



FROM TEXT TO KNOWLEDGE,
FROM KNOWLEDGE TO DECISIONS

emvista™

TEXT ANALYTICS

**A technology (AI-NLP)
and Prevyo, a product line**

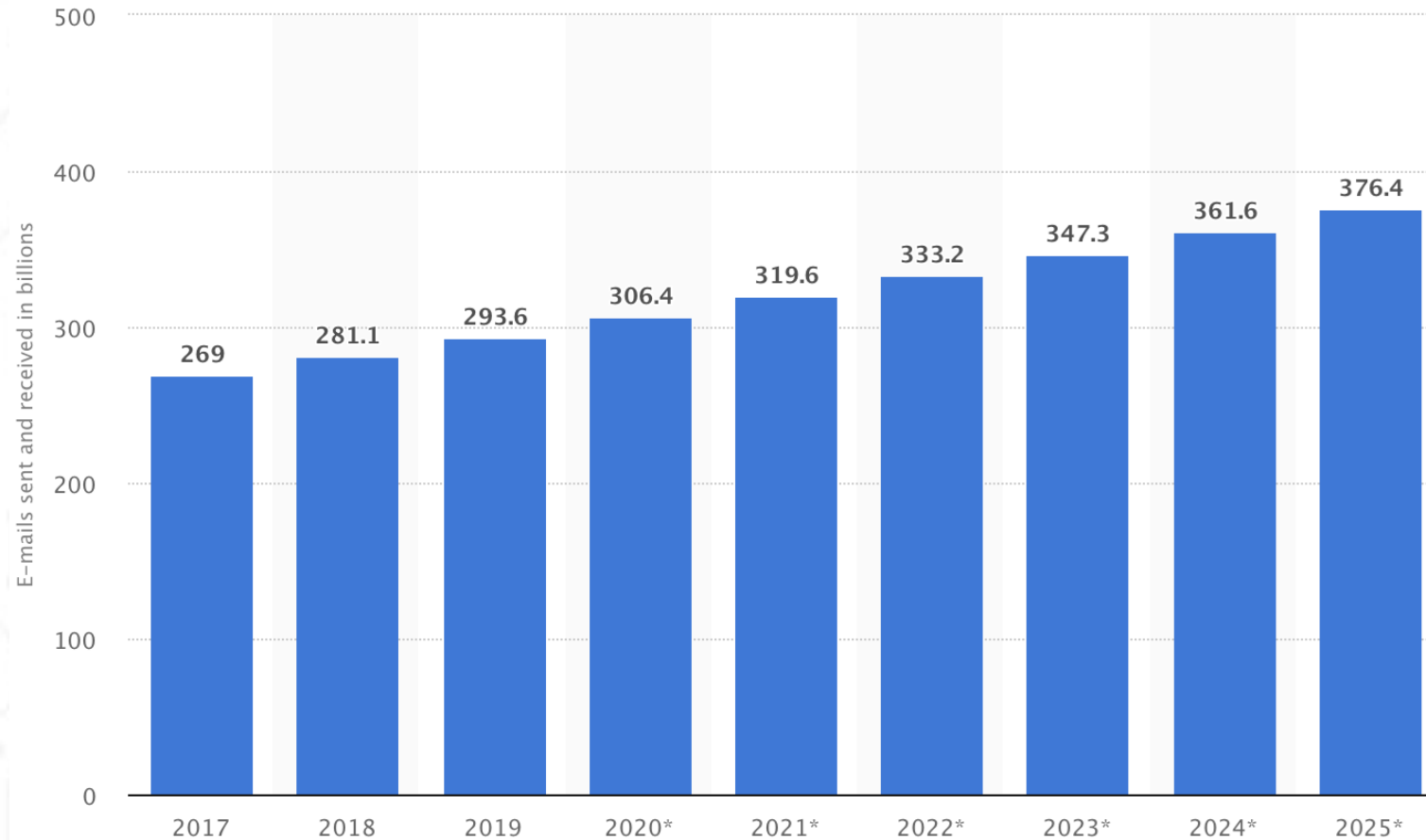
*10 peoples (PhD students, engineers, research engineers)
13 papers since 2018, 2 awards
Patents pending*



Institut de Recherche en Informatique de Toulouse
CNRS - INP - UT3 - UT1 - UT2J



Email: Simple & massively used



**330 billion e-mails
per day worldwide**
(source: Statista, 2022)

The email dilemma

<u>Strengths</u>	<u>Weaknesses</u>
Simple	Massive
Universal	Disturbing

Data you can find in emails

Structured



Sender
Recipient(s)
Date
Priority



Unstructured



Object
Body
Attachments



Object

Request for information

Boîte de réception ×



Nicolas Gagean

aujourd'hui à 12:34

À : Philippe Garnier



Body

Hi Philippe,

I am Penbase sales manager and I am contacting you because we would like to know more about your Prevyo solution. To give you an idea, we are a 40 people company and all of us spend an average 1 hour per day managing emails.

Could we arrange a meeting next week in your offices?

Thank you very much,
Nicolas Gagean

Signature

Nicolas Gagean - Directeur commercial

nicolas.gagean@penbase.com

4 30 78 12 86

Penbase - www.penbase.com

Espace Bocaud - 42 rue de la Pierre Plantée
34830 Jacou - France

Two kinds of information

<u>Facts</u>	<u>Requests</u>
“Your invoice is available”	“Please call me back at 4pm”
“I studied your project”	“Can you send the agreement?”

- Identification of tasks in e-mails since the 90's (Khosravi et Wilks, 1999)
- Lot of research thanks to the Enron corpus (Klimt et Yang, 2004).

Dialogue act classification

- Statistical approaches based on n-grams (Carvalho et Cohen, 2006)
- Supervised learning (Khoo et Albrecht, 2006 ; Lampert et al. 2009 ; Kalitvianski 2018)
- Unsupervised learning (Joty et al. 2011 ; Lampert et al. 2014)
- Semi-supervised learning (Jeong et al. 2009)
- Rule-based system (Scerri et al. 2010)

- 1 I'm curious - please let me know what you think about this option.
Request (length = 47, start = 0)
- 2 I'm curious - please let me know what you think about this option.
Request (length = 45, start = 21)

Lampert et al. (2014)

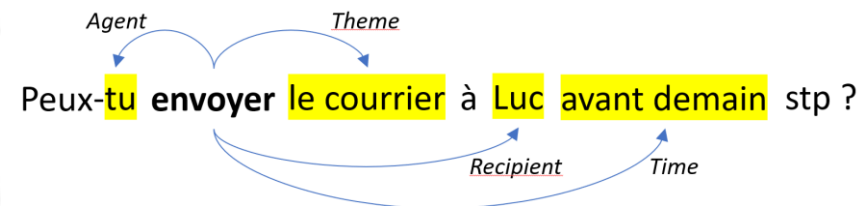
Arnaud,

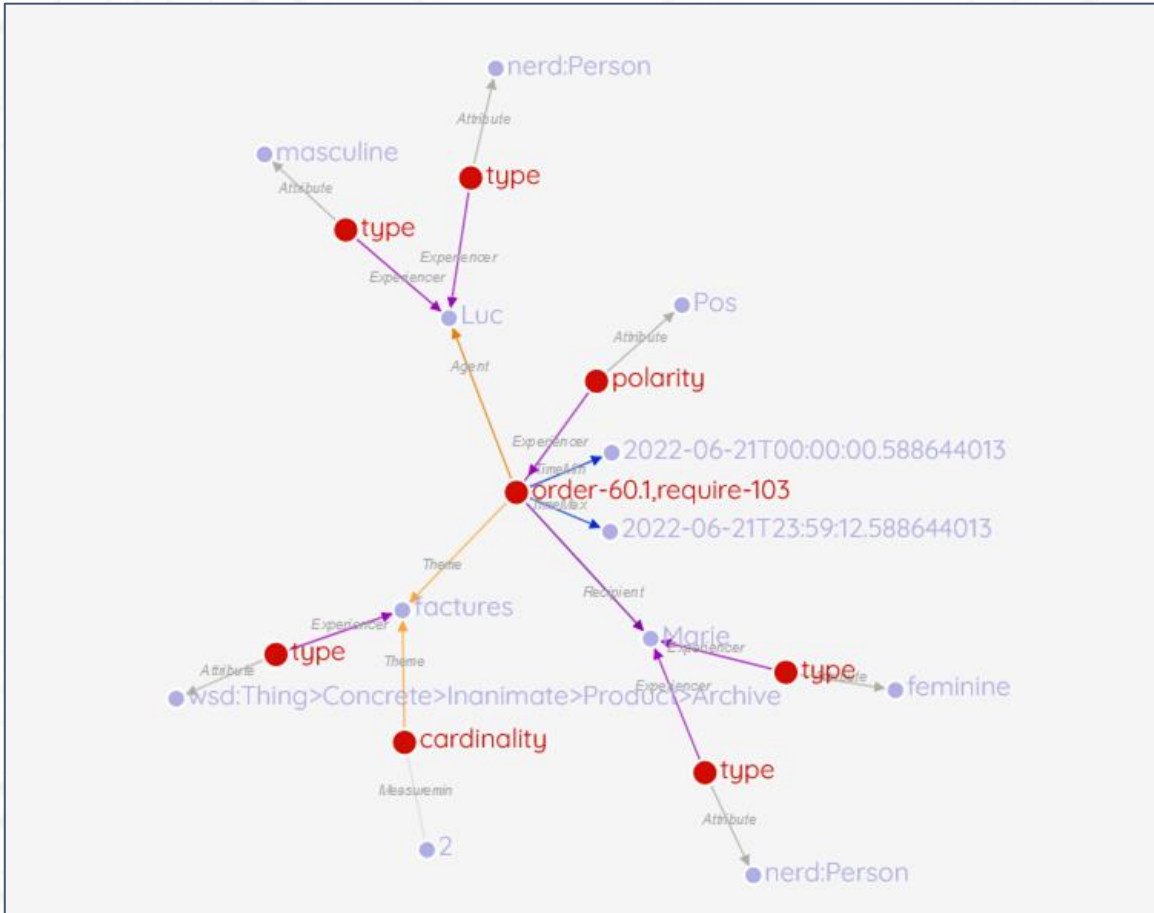
Peux-tu me dire si tu prévoies de présenter des diapos sur le projet ? Si tel est le cas, peux-tu me les envoyer avant pour que j'ajuste les miennes afin d'éviter les redondances.

Merci

Véronique

Kalitvianski (2018)





Collaborative research projects in progress...

- **POPCORN**, 36 months, funded by AID : industrial research for semi-automated enrichment of a knowledge base for security and defense customers.
- **XP-Event**, 36 months, funded by Occitanie : Event detection and prediction in emails.



1 CHOOSE A LANGUAGE

French

2 CHOOSE A SERVICE

Search a service

Parser ?

Keywords ?

Concepts ?

Highlighter ?

Anonymizer ?

Sentiments ?

 #!* Insult LABS ?

Summarizer ?

Meaning representation ?

 Trusty LABS ?

 Relations LABS ?

IP IndexPresse ?

3 SUGGEST A TEXT

Sentiments

 Drag & drop a text or import a file (.txt) Choose a file

Text to be analyzed

1880 remaining characters

Luc déteste les e-mails. Les e-mails sont bien sûr un excellent moyen de communication même s'ils sont parfois inutiles.

💡 To test this service and discover its full potential, it is suggested to provide one or more sentences conveying opinions (positive, negative) and/or emotions (joy, sadness, anger, for example).

 4 Display result
Result

General sentiment :

Emitters	Opinions	Targets
Luc		e-mails
Auteur		moyen de communication
Auteur		e-mails

Emitters	Emotions	Triggers
Auteur		e-mails

Demo available online :
<https://pss.prevyo.com>

emvista™

TEXT ANALYTICS

Thank you for your time!

cedric.lopez@emvista.com



SORTED LIKE YOU'VE NEVER SEEN BEFORE.

The Prevyo Assistant extracts essential information from your emails to optimize your time. Every morning, it sends you a summary of the requests that have been sent to you. With Prevyo, never miss important information again and make e-mail productive!

			
DETECTS	ACCELERATES	ENRICHES	CLASSIFIES
Requests addressed to you.	E-mails forwarding to your contacts, according to your instructions.	Your diary and your databases.	Attachments automatically (invoices, reports, etc.).

Save 1 hour per day in e-mail management.

PREVYO a solution by **emvista**