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Executive Summary

The premise of this business problem is to prove to Dillard's, a struggling retail department store, that rearranging up to 20 SKUs on the floor of their department store will improve sales and information about their consumer. Analysis conducted specifically on the Polo Men's Department found many candidates for items that should be placed near each other because of the frequency in which they are purchased together. The group of association rules which begot these conclusions had an average lift of 29.3, meaning that on average customers are 29.3 times more likely to one item if they have purchased a set of other items when compared to independent items. Overall, with this information Dillard's can be surer that they are serving the needs of their customers by improving ease of access to items they might be interested in and devising sales which target specific groupings of items such as BOGO sales.