

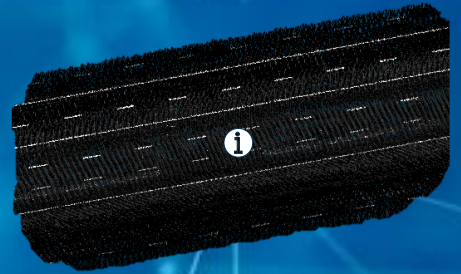
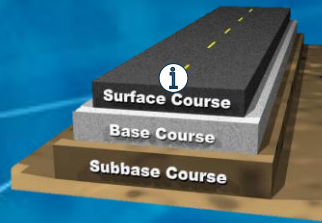
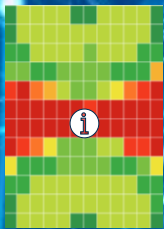
Data Agility for the Harmonization of Road Profile Survey Data

Ing. Inga Maria Giorgadze



**Partner
for
Progress**

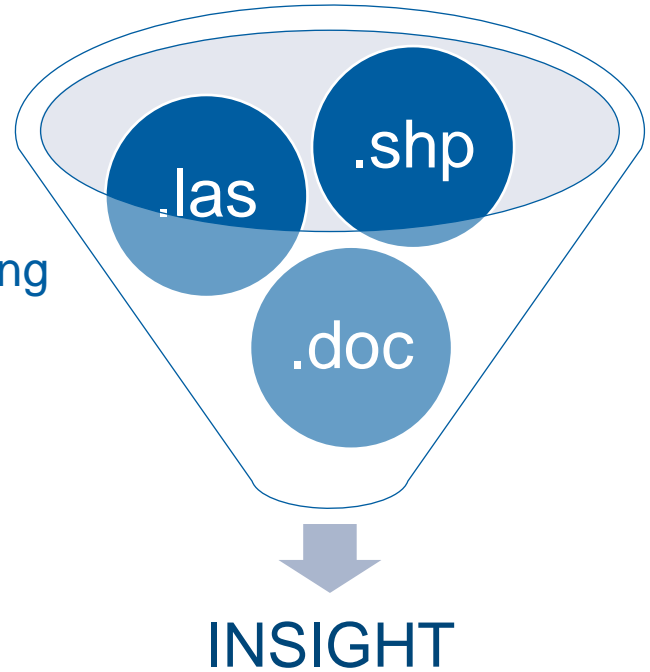




Data Agility: A Solution to Fragmented Data

Data Agility is the ability to swiftly connect, organize, and access diverse data, enabling it to adapt to changing needs and technologies.

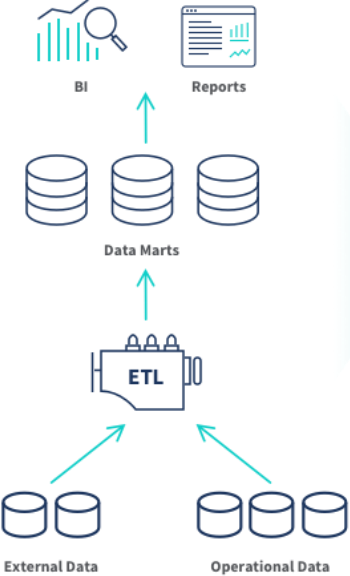
- Provides a Flexible, Connected Data Structure
- Makes Data Accessible and Ready for Future Tools



Data architecture evolution

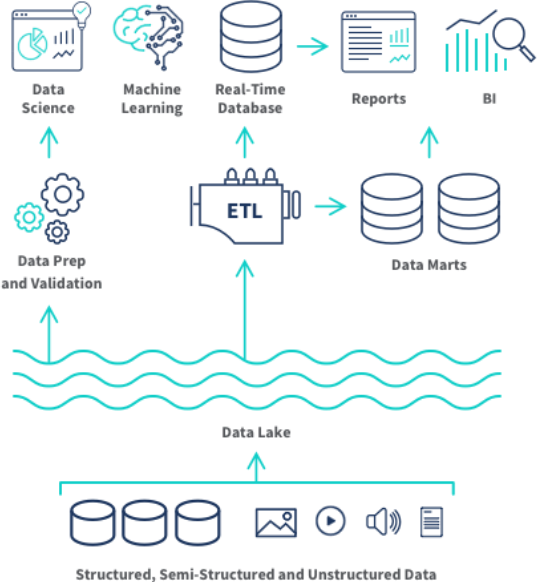
LATE 1980'S

Data Warehouse



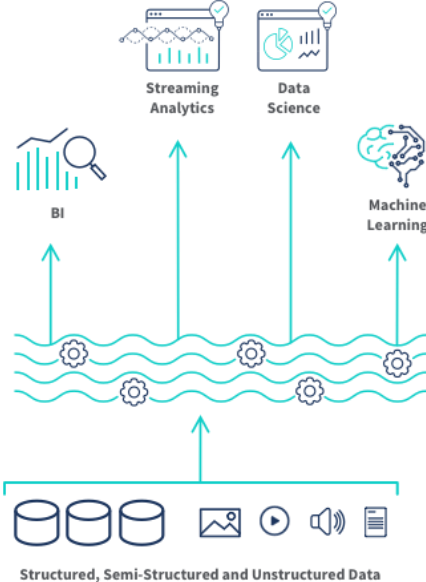
2011

Data Lake



2020

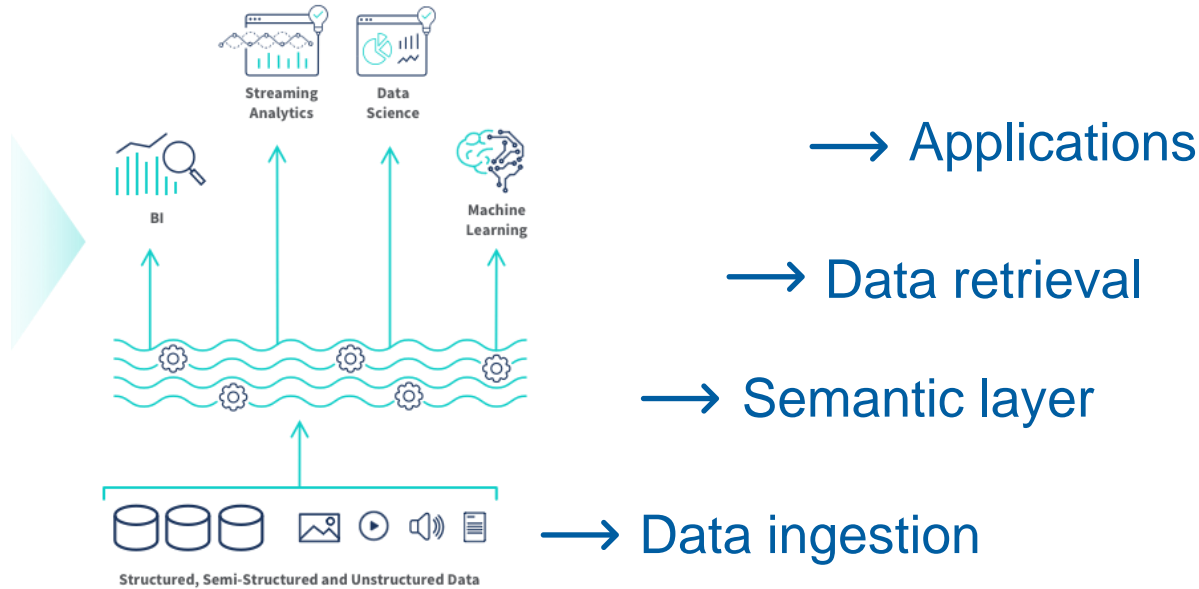
Lakehouse



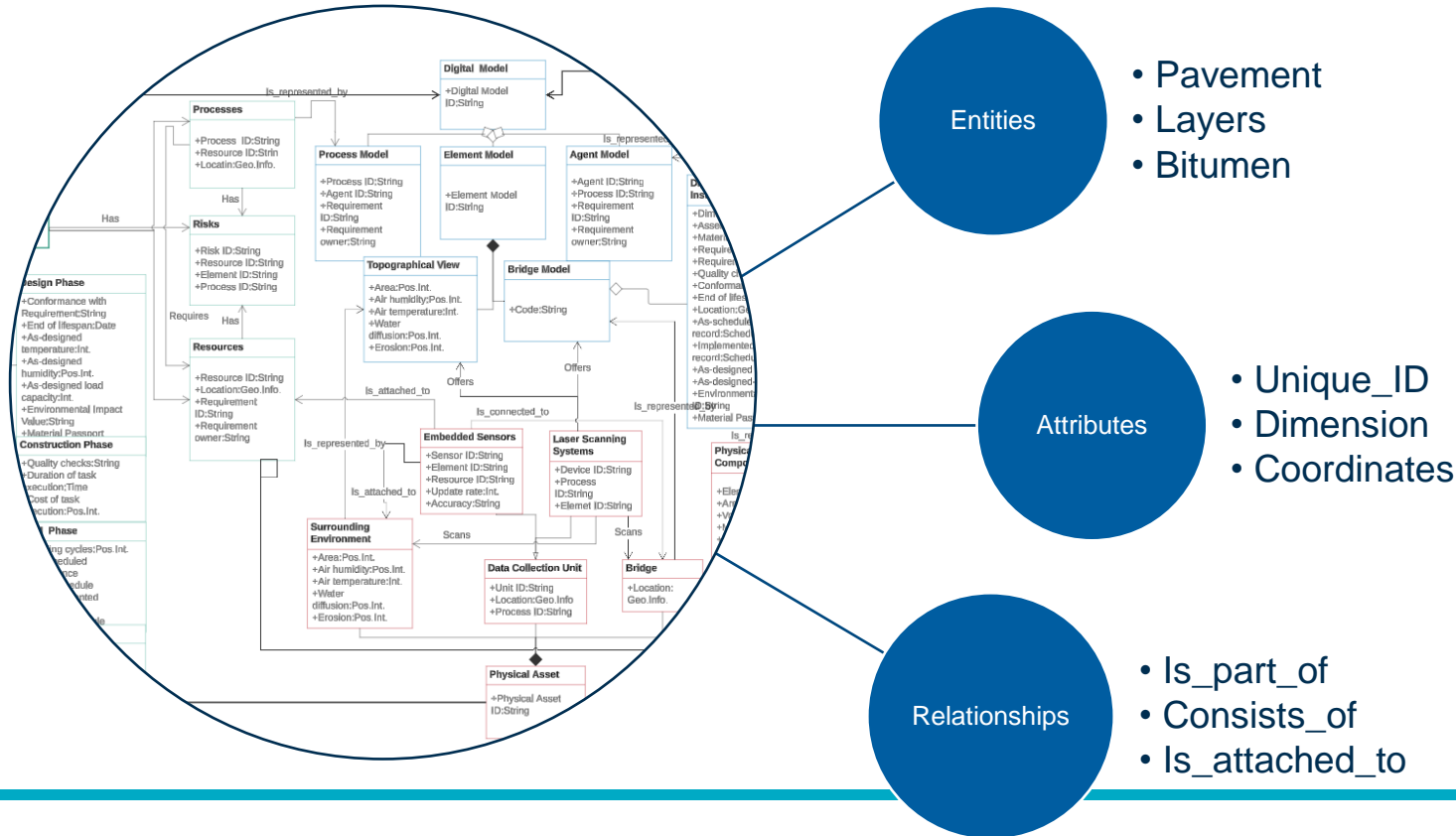
The mechanism of the Lakehouse

2020

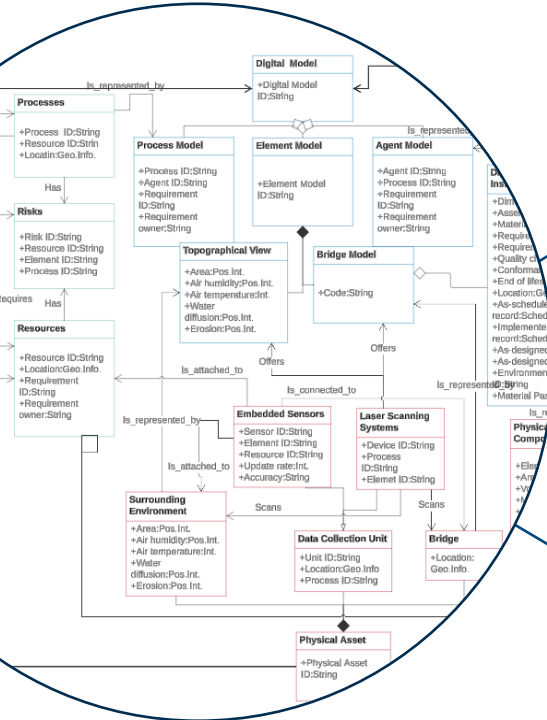
Lakehouse



Semantic Layers and Ontologies



Semantic Layers and Ontologies



Entities

- Pavement
- Layers
- Bitumen

Attributes

- Unique_ID
- Dimension
- Coordinates

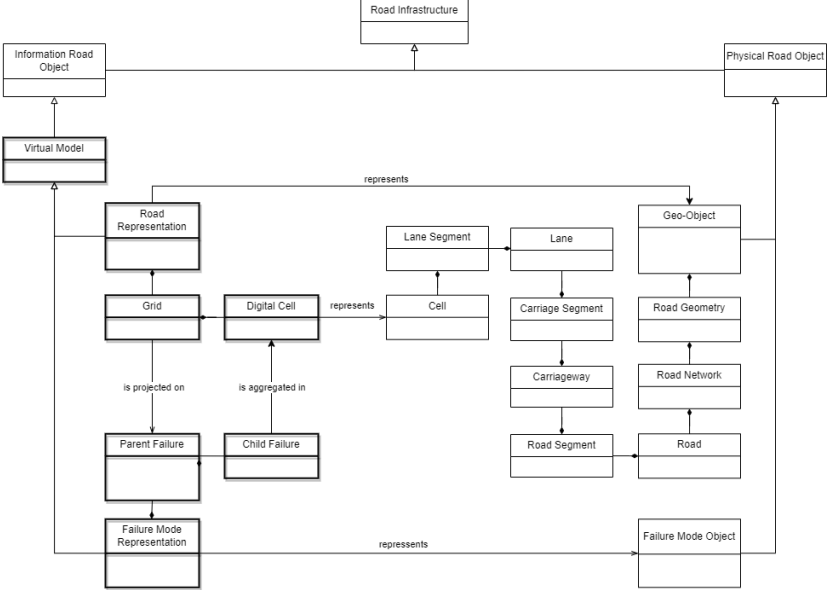
Relationships

- Is_part_of
- Consists_of
- Is_attached_to

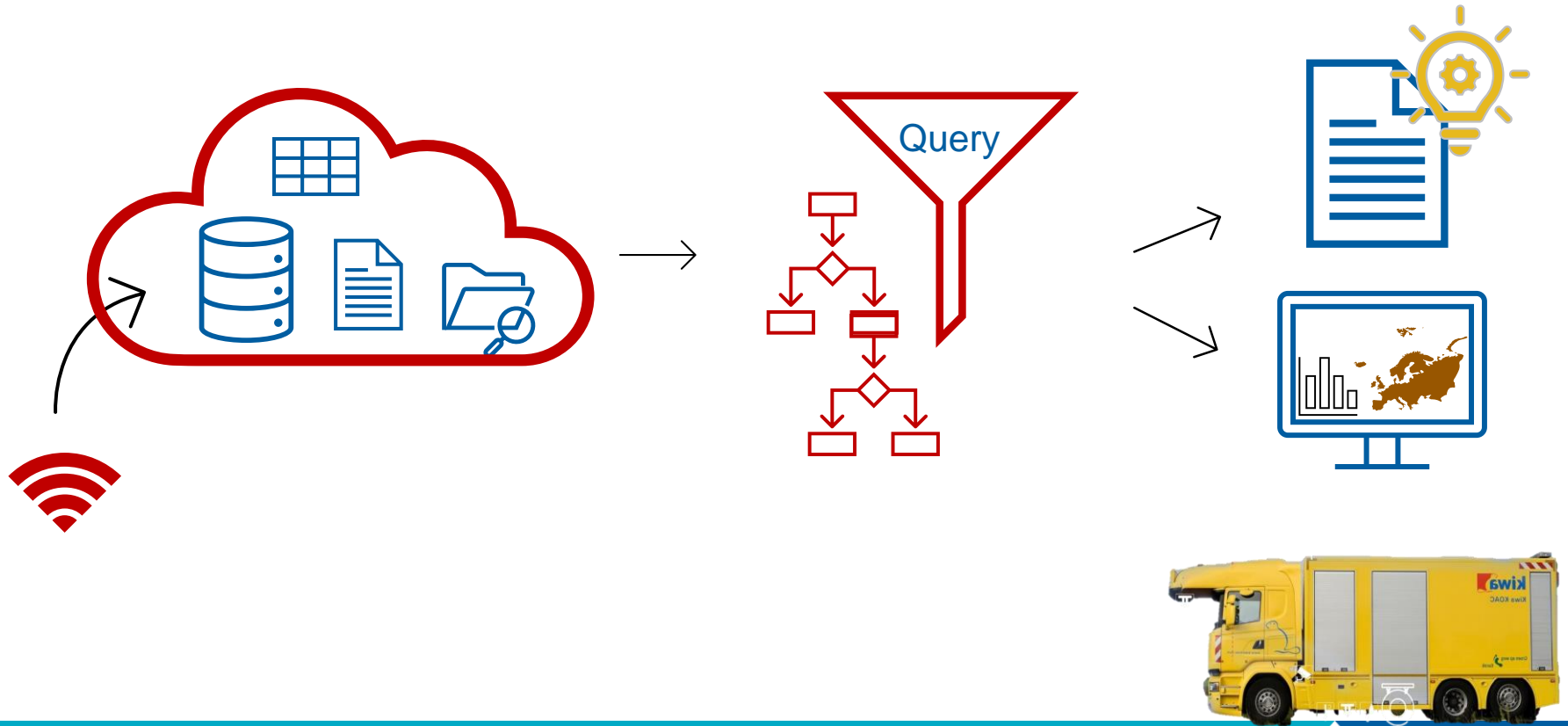
Automatic
Semi-automatic
Manual

KIWA KOAC Lakehouse

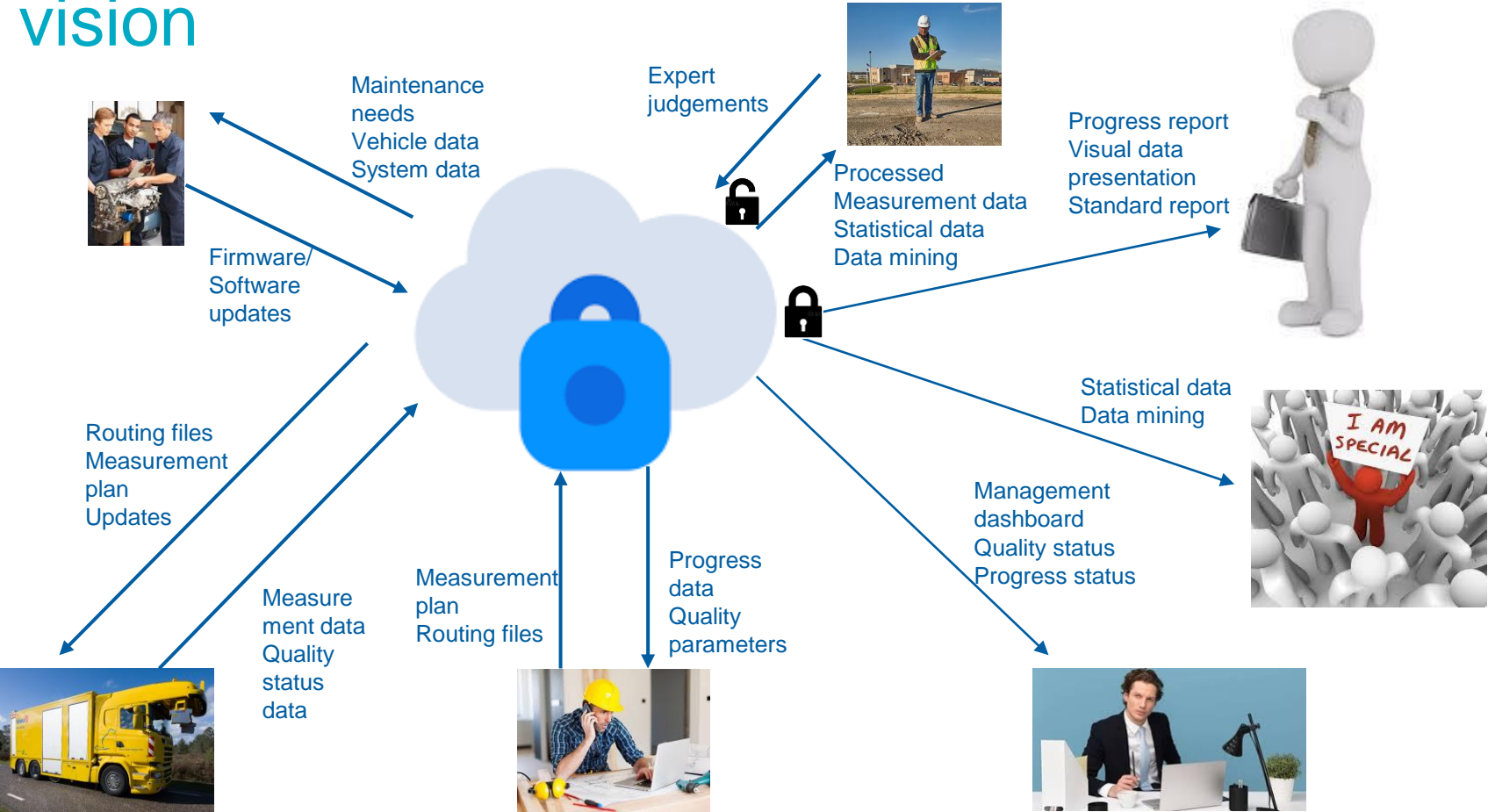
- Software & cloud computing partner
- KIWA KOAC Ontology
- NEN 2660-1&2:2022 nl



Ongoing pilot project



Our vision



Discussion

- Sharing experiences
- Attention points and ideas
- Potential applications

Let's stay in contact

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Inga Maria Giorgadze 