

Xtream

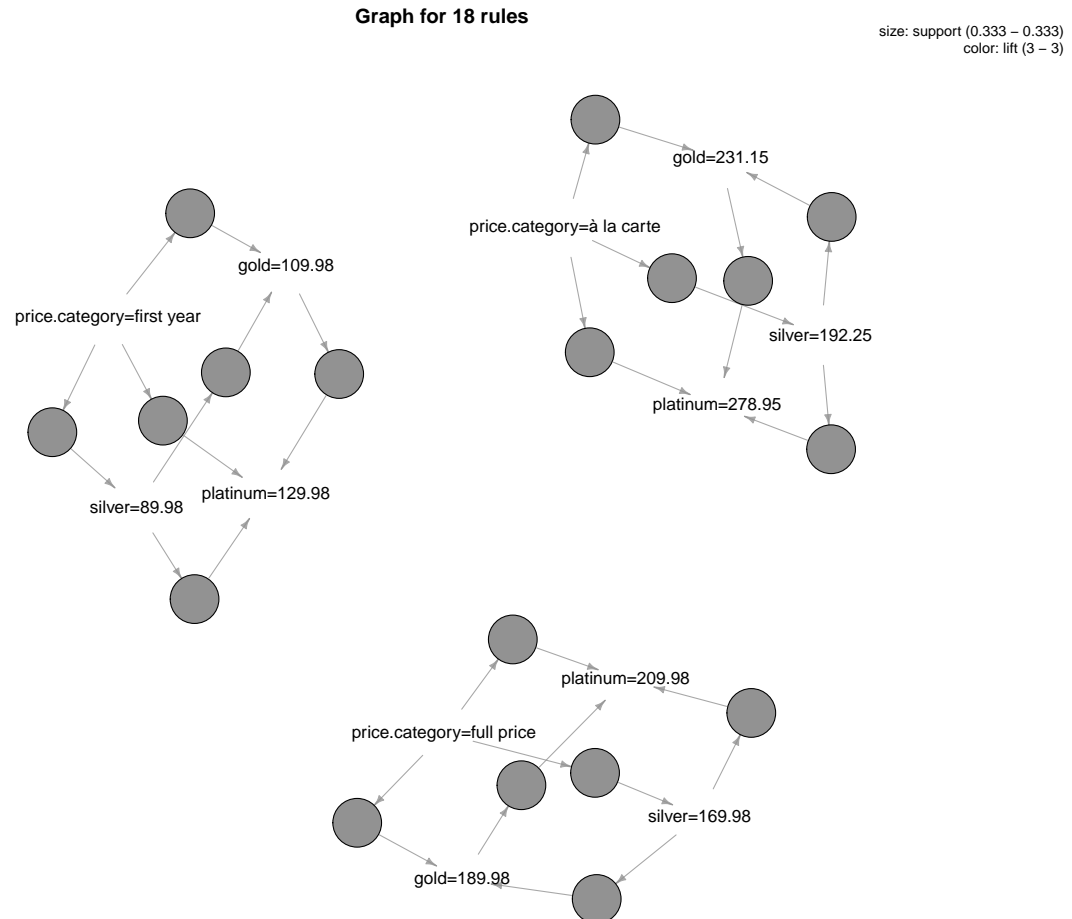
Xtream Experience

Xtream is designed to showcase Mediacom's all-digital experience with state of the art equipment, and services, into a new platform combining ultra-fast whole-home Wi-Fi with an intuitive TiVo® DVR to create an easy and seamless entertainment experience.

Pattern Discovery

Pattern discovery is often used for market basket analysis on transactional purchase data, such as examining the relationship between Xtream Silver, Gold, and Platinum packages in order to refine marketing tactics. A descriptive model is used for tasks that would benefit from the insight gained from summarizing data in new and interesting ways. As opposed to predictive models that predict a target of interest; in a descriptive model, no single feature is more important than any other. Figure 1 uses an A Priori algorithm based on the descriptive model. The name is derived from the fact that the algorithm utilizes a simple prior (that is, a priori) belief about the properties of frequent itemsets like Offer ID 2282.

Figure 1. Xtream A Priori Algorithm.



Quick Analysis

As noted earlier, the A Priori algorithm employs a simple a priori belief as guideline for reducing the association rule search space: all subsets of a frequent itemset must also be frequent. The algorithm removes

redundancy, enumerates the price structure, and uses 18 association rules to correctly cluster the price categories into three groups: full price, first year, and à la carte.

First Year

Silver package is about 81.7% of Gold package cost. Or there is an 18.3% increase in cost from Silver to Gold packages. And Gold package is about 84.5% of Platinum package cost or there is an increase of 15.5% from Gold to Platinum.

Full Price

Silver package is about 89.4% of Gold package cost with an increase of 10.6%. And Gold package is about 90.4% of Platinum package cost or an increase of 9.6% in cost.

A La Carte

Silver package is about 83.1% of Gold package cost with an increase of 16.9% and Gold package is about 83.1% of Platinum package cost with an increase of 16.9% as well.

Conclusion

We enumerated the price structure of Xstream and unearthed 18 association rules for this small dataset. Association rules are used for unsupervised knowledge discovery in the hope that interesting associations are found.