be interrupted.

LT to support the CEO:

- Machine translation
- Summarisation
- Semantic content analysis



Impact

- Language Technologies empowered solutions
 - ⇒ Support SMEs with
 - ⇒ Low time and cost initial market assessments
 - ⇒ Easy identification of markets for targeted analysis
 - ⇒ Decision support and risk assessment
 - ⇒ Supporting legal aspect understanding
 - ⇒ Better understanding using the SME native language
 - ⇒ Negotiating trust
 - ⇒ Improving the knowledge and the interrelationship between countries



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MULTISENSOR

- **FP7 research project**

- ⇒ Develops user-driven LT technologies and solutions
- ⇒ Supports SMEs internationalization with
 - ⇒ Multilingual analysis and machine translation
 - ⇒ Semantic reasoning oriented decision support and risk assessment
 - ⇒ Decision support and risk assessment
 - ⇒ Summarisation of multilingual market information
 - ⇒ Opinion mining on products and consumption habits

- <http://www.multisensorproject.eu/>





Thank you!



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