Basket Analysing

Nov 2022

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Executive Summery

Customer shopping behavior was modeled using a Basket Analysis framework in order to identify potential product for promotion in sales bins within our stores.

Our model assessed 7056 product pairs across 14962 transactions during the time period 2014-2015. The following 5 product pairs are recommended based on their purchase affinity. Also, needs to be in fridge or not is considered for suggested location.

Product in bin	Location product	Support	Lift
Bottled beer	Sausage	1.1%	2.35
Salad dressing	Other vegetables	0.99%	2.43
sauces	Chicken	0.71%	7.0
Cereals	Milk	0.45%	2.22
soda	Rolls/buns	3.48%	2.1

Support: Combination proportion to all transactions

Lift: Compared to expected frequency

Appendix

Rejected Product Combinations with Good Metrics

Product in bin	Location product	Support	Lift	Rejection reason
other vegetables	root vegetables	3.22	2.2723756	They are already together.
Italian sausage	sausage	2.86	4.9701004	They are already together.
large milk	shopping bags	0.79	2.6268415	Shopping bags are not counted as real products
fish	small milk	0.74	9.072188	Both of them need to be in fridge. So non of them can go to bins.
Herb	Pork	0.8%	5.1	Both of them need to be in fridge. So non of them can go to bins.