



Digital Twins.
The future is coming today



What is a Digital Twin?

A digital copy of a physical object that simulates the actual operating state of the product or process. It is used in the energy, aviation, manufacturing, transport, logistics and medical industries.



Digital Twins trends

48,2B \$

- Digital Twin Market growth by 2026 (today >3.2B \$).

MarketsandMarkets™

87%

of executives agree Digital Twins are becoming essential to their organization's ability to collaborate in strategic ecosystem partnerships.

Accenture™

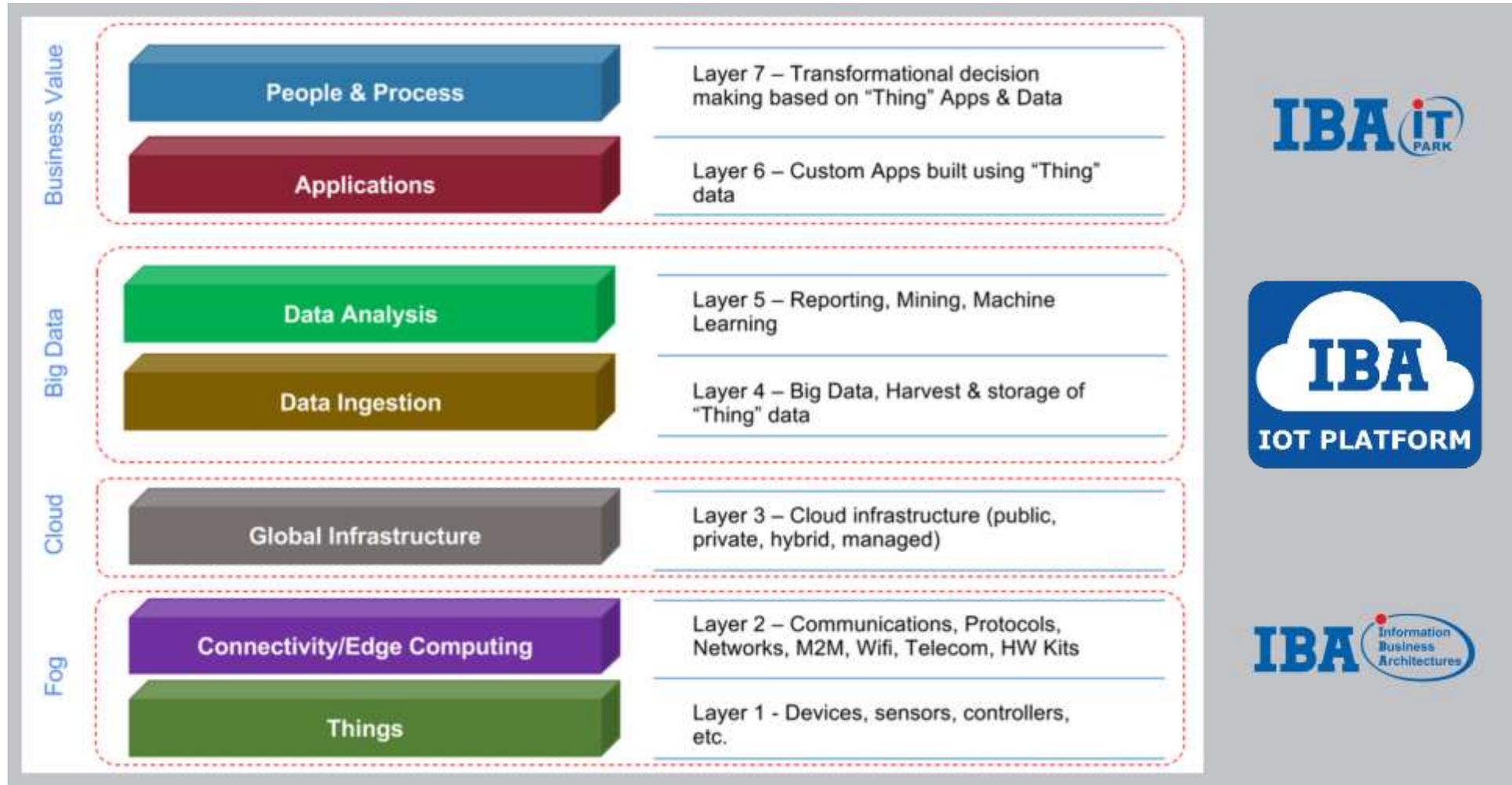
1/3

of mid-to-large-size companies that implemented IoT will have implemented at least one Digital Twin associated with a COVID-19-motivated use case.

Gartner™

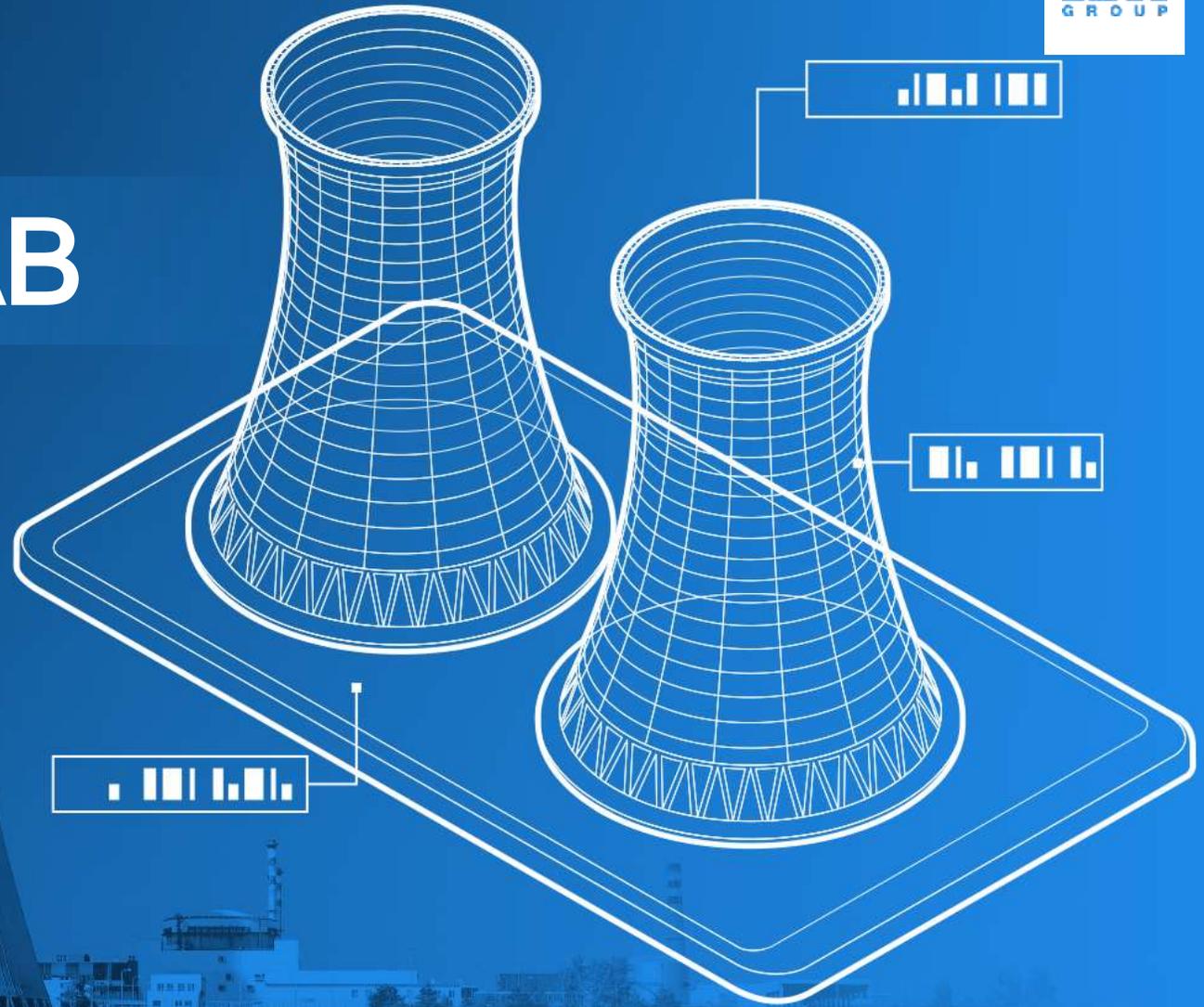


Digital Twin architecture

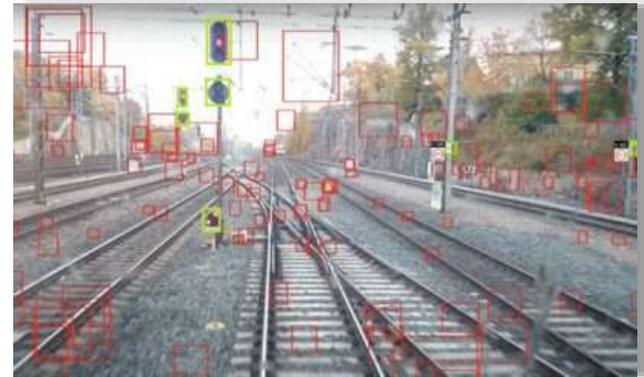
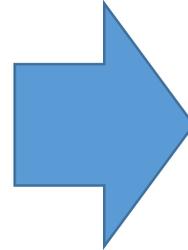


DIGITAL TWIN LAB

Development and
implementation
of Digital Twins



Container terminal



Платформа: 94233617
 Загрузка контейнеров: 1
 Верхний контейнер: BLRU10000115

Новый состав

ЛКМ - ЛКМ: переместить контейнер
 Стн + ЛКМ: вывезти контейнер
 Держать ПКМ: переместить карту
 Держать скролл: вращать карту
 Скролл: масштабирование

Контейнер: BLRU10000115
 Размер: 20F1
 Вес: 6.38 тонн
 Владелец: Белтаможсервис

IBA
 GROUP



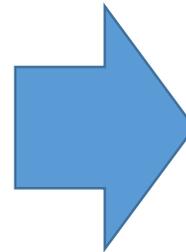
Поиск	Поиск	В грузовик
Платформа (или место)	Поиск	В грузовик



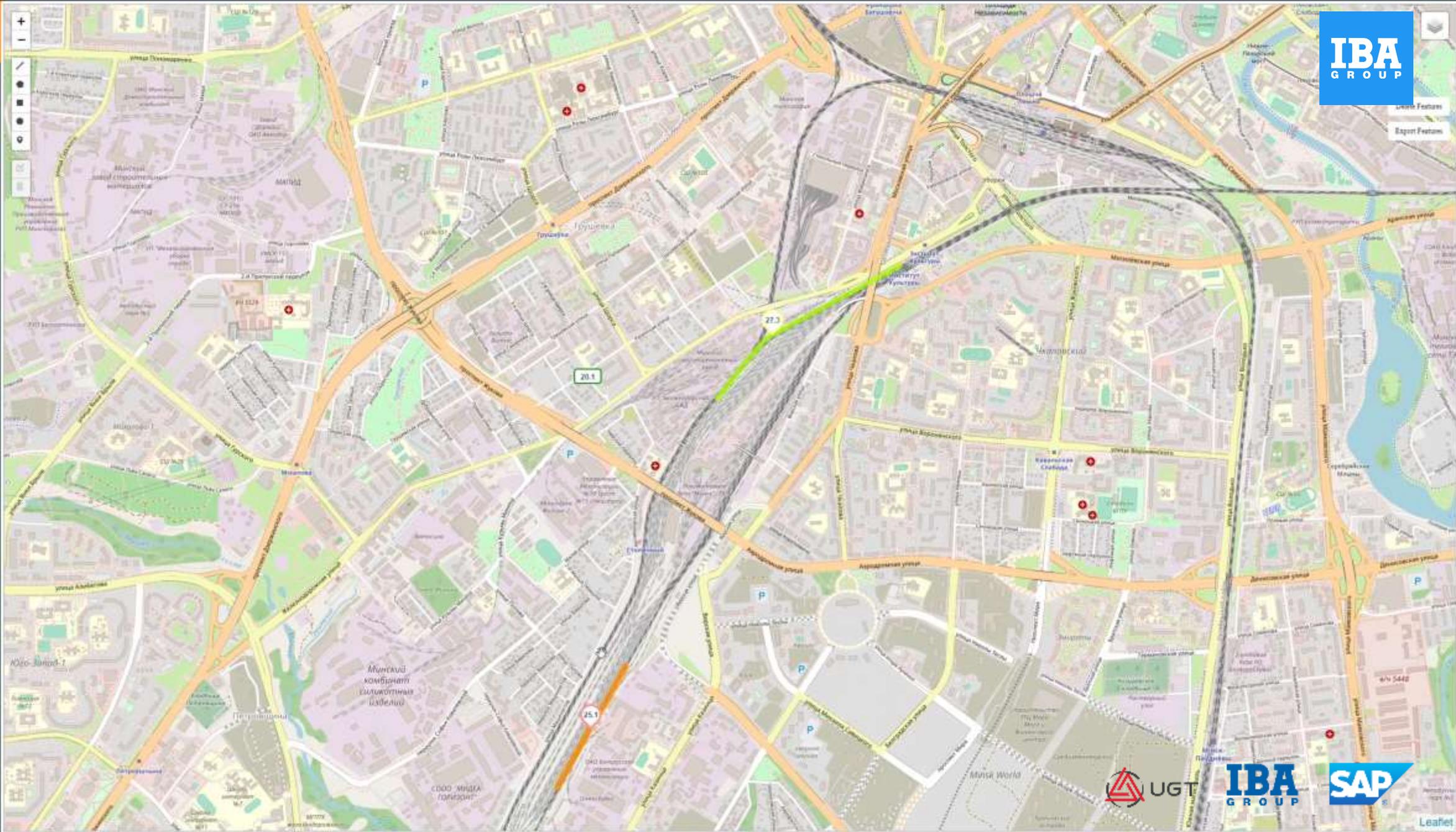
[Задание на работу](#)
[Активные задания](#)

[Отправить на исполнение](#)

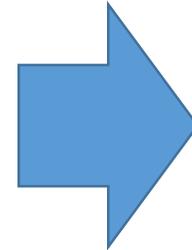
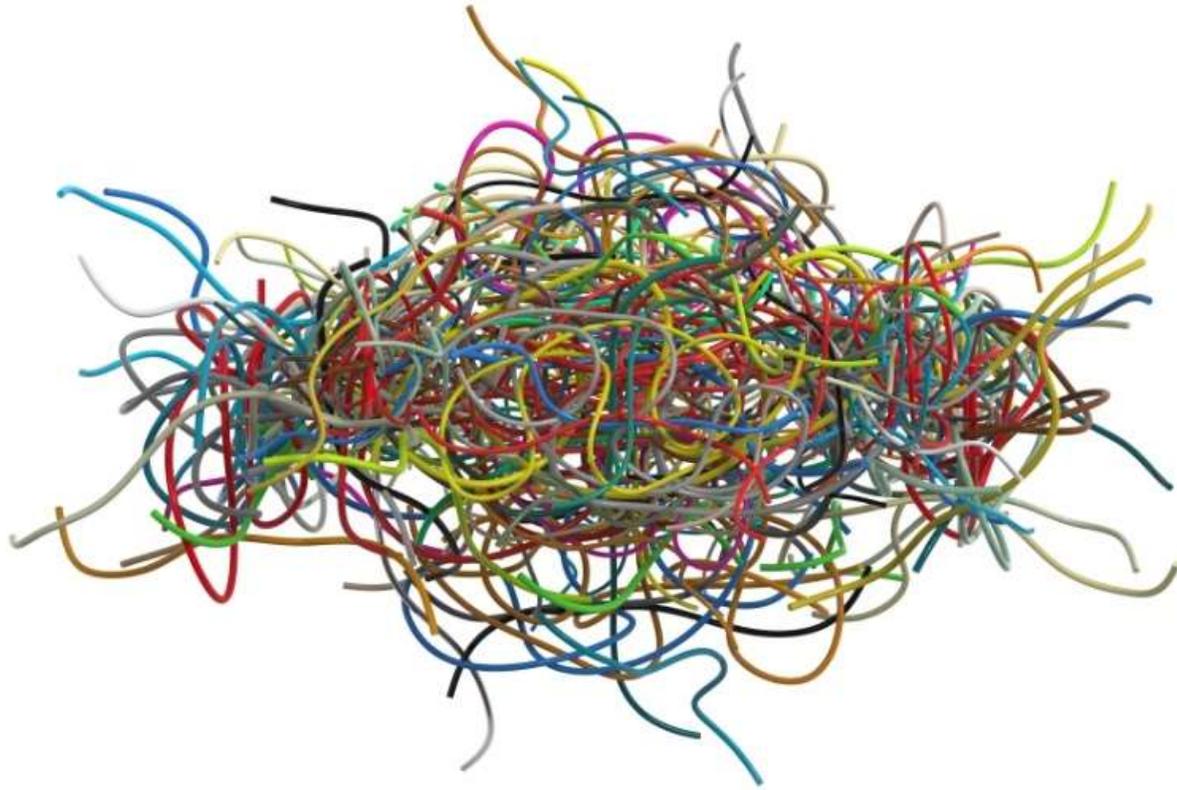
Roadway



- Map
- CWR list
- Sensors
- Messages
- Users
- Customizing

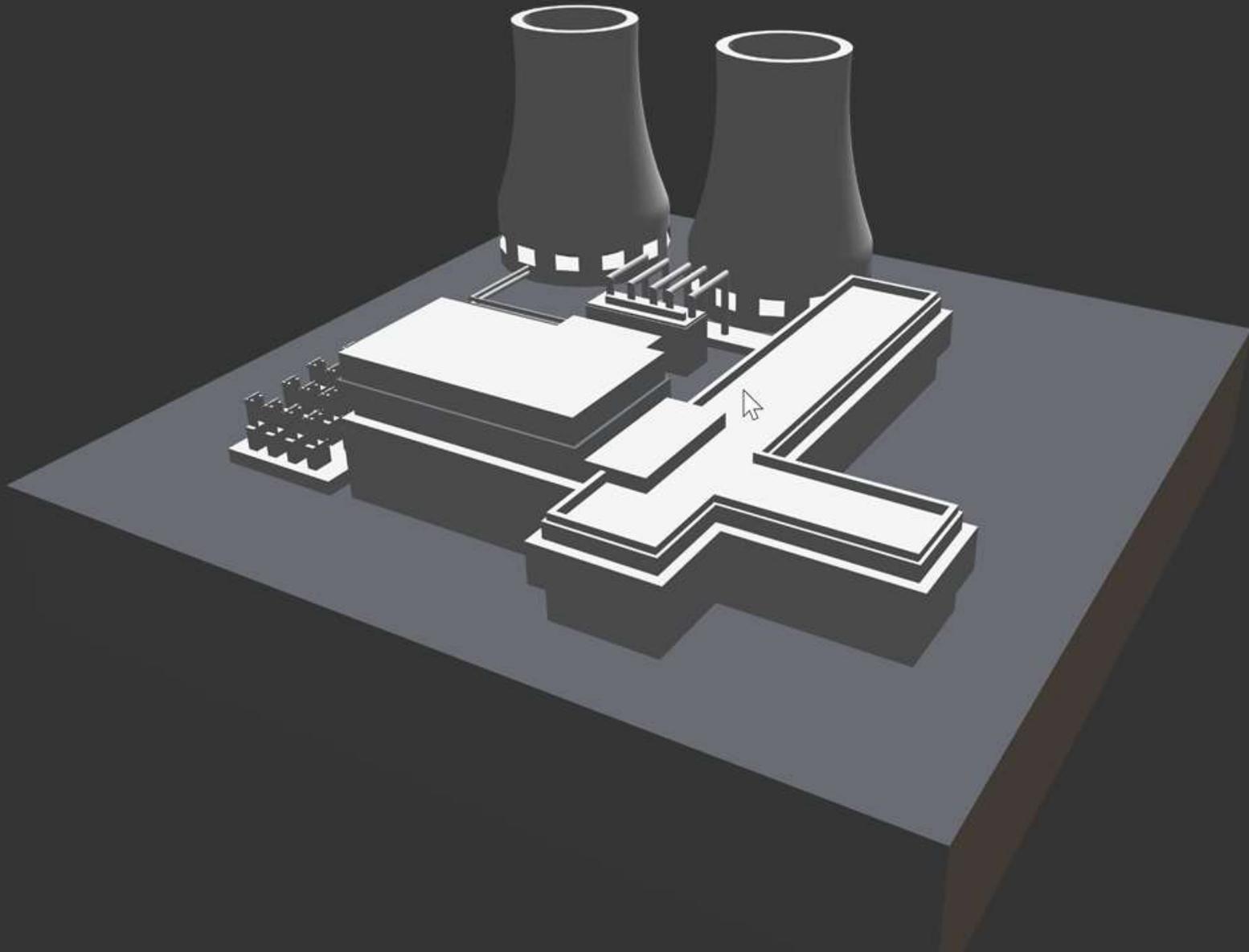


Power Plant



Fluctuation: 4
Power:
Steady:

Object type: *Rele4*
UUID:
6570F8ED-3C01-4A6D-B542-BA9A03DF



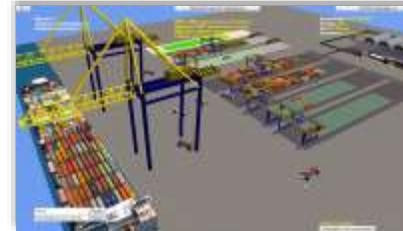
Made by DIGITAL TWIN LAB



for Transportation:



Container terminal*



Sea port



t-Rail

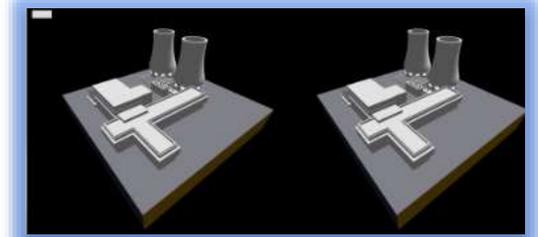
for Utilities:



r-Tube (map+IoT)

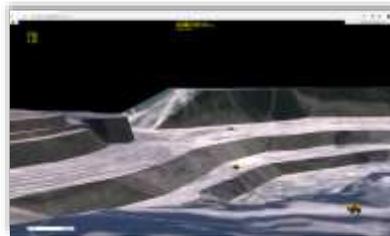


Indoor Lighting

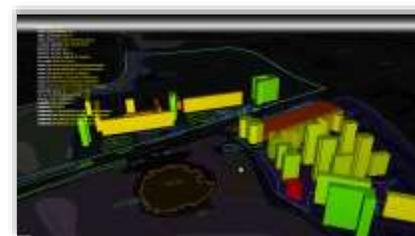


Power Plant

for Geo objects:



Quarry

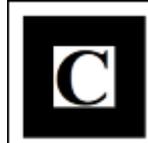


Smart city



AgronomX

AR-manuals:



**In PDF you can click on the [links](#).*





Why IBA Digital Twin Lab?

- ✓ Open-source oriented
- ✓ Possibility of integration with the most commonly used Vendors/Technologies (IBM, SAP, Siemens e.t.c.)
- ✓ All-in-one expertise: IoT-layer (incl. R&D for devices and infrastructure), Connectivity (NB/Iot, LoRaWAN, etc), Cloud (ML/AI incl. Computer vision, Predictive Maintenance), UI/UX (incl. 3D)



Next Steps

1. **Contact IBA Digital Twin LAB.**
2. **Allocate a team from the customer's side (product owner, methodologist, etc.).**
3. **Select an object for prototyping.**
4. **Make a prototype (1-2 months).**
5. **Agree on a strategy for further development.**

«The businesses that start building intelligent twins of their assets and piecing together their first mirrored environments today, will be the ones that push industries, and the world, toward a more agile and intelligent future.»

Mirrored world

IBA DAY GEORGIA 2021

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