Association Rules Executive Report

This project entailed looking at Dillard’s transaction data in order to try and re-organize areas of the store in order to better facilitate frequently coupled customer purchases. In order to attack this problem, I only considered inter-departmental moves, as Dillard’s departments are segregated according to brand and as such any cross-brand associations wouldn’t matter much to reorganizing due to this. The results of possible sku associations come from observing trends in item purchases and focusing on the most bought items in order to come to solid, impactful decisions. Additionally, the associations were chosen based on a balance of their co-occurrence, overall prevalence, and relative power to ensure a well-rounded selection of changes. The top 100 rules according to these criteria are listed in the attached file, and sku’s should be adjusted to move the associated items closer together.