

## IBM Cognos Retail Demo

### Part 4: Predictive Analytics Demo

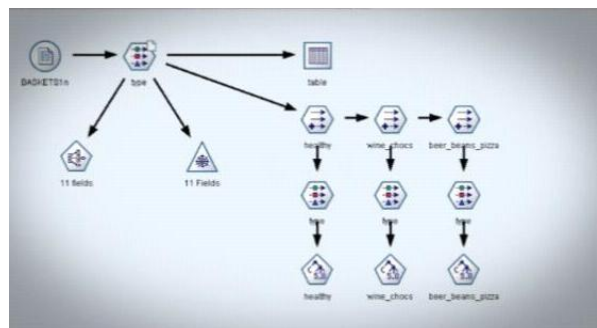
“When I think about technology that influences the shopping experience I break it into two dimensions. The first dimension is all around the analytics. Better understanding who our customers are, segmenting them and understanding what triggers and what events will help them or encourage them to purchase more. The next step in the evolution is prediction. So really taking what has happened in the past and applying that to what the propensity to buy, to service, whatever other actions the consumer will do in the future.”

Rob Garf, IBM

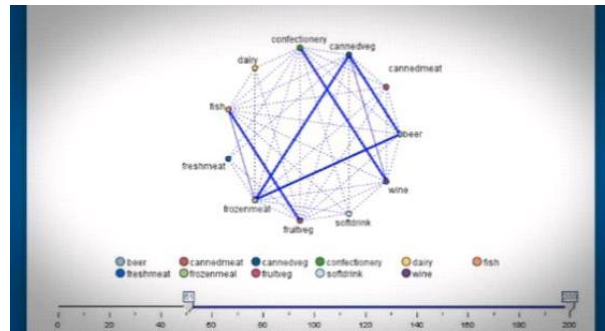
Through point of sale transactions, the retail industry generates enormous amounts of customer data. However, in the past, identifying patterns within those enormous volumes of information was costly and time consuming, using manual and error-prone processes.

But with predictive analytics from IBM, companies can easily gain the insights they need to better serve customers with a differentiated assortment and targeted promotions. By matching promotions and products to patterns in specific customer segments, retailers can harness the power of predictive analytics. Here’s how it works...

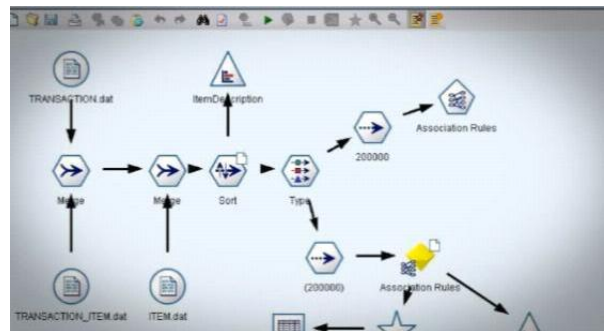
The IBM SPSS Market Basket Analysis solution allows retailers to capture, predict, and act on customer buying patterns. Using highly scalable SPSS algorithms, Market Basket analyzes transactional information to identify “associations” – patterns that link products which are often purchased together.



Using these associations, Market Basket Analysis can then calculate Primary, Secondary and Tertiary Recommendations for any individual customer or segment and for any product offering. Armed with these insightful recommendations, organizations can make calculated decisions about which offers to give to which customers, predict the likelihood of those customers to participate in those offerings, and anticipate the ROI of the customer's response.



Furthermore, users can apply predictive capabilities to other data to get an even more comprehensive view of their customers. For example, the combined data allows for Product Affinity Predictions, which enables retailers to anticipate which customers will be more likely to purchase combinations of products associated with previous purchases.



No matter what the product or service, IBM SPSS Market Basket Analysis enables retailers to achieve higher sales, greater returns on marketing spends, and a more targeted approach to future products and offerings. At the same time, the customers will feel that their needs are understood and met, leading to higher customer satisfaction.

	2007		2008		2007		2008	
	Sales	Sales	% Growth	Customer Count	Customer Count	% Growth	Customer Count	
Mid Status Family Starter	915,879.41	870,252.68	-4.97%	9,901	9,957	0.57%		
Retired home owners	502,402.23	493,433.79	-1.79%	5,807	5,839	0.55%		
Mid Status Suburban	279,473.85	276,344.04	-1.12%	3,445	3,450	0.15%		
Poor_Mixed Urban	1,195,860.24	1,183,162.91	-1.06%	12,641	12,629	-0.09%		
Single elderly people	973,701.82	931,602.19	-4.52%	9,679	9,956	0.23%		
Low Income Highes	981,538.20	961,608.60	-2.03%	11,414	11,372	-0.34%		
Urban Suburban	1,480,824.36	1,420,155.50	-3.69%	16,711	16,476	-1.40%		
Metropolitan Suburban	1,818,739.89	1,803,849.49	-0.82%	11,377	11,216	-1.43%		
Affluent Family	1,834,117.01	1,856,744.68	1.26%	20,327	19,961	-1.80%		
Students	45,070.48	44,172.68	-1.99%	510	499	-2.16%		
Empty Nester	2,638,123.35	1,988,825.83	-2.42%	21,241	20,725	-2.43%		