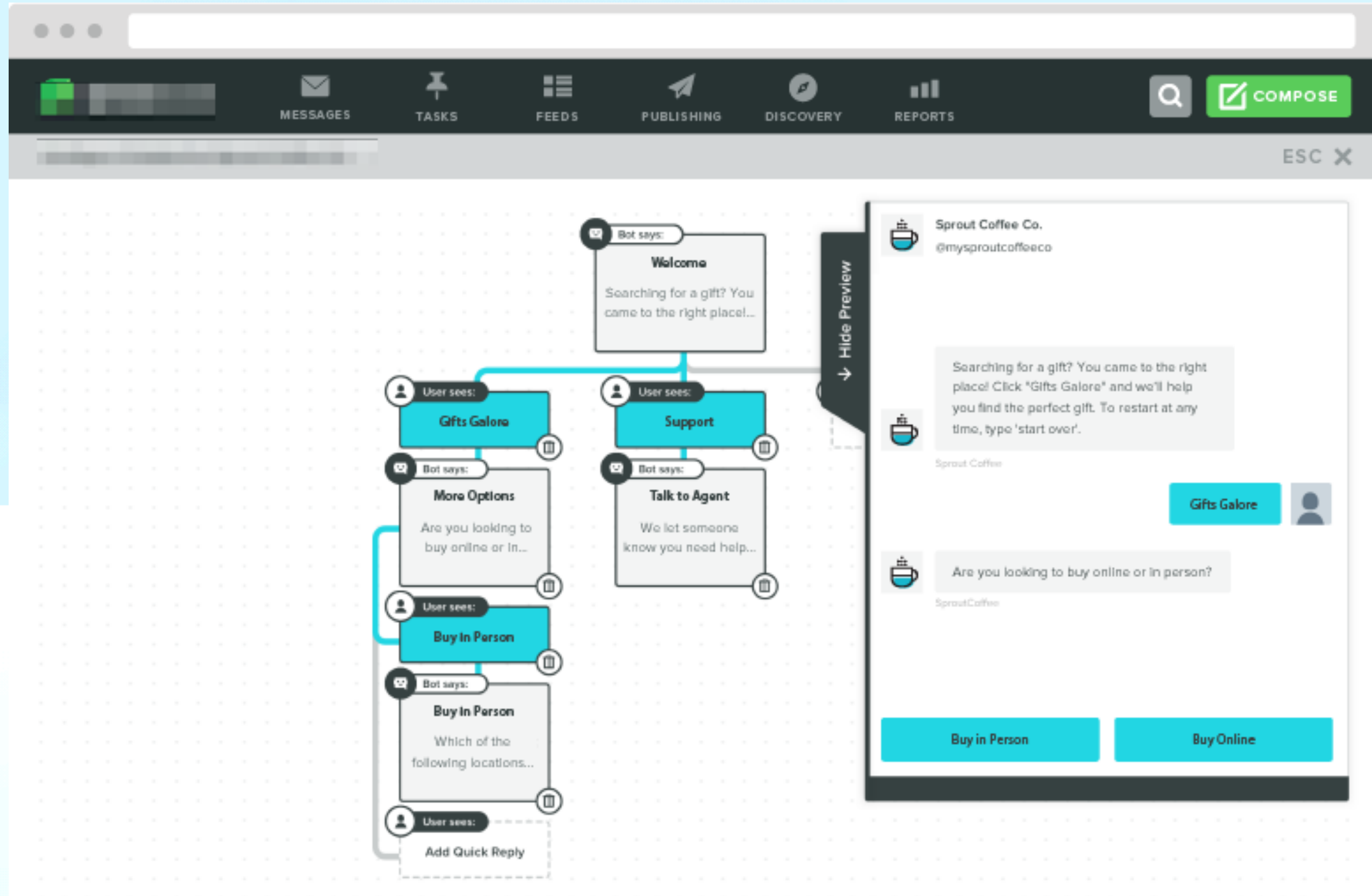


NexGen Chatbots

LLM based (asya.ai)

Dr. Evalds Urtans, evalds@asya.ai

Old chatbots



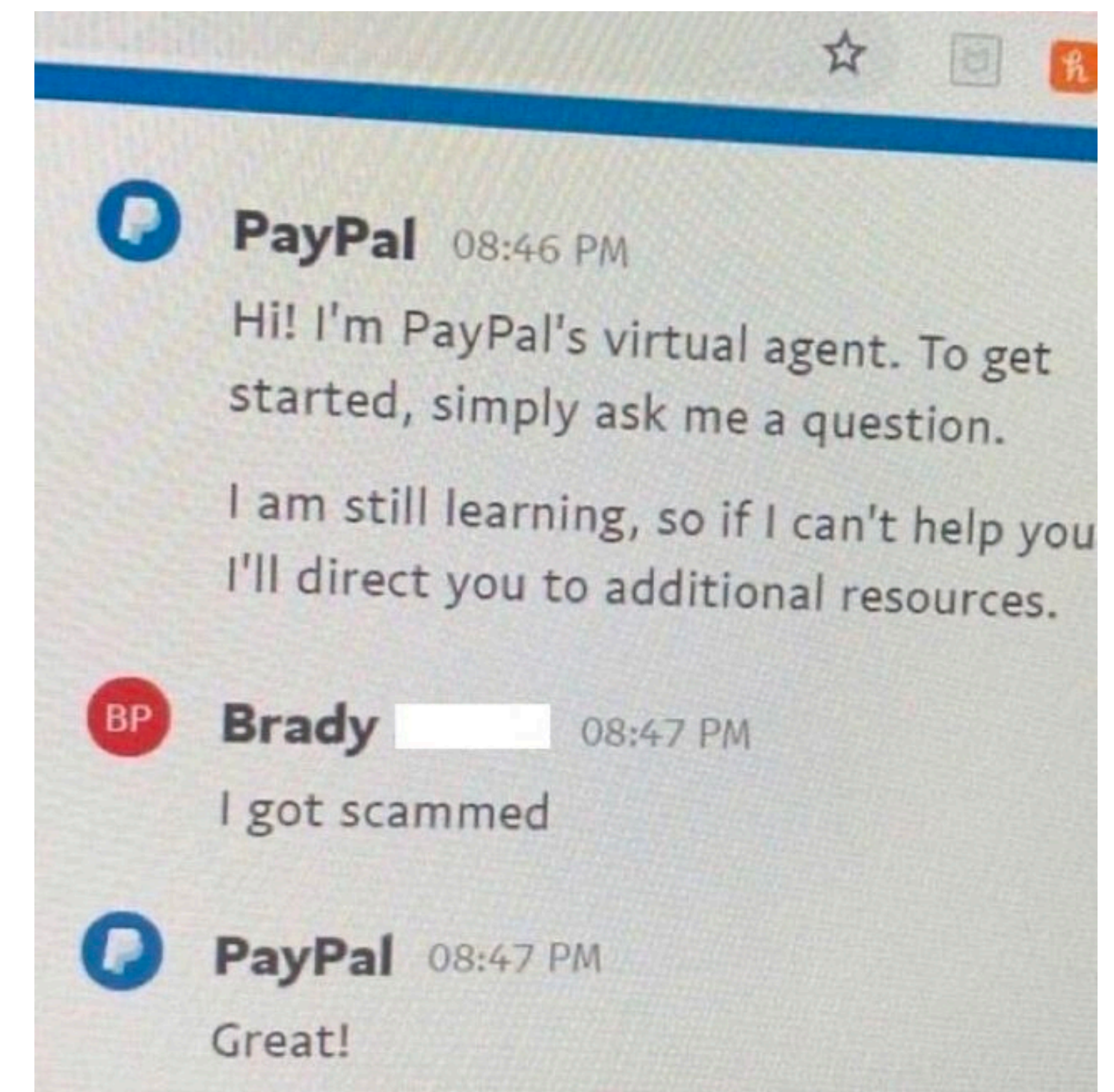
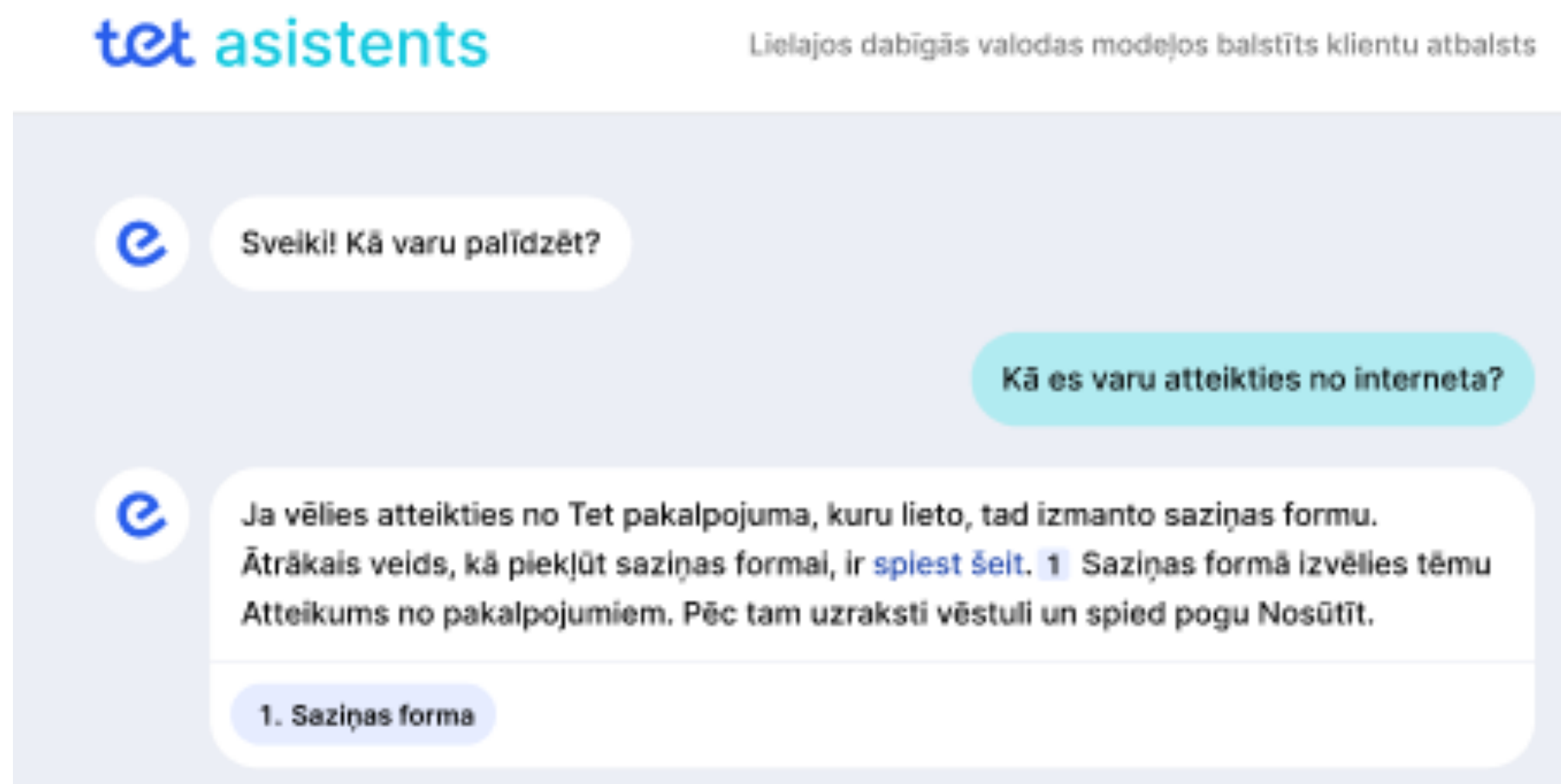
New chatbots

1. Not based on rules
2. Based on semantic search
3. Zero-shot intent classifier
4. Understands context
5. Gives references
6. Adapts to unpredictable situations
7. Works with multi-languages

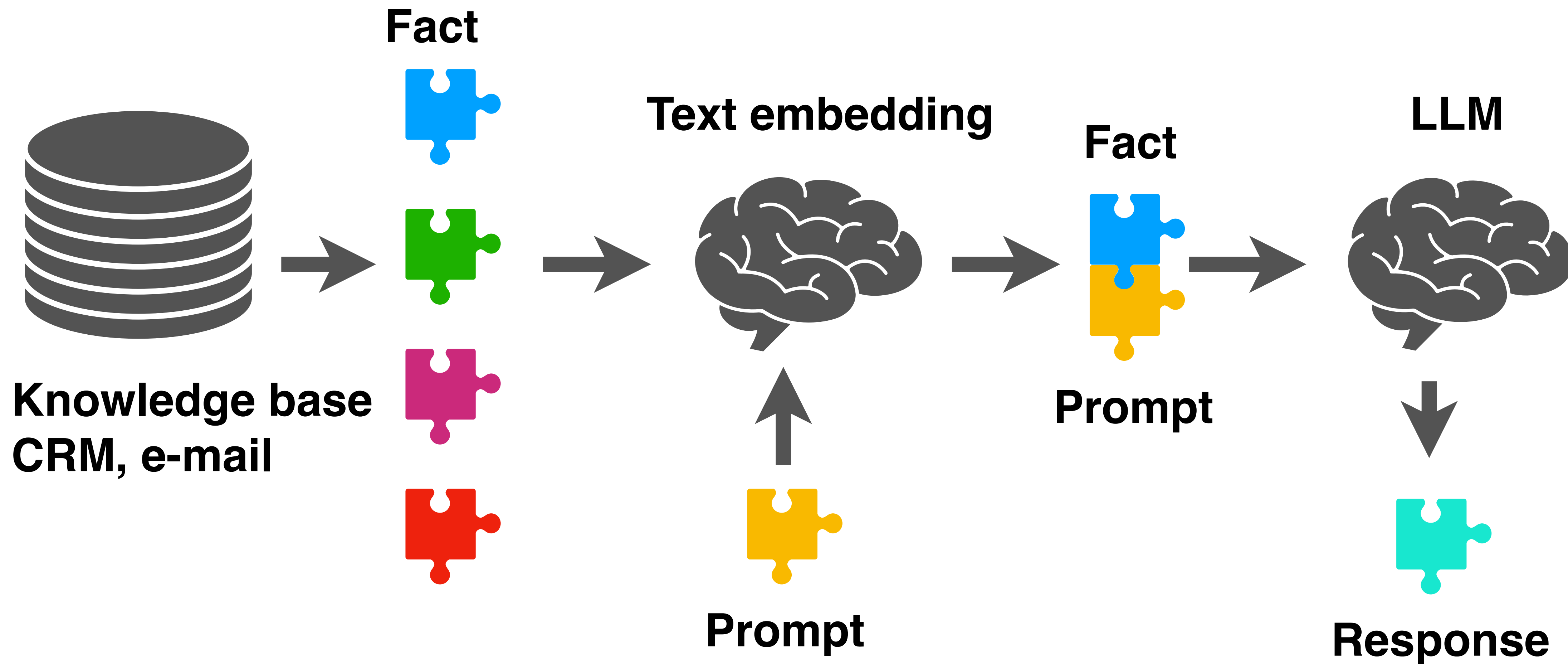
vs

Old chatbots

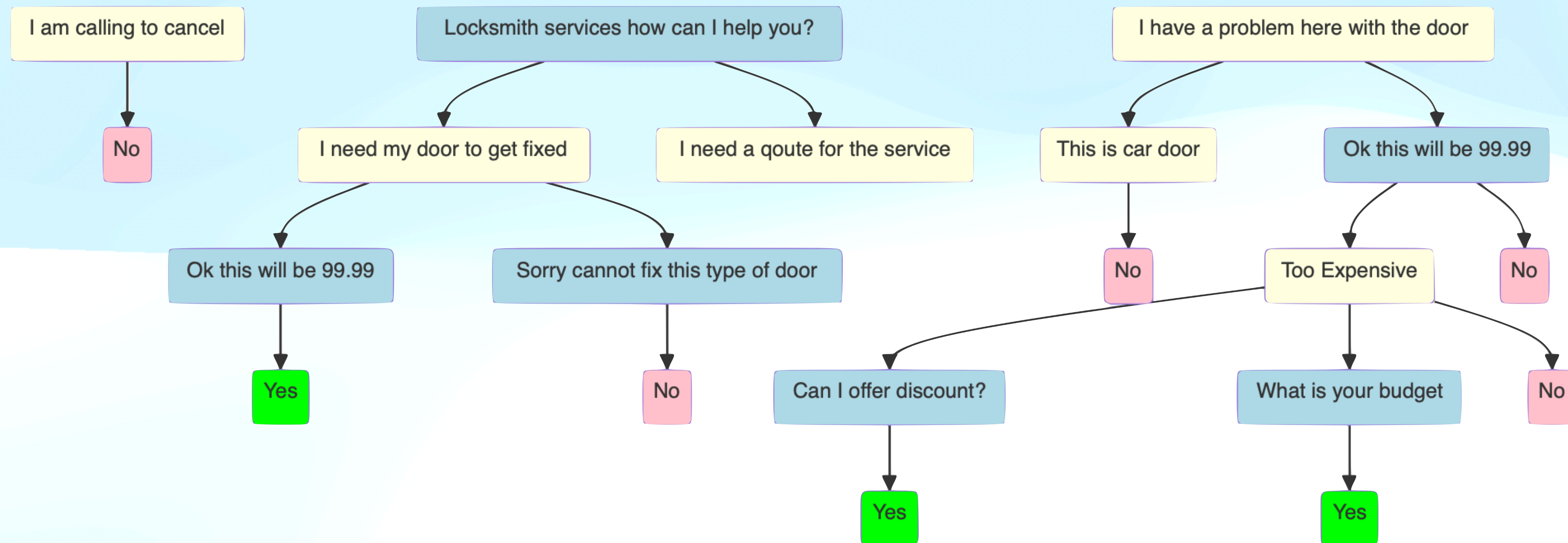
1. Based on rules
2. Limited intent classifier
3. Do not understand context
4. Not able to adapt to unpredictable situations



How it works? (on-premises, not openai)

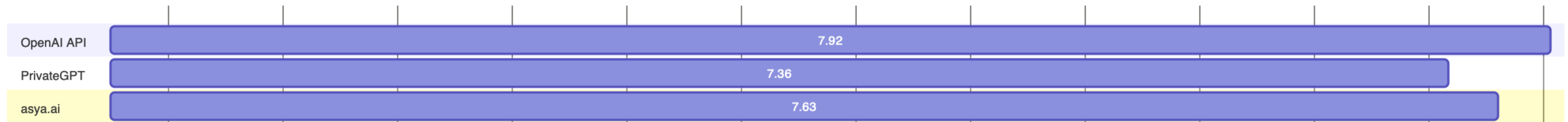


Communication analysis

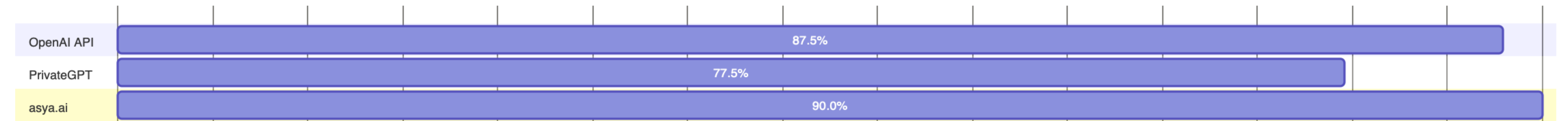


Accuracy over 90%, quality score 7.63

Comparison of ChatBot scores (max 10)

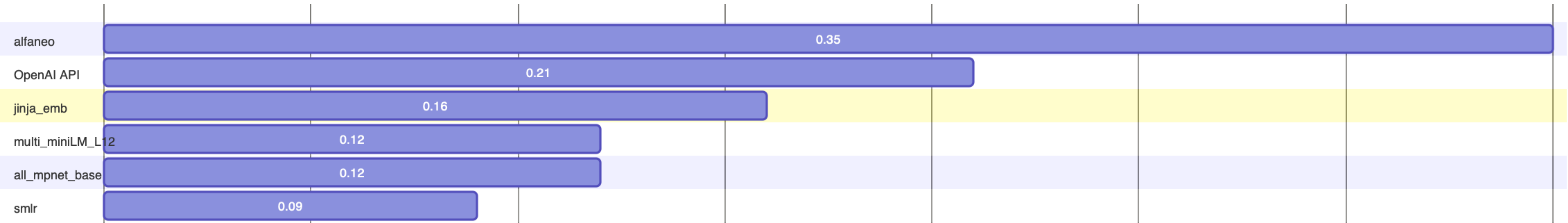


Comparison of ChatBot accuracy

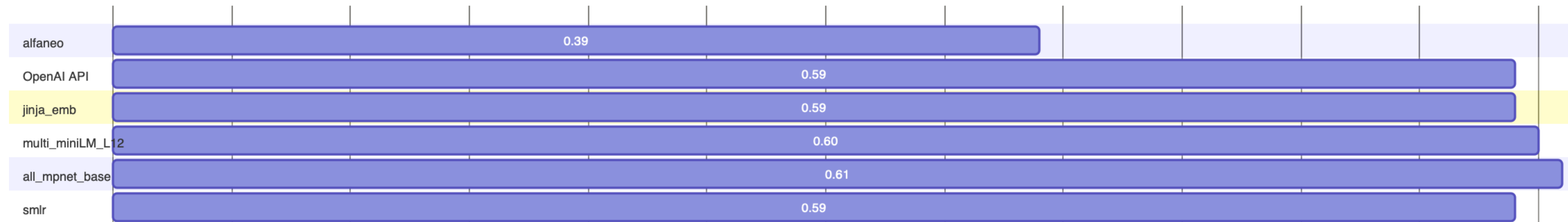


Best text embeddings on market

ChatBot embeddings for extracting meaning (smaller distance better)



ChatBot embeddings for extracting structure (larger distance better)



Scientific competency

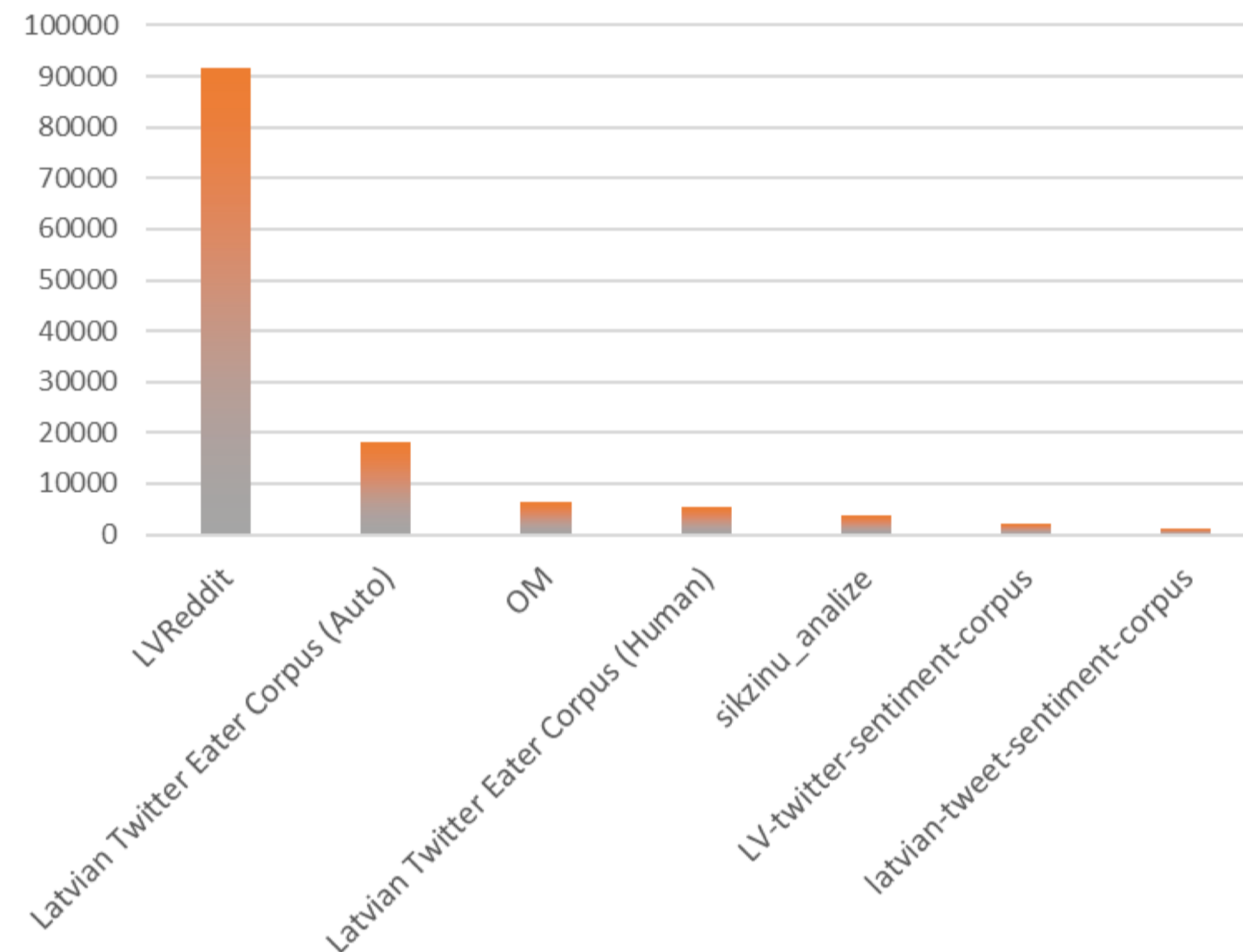
ASYA.AI have published multiple scientific publications in this field, for example, largest dataset in Latvian language for sentiment analysis using LLMs

"Using Large Language Models to Improve Sentiment Analysis in Latvian language", Pauls Purvins, Evalds Urtans, Vairis Caune, ICIC 2023

Table 2: Top 5 prompts of 24 prompts tested and accuracies

Prompt	Accuracy
Based on the tone of the text, what is your overall impression? Choose one of the following: Positive, Negative, or Neutral.	82.0%
What is the general sentiment of this sentence? Choose one of the following: Positive, Negative, or Neutral.	79.0%
Balstoties uz teksta toni, kāda ir kopējā noskaņa - pozitīva, neitrāla vai negatīva?	78.2%
Based on the tone of the text, would you categorize the overall sentiment as positive, neutral, or negative?	78.0%
Does the author's language in this sentence indicate a positive, neutral, or negative sentiment?	77.4%

	Positive	Neutral	Negative
Positive	127	37	3
Neutral	13	141	13
Negative	2	30	135



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Tet čatbota rezultāti

Pilots limitēts uz 400 faktiem un jautājumu testa kopu

Jautājums: Kā atteikties no interneta?

Testa atbilde: Ja vēlies atteikties no Tet pakalpojuma, kuru lieto, tad izmanto saziņas formu. Ātrākais veids, kā piekļūt saziņas formai, ir spiest šeit .

Kā atteikties no interneta?



Ja vēlies atteikties no Tet interneta pakalpojuma, izmanto saziņas formu Tet.lv mājaslapā. Saziņas formā izvēlies tēmu Atteikums no pakalpojumiem un norādi, ka vēlies atteikties no interneta. Pēc tam uzraksti vēstuli un spied pogu Nosūtīt. Pēc 30 dienām no brīža, kad Abonents atteicies no pakalpojuma un rakstveidā par to paziņo Tet autorizējoties Tet.lv/Mans konts vai ierodoties personīgi jebkurā Tet veikalā, pakalpojuma abonēšanas maksa tiek aprēķināta par visu periodu līdz Līguma izbeigšanas brīdim.

1. Atteikšanās no pakalpojuma