NLTP
National Language Technology Platform

45th mipro 2022 HYBRID CONVENTION

NLTP and use of Language Technologies in Public Administration

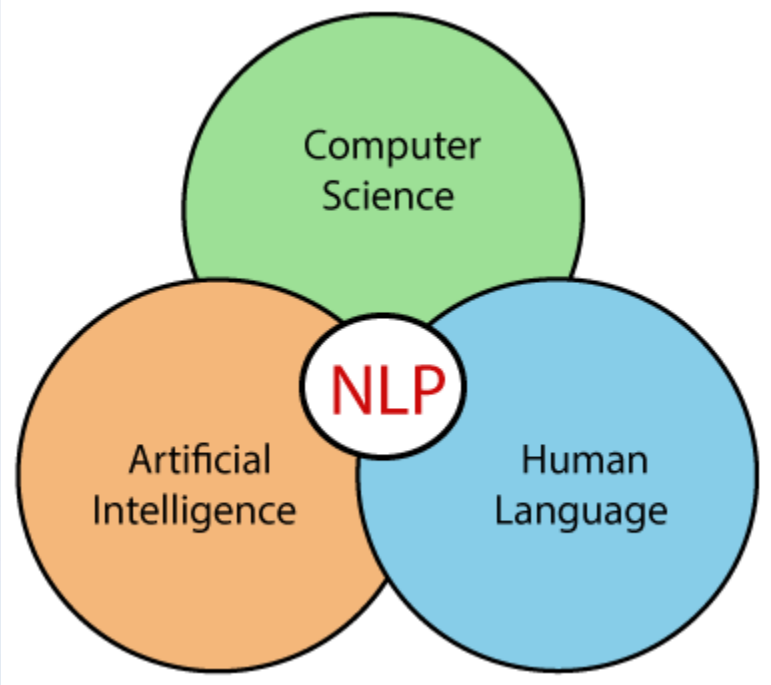
Željka Motika
45 Jubilee International ICT Convention MIPRO 2022
Artificial Intelligence Systems (CIS-AIS)
5/26/2022, Opatija

Agenda

- ✓What are Language Technologies (LT)?
- ✓Foundations of LT - how language tools are created?
- ✓LT in Action!
- ✓LT in public administration - what is it good for?
- ✓NLTP - how do we fit in the story?
- ✓LT in public administration - Survey

What are Language Technologies (LT)?

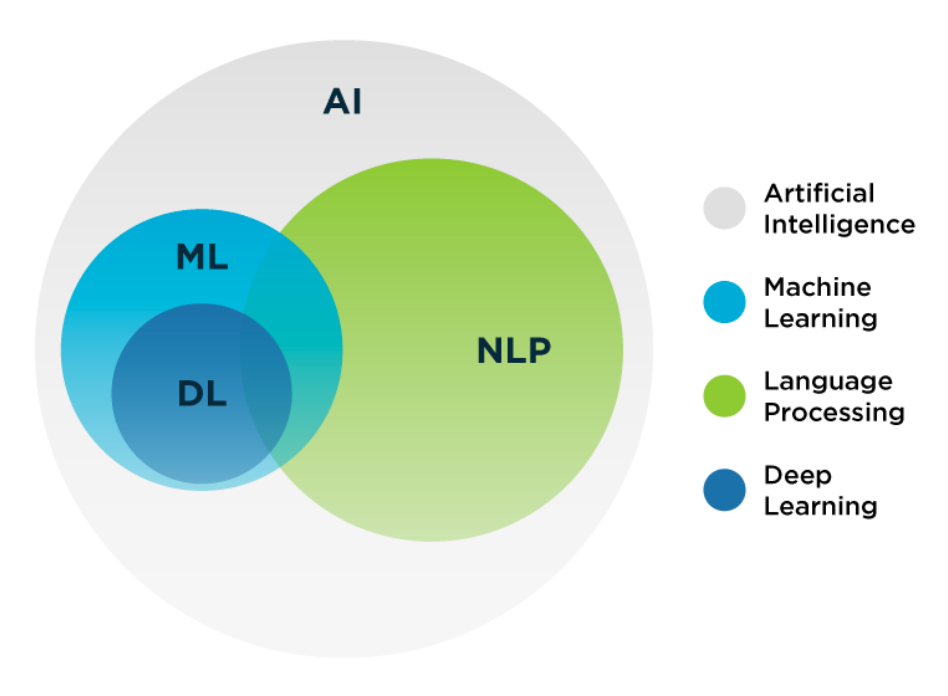
Language Technologies - technologies that can analyze, produce, modify or respond to human texts and speech. The most common example of language technologies can be the Google Translate machine translation engine.



Foundations of LT - how language tools are created?

Data Sets + Natural Language Processing (NLP)

Natural language processing is a type of AI that assists programs in understanding and interpreting human language. NLP techniques analyze large bodies of unstructured text data.



LT in Action

- ✓Computer Assisted Translation
- ✓Machine Translation
- ✓Chatbot Solutions
- ✓Terminology Solutions
- ✓Image to Text Technology
- ✓Text to Speech Technology
- ✓Speech to Text Technology
- ✓Transcribing/ Automated Meeting Notes
- ✓Meeting Assistant
- ✓Subtitling

LT in public administration - societal benefits

- ✓ State
  - ✓ **Author of a large amount of publicly available language resources*** - *access to public sector data*
    - ✓ *collection*
    - ✓ *storage*
    - ✓ *share*
  - ✓ **Creator of National strategy on AI** - *highlight LT in AI strategy*
    - ✓ *protect the use of the Croatian language in a digital society*
  - ✓ **Provider of public e-services** - *interactive and personalized public services*
    - ✓ *multilingual access*
    - ✓ *access for users with disabilities*

LT in public administration - raising efficiency

- ✓Centralization of translation practices - **single Translation Office** for the entire public administration
  - ✓Reduction of translation costs
  - ✓Legal support to enforce the use of modern, state-of-the-art resources and CAT tools in the translation process
  - ✓Infrastructure to exchange and share language resources (TMs, glossaries, vocabularies…)
  - ✓Standardization of the language of public administration
  - ✓Rationalization of human resources in public administration

NLTP - how do we fit in the story?

Partners

- Industry, academia and research leaders in Language Technologies across Europe:

- **Tilde**, Riga, Latvia (coordinator)
- **Culture Information Systems Centre**, Riga, Latvia
- **Malta Information Technology Agency**, Valletta, Malta
- **University of Tartu**, Tartu, Estonia
- **Office of the State Advocate**, Valletta, Malta
- **L-Università ta' Malta**, Valletta, Malta
- **Central State Office for the Development of Digital Society**, Zagreb, Croatia
- **University of Zagreb, Faculty of Humanities and Social Sciences**, Zagreb, Croatia
- **Reykjavik University**, Reykjavik, Iceland

Mission

- Remove language barriers;
- Promote language equality;
- Increase accessibility;
- Foster cross-border integration in use of public digital services offered in languages of EU and EEA.

Duration

2021-04-01 — 2023-03-31

Funding

EU Connecting Europe Facility (CEF) Telecommunications Programme

Total eligible costs: 1,061,457 €

Estimated CEF contribution: 796,160 €

This action received funding from the Connecting Europe Facility Telecommunications Programme.

NLTP - how do we fit in the story?

NLTP solution builds on the already existing hugo.lv platform (https://hugo.lv/en) *and the results of EU Council Presidency Translator* (*https://hr.presidencymt.eu/*)

Central State Office for the Development of the Digital Society - RDD

Central State Office for the Development of the Digital Society - a driving force behind the digitalisation process in the Republic of Croatia

- ✓improvement and standardization of digital public services and digital infrastructure,
- ✓popularization of digital skills,
- ✓coordination of ICT development and application,
- ✓unique and permanent availability and re-use of Croatian public official documentation and information and other open data to the public

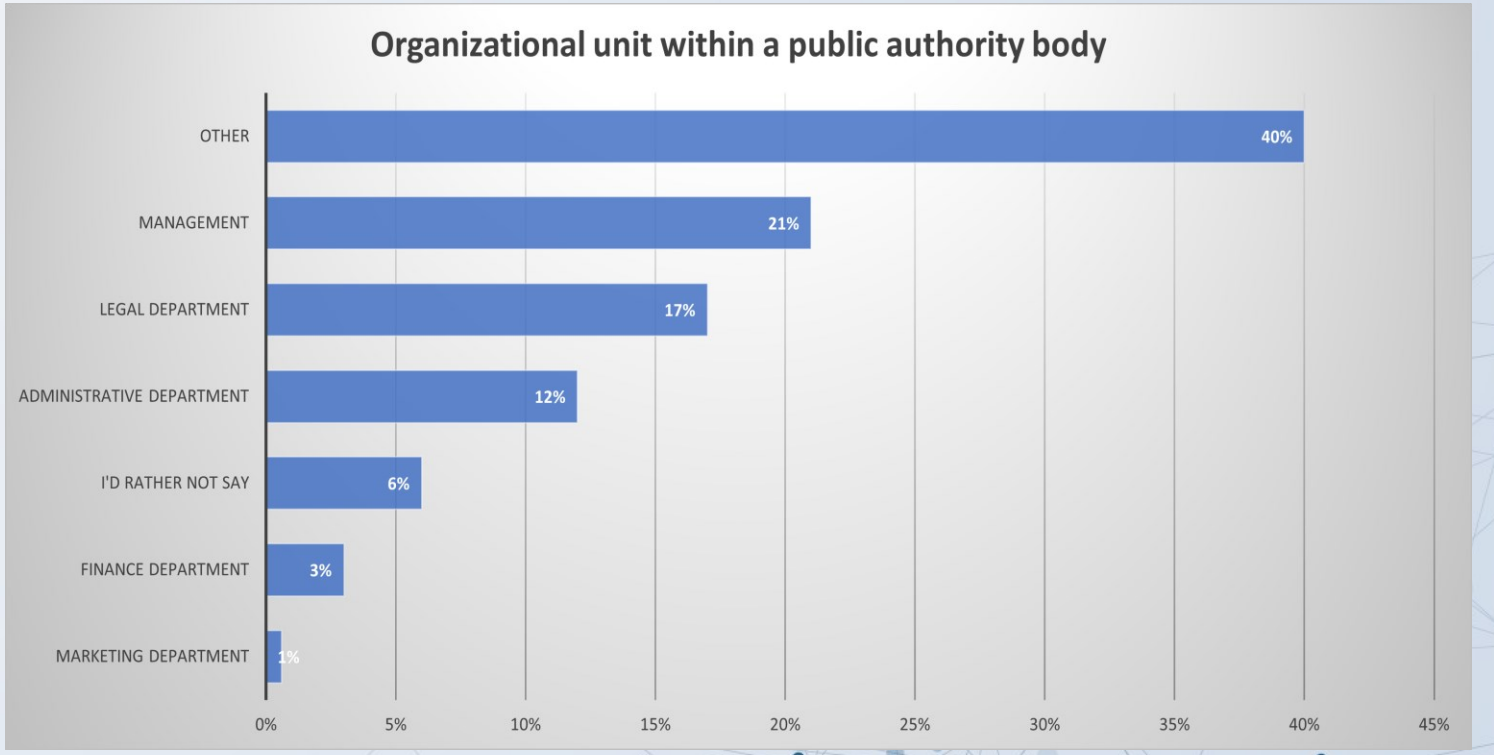
As a coordinator of the digitalization process in the Republic of Croatia, we are responsible for collecting and publishing legal documents in a machine-readable format, which we publish using the language-sensitive search engine CADIAL.

Central State Office for the Development of the Digital Society – NLTP activities

- ✓Estimation and aggregation of language resources
- ✓Deployment and hosting of NLTP on State IT infrastructure
- ✓Integration of NLTP through existing APIs in other public services in Croatia
- ✓Testing, validation and evaluation of implemented modules
  - ✓**deployment of fully functional NLTP tailored for the needs of Croatia**.

LT in public administration - Survey

- ✓Sent to **540** public authorities
- ✓**308** Total responses



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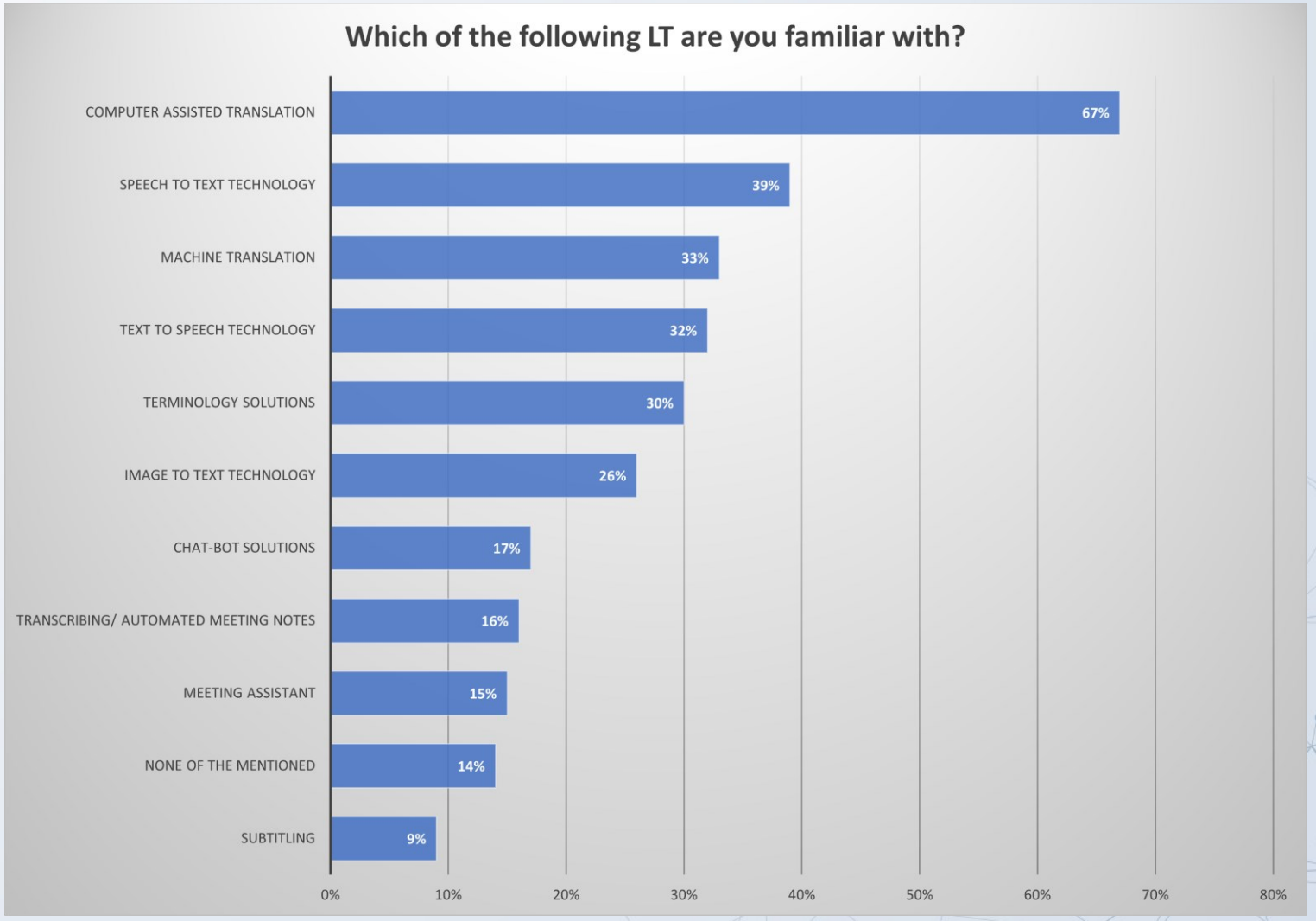

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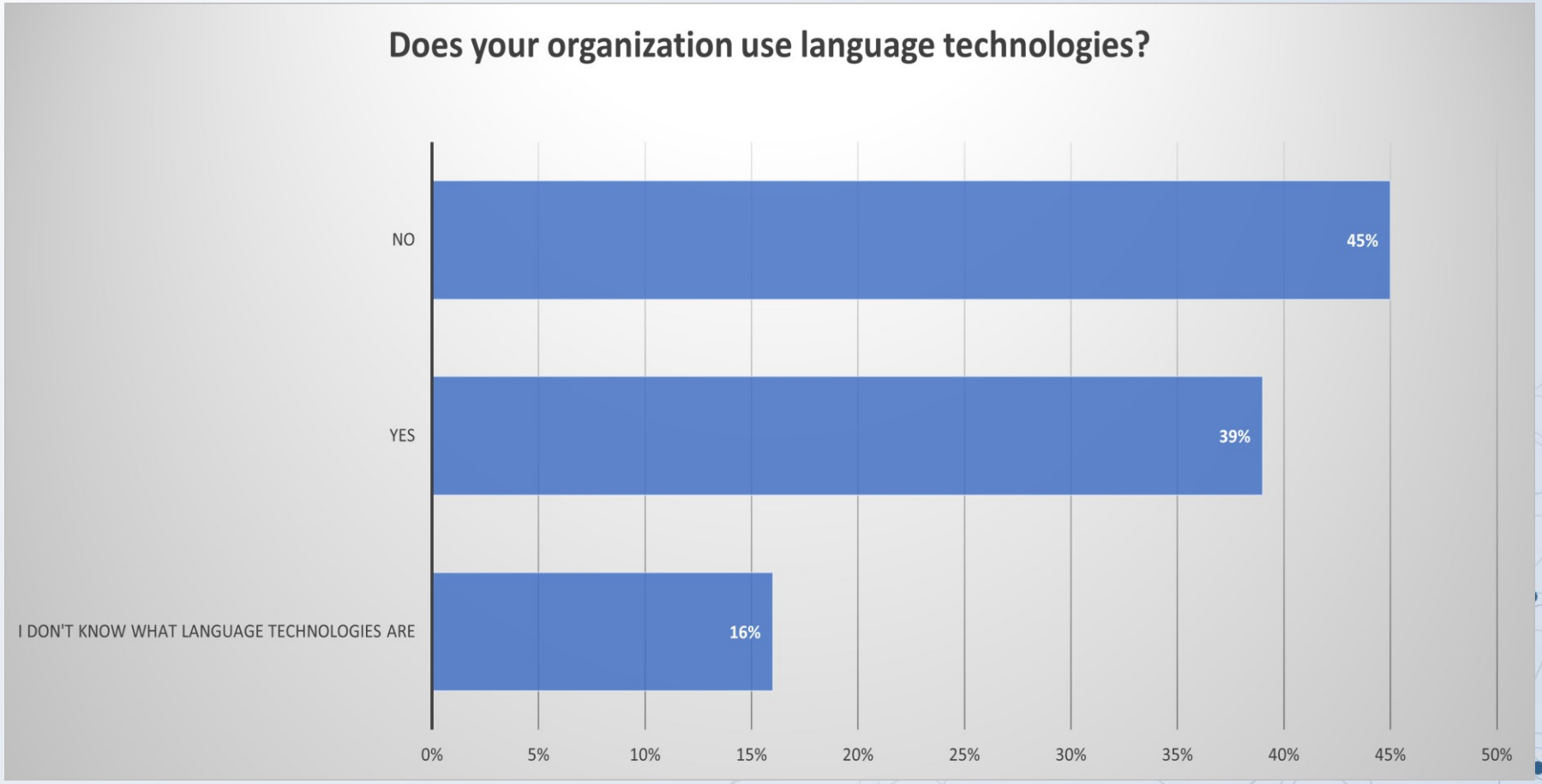

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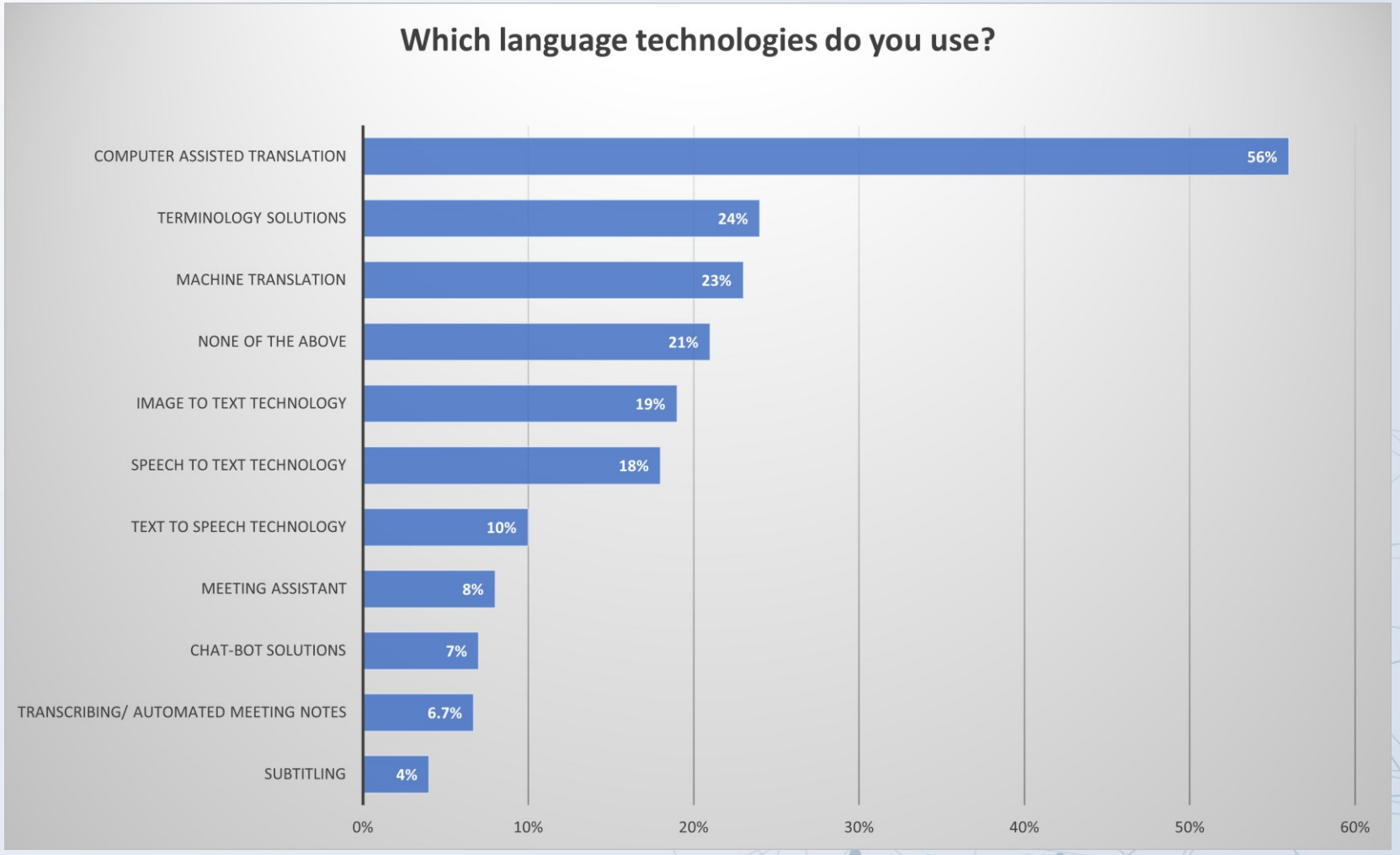

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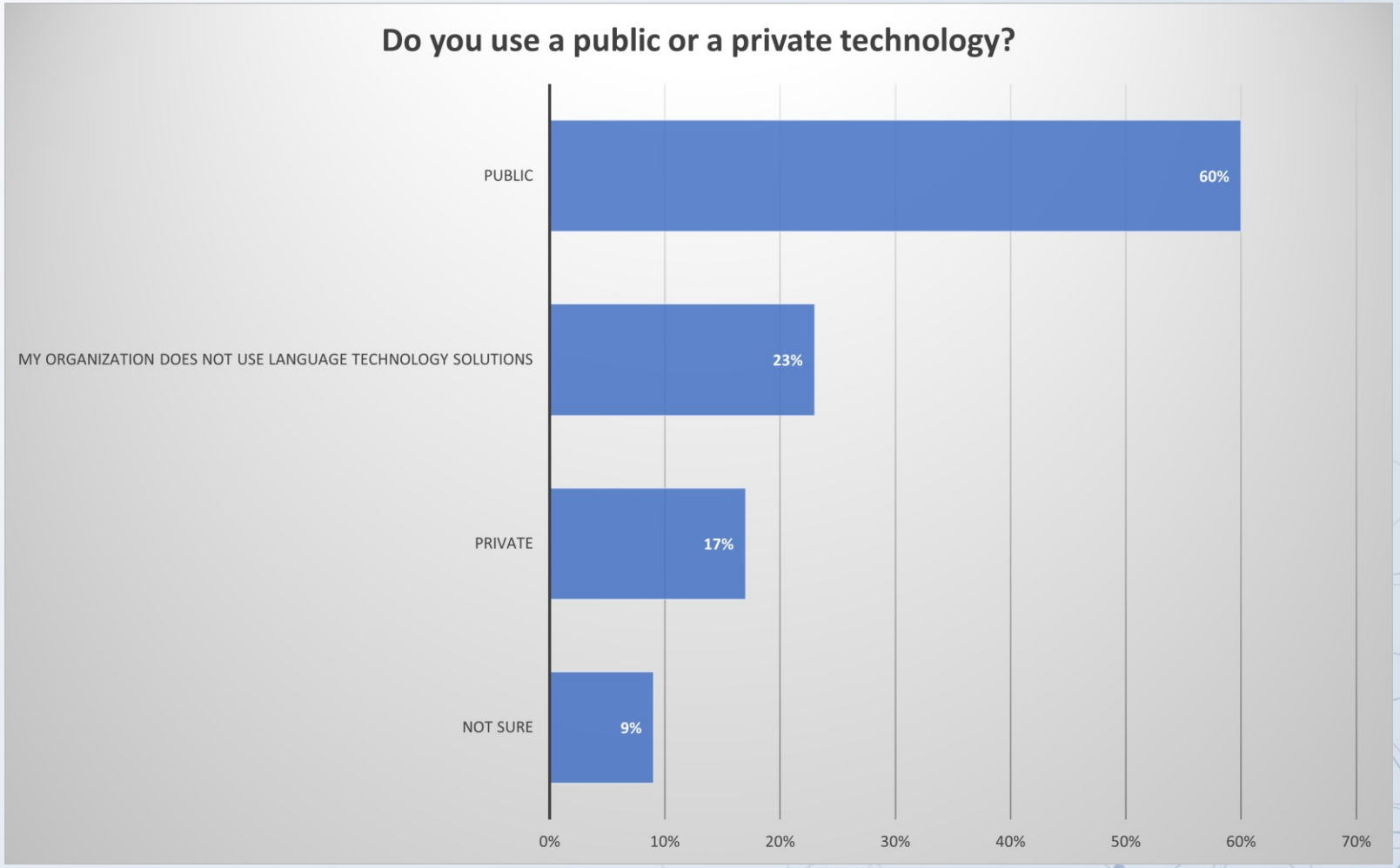

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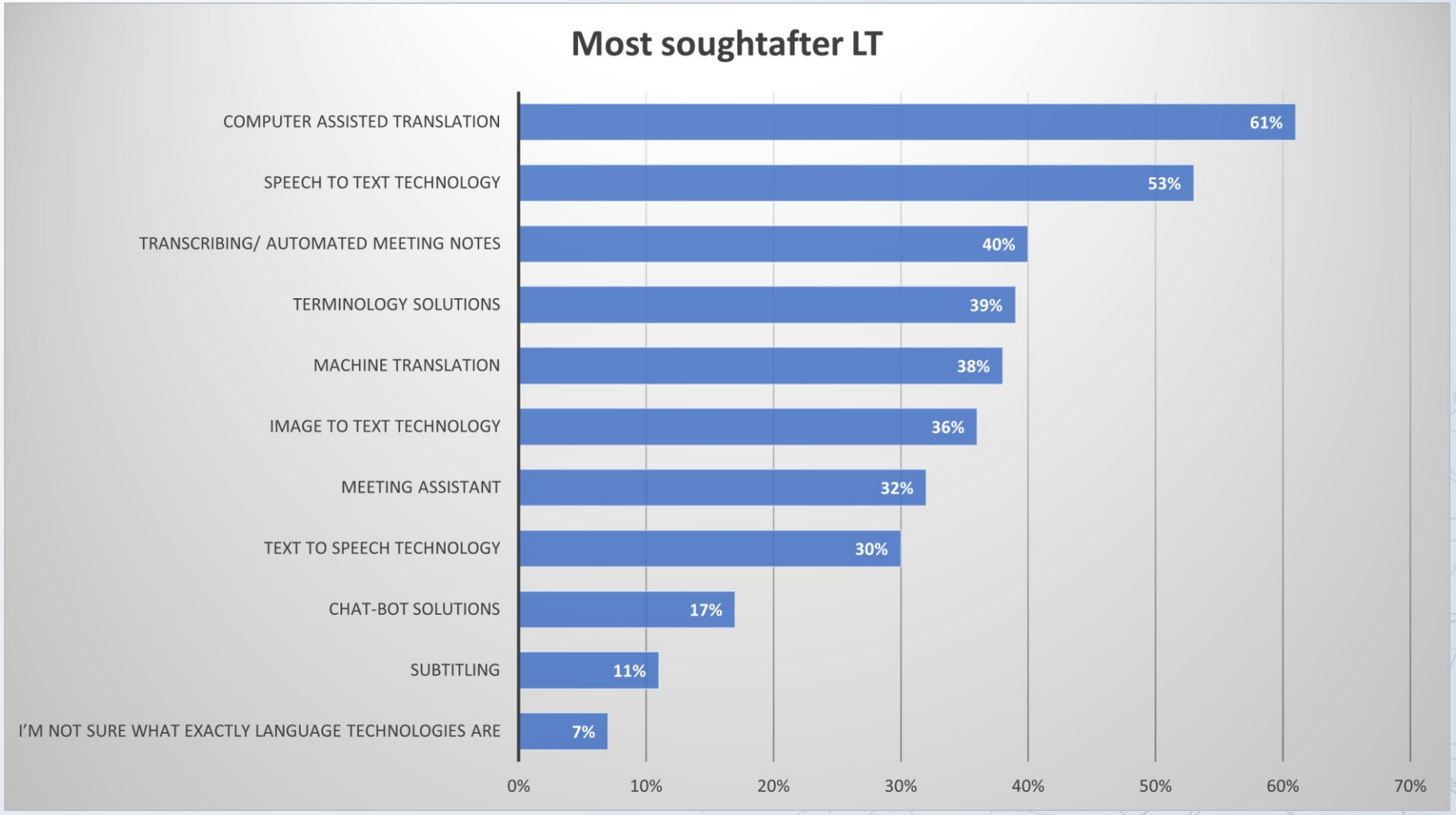

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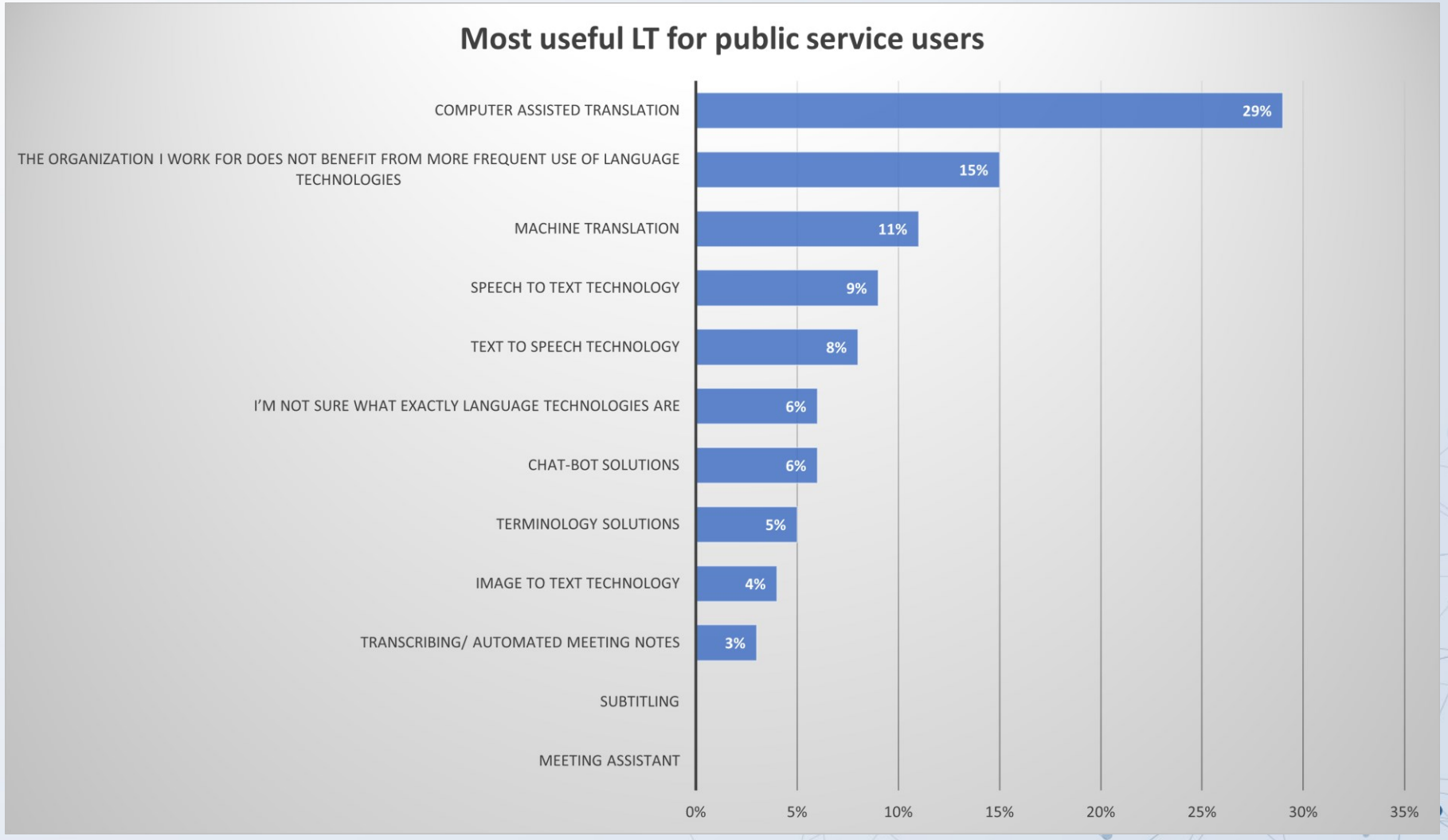

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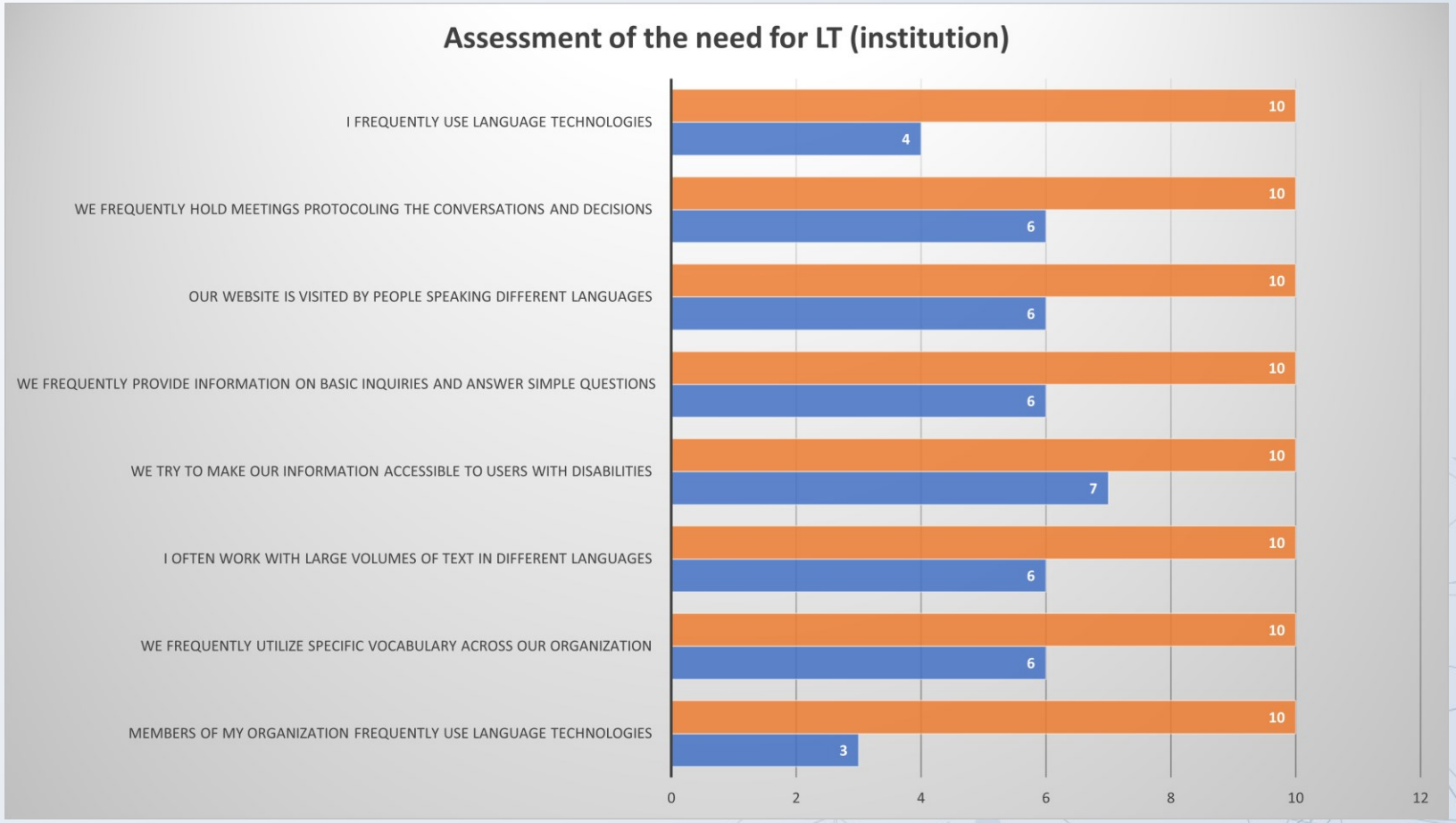

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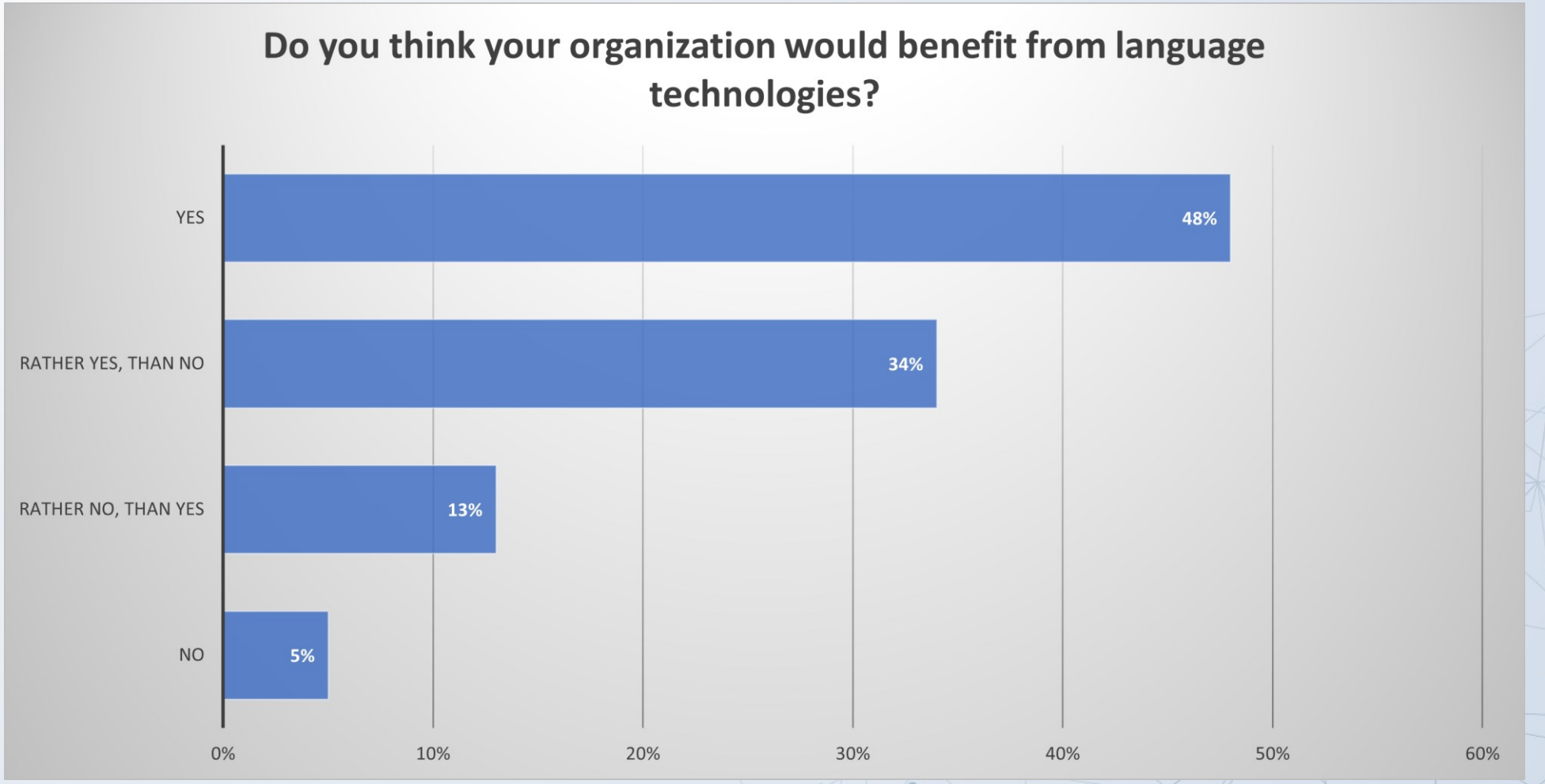

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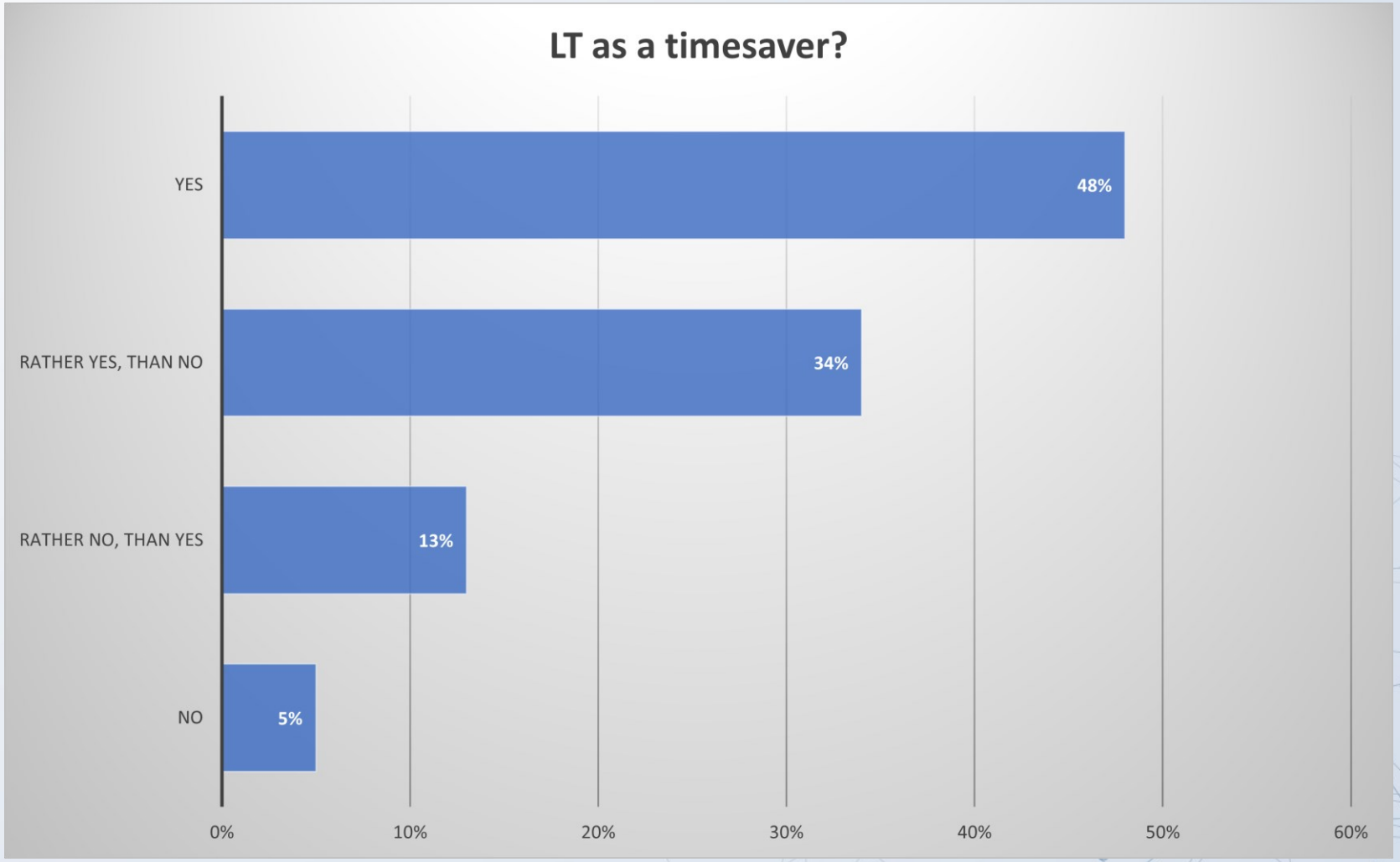

Thank you!

nltp@rdd.gov.hr

www.nltp-info.eu