EUSKORPORA: A STRATEGIC FRAMEWORK FOR DIGITAL SOVEREIGNTY AND LINGUISTIC INCLUSION OF BASQUE IN THE ERA OF AI

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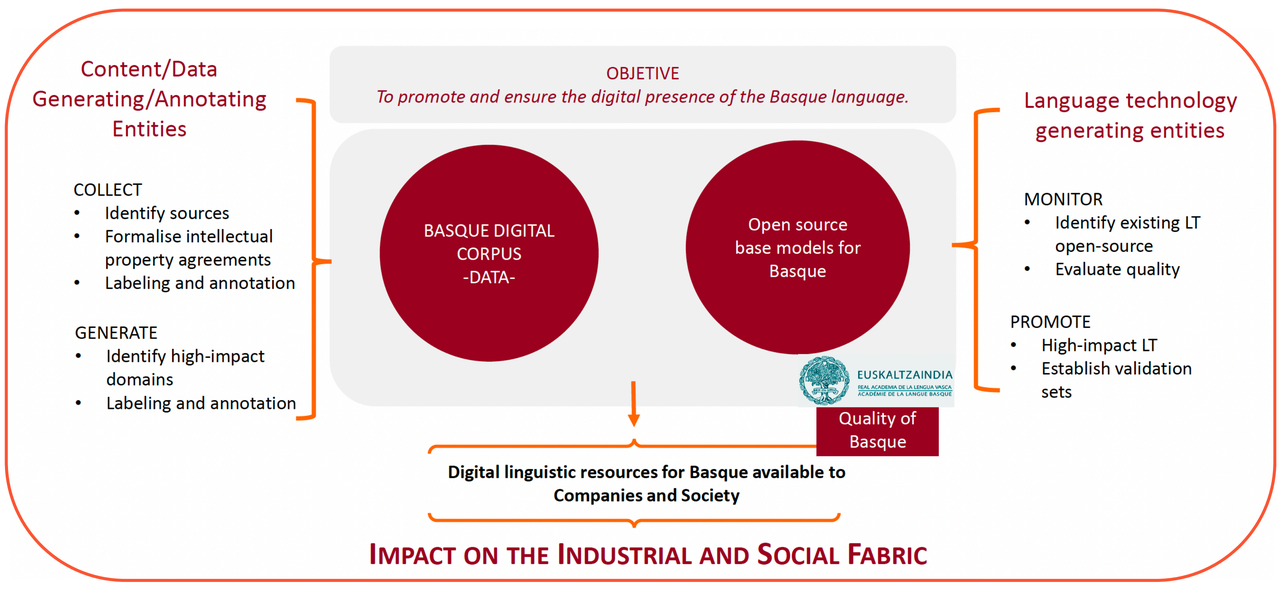
INTRODUCTION

- Basque is a non-Indo-European language spoken by ~800,000 people.
- Despite strong social presence, it remains under-resourced in digital environments.
- Languages without sufficient technological support risk digital extinction.
- Current AI systems require large-scale, high-quality linguistic data **(Euskorpus project)**.

Euskorpora addresses this gap by building a comprehensive infrastructure for Basque language technologies, combining corpora, models, and data governance.



EUSKORPORA´S INFRASTRUCTURE

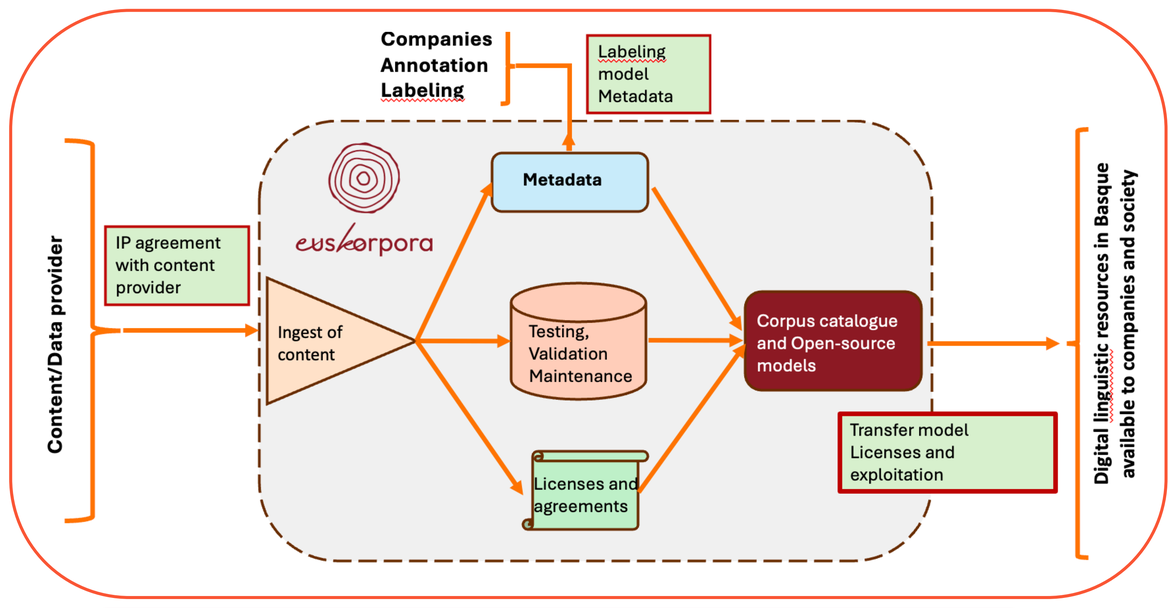
- **Strategic framework:** European, Spanish, and Basque language technology initiatives.
- **Collaborative ecosystem:** public institutions, academia, industry; shared governance and resource contribution.
- **Impact:** pioneering model advancing technologies for low-resource languages.

PARTNERS

COLLABORATORS

CORPUS PRODUCTION

- Data is collected through collaboration with public institutions, academia, and industry.
- Contributions include speech, video, and text data across multiple domains and dialect variations.
- A dedicated platform (“Bildaltzaile”) enables secure data submission.
- Data acquisition follows legal agreements and licensing frameworks ensuring compliance and trust.
- Full corpus production workflow, comprising data processing, annotation, validation, sharing and language model development.



EUSKORPUS STATISTICS

CONTENT TYPE	CONTENTS	SIZE
Speech from EiTB (EUS)	**Collected** (TV and radio)	~2,000 Hours (TV)
		~4,000 Hours (radio)
	Transcribed (TV)	1,396 Hours (TV)
Text (EUS, SPA, ENG) Aim: feed Euskorpus Produce data for MT training and test	**Crawled and processed** data from 3 webs Source: Mondragon Corporation	TULANKIDE: 4739749 words ORAIN: 22834014 words MONDRAGON HEALTH: 87557 words
	ADDI (scientific documents repository) Source: EHU	**Collected**: ~2,000 scientific documents
		Converted, cleaned, categorised, segmented: ~700 documents

CONTENT TYPE	CONTENTS	SIZE
Speech from EiTB (EUS)	**Transcription** (radio)	~900 Hours
Text (EUS, SPA, ENG)	**Crawled and processed** data from 3 webs Source: Mondragon Corporation	Under categorisation (per domain and language) and segmentation Aim: prepare data for translation
Text (SPA) **Collected, converted, cleaned, segmented** **Aim: to be translated into Basque to produce SPA – EUS training data and benchmarks (2 references)**	*Cultural Studies and Anthropology (ADDI)*	Source for train: 336,966 words
		Source for benchmarks: 4,000 segments (126,599 words)
	Education and Pedagogy (ADDI)	Source for train: 83,259 words
		Source for benchmarks: 2,000 segments (75,198 words)
	History and Archaeology (ADDI)	Source for train: 239,635 words
		Source for benchmarks: 4,000 segments (145,853 words)
	Public Health and Epidemiology (ADDI)	Source for train: 147,289 words
		Source for benchmarks: 2,000 segments (66,678 words)

CONCLUSIONS

- Comprehensive infrastructure for Basque language technologies
- End-to-end pipeline: from data collection to AI models
- Aligned with European frameworks (LDS, FAIR)
- Supports digital sovereignty, inclusion, and innovation
- Scalable and transferable to low-resource languages

FUTURE WORK

- Expand both speech & text corpora
- Address new domains according to user needs
- Develop LLMs and LT services for pilots
- Automate data processing and annotation
- Integrate European infrastructures (LDS)
- Deploy real-world AI applications
- Focus on scalability, usability, and impact

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