Next Generation AI Projects With Geospatial Data

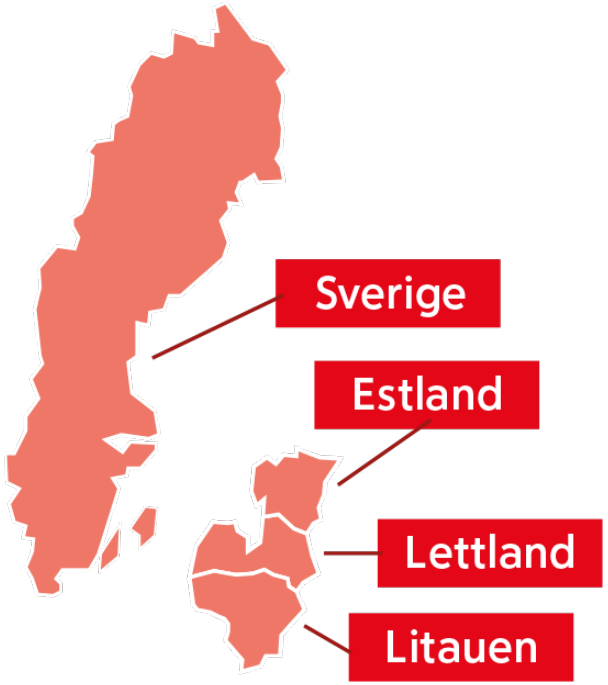
Anna Baecklund
Head of Data Science & AI

A Unique Ecosystem Around Food And Health

ICA: A Summary

1 657

merchant-owned and own stores and pharmacies.
The core of the business is grocery shopping.



The operations within ICA are divided into

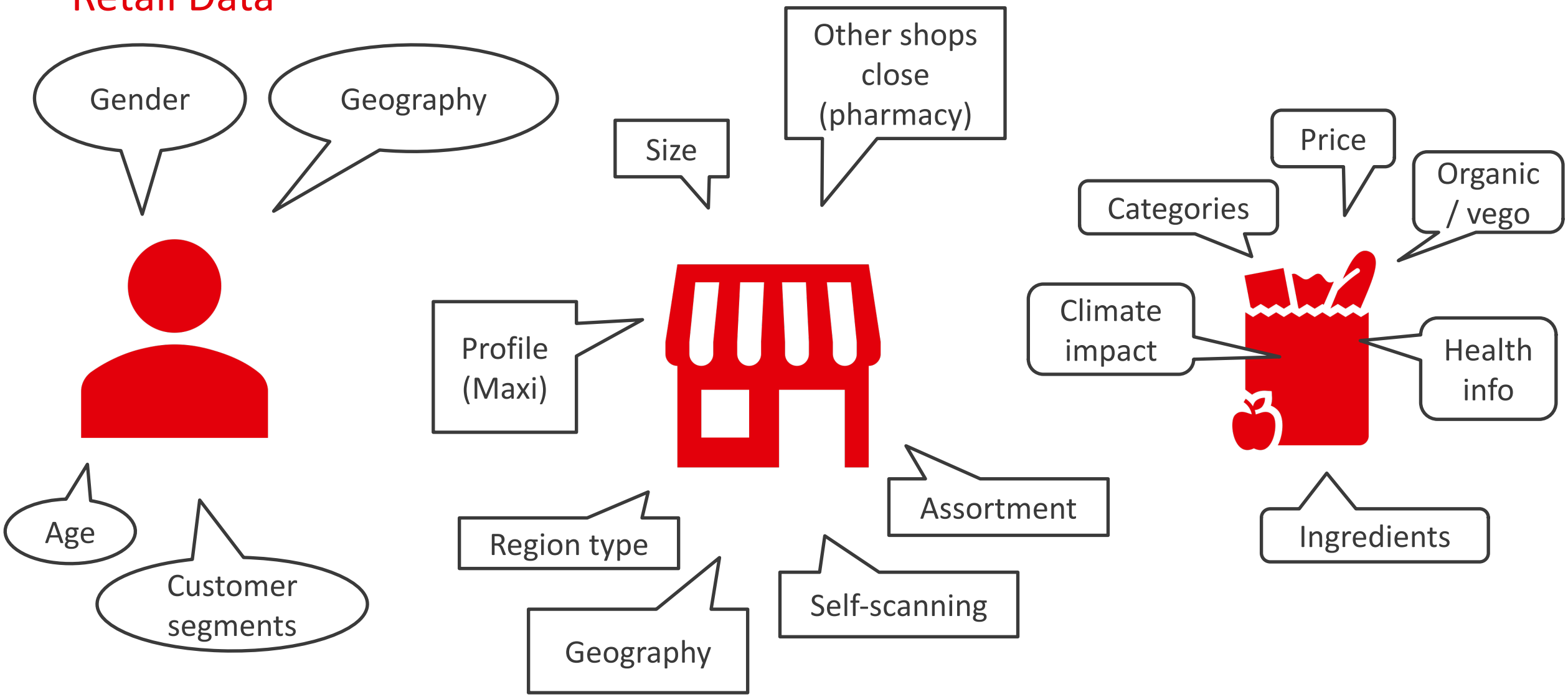
ICA Sverige
Rimi Baltic
Apotik Hjärtat
ICA Fastigheter
ICA Banken

Ca
24 000
Employees in ICA

Ca
50 000
Working in the merchant-owned ICA stores

Turnover in 2021
128 Mdkr
Of which daily goods
85%

Retail Data


Gender
Geography
Other shops close (pharmacy)
Size
Price
Organic / vego
Categories
Climate impact
Health info
Profile (Maxi)
Age
Customer segments
Region type
Geography
Assortment
Self-scanning
Ingredients

Solving Business Challenges Across the Business Areas

Wholesale

Store

Customer

Competitor

Logistics

Other (HR)

Case Study: Customer Support and Complaints

Challenge

ICA wanted to understand the reason to why complaints arise in order to act proactively.

Solution

1. Data on the connection between supplier, warehouse and transport was used together with information about stores
2. Which store credits the most, which product groups advertises the stores the most
3. Report on trend deviations in real time: increase in complaints between consecutive weeks, months, years to find patterns in warehouses and stores, and between items, stores and transport.

Case Study: Anomaly Detection of Complaints

Challenge

ICA wanted to do a multivariate anomaly detection of complaints at product level in warehouses and stores to see product groups that stands out and trend break in complaints.

Solution

1. Information about supplier at product level: loading history, which delivery company, which intermediate warehouses
2. Mobile location data and times for deliveries and arrivals to various actors
3. Segments to better understand complaints per product and store, whether a complaint was accepted or rejected based on what grounds, and if specific transports were linked to certain anomalies

Case Study: Forecast Load Carrier Needs

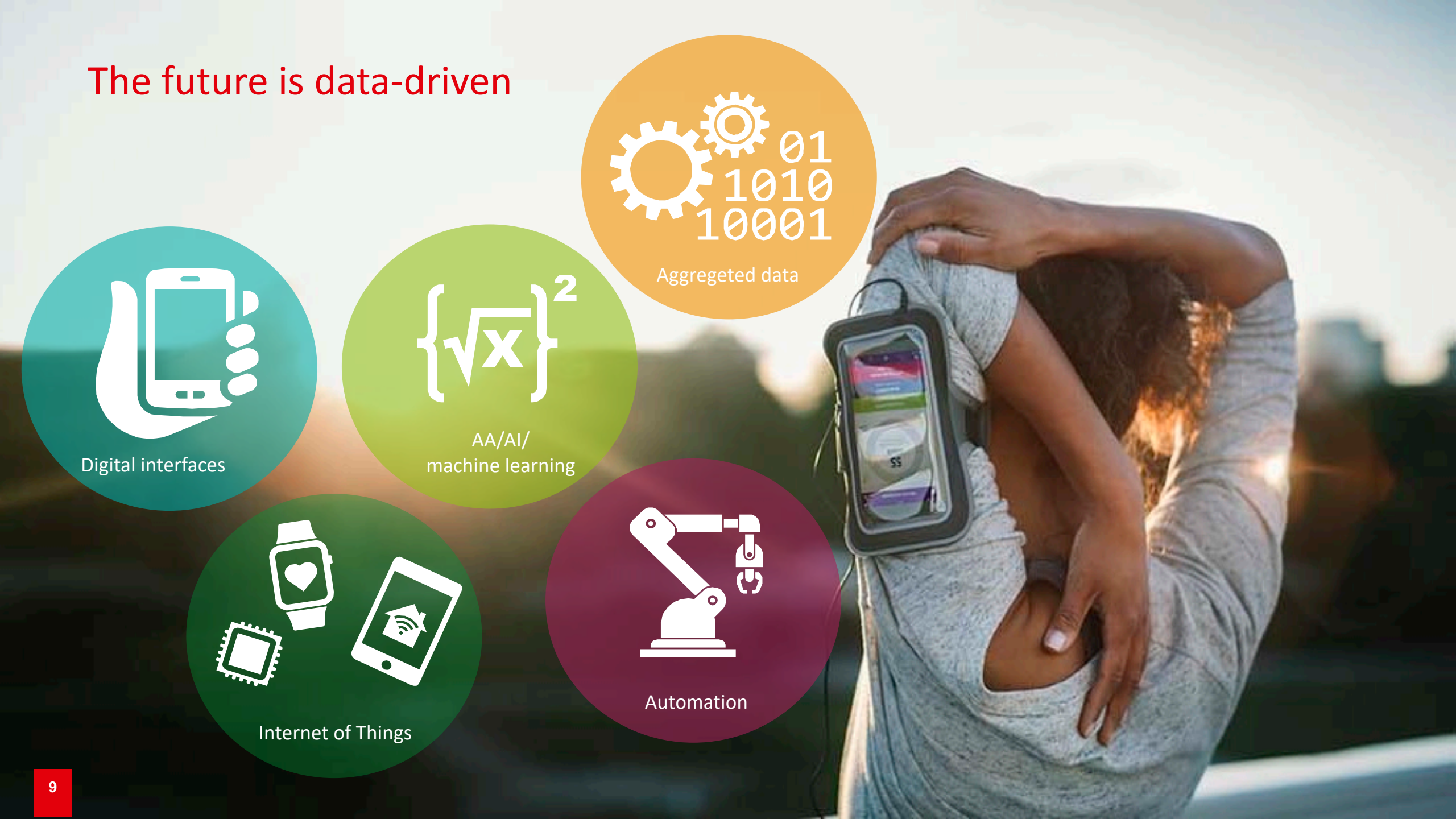
Challenge

ICA wanted to improve their cargo carriers and have a smarter placement of cars and goods in order to improve loading time consumption and assortment.

Solution

1. Data of where cargo carriers are located, how many cargo carriers were delivered from point A to B, historical packing times for each product and car and when the cars were scheduled to arrive
2. Visualize and forecast load carrier needs based on assortment efficiency
    - What assortment should we offer from a sales, customer perspective and inventory perspective.
    - What proportion of clips should we have based on assortment and purchases
    - Which items should we have the highest level of service on

The future is data-driven



Thanks!