



# META-FORUM 2019

ELG industry testimony

Jose Manuel Gomez-Perez  
October 8-9 2019, Brussels



# EXPERT SYSTEM



## ABOUT US

<https://www.expertsystem.com>

1. **LONG HISTORY PROVIDING NLP and AI SOLUTIONS**
  - ☑ 20 years of experience, more than **300** successful projects
  - ☑ 20 years of R&D investments to create **Cogito©**, best in class Artificial Intelligence platform for text understanding
2. **INTERNATIONAL COMPANY**
  - ☑ Global company with local technical and sales teams to be close to our customers in their own language and culture
  - ☑ Branches in Italy, Spain, France, Germany, UK, USA
3. **LARGEST EUROPEAN VENDOR**
  - ☑ More than €28,7M in revenue in 2018
  - ☑ More than 230 employees

# MISSION & VISION



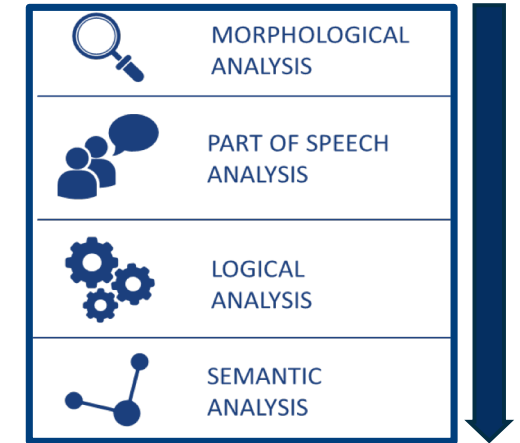
## OUR MISSION

- ① We created and continue to develop AI technologies that **transform the way people find, UNDERSTAND and use text**

## OUR VISION

- ① We believe that technology that ensures a **human-like comprehension of language** is a strategic factor for improving human decision-making

# INSIDE COGITO



- ✓ **Best-in-class AI platform for text understanding and analytics**  
More than **400 person/years** of development in **14 languages**  
**Based on Sensigrafo**, the Cogito Knowledge Graph
- ✓ **Cogito disambiguates every word and expression** with one of the highest levels of accuracy in the market (source Forrester)
- ✓ Then, adds **reasoning and explanation** to support decision-making

**(\*) 300K concepts**  
**400K lemmas**  
**80 relation types**  
**3M links**

\*per language



# OUR MARKET

## AUTOMATION & CUSTOMER INTERACTION

- RPA acceleration
- Email, claims and compliance management
- Loan/mortgage approval
- Customer onboarding
- Automatic communication management
- Natural search and chatbots

## KNOWLEDGE DISCOVERY

- Market analytics
- Due diligence
- Know your customer-supplier
- Corporate security and investigation
- Legal and compliance
- Fraud detection
- Commercial opportunity detection

## FORRESTER WAVE

- ☑ Big Data Text Analytics Platforms 2016
- ☑ AI-based Text Analytics Platforms 2018

## GARTNER

- ☑ Magic Quadrant for Insight Engines 2017 – 2018

## FORRESTER

- ☑ Four Use Case Categories To Push RPA and AI Convergence

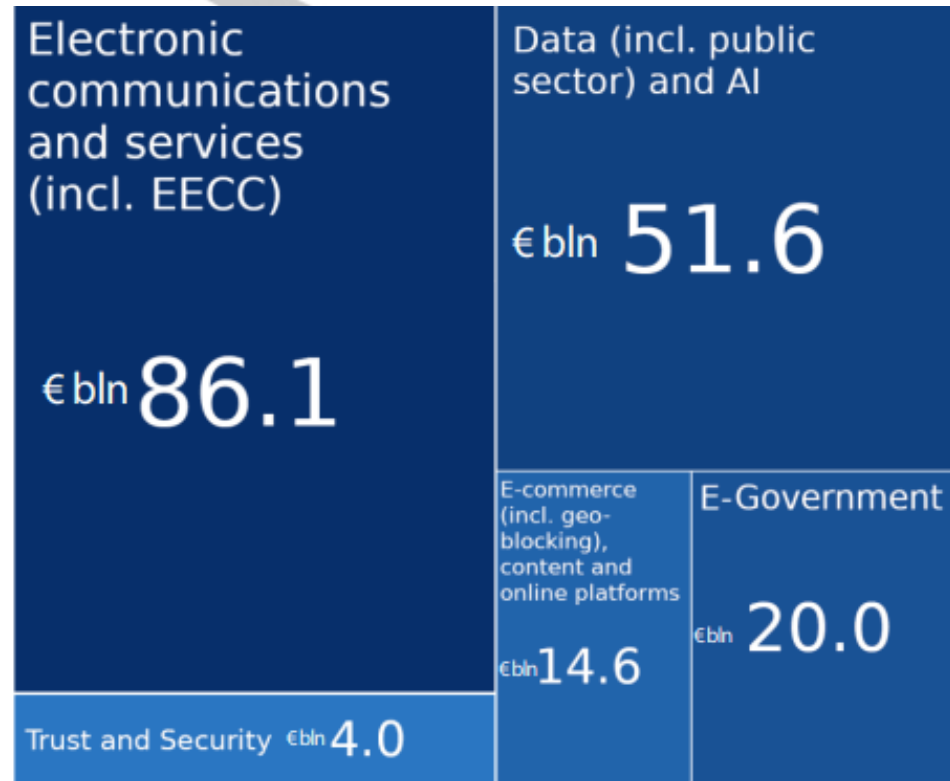
FORRESTER®

Gartner®



# THE EUROPEAN LT MARKET

Contribution to growth. The European Digital Single Market.  
Delivering economic benefits for citizens and businesses



The European Digital Single Market

- ✔ **LT market relatively small but fast-growing**  
€ 1.B and 9.8% CAGR vs. 6B and 25.2% CAGR globally
- ✔ **AI market growing strongly (40% CAGR)**
- ✔ **Very FRAGMENTED (big problem!), composed by SMEs**  
Go-to-market is often niche, looking for less intense competition
- ✔ **Low profitability** due to compressed margins  
Still, high innovation is needed to stay competitive
- ✔ **Large non-European players are a blessing and a curse**  
Google, Microsoft, Amazon etc. strongly contribute to create or **increase market awareness**  
**Cheap mass market software and APIs.** Hard to compete, especially for SMEs.



*Final study report on CEF Automated Translation value proposition in the context of the European LT market/ecosystem*

[Global Text Analytics Market: Text Analytics, Visualizing and Analyzing Open-Ended Text Data](#)

# WHY WE ARE SO EXCITED ABOUT ELG

Dealing with fragmentation requires a model that tends to **CONCENTRATE**

“

*PLATFORM BUSINESS MODEL DEFINITION: a business model that creates value by facilitating exchanges between two or more interdependent groups, usually consumers and producers.*

”

EUROPEAN LANGUAGE GRID

Home Technologies Resources Community Events About ELG

**Towards the Primary Platform for Language Technologies in Europe**

Search for services, tools, datasets, organizations... Search

- Language technologies**  
Language technologies, processing and generation services, tools and components  
Browse and Try Technologies
- Language resources and data sets**  
Language resources, data sets, corpora, models and other types of language resources  
Browse Resources
- Community**  
Companies, research centres, universities, projects and initiatives in European Language technology landscape  
Browse Community

## THE PLATFORM MODEL



- ✓ SaaS is NOT a platform. Amazon, Instagram, YouTube, Airbnb, GitHub, Uber, the iPhone... are all platforms!
- ✓ **Platforms do not own the means of production, they create the means of connection**
- ✓ **A platform creates value by facilitating exchanges** between two or more interdependent groups, usually consumers and producers
- ✓ **Rule of 4C's** - Create, Connect, Consume, Compensate
- ✓ **Accelerate innovation**, reducing individual costs
- ✓ **Remove geographic boundaries**, towards the Digital Single Market
- ✓ **12% average higher valuation** than linear businesses

# WHAT TYPE OF PLATFORM

1:1 connections

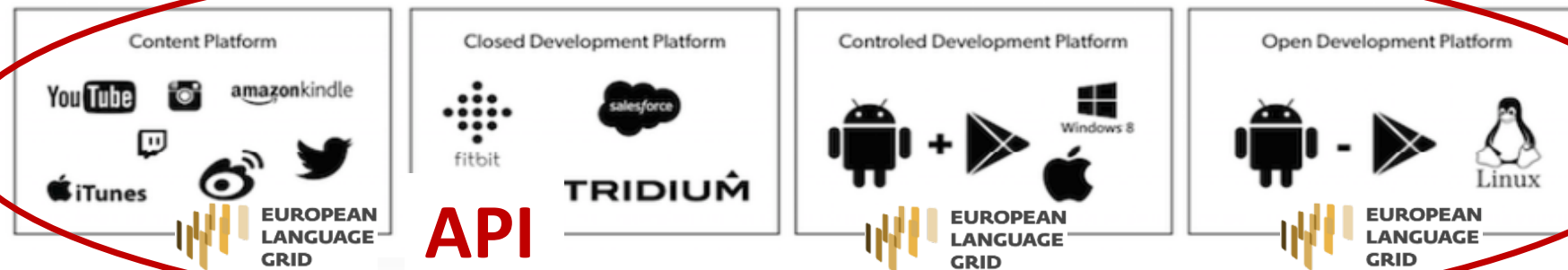
## EXCHANGE PLATFORM



Type of value  
exchanged in  
the platform

1:N connections

## MAKER PLATFORM



API



# HANDS ON - COGITO IS IN THE ELG!

Metadata Try it out! Documentation Code samples

There has been a long-running tussle over the encryption technologies developed to try to protect their communications and data transfers. It was first seen in 2007 when the Global Islamic Media Front, which distributes propaganda for militant groups, launched encryption software.

4. Clause	
Name	Value
pk	PURPOSE

Annotation Selector

- 1. Token
- 2. Word
- 3. Group
- 4. Clause
- 5. Sentence

## Cogito Discover PoS

Metadata Try it out! Documentation Code samples

There has been a long-running tussle over the encryption technologies developed to try to protect their communications and data transfers. It was first seen in 2007 when the Global Islamic Media Front, which distributes propaganda for militant groups, launched encryption software.

/Entity/ORGANIZATIONS	
Name	Value
name	Global Islamic Media Front

Annotation Selector

- /Entity/KNOWN CONCEPTS
- /Entity/ORGANIZATIONS
- /Tag/DATE

## Cogito Discover Entity Recognizer

☑ Five services based on Cogito Discover® already available through the ELG

☑ A how-to guide soon publicly available

☑ Currently EN-ES, let us know which other languages you would like

☑ More taxonomies soon available for the categorization service

☑ Next (governance) challenge: implementing licensing and business models in the ELG platform

Metadata Try it out! Documentation Code samples

Islamic militants brag online that it is only a matter of time before they manage to pull off a highly disruptive attack on America's infrastructure or financial system. In addition, ISIS, the terror group that claims to have established a caliphate across Syria and Iraq, boast openly of plans to establish a "cyber caliphate", protected by jihadist developed encryption software from behind which they hope to mount catastrophic hacking and virus attacks on America and the West.

Concept	
Name	Value
Glossa	one day a certain thing will surely happen;
gt	NOU
Lemma	matter of time

Annotation Selector

- Concept
- Lemma

## Cogito Discover Semantic Annotator

Metadata Try it out! Documentation Code samples

Islamic militants brag online that it is only a matter of time before they manage to pull off a highly disruptive attack on America's infrastructure or financial system. In addition, ISIS, the terror group that claims to have established a caliphate across Syria and Iraq, boast openly of plans to establish a "cyber caliphate", protected by jihadist developed encryption software from behind which they hope to mount catastrophic hacking and virus attacks on America and the West.

/Category	
Name	Value
CATEGORY_ID	16001200
path	/IPTC/Unrest, Conflicts and War/Act of Terror/Key Groups
SCORE	12015
COMPOUND	12015
hierarchy	/IPTC/Unrest, Conflicts and War/Act of Terror
prefLabel	Key Groups
name	16001200

Annotation Selector

- /Category

## Cogito Discover IPTC Categorizer

Metadata Try it out! Documentation Code samples

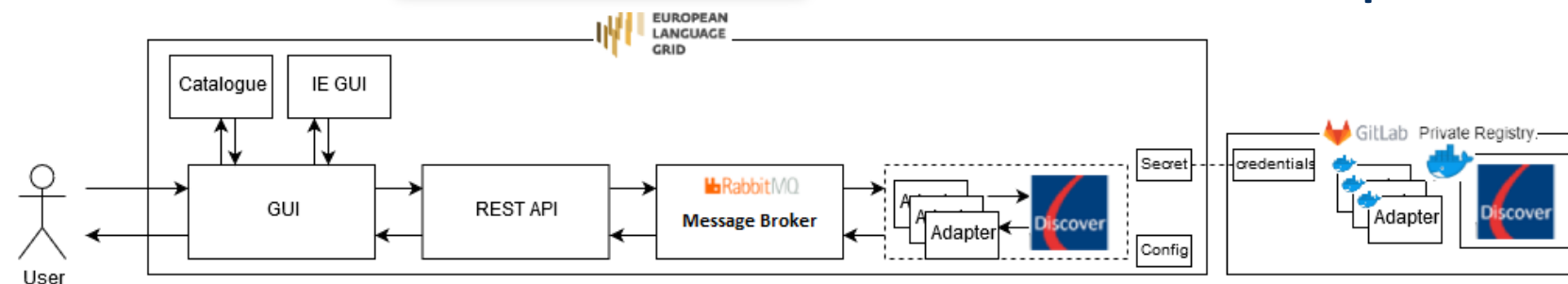
Islamic militants brag online that it is only a matter of time before they manage to pull off a highly disruptive attack on America's infrastructure or financial system. In addition, ISIS, the terror group that claims to have established a caliphate across Syria and Iraq, boast openly of plans to establish a "cyber caliphate", protected by jihadist developed encryption software from behind which they hope to mount catastrophic hacking and virus attacks on America and the West.

/Relevant/MAINSYNCONS	
Name	Value
Glossa	Active group in Iraq and Syria, established in the early years of the Iraq War, that pledged allegiance to al-Qaeda...
Lemma	ISIS

Annotation Selector

- /Relevant/MAINGROUPS
- /Relevant/MAINLEMMAS
- /Relevant/MAINSENTENCES
- /Relevant/MAINSYNCONS

## Cogito Discover Summarizer






**THANKS!**

 [linkedin.com/company/expert-system](https://www.linkedin.com/company/expert-system)

 [twitter.com/Expert\\_System](https://twitter.com/Expert_System)

 [info@expertsystem.com](mailto:info@expertsystem.com)