# Al for back-office and client centers

Presenter: Filip Staňo



# **Kognitos**

- Automate business processes
- Processes written in human-understandable form.
- Specialized in Document and Text-heavy processes







Developers in control



Business users and COE in control.



Army of people needed to map, build and maintain.



Generative AI helps user build and maintain process.



All steps must be mapped ahead of time. Complex processes break.



Learns on the fly. Continuously improving and can handle even most complex processes.



Limited to highly standardized processes. Expensive. Inflexible.



Open to even the most complex processes. Robust. Flexible. Easy.





Developers in control



Business users and COE in control.



Army of people needed to map, build and maintain.



Generative AI helps user build and maintain process.



All steps must be mapped ahead of time. Complex processes break.



Learns on the fly. Continuously improving and can handle even most complex processes.



Limited to highly standardized processes. Expensive. Inflexible.



Open to even the most complex processes. Robust. Flexible. Easy.





Developers in control



Army of people needed to map, build and maintain.



Business users and COE in control.



Generative AI helps user build and maintain process.



All steps must be mapped ahead of time. Complex processes break.



Learns on the fly. Continuously improving and can handle even most complex processes.



Limited to highly standardized processes. Expensive. Inflexible.



Open to even the most complex processes. Robust. Flexible. Easy.





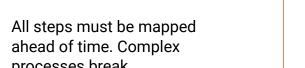
Developers in control



Army of people needed to map, build and maintain.



processes break.





**Limited to highly standardized** processes. Expensive. Inflexible.



Business users and COE in control.



Generative AI helps user build and maintain process.



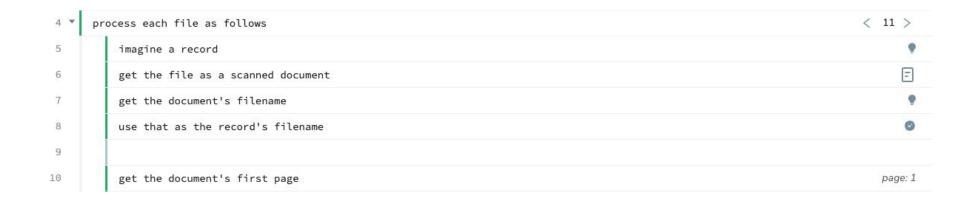
Learns on the fly. Continuously improving and can handle even most complex processes.



Open to even the most complex processes. Robust. Flexible. Easy.



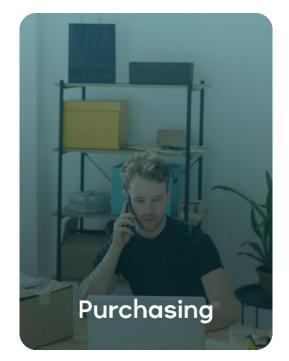
# **Processes written in Human Language**





#### **Few Areas**









# **The Process**

#### Inputs

composition			
Si %	Mn %	P %	S %
0,32	0,46	0,007	0,002
Ni %	Mo %	Cu %	V %
3,31	0,16	0,172	0,008
As %	Sn %	B ppm	Ti ppm
0,007	0,009	1	7
N ppm	Ca ppm	н ррт	
78	4	0,68	
	Si % 0,32 Ni % 3,31 As % 0,007 N ppm	Si %         Mn %           0,32         0,46           Ni %         Mo %           3,31         0,16           As %         Sn %           0,007         0,009           N ppm         Ca ppm	Si %         Mn %         P %           0,32         0,46         0,007           Ni %         Mo %         Cu %           3,31         0,16         0,172           As %         Sn %         B ppm           0,007         0,009         1           N ppm         Ca ppm         H ppm

Povin	né legujú	ce prvky			Škodlivé prvky
C	0,15	-	0,20	%	P ≤ 0,025 %
Si		je.	0,40	%	S ≤ 0,010 %
Mn	0,40	-	0,70	%	As ≤ 0,04 %
Cr	1,30	1-	1,60	%	Sn ≤ 0,03 %
Mo	0,15	1-	0,25	%	Sb ≤ 0,0050 %
Ni	3,25	in.	3,75	%	Pb ≤ 0,0020 %
Al	0,03	le.	0,05	%	Cu ≤ 0,25 %
					Ca ≤ 0,0010 %
					Ti ≤ 0,0030 %
					B ≤ 10 ppm (nie je potrebné merať v každej dávke, ale uviesť do certifikátu)
					N ≤ 100 ppm (nie je potrebné merať v každej dávke, ale uviesť do certifikátu)
					H ≤ 2,0 ppm
					O ≤ 12 ppm

# Output

element	max value	min value	reading	result
С	0.20	0.15 -	0,17	PASS
Si	0.40	e	0,32	PASS
Mn	0.70	0.40 -	0,46	PASS
Cr	1,60	1,30 -	1,36	PASS
Мо	0.25	0,15 -	0,16	PASS
Ni	3.75	3.25 -	3,31	PASS



#### **Invoices**

FROM INVOICE # 43111

AD Supplier INVOICE DATE 11/02/2019

1912 Harvest Lane P.O.# 2312/2019

New York, NY 12210 DUE DATE 26/02/2019

BILL TO SHIP TO

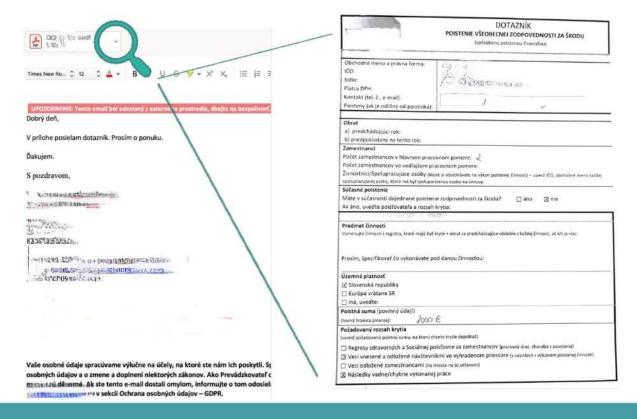
John Smith John Smith

2 Court Square 3787 Pineview Drive New York, NY 12210 Cambridge, MA 12210

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
1	Front and rear brake cables	100.00	100.00
2	New set of pedal arms	15.00	30.00
3	Labor 3hrs	5.00	15.00



#### **Insurance requests**





#### **Insurance requests**

```
dobrý deň,
chcem vás požiadať o vypracovanie ponuky poistenia pre horeuvedeného klienta.
poistnik: HIMM ERRY, sro, I was an all the track by
IČO: 1234780
predmet: Všeobecná zodpovednost za škodu z činnosti.
Poistná Suma: 30.000€
uzemná platnost: SR
rozhodná činnost z OR: prípravné a dokončovacie stavebné práce, čistenie, malovanie,
- práce vo výškach nad 5 m
- škodovost: 0 doposial nemal uzatvorené poistenie zodpovednosti
obrat r. 2022 - 43,000 bez DPH
predpoklad na rok 2023 - 100.000 €
Prajem krásny a úspešný deň.
wooding on
zapísaný pod registračným číslom v Registri NBS:
mobil: 0949 xxx xx6, e-mail: 2352/29 0053 2232
IČO: a vi avvegeta
IRLANDIAMINA PAR HOUR
A row to the Bratislava
```



# Chat with your documents

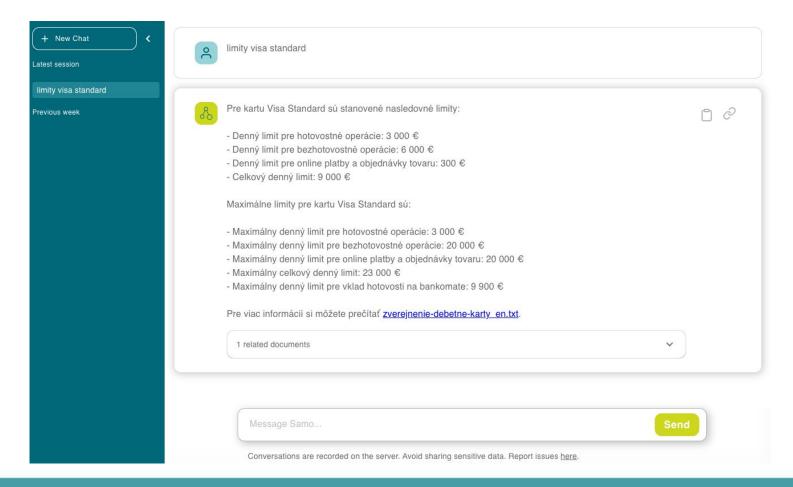


# **Chat with your documents**

- Chatbot application
- Knowledge separated from OpenAl services
- Using private GPTs on Microsoft Azure
- Referring to sources
- Ability to filter response based on metada









# **Learning the Knowledge**



Get access to private knowledge base



Process the knowledge base



Represent the knowledge base using a Language Model



# **Answering from the Knowledge**





**Answer Search** 



Identify sources to prevent hallucination



Merge answers from sources

Form an answer using LLM



# Who does it help?

#### **Employees of institutions**

- Smart search over domain knowledge
- Increased productivity
- Onboarding and Training processes
- Tone of Voice modification

#### **Customers**

- 24/7 customer support
- Consistency of response
- Get professional advice on the domain
- Advice on product purchase





Filip Staňo
Head of Al @ ableneo

10 years of experience as Al engineer & engineering lead.

Expertise in Computer Vision and Language Processing



