# POLIMI GRADUATE MANAGEMENT

# **UNSUPERVISED LEARNING LAB**

**CLUSTERING CASE** 









### FOOD RETAILER CASE STUDY

- The dataset refers to customers of a retailer in the food industry.
- Customers come from two different channels (POS=0, Online=1) and are distributed into three regions.
- Data include the annual spending on some product categories.
- Data also include responses to a questionnaire intended to evaluate managerial actions with potential impact on sales (extending products' assortment).
- Customers were asked: "Would extending products' assortment have impact on your purchases?"

Channel <sup>‡</sup>	Region <sup>‡</sup>	Fresh	MeatAndFish	Wine <sup>‡</sup>	Frozen	PersonalCare <sup>‡</sup>	Deli <sup>‡</sup>	AssortmentExt
0	North	8708	3634	6100	2349	2123	5137	Indifferent
0	North	8258	2344	2147	3896	266	635	High
1	North	44466	54259	55571	7782	24171	6465	Indifferent
0	North	140	8847	3823	142	1062	3	Very low
1	Center	16823	928	2743	11559	332	3486	Low
0	North	2438	8002	9819	6269	3459	3	High
0	North	7005	829	3009	430	610	529	High
0	North	9658	2182	1909	5639	215	323	Very low
0	North	11442	1032	582	5390	74	247	Very high
0	North	759	18664	1660	6114	536	4100	Very low
0	South	9193	4885	2157	327	780	548	High
0	North	20874	1563	1783	2320	550	772	High
0	South	4720	1032	975	5500	197	56	Very high
0	Center	9790	1786	5109	3570	182	1043	Indifferent
0	North	43088	2100	2609	1200	1107	823	Indifferent



### POSSIBLE INTERPRETATION



## Segment A

- o Valuable customers
- Online channel
- Majority of their spending on:
  - Wine
  - Meat & Fish
  - Personal Care
- Sensitive to assortment extension



# Segment B

- o POS channel
- Northern part of the Country
- Half (on average) of their spending on fresh products
- Not so sensitive to assortment extension (special promotions, store layout changes, etc...)

