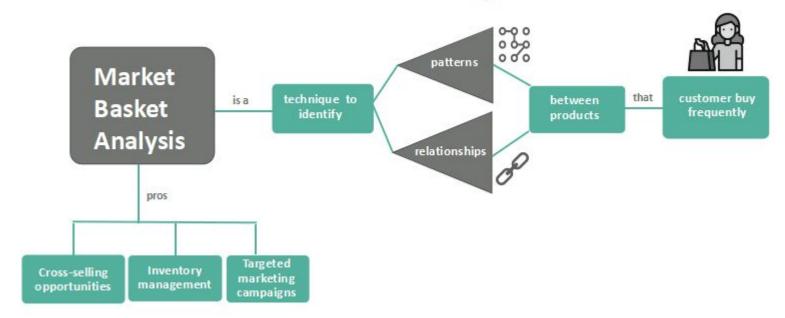
# Market basket insight

### Market Basket Insight

Market basket analysis is a data mining technique used by retailers to increase sales by better understanding customer purchasing patterns. It involves analyzing large data sets, such as purchase history, to reveal product groupings, as well as products that are likely to be purchased

#### **Market Basket Analysis**



### Types of market basket analysis

- Predictive market basket analysis. This type considers items purchased in sequence to determine cross-sell.
- Differential market basket analysis. This type considers data across different stores, as well as purchases from different customer groups during different times of the day, month or year.

### Algorithms for market basket analysis

Algorithms that use association rules include AIS, SETM and Apriori. The Apriori algorithm is commonly cited by data scientists in research articles about market basket analysis and is used to identify frequent items in the database, then evaluate their frequency as the datasets are expanded to larger sizes.

- arulesNBMiner
- Opusminer

- RKEEL
- RSarules

### **Examples of market basket analysis**

- Amazon's website uses a well-known example of market basket analysis. On a product page, Amazon presents users with related products, under the headings of "Frequently bought together" and "Customers who bought this item also bought."
- Market basket analysis also applies to bricks-and-mortar stores.

## Benefits of market basket analysis

Market basket analysis can increase sales and customer satisfaction. Using data to determine that products are often purchased together, retailers can optimize product placement, offer special deals and create new product bundles to encourage further sales of these combinations.

#### **Conculation**

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