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## Basket Analysis

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### Synonyms

Market basket analysis

### Definition

The goal of basket analysis is to utilize large volumes of electronic receipts, stored at the checkout terminals of supermarkets, for better understanding of customer behavior.

While many forms of learning and mining can be applied to market baskets, the term usually refers to some variant of ► [association rule](#) mining. In the

basic setting, each market basket constitutes an example essentially defined by the set of purchased products. Association rules then identify sets of items that tend to be bought together. A classical, anecdotal discovery from supermarket data is that “if a basket contains diapers then it often also contains beer.” This example illustrates several potential benefits of market basket analysis by association rules: simplicity and understandability of the results, actionability of the results, and a form of non-supervised approach where the consequent of the rule has not been fixed by the user.

Association rules are often found with the ► [Apriori algorithm](#), and are based on ► [frequent itemsets](#).

### Cross References

- [Apriori Algorithm](#)
- [Association Rule](#)
- [Frequent Itemset](#)
- [Frequent Pattern](#)