Hello,
We are DNAi

DNAi

Pavel Wimmer
CEO, DNAi
pavel.wimmer@dnai.ai

Our uniqueness

240+

Leading multidisciplinary experts

Big Data, Mathematics, Statistics, Multiple AI domains, Latest R&D

20+

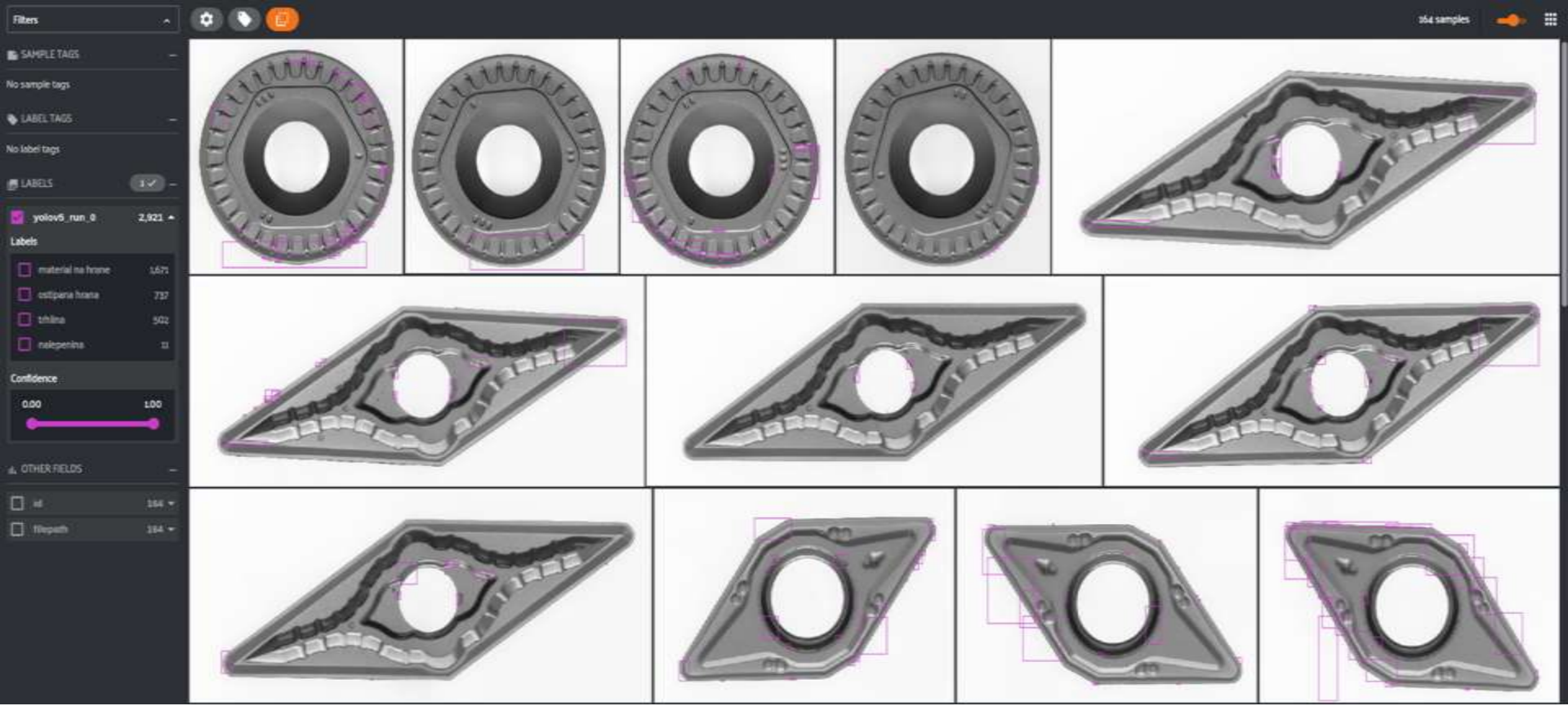
years of experience

Large scales IT architectures and new IT technologies

Helping you define an AI strategy

... and operating model, integrate AI applications into flexible business processes and the wider ecosystem.)

Computer Vision


Filters
SAMPLE TAGS
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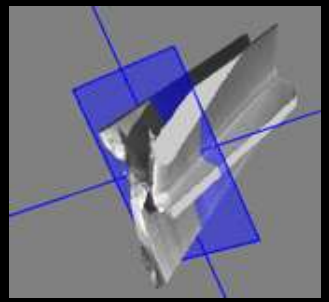
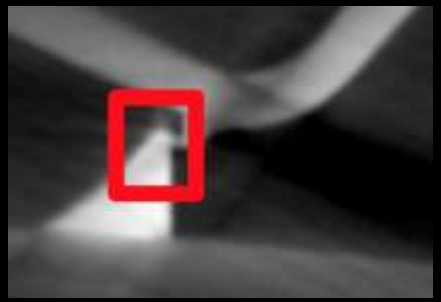
LABEL TAGS
No label tags
LABELS
yolov5_run_0
2,921
Labels
material na hrane
1,671
ostiparia hrana
737
trhlina
502
nalepenina
Confidence
0.00
1.00
OTHER FIELDS
id
164
filepath
164
164 samples

Inspekce svárů



weld 3D
inspection



Zuzana Kibritov

9 3 0 3

Print report

Cultivation time: **115h:40m**
Fertilization date: **30.3.2017**
Date of birth: **Invalid date**

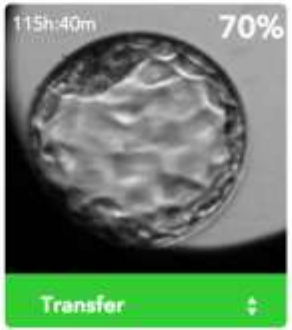
Fertilized oocytes: **9/9**
Date of puncture: **30.3.2017**

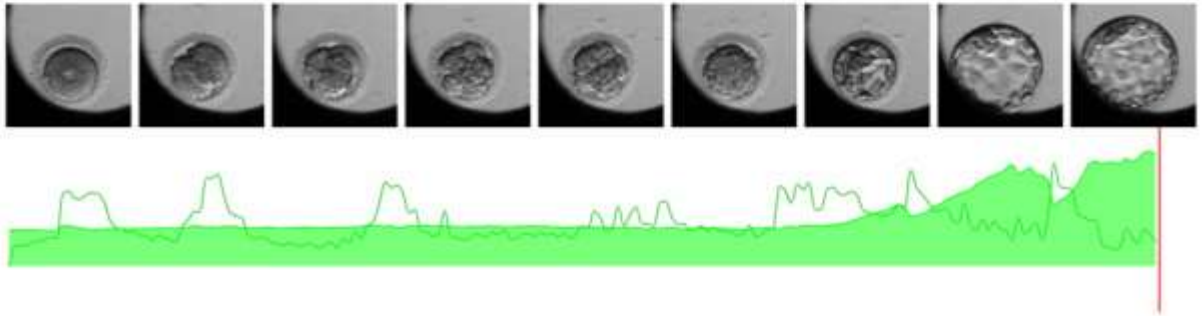
Petri dish No.: **9**

Hatching Blastocyst

1aa

Compare cycles

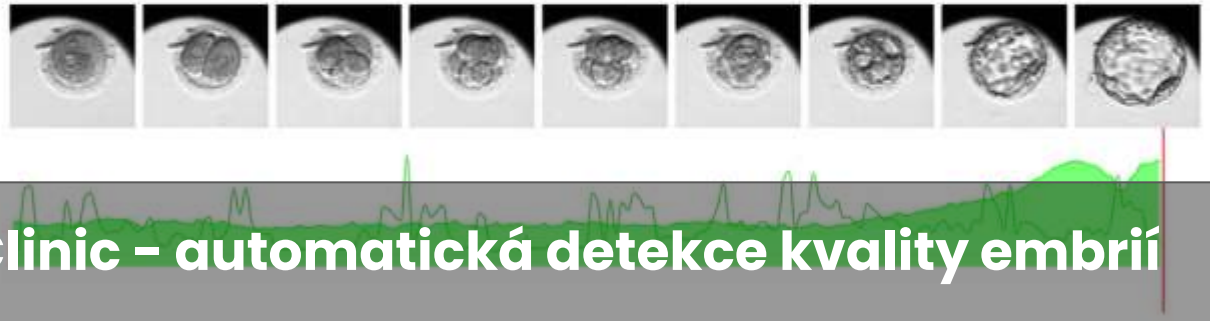




Hatching Blastocyst

1aa

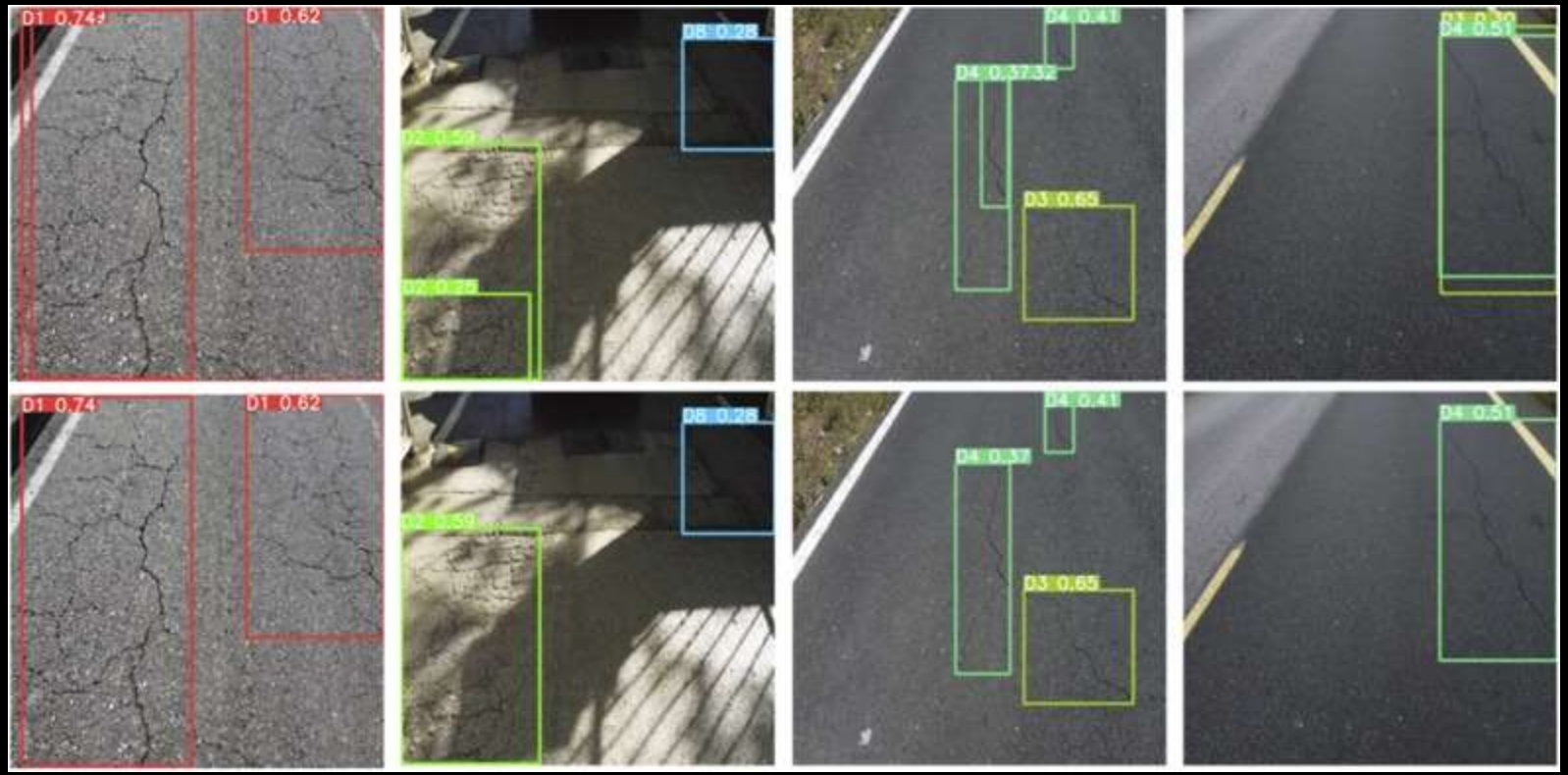
Compare cycles



IVF Clinic – automatická detekce kvality embrií

Computer Vision

Video analytics



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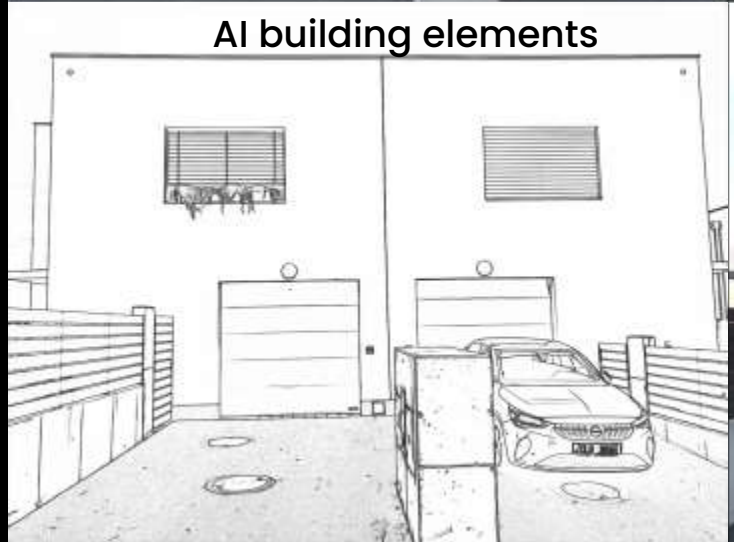
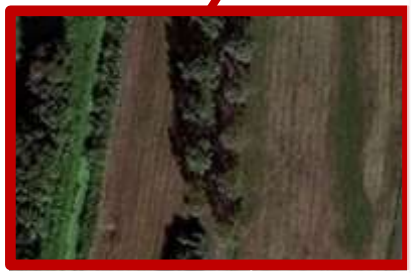
Virtual Lab

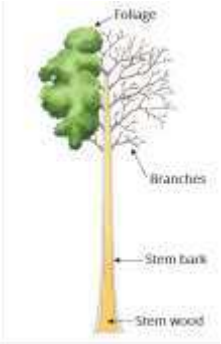
Building segmentation



DNAi



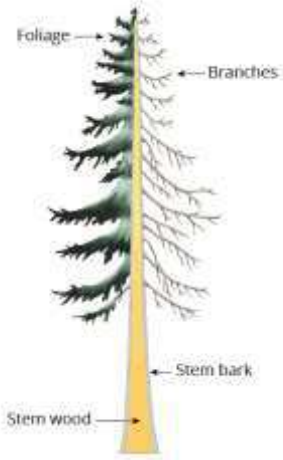
Stem wood: 98 kg
Stem bark: 14 kg
Branches: 18 kg
Foliage: 13 kg
Total: 122 kg



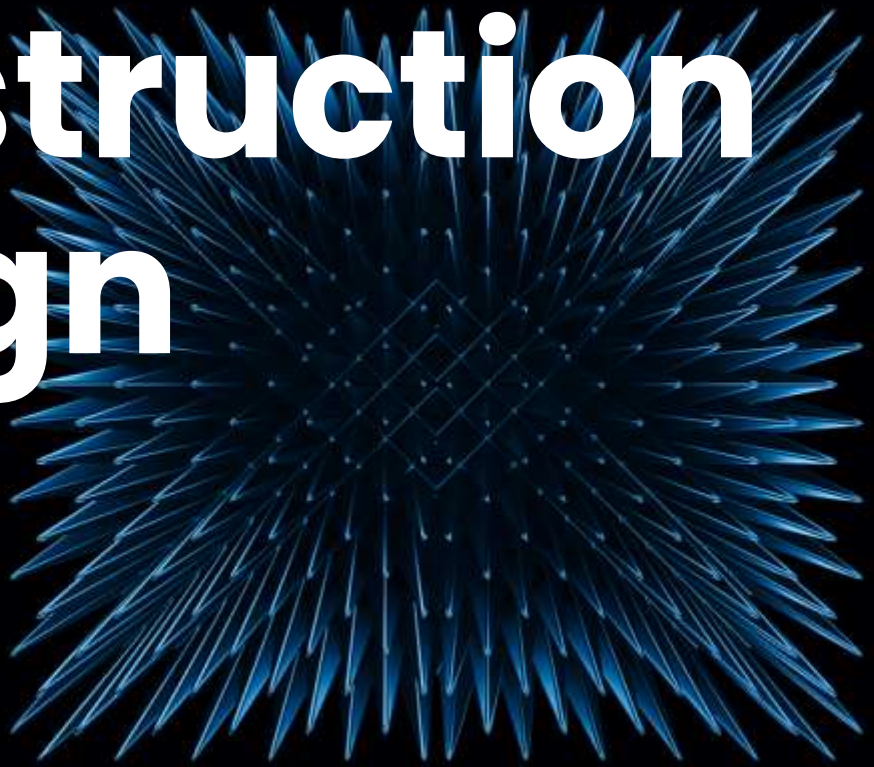
0.02 trees per m²
Height ~ 8m
=> DBH ~ 40cm

0.07 trees per m²
height ~ 25m
⇒ DBH ~ 1m

Stem wood: 3150 kg
Stem bark: 205 kg
Branches: 1206 kg
Foliage: 256 kg
Total: 4817 kg



Construction Design



Konstrukční design

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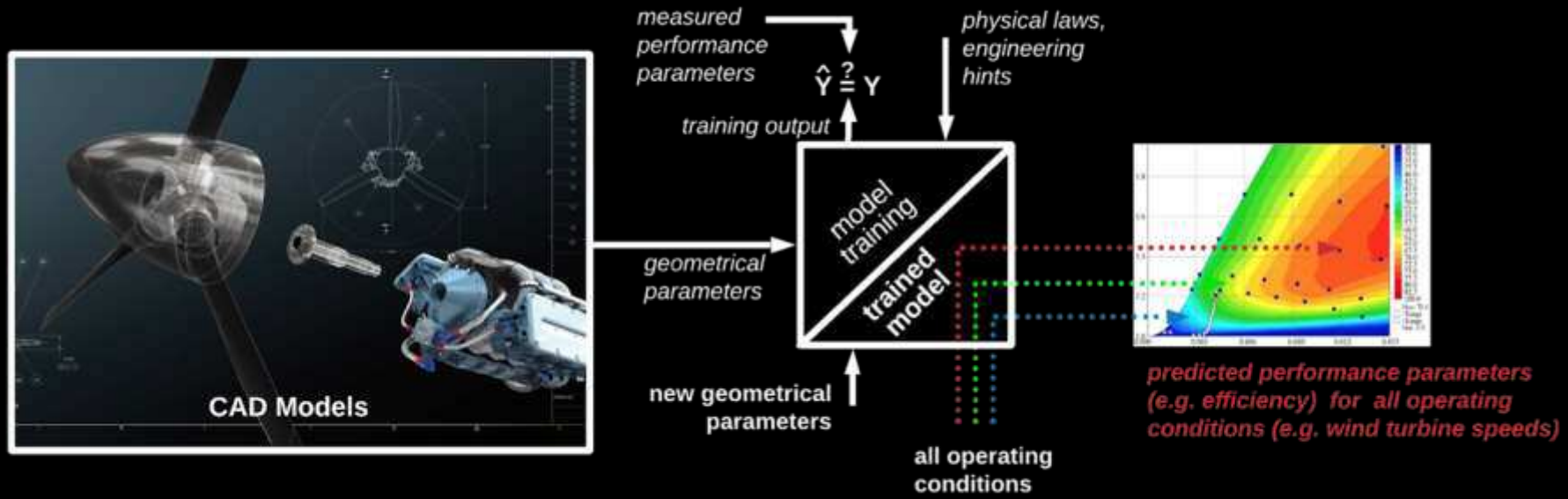


DNAi

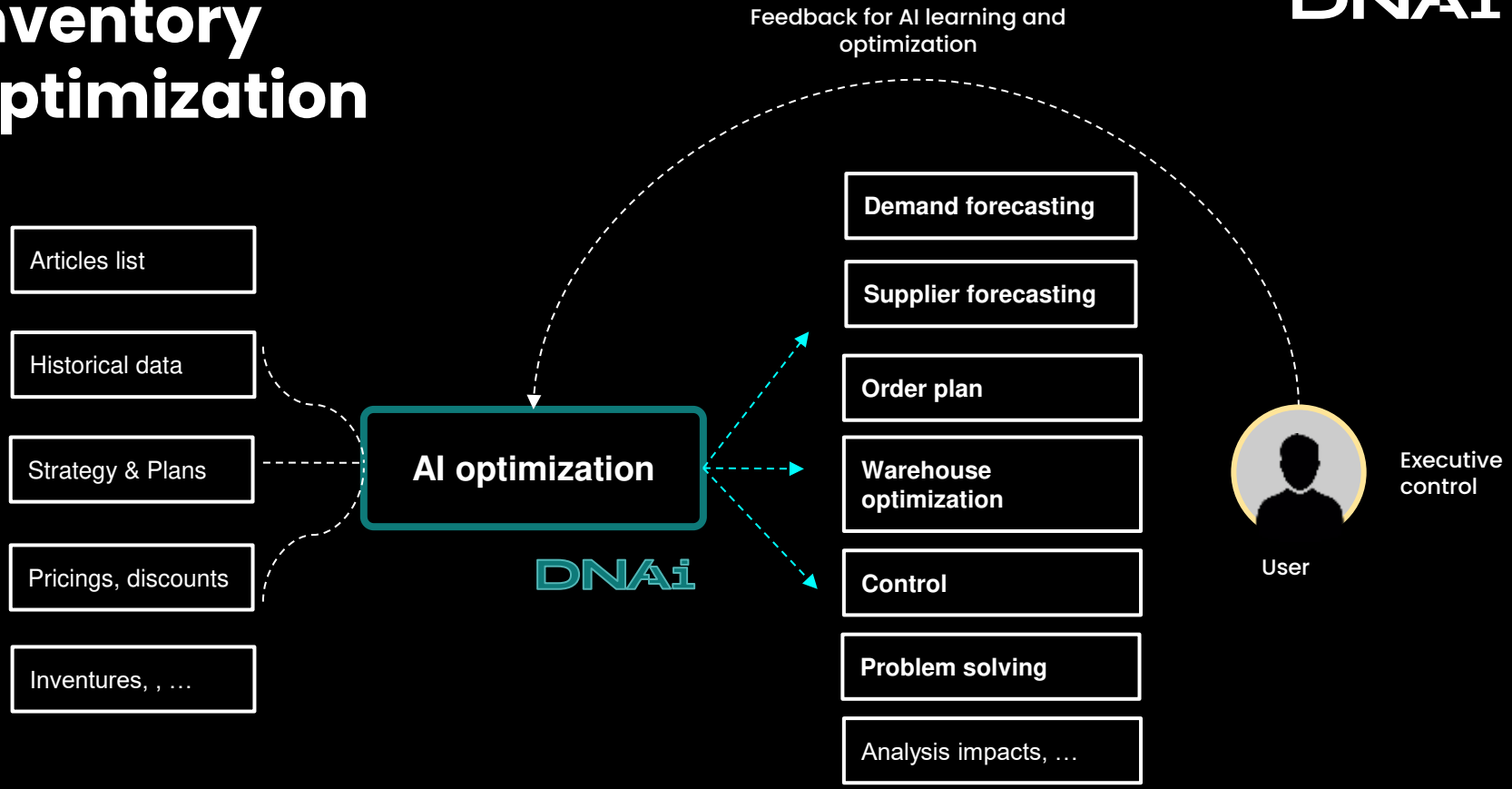
Education, Quality, Work & Safety

Virtual Lab
Development

Supply Chain

Inventory Optimization

DNAi



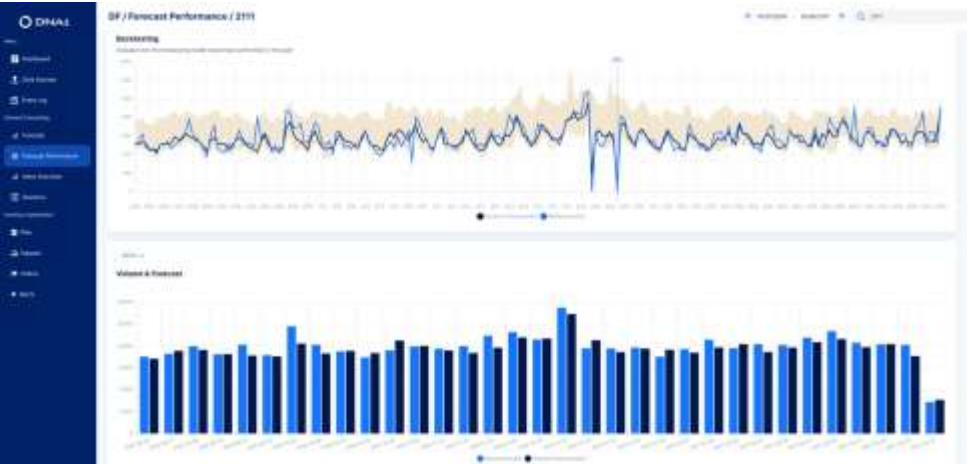
Forecast algorithm

Forecast 10000+ items
Cloud platform
Hierarchical forecast: Region/Store/Product family
Probabilistic forecast

Historical data, important events, holidays, weather.

Solution utilizes ensemble of neural networks, regression trees and statistical methods.

Industries:
Retail
Logistics
Manufacturing



PoC

Forecast Q1 2023
45 000 000 packages yearly
Average global error 3,9%
80% errors under **5%**
Lead time: **4 weeks**
Probabilistic forecast
Global/Country/Region/Postcode forecast

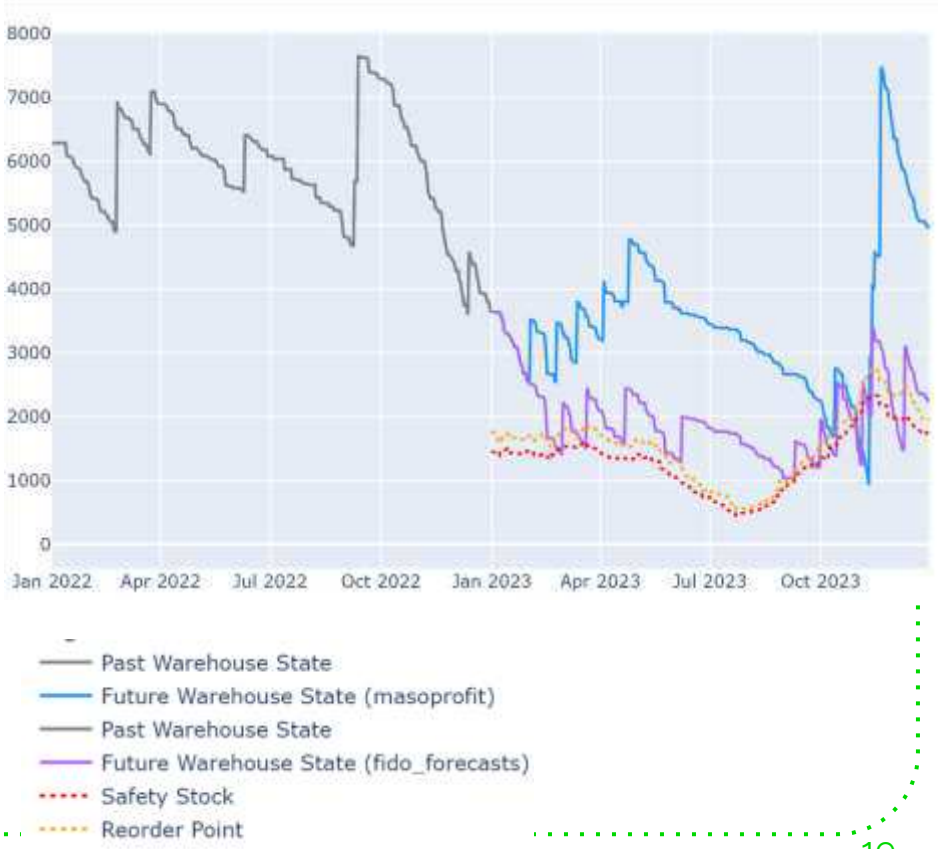
DEMO
Available in cloud platform MyIO
Forecast calculation, performance monitoring, retrospective evaluation of previous years, change in time series dynamics

20
000+
Items Inventory optimization

35%
Improvement on daily forecasts against base solution

15%
Stock level improvement

- Forecasting model per time series
- Taking into account large seasonality
- Aggregation Weekly, Monthly
- Preliminary results suggest **15% stock level improvement**, while reducing stockouts



DNAi

Menu

Dashboard

Data Sources

Items

BOM

Stockout

Event Log

Demand Forecasting

Forecast

Forecast Performance

Items Overview

Inventory Optimization

Plan

Warehouse

Impacts

PM

v1.0.0 TEST

Buyer

First name	Petr
Last name	Marek
Email	petr_marek@dnai.ai

Managed items

Detail >

Items	154
Units	804660
Total price	180 477 597,52 CZK
Suppliers	367

Orders to submit

Detail >

Critical orders	8
Next 14 days	
Total orders	15
Total items	32344
Total price	2 862 252,93 CZK
Next 30 days	
Total orders	51
Total items	152453
Total price	29 499 768,64 CZK

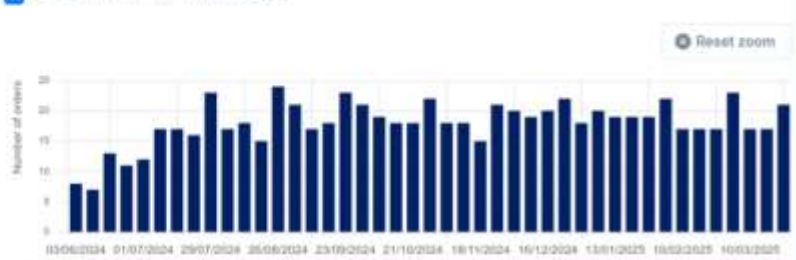
Incoming orders

Detail >

Next 14 days	
On time orders	1
Delayed orders	0
Next 30 days	
On time orders	1
Delayed orders	0

Orders

Detail >



In Stock

Detail >

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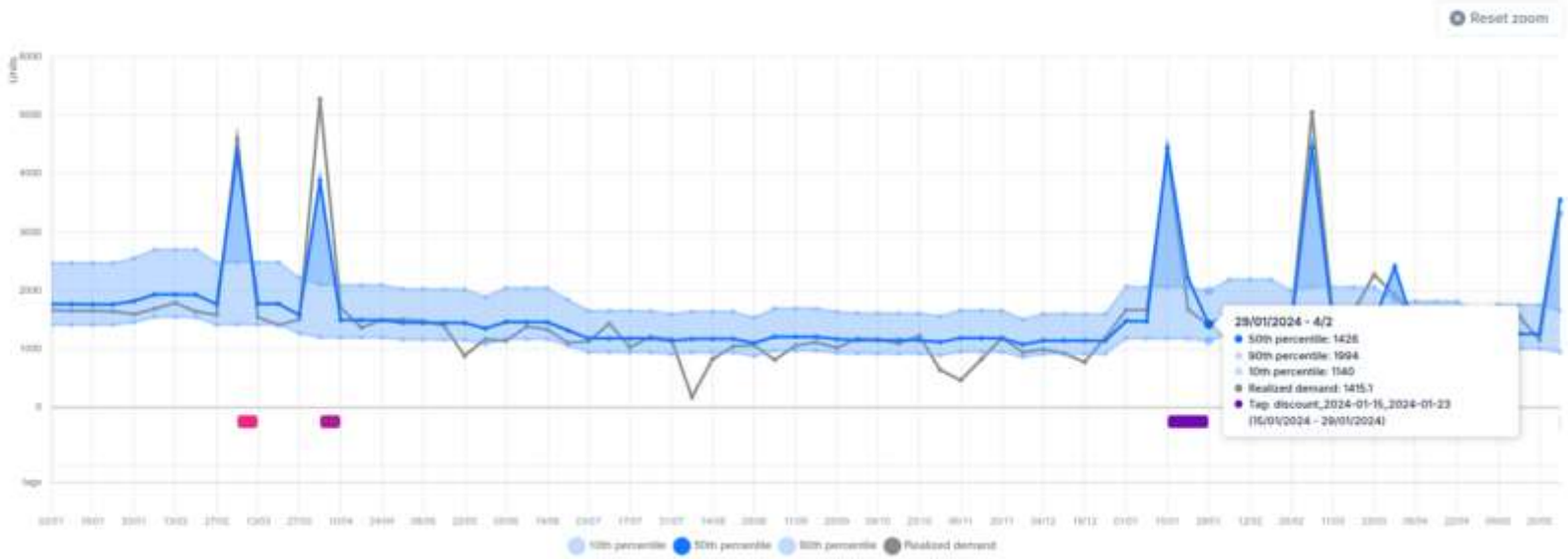
Filters

5245 | 01/01/2023 - 03/06/2024 | Reset | WEEK

Range	01.01.2023 - 31.12.2024	Reality Mean	218.62	Root Mean Squared Error	320.23
Error Mean	66.92	Abs. Error Mean	217.75		
Error Percentage	4.36 %	Abs. Error Percentage	14.20 %		

Backtesting

Evaluate how the forecasting model would have performed using past data to assess prediction accuracy.



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Filters

Pharmacy form

Search in BOM

Bill of Materials

Bill of Materials (BOM) displays a hierarchical structure of all components and materials needed to assemble a product, enabling efficient inventory tracking and planning.

- Lékárna - Aplikační formy
  - Tablety a kapsle
    - Ibalgin Rapidcaps 400 mg 30 měkkých tob...
    - Ibalgin 400 mg 96 tablet
    - Ibalgin 400 mg 48 tablet
    - Brufen 400 mg 100 tablet
    - Paralen 500 mg 24 tablet
    - **Dr. Max Paracetamol 500 mg 20 tablet**
    - Ataralgin 20 tablet
    - Junior-angin 36 pastilek
    - Gaspan 14 měkkých tobolek
  - Nosní spreje
    - Otrivin Breathe Clean jemný nosní sprej s A...
    - Muconasal Plus nosní sprej 10 ml
    - OLYNTH® HA 0,5 mg/ml nosní sprej, roztok...
  - Kapky
    - Ophthalmo-Septonex oční kapky, roztok 10...
    - Stoptussin kapky 50 ml
    - Visine Classic oční kapky 15 ml
  - Gely a masti
    - Voltaren Forte 20 mg/g gel 150 g
    - Fenistil 1 mg/g gel 30 g
    - Bepanthen mast 100 g
  - Sirupy
    - Mucosolvan sirup 100 ml
    - Robitussin Antitussicum sirup 100 ml
    - Erdomed 35 mg/5 ml perorální suspenze 10...
  - Sáčky a prášky
    - Paralen Grip Horký nápoj pomeranč a zázv...
    - Oscillococcinum perorální granule 30×1 g

Dr. Max Paracetamol 500 mg 20 tablet

id:	1297
url:	https://www.drmax.cz/dr-max-paracetamol-500-mg-20-tablet
price:	35,00 CZK
unit:	20 tablet
Tags:	TABLETS ORAL PAIN FEVER GENERIC
Item:	Dr. Max Paracetamol 500 mg (1297)

Forecast | Forecast Performance | Warehouse

Farma - Cost of Goods

Calculating manufacturing costs for products after changes in formulation, manufacturing process and created amount.

Within seconds user can get precise estimation of new product which is within 10%, which was not manufactured before.

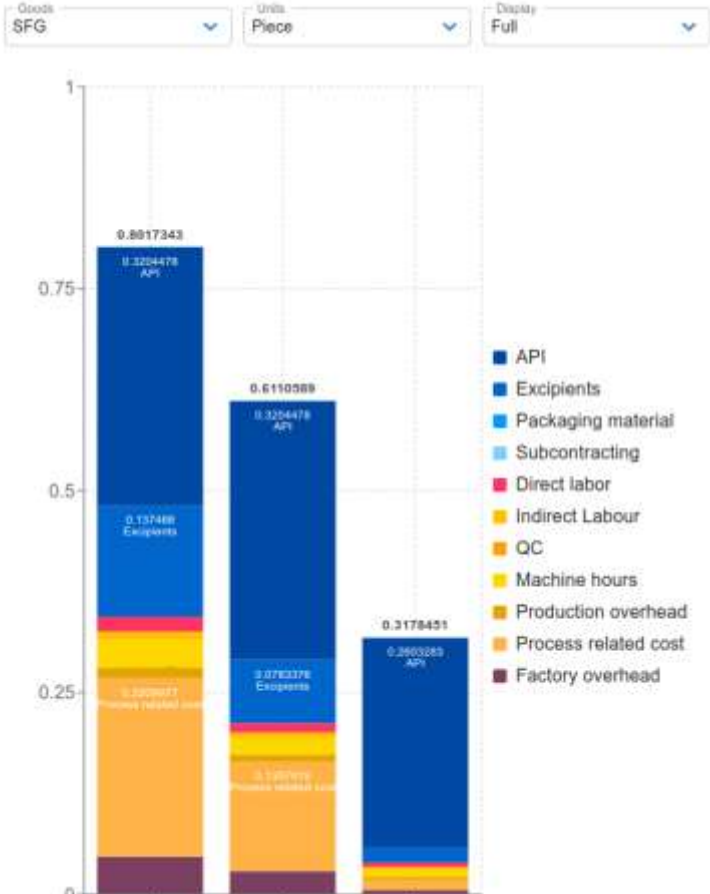
Without Platform estimation of costs for new formulation takes up to 2 months, due to capacity and estimation complexity.

Algorithm estimates using regression and matching similar products, manufacturing times on new machines.

Complete overview of production process, with ability to change each step within Platform.

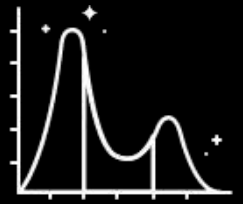
Provides manufacturing costs for new formulations of products within seconds.

New formulation can save millions in manufacturing costs compared to old formulations.

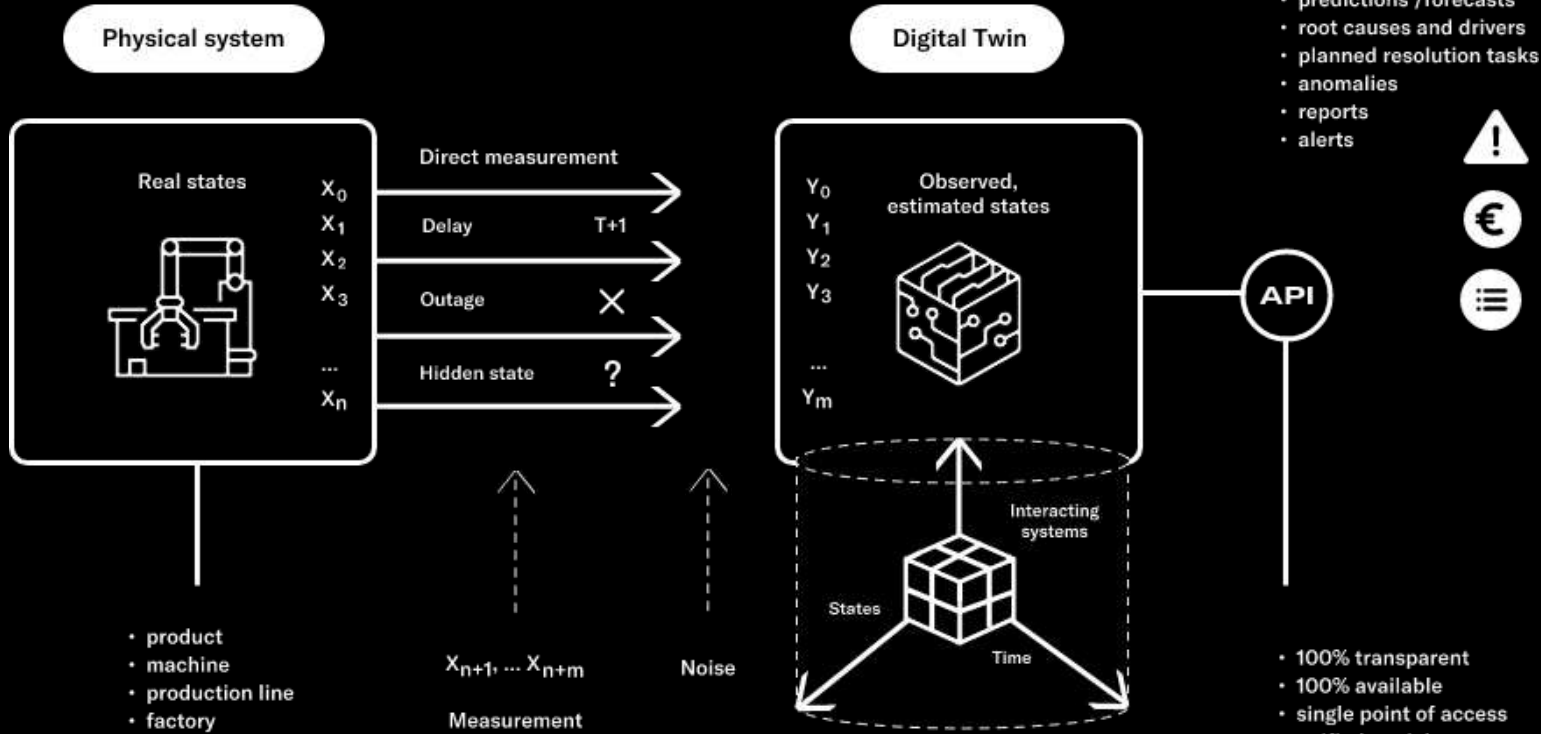


Digital Twin

Digital Data Twin



- predictions /forecasts
- root causes and drivers
- planned resolution tasks
- anomalies
- reports
- alerts

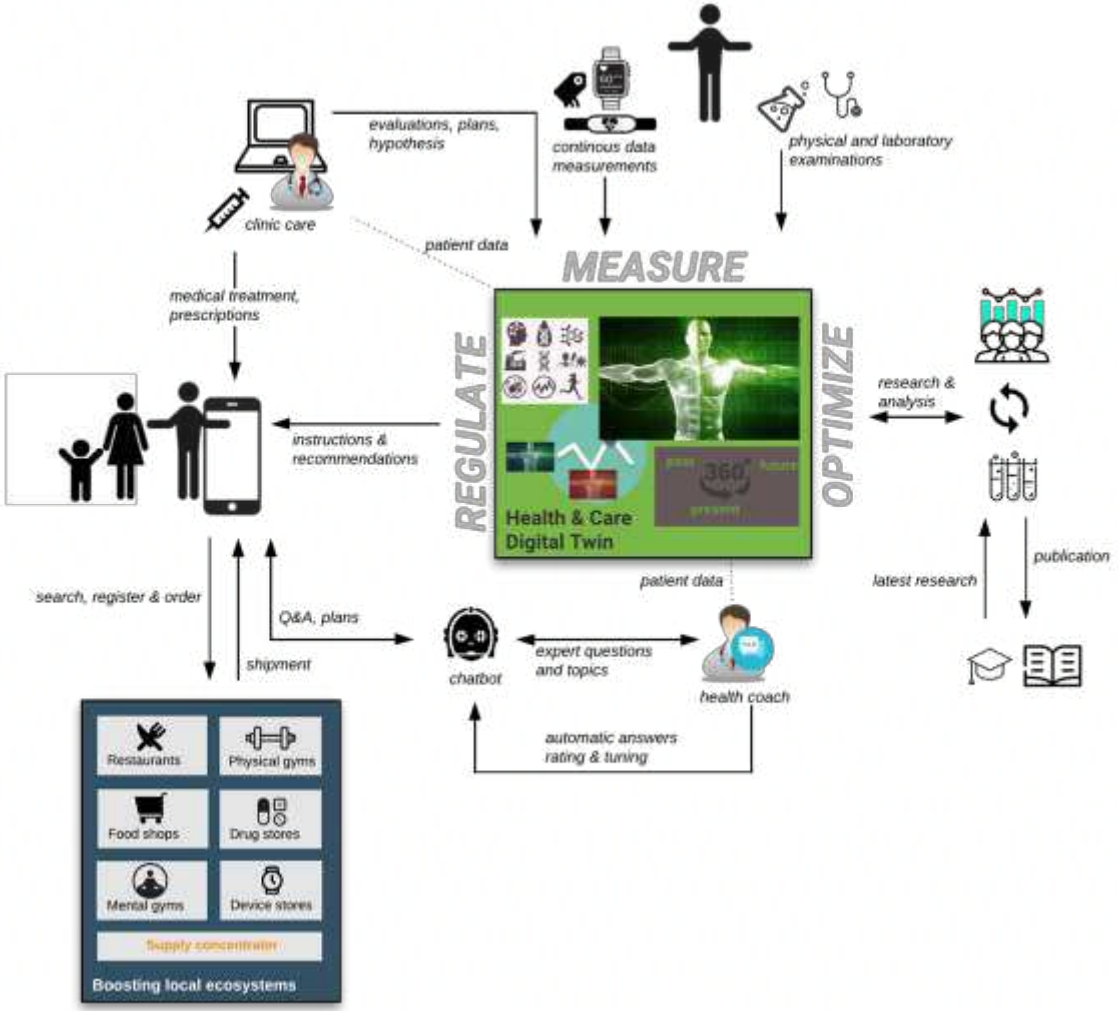


- 100% transparent
- 100% available
- single point of access
- unified model
- near real time

DNAi

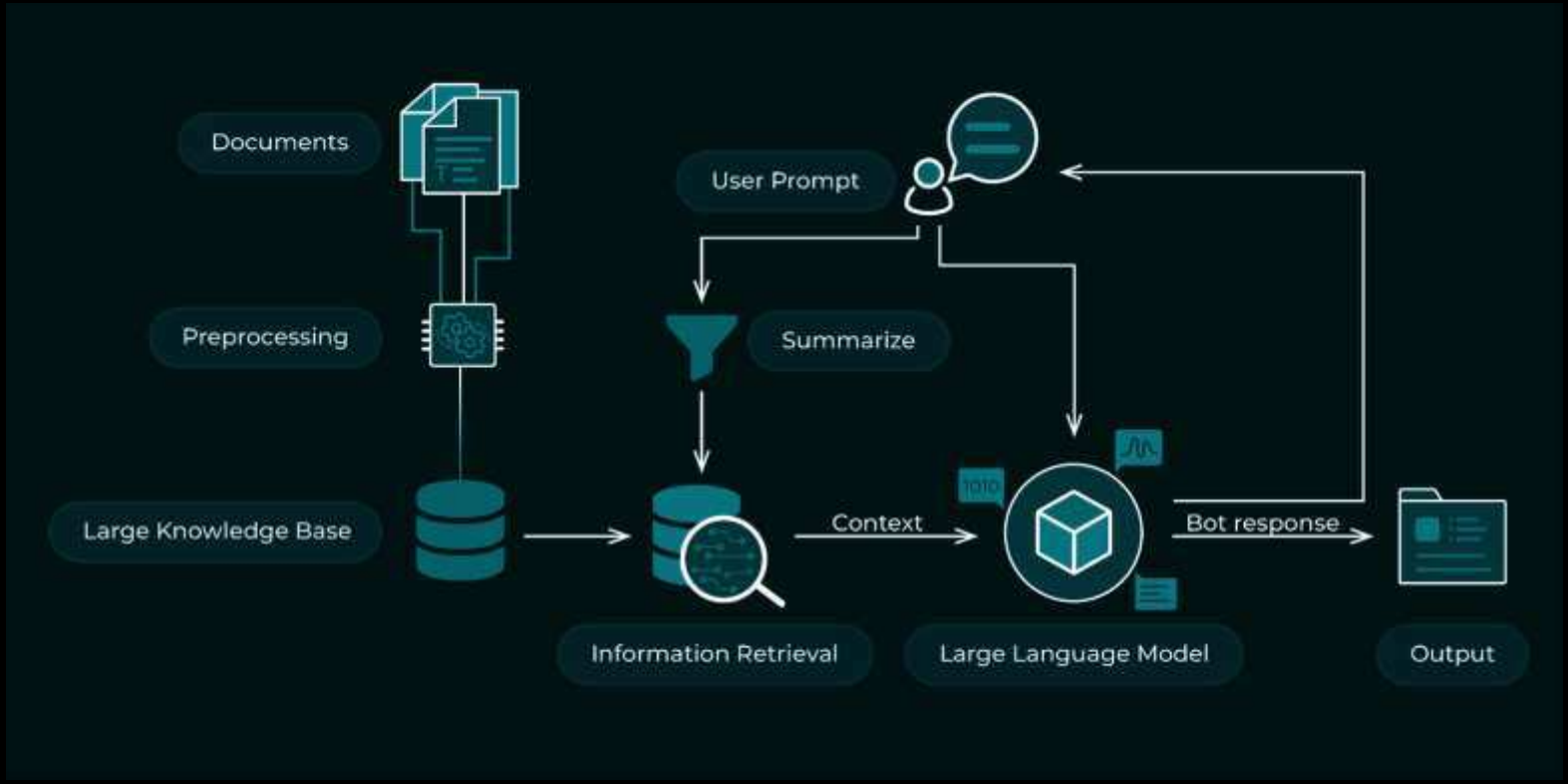
Digital Twin

Digital twins are represented by different models. The main function of these models is to **accurately reproduce** the **properties, behaviour** and **rules of a physical object.**



Cognitive Agent

Cognitive assistant architecture



Call Centrum
950 191 590

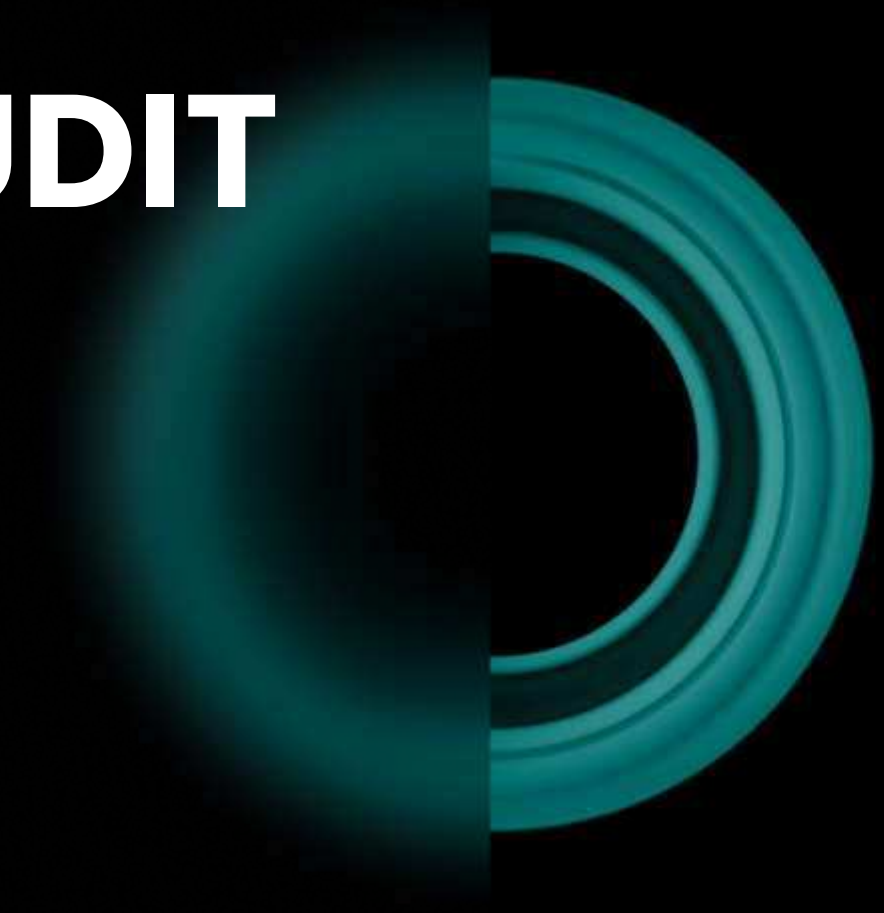
Intranet / Internet

L1, L2, L3 Support

Realtime Education / Knowledge management

Shared Services Centers

AI AUDIT



Thank you!

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/ @dnaigroup

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