



- Big shifts in customer needs & behavior
- Online businesses can benefit from these changes quite easily
- Brick-and-mortar own large amounts of valuable transactional data that needs to be translated into business insights



#### The AI Solution for Retail

- Use AI to analyze the transactional data
- Get automated business insights from your data, like:



✓ Customer needs & purchasing patterns



✓ Assortment purchasing behavior

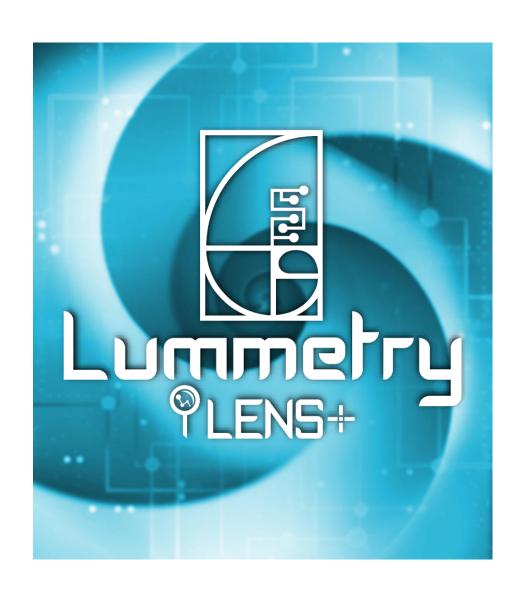


✓ Store-level selling behavior



✓ Predictive trends

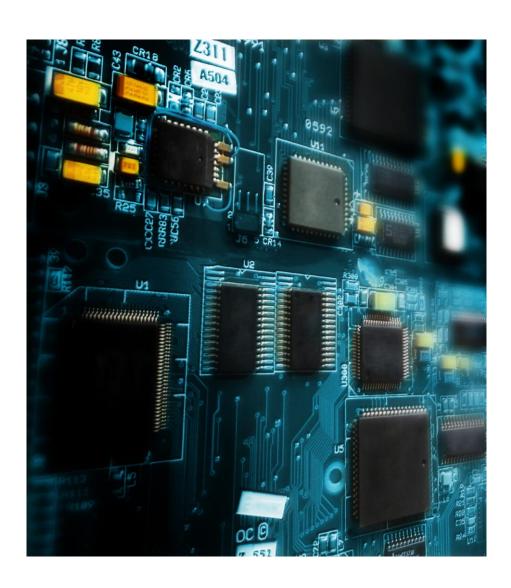




#### Our AI Solution

- Automated business radiography
  - ✓ Purchasing patterns
  - ✓ Customer needs discovery & trend
  - ✓ Behavioral segmentation
- Predictions
  - ✓ Demand and out-of-stock forecasting
  - ✓ Sales Anomalies
  - ✓ Promo campaigns future impact
- Analysis at Store, SKU or customer level





#### Key Science of LENS+

- Consumer needs understanding
  - deep content filtering approach based on prod2vect and other similar DL approaches
  - own researched and developed approach (https://arxiv.org/abs/1903.09942)
- Advanced time-series forecasting
  - based on multiple Deep Learning architectures such as hierarchical attention-based recurrent encoder-decoders or temporal convolutional graphs
  - customer event prediction based on own research (https://arxiv.org/abs/1904.07687)
- Anomaly detection
  - advanced heuristics for various tasks combined with deep learning techniques





## What you get

- Assortment optimization
   (right product to the right place at the right time)
- Marketing optimization
- Merchandising optimization
- Supply chain optimization



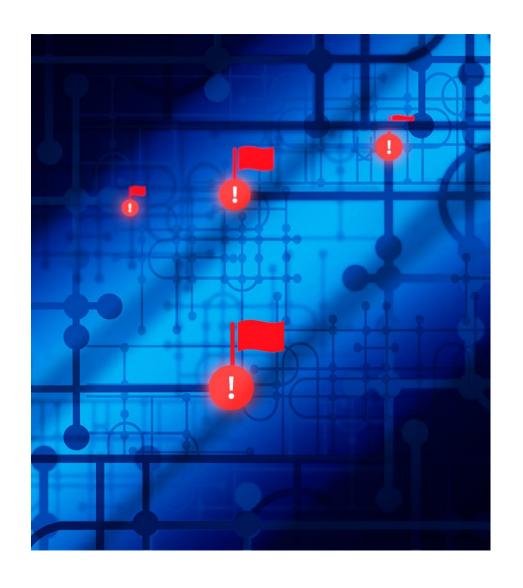


### What you gain

- Improve operational efficiency
- Increase customer satisfaction
- Increase customer loyalty
- Increased revenues







# Case study: Lummetry LENS+

- Automated out-of-stock predictive alerts
- Behavioral based store segmentation for smart replenishment
- Store level sales anomalies detection & prevention





### Lummetry.AI

Artificial Intelligence company

Deep Learning for data-driven insights

#### Our expertise:

- Predictive Business Analytics
- Video Analytics
- Domain Agnostic Anomaly Detection
- Neural Language Modelling Solutions

**Target application domains**: Retail, Banking, Manufacturing, Security, Healthcare, Distribution and Logistics



# OUR AI

















