





Supporting use cases with the power of AI

Peter Boros



To Develop – We Love

E2E delivery of business solutions

SUPPORTING BUSINESS-, AND IT PROJECTS

Providing experienced business analyst, solution architect and testing competencies



USER EXPERIENCE DESIGN

User experience concept and research, UX/UI design



CLOUD-NATIVE SOLUTION DELIVERY

Planning and implementation of cloud-native solutions that cover custom requirements



DATA MANAGEMENT SOLUTIONS

Data warehouse, Big Data, Data science analysis, Data asset management



ENTERPRISE INTEGRATION USING MICROSERVICES

Integration process and automation consultancy, implementation of microservices



ARTIFICIAL INTELLIGENCE (AI)

Apply Artificial Intelligence capabilities in corporate environment



Partners and Projects



Digital OnBoarding integration

Online account registration (green field) process implementation.
Subsystems integrated completely on BPMN basis.



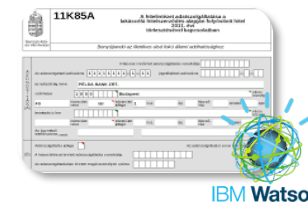
Border control renewal

Providing software solution for border control of Hungary.
Implementation crucial modules of NOVA.BORDER, front-end system development.



Critical facility process-support system

Implementation of a process-support solution to cover identification, designation and defense of vital systems and facilities.



Artificial Intelligence in accounting processes

A.I. in accounting services: multilingual service support, automated processing of forms.



Partners and Projects



MFB Invest Sign4All

Basic workflow system for approval, certification and signature. It bring the integration into the everyday life.



Hungarian Police Investigation Expert Accounting

Manages the assignments of the experts for the investigations. The communication and accounting is still part of the application scope.



Messe Munchen eXchangeHub

Innovative tools to offer digital marketplace to the stakeholders of a fair.



Freeway Entertainment Blockchain solution

The blockchain is involved in the process to harden the financial data sharing and access.





GPT-3

Generative Pre-trained Transformer 3

„**Generative Pre-trained Transformer 3 (GPT-3)**; stylized **GPT·3**) is an autoregressive language model that uses deep learning to produce human-like text. Given an initial text as prompt, it will produce text that continues the prompt.” (*wikipedia*)

Summarize the current state of the GPT model in one paragraph.



Try this in OpenAI playground!

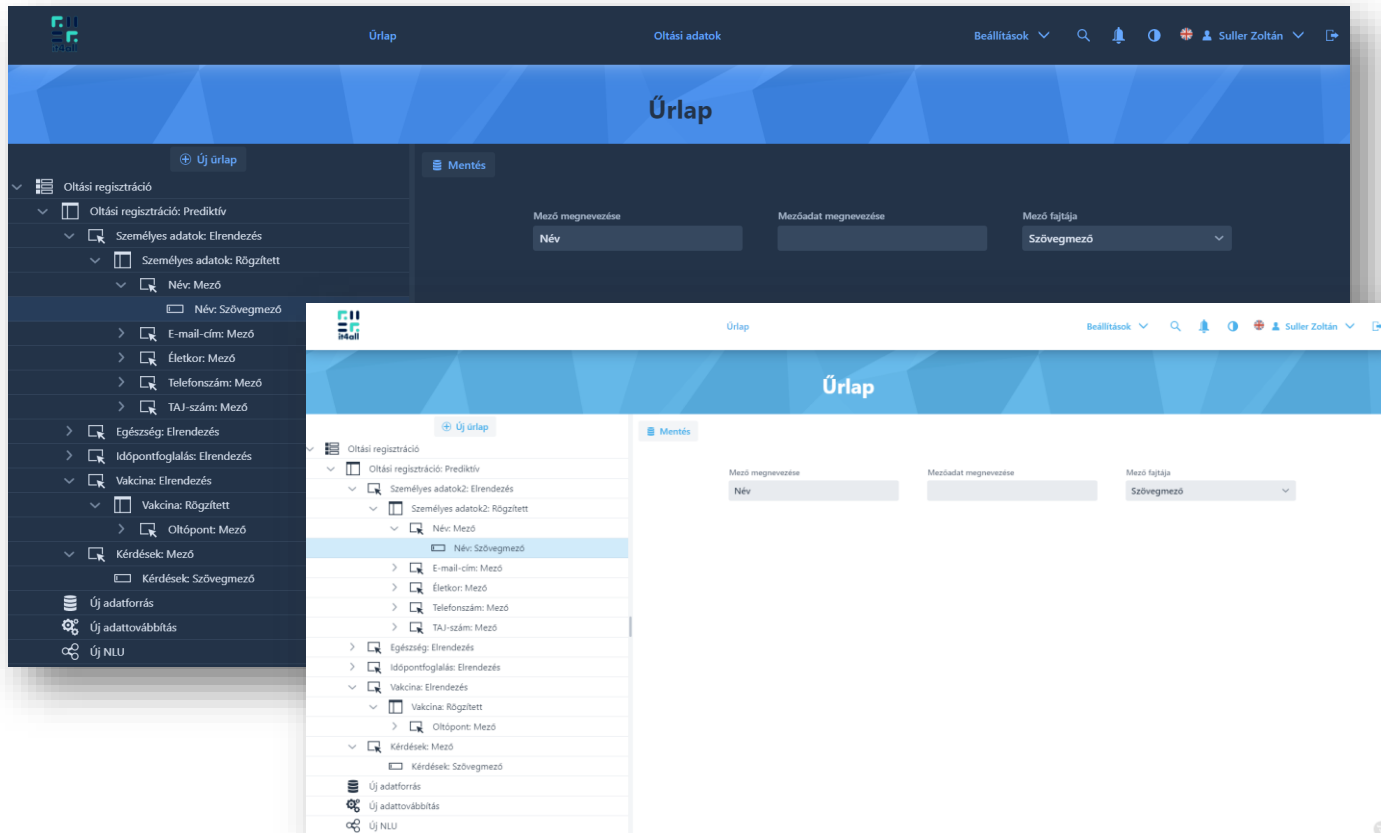
A practical use case

Hand free, speech to data sheet process

- ✓ A business process with „out of office” steps
- ✓ Involve the on-site colleagues
- ✓ Give them information pre-filled data sheets
- ✓ Speech to text
- ✓ Analyze the text and extract the information
- ✓ Fill the data sheet data fields
- ✓ Forward the content of the data sheet
 - ✓ Generate documentation
 - ✓ Trigger the business process
 - ✓ ...

Data sheets, form definitions

No-code administration



Data sheets
Form definitions



NLU
(Natural-language
understanding)



Data integration
Collect and transfer



Predictive data sheets

Interactive way to communicate with the IT

MI Folyamat 360°

Oltás regisztráció

Személyes adatok ... Név: Boros Péter ... Telefonszám: +36208757647 ...

Egészség ... Testhőmérséklet: 36.6 ... Szedett gyógyszerek: Nem szed ... Közérzet: jó ...

Vakcina ... Oltástípus: AstraZeneca ...

Időpontfoglalás ? Kérdések

Vissza Véglegesít

Melyik oltóponton szeretné megkapni a védőoltást?

Szent István Kórház.

#Vaccination_point

Értem.

Mikor szeretné megkapni a védőoltást?

Június 11-én lenne megfelelő.

#Time

Rendben.

UI screens and Microfrontends

Business process driven screen flow and control



Business Case Examples

Where we can support the on-site, hand-free data gathering to increase the level of digitalization...

- Healthcare and medical
- Agriculture
- Office and services
- Industry, manufacturing and utilities
- ...



Healthcare and medical

The extra administration can be decreased, work for the patients could be a more impressive profession

- **Nursing support**

- Common communication frontend
- Touch free administration
- Document generation

- **Document diagnostical data**

- Medical diagnosis
- Surgeries and treatments
- Data transfer to registries



Agriculture

To support the research and the precisional control we need to support the communication

- **Supporting on-site activities**
 - On-site data sheets
 - Registration processes
 - Prepare the mid-, longterm plans
- **Support the planning**
 - Real time data sharing
 - Input for documentation
 - Immediate approval processes



Office and services

Increase the level of digitalization and customer services

- **Prepare the personalized data for the process**
 - Communication with the customer
 - Start and manage processes
 - Document the communication
- **Support decision makers**
 - Help to ask for information
 - Proposal writer
 - Communication assistant



Industry, manufacturing and utilities

Better the utilization of the workforce, faster communication

- **Supporting on-site activities**
 - Quality assurance
 - Project managements
 - Task control
- **Synchronization of processes**
 - Office and on-site share the same state
 - Better documentation
 - Approval and online processes
- **Assitency – advisory**
 - Assitancy with huge knowledge
 - Ask in real time
 - Ask for the result of analysis



Scoped agile Delivery

Business process analysis

Understand the business process to collaborate. Important to integrate the new capability into the daily processes of the organization.

Deploy and operate

Running the GPT model (inference) is available on premise. Operate in the cloud is a good option. Pay as you go and SaaS service could be better.

Customize and develop

Focus on the usability, adding UI/UX to deliver. Develop the special integrations with microservices following the modern DevOps approach to have a well designed and tested solution.

Data integration design

The data supplier and consumer interfaces must be defined. In this way we can personalize, pre-fill the data sheets and submit the results.

Data sheets design

The data set for this process can be defined with dynamic form definitions. This low-code / no-code approach offer a faster introduction.

GPT customization

Normally we can add samples to the data sheet definition. It is enough for generating a good question. We might need to train the model only if the domain is so special.



Let's start talk about your ideas!



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