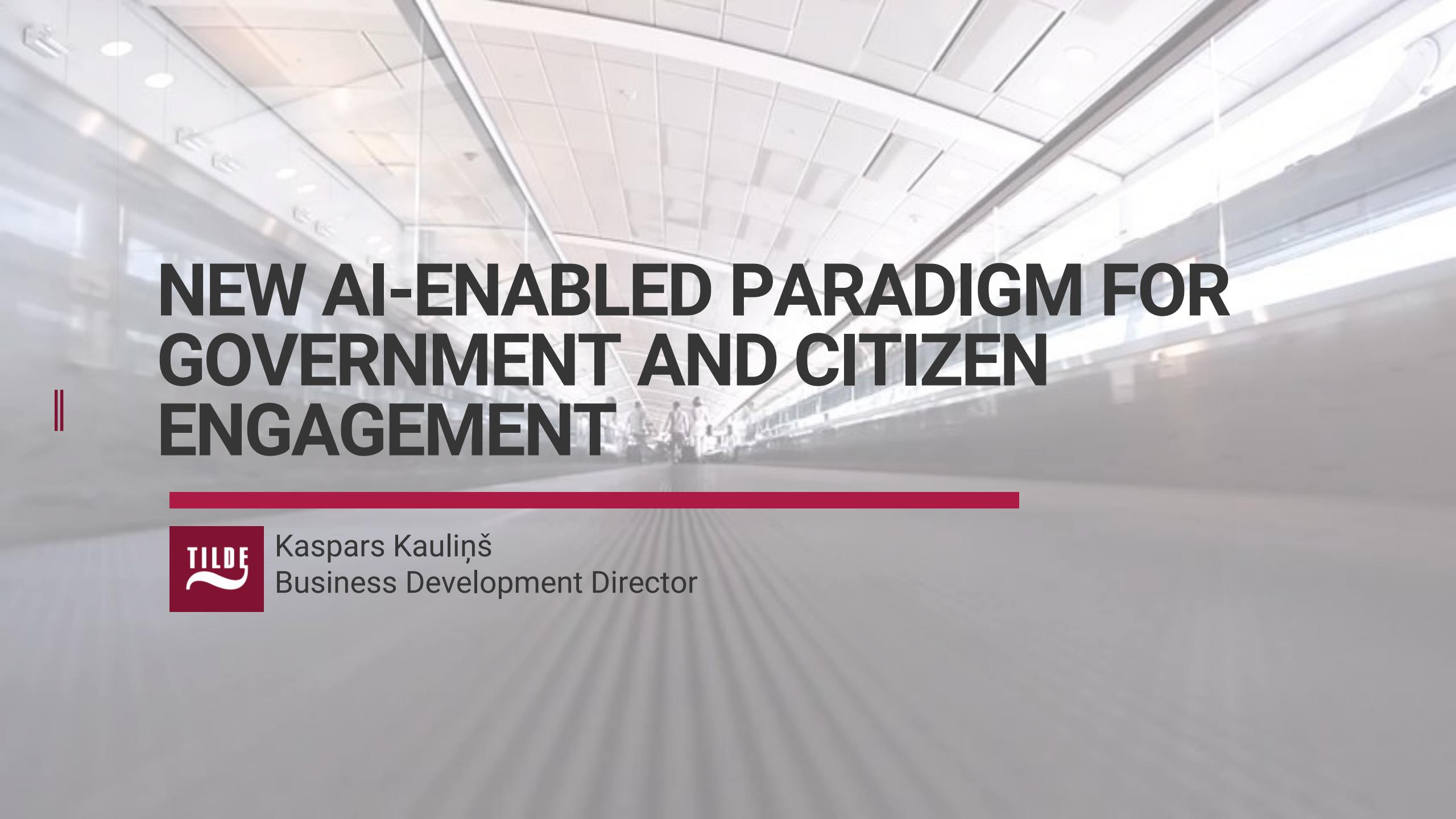


NEW AI-ENABLED PARADIGM FOR GOVERNMENT AND CITIZEN ENGAGEMENT

Kaspars Kauliņš
Business Development Director

PUBLIC GOVERNANCE IN THE DIGITAL AGE. CHALLENGES.

DIGITAL TRANSFORMATION: USING TECHNOLOGY TO INCREASE EFFICIENCY

NEW COMMUNICATION CHANNELS AND USER HABITS

MULTILINGUAL ACCESS TO SERVICES AND INFORMATION

INCREASING USER EXPECTATIONS

INCLUSION OF CITIZENS WITH SPECIAL NEEDS

SHORTAGE OF TECH TALENT

NEED FOR OPEN DATA AND UNIFIED TERMINOLOGY

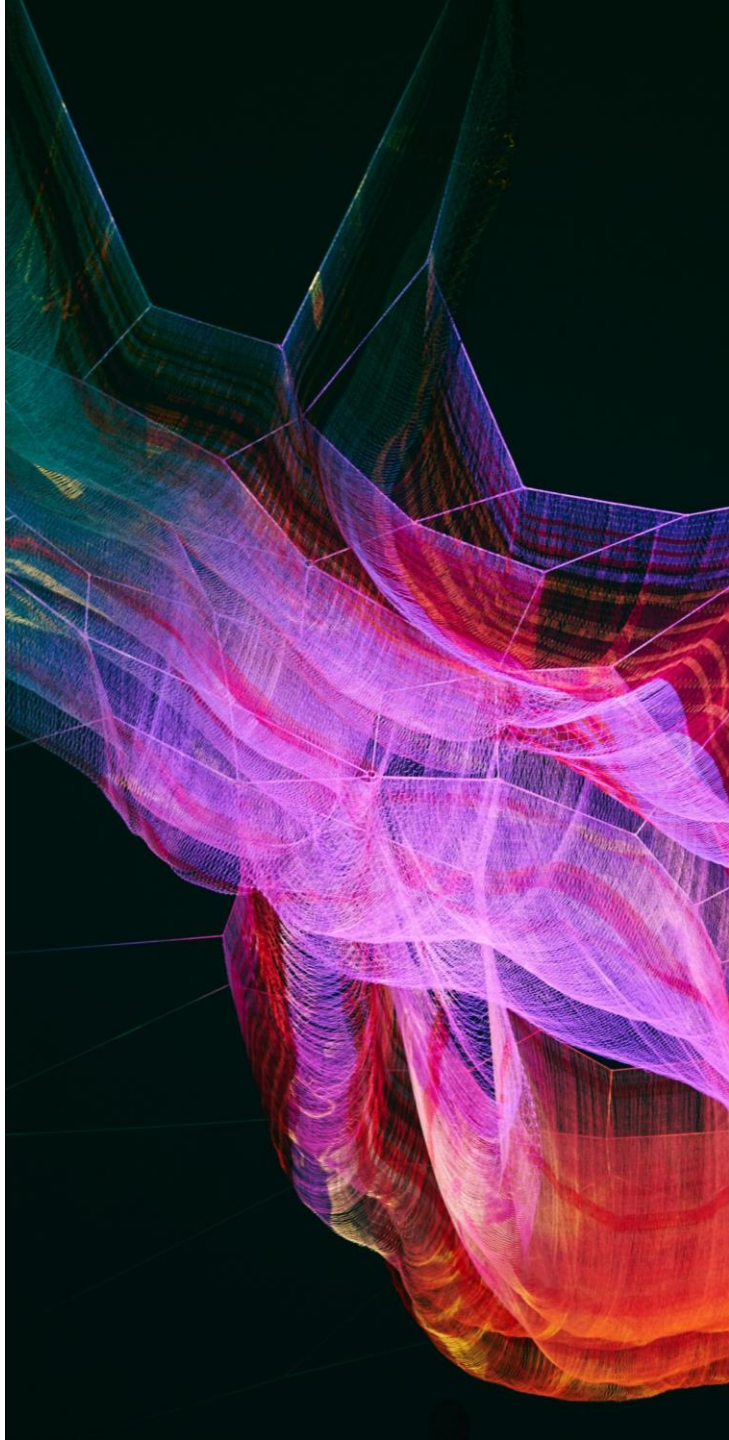
OUR KEY LANGUAGE TECHNOLOGIES

CUSTOM NEURAL MACHINE TRANSLATION

CONVERSATIONAL AI PLATFORM

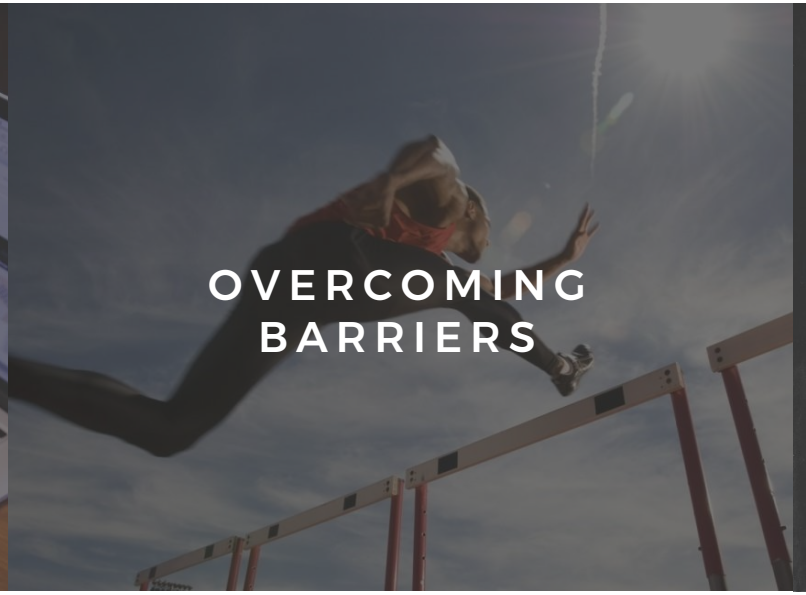
NATURAL LANGUAGE UNDERSTANDING/ PROCESSING

AUTOMATED SPEECH RECOGNITION AND SYNTHESIS



WHAT ARE THE USES FOR MACHINE TRANSLATION IN PUBLIC DOMAIN?

Providing access to **multilingual content and e-services**



Reducing language barriers in communication

To increase the productivity of translators, journalists ect.

WHAT ARE THE USES FOR SPEECH RECOGNITION IN PUBLIC DOMAIN?

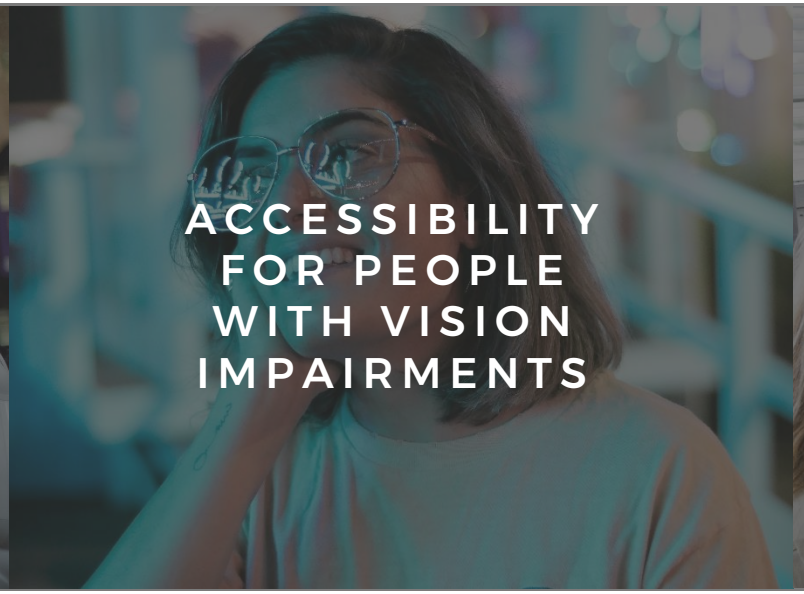
Supporting people with hearing impairments

Automating transcription of meeting minutes and protocols e.g. Parliament, courts

Enabling spoken content analysis and voice communication with chatbots and «smart» devices.

WHAT ARE THE USES FOR SPEECH SYNTHESIS IN PUBLIC DOMAIN?

Supporting voice enabled robots and chatbots



Enabling access to written content for people with special needs (e.g. vision, dyslexia)

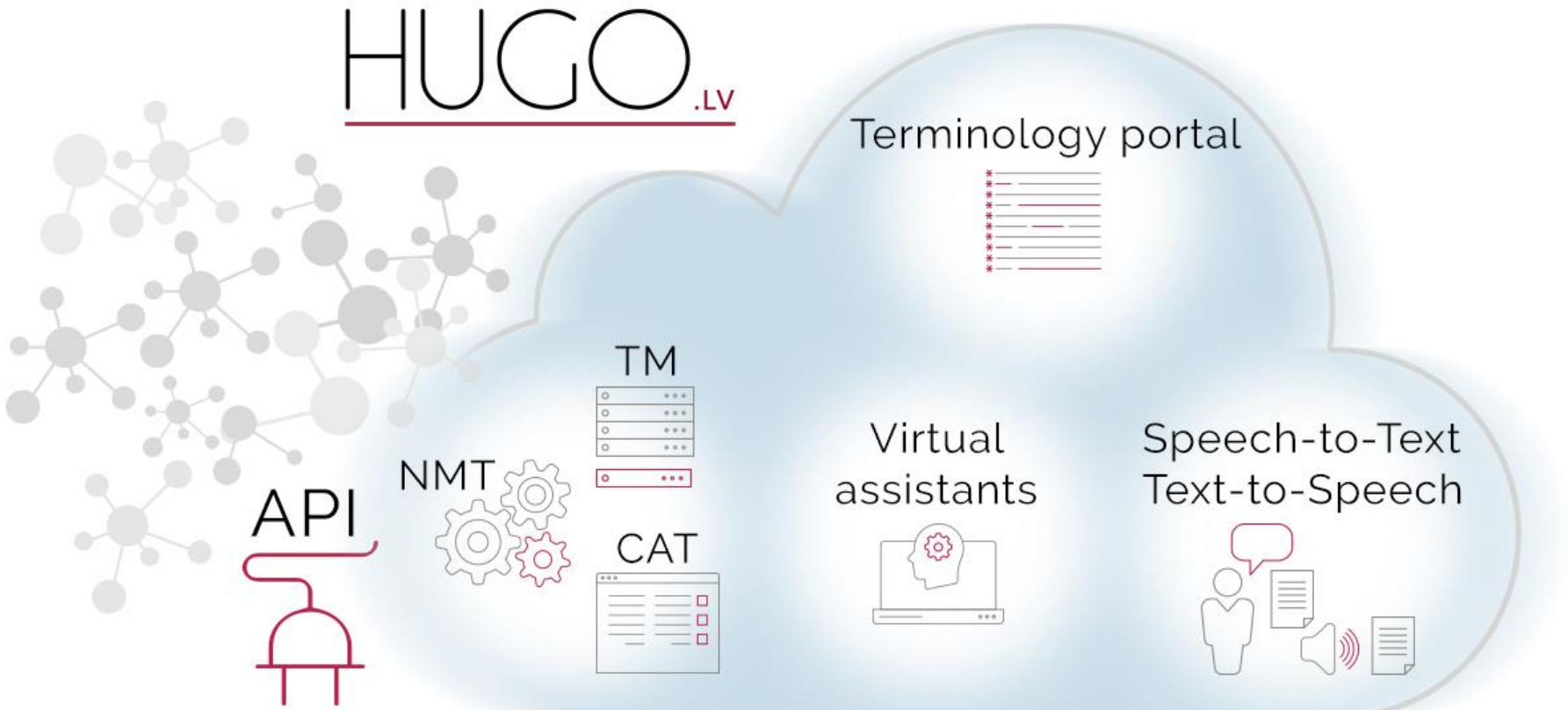
Enabling automated phone calls

LANGUAGE TECHNOLOGY APPLICATION IN LATVIAN PUBLIC SECTOR

SELECTED PROJECTS

Culture Information Systems Centre Republic of Latvia

HUGO.LV – LANGUAGE TECHNOLOGY PORTAL FOR LATVIAN E-GOV



TILDE

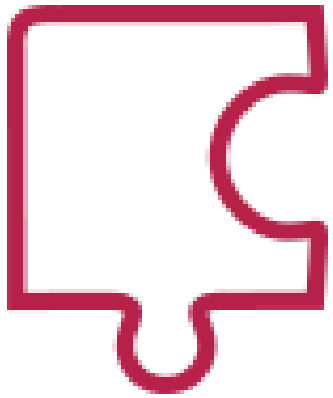
Culture Information Systems Centre Republic of Latvia

HUGO.lv connection options and tools

Translate add-on for browsers

Speech add-on for browsers

Translation API



Available on the App Store

Get it on Google play

Mobile apps

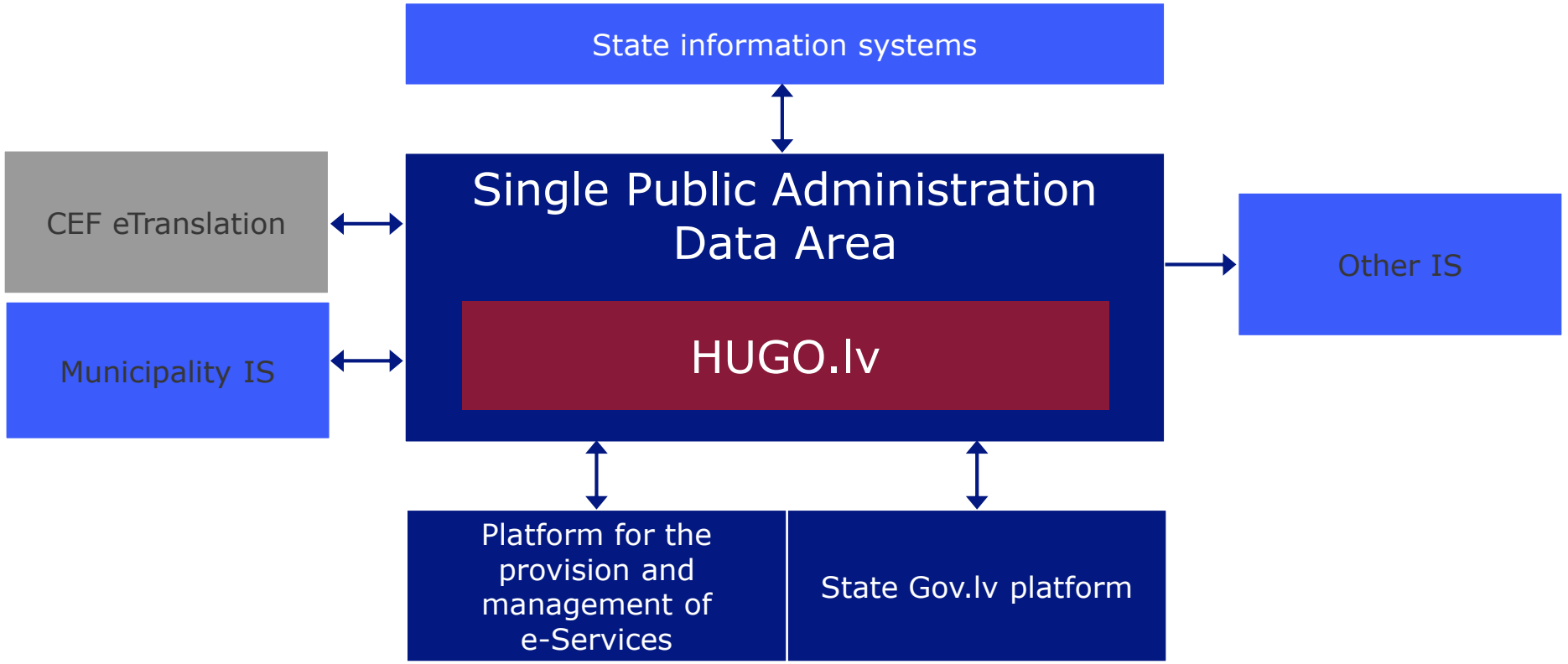
SDL Trados plug-in

Speech module for Windows

Translation widget

TILDE

Culture Information Systems Centre
Republic of Latvia



Hugo.lv | Factsheet

Tilde partnered with the Latvian public administration to create a language technology platform with MT, speech, and terminology management functionalities

- Platform provides **integration** with governmental websites and information systems enabling **dynamic content translation**
- The next phase of the project will introduce a set of virtual assistants to **improve accessibility** to public services

149 M **TRANSLATED WORDS USING MT**
in 6 months

8.1 M **RECOGNIZED WORDS**
in 6 months

5.4 M **SYNTHESISED WORDS**
in 6 months

SPEECH RECOGNTION: AUTOMATED PROTOCOL CREATION FROM AUDIO RECORDINGS

1. AUDIO PROCESSING (ASR)

2. AUTOMATIC LABELING

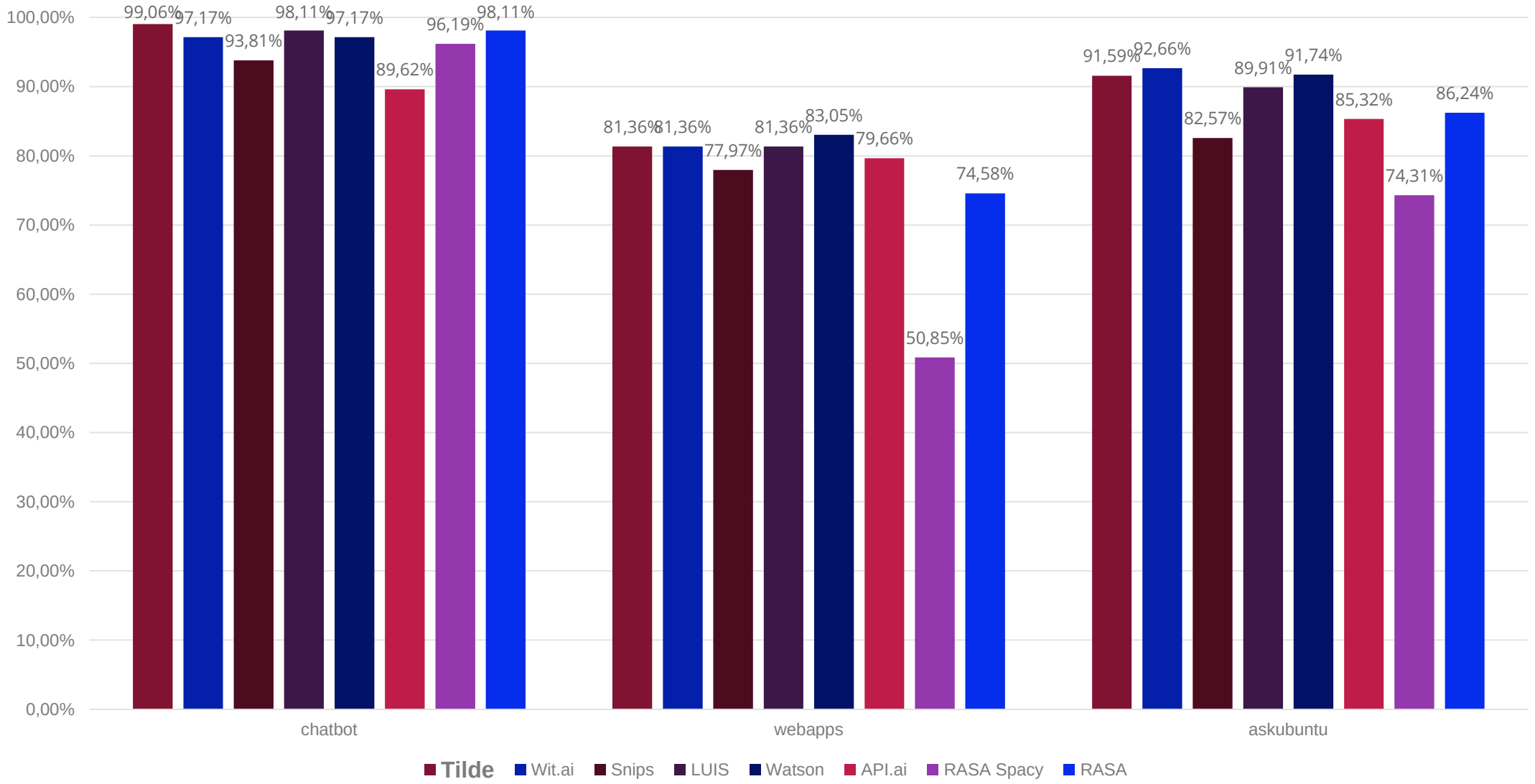
3. POST EDITING

4. QUALITY CONTROL

5. PUBLICATION

Tilde has developed automated protocol creation solution for the Latvian Parliament (Saeima)
TILDE

BEST NLU IN THE MARKET



UNA

THE FIRST VIRTUAL ASISSTANT OF PUBLIC ADMINISTRATION IN LATVIA.

WSA
WORLD SUMMIT AWARDS

UNA | Factsheet

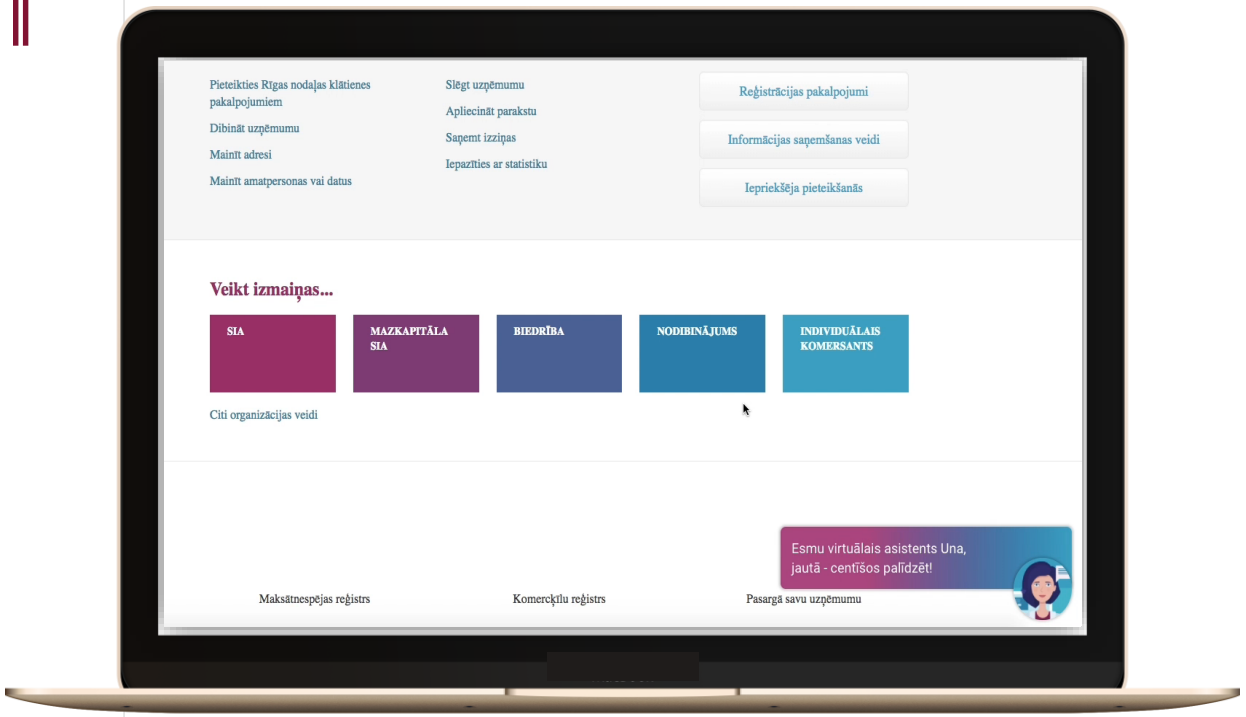
30% OF ALL INCOMMING CUSTOMER INQUARIES ARE HANDLED BY UNA

20 390 UNIQUE USERS

33 848 CUSTOMER QUESTIONS ANSWERED

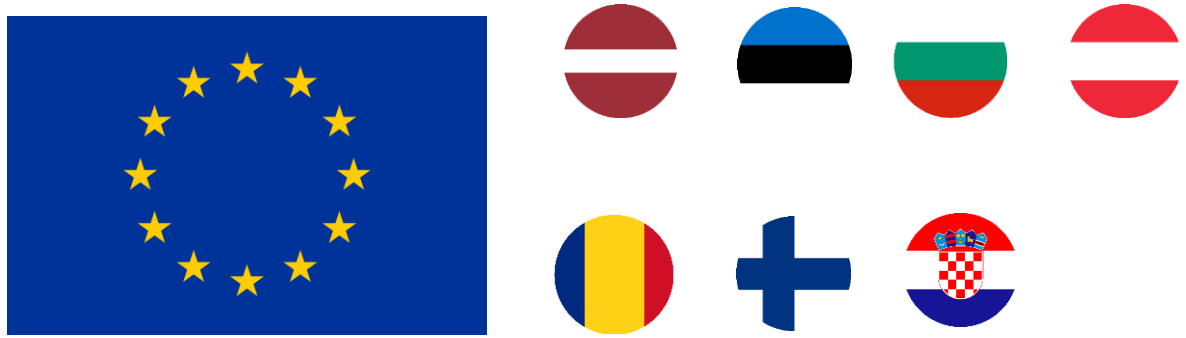
FROM 3 TO **15 TOPICS**

«LEARNING» **ENGLISH** IN 2019



EU Presidency | Showcase

- To facilitate **multilingual communication in Europe**, Tilde is helping the **European Commission** to build a pan-European MT infrastructure
- The systems in CEF.AT will be integrated into public online services, such as Europeana, the Open Data Portal, and the Online Dispute Resolution platform
- Since 2015 presiding countries of the Council of the EU have been using MT systems developed by Tilde



EUROPE HAS A UNIQUE CHANCE TO LEAD THE PRACTICAL DEPLOYMENT OF AI BASED LANGUAGE TECHNOLOGIES IN THE PUBLIC DOMAIN.

tilde.com

Tilde.AI – essential tools for a multilingual Europe

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