

Words in Flux: How AI is Rewriting the Language Industry

Gábor Bessenyei

Globalese



Two souls alas! are dwelling in my breast.







Trends in the language industry





Trends in the language industry



Increasing demand for translation Significant decrease of turnaround times



Smaller, but more frequent projects



Booming technology (MT & AI)





Behind AI, there is more than just ChatGPT



GPT-3.5 GPT-3.5 models can understand and generate effective model in the GPT-3.5 family is gpt-: Completions API but works well for traditional MODEL DESCRIPTION		Model gpt-3.5-turbo-in Temperature				
		Maximum length	256	ONTEXT	TRAINING DATA	
gpt-3.5-turbo-1106	The latest GF improved ins mode, reproc function callin maximum of	Stop sequences Enter sequence and press Top P	s Tab	3,385 tokens	Up to Sep 2021	
gpt-3.5-turbo	Currently poi 0613.	Frequency penalty Presence penalty	0	,096 tokens	Up to Sep 2021	
gpt-3.5-turbo-16k	Currently poi 16k-0613.	Best of	1	3,385 tokens	Up to Sep 2021	
gpt-3.5-turbo-instruct	Similar capal: models. Com Completions Completions.	Inject start text		,096 tokens	Up to Sep 2021	
gpt-3.5-turbo-0613	Legacy Snaps from June 13t deprecated o	Inject restart text Show probabilities		,096 tokens	Up to Sep 2021	
gpt-3.5-turbo-16k-0613		Off ne 13th 2023. Will be June 13, 2024.	• е	3,385 tokens	Up to Sep 2021	



Consequences of the new trends





Consequences of the new trends



Changing workflows & processes



Changing tools



Changing tasks & roles

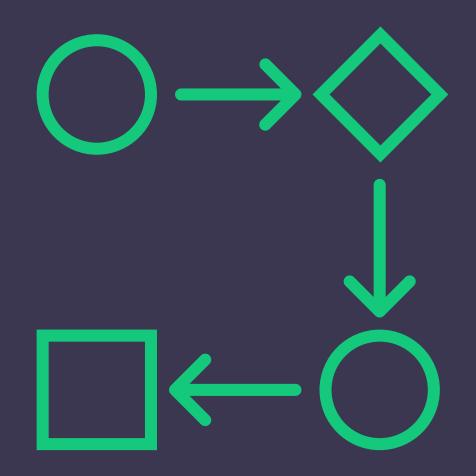


Changes in pricing





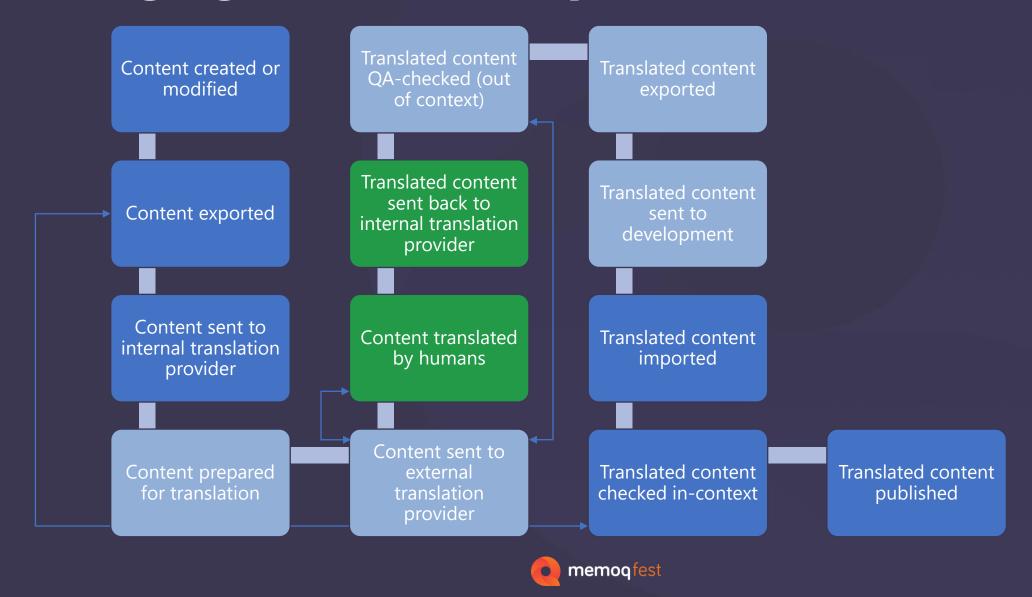
Changing workflows & processes





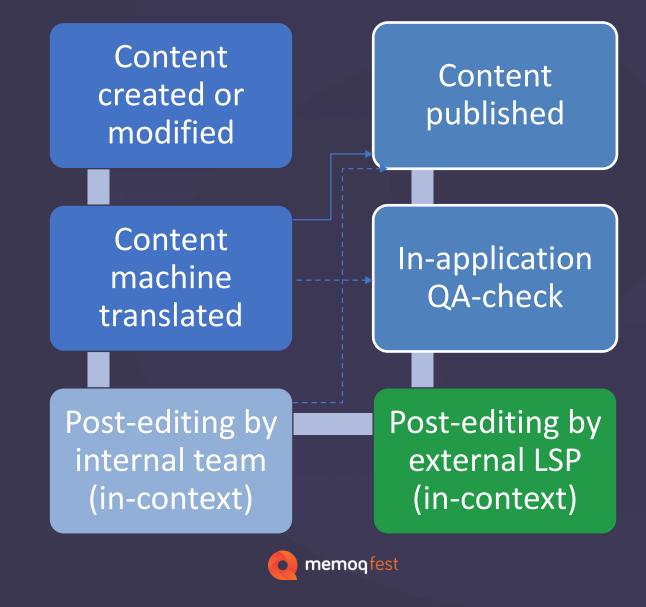
Changing workflows & processes





Changing workflows & processes

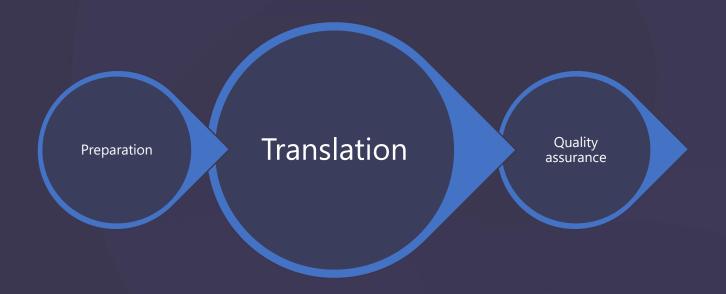






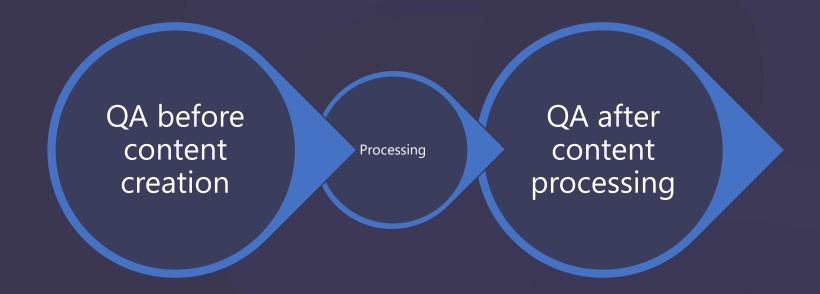


















- Terminology work
- Translation training data set maintenance
- Translation reference data set maintenance
- Data labelling
- Content qualification
- Metadata creation and maintenance
- MT quality evaluation
- Prompting, prompt testing









- QA on source
- QA on target (aka post-editing)

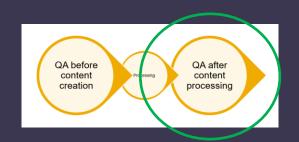






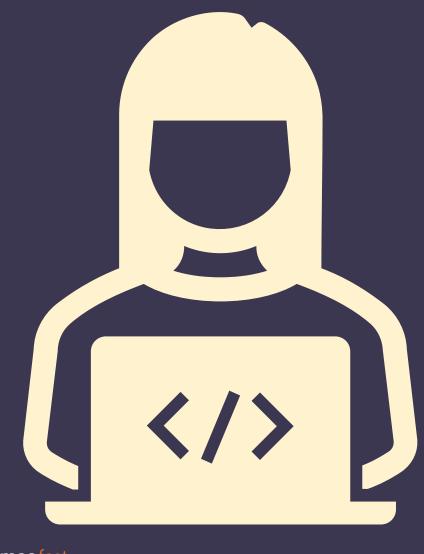
QA after content processing

- In-context review
- In-application testing
- + all the tasks from the preparation phase





Changing tools





Changing tools



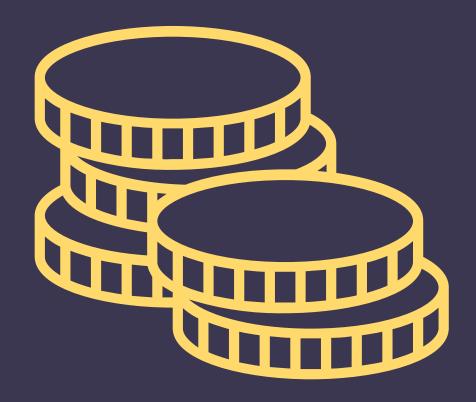


- Focusing on content analysis and panipulation

- context editing tools are only additions tools are the heroes
- Prompting tools



Changes in pricing









- Volume-based pricing is obsolete
- Fuzzy-match and Edit Distance type calculations are obsolete
- Hourly-based, project-based, individual flat price models will come back

Summary









- Software UI translation
- 50 target languages
- 800k characters in total
- Domain: law enforcement
- Raw MT, in-context review
- 1 Project Manager/linguist, 1 prompt engineer



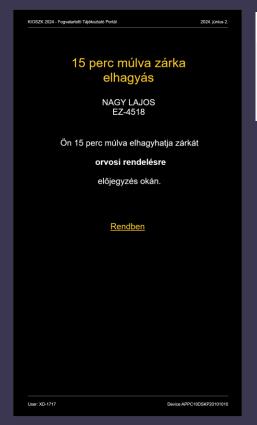


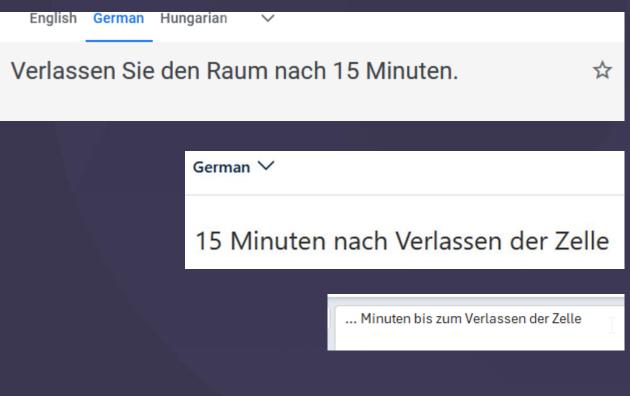
- Abbreviations
- Keywords/terminology
- Context window
- Validation





Keyword/terminology





Generic MT 1

Generic MT 2

LLM with customized prompt



Challenges (all about prompting)

Keywords + Abbreviations

Hungarian 🗸	₹	German ✓		
Jogerúsen elítélt - fogház	×	Verurteilt nach dem Gesetz - Gefängnis		
Hungarian 🗸		⇔ German ∨		
<u>Jogerúsen elítélt - börtön</u>	×	Rechtskräftig verurteilt - Gefängnis		
Hungarian ∨				
Jogerúsen elítélt - fegyház	×	Verurteilt nach dem Gesetz - Gefängnis		
Jogerősen elítélt - Fogház	Convicted with final judgment - Detention Center			
Jogerősen elítélt - Börtön	Convicted with final judgment - Prison			
Jogerősen elítélt - Fegyház	Convicted with final judgment - Penitentiary			
Jogerősen elítélt - Pbh. Fogház	Convicted with final judgment - detention replacing a fine			
Jogerősen elítélt - Km. Fogház	Convicted with final judgment - detention replacing community service			
Jogerősen elítélt - Fk. Fogház	Convicted with final judgment - Juvenile Detention Center			
Jogerősen elítélt - Fk. Börtön	Convicted with final	al judgment - Juvenile Prison		

Generic MT 1 or Uncustomized LLM

LLM with customized prompt

Summary



- Al has reached already the level of human quality in translation
- Translation as a task / process step will disappear or at least shrink to a minimum
- The focus of the tools, process and roles will switch from translation to QA, data manipulation and prompt engineering





Thank you!

Any questions?

gabor.bessenyei@globalese.ai