Acme Dog Nutrition Analysis

Josh Cubero

MSBA 324

Golden Gate University

Abstract

The global pet food market was booming in 2021 worth an estimated $110B. According to Fortune Business Insights, the pet for market will top $167.7B by 2029. Additionally, it's estimated that the COVID-19 pandemic has caused a 4.75% increase in pet food costs compared to 2019. Of the $110B pet food market cap, dog for has the largest portion, comprising a staggering 59.4%. Furthermore, the growing trend of dog adoptions, coupled with increasing dog food costs, leaves the dog food market in a position to outperform other sectors (Fortune Business Insights, 2022).

There are currently 10 key players on the dog food market located mostly in Europe and the US, therefore, competition in the industry will continue to grow with the market trends. Dog food marketing will be key to the success of any company in the space. As such, companies must conduct marketing research to identify and properly target customers segments.   The purpose of this paper is to simulate a dog food market analysis based on a survey conducted on current dog owners. This paper will analyze the outcome of the survey, conduct a comparison with a similar other dog food marketing study, then provide recommendations on a course of action.

Analysis

The analysis in this started with a customer survey of 45 respondents. The survey asked respondents six questions regarding the effectiveness of dog food regarding the dog's dental hygiene and the appearance of the dog's coat. The responses utilized a Likert scale from 1-7. The dataset was then imported to the R console for analysis. The analysis portion of the study employs a hierarchical clustering analysis.

The first step in the clustering analysis was to measure the Euclidean distance between the datapoints. Euclidean distance is an offshoot of the Pythagorean theorem and is applied to points on a grid. The dist function was used to determine the Euclidean distance and saved to a variable, distance. Next, the hclust function was called with distance as the first argument and employed the ward.D2 method. Once the h-cluster was assigned to a variable, h-clust variable was plotted with red boxes boar
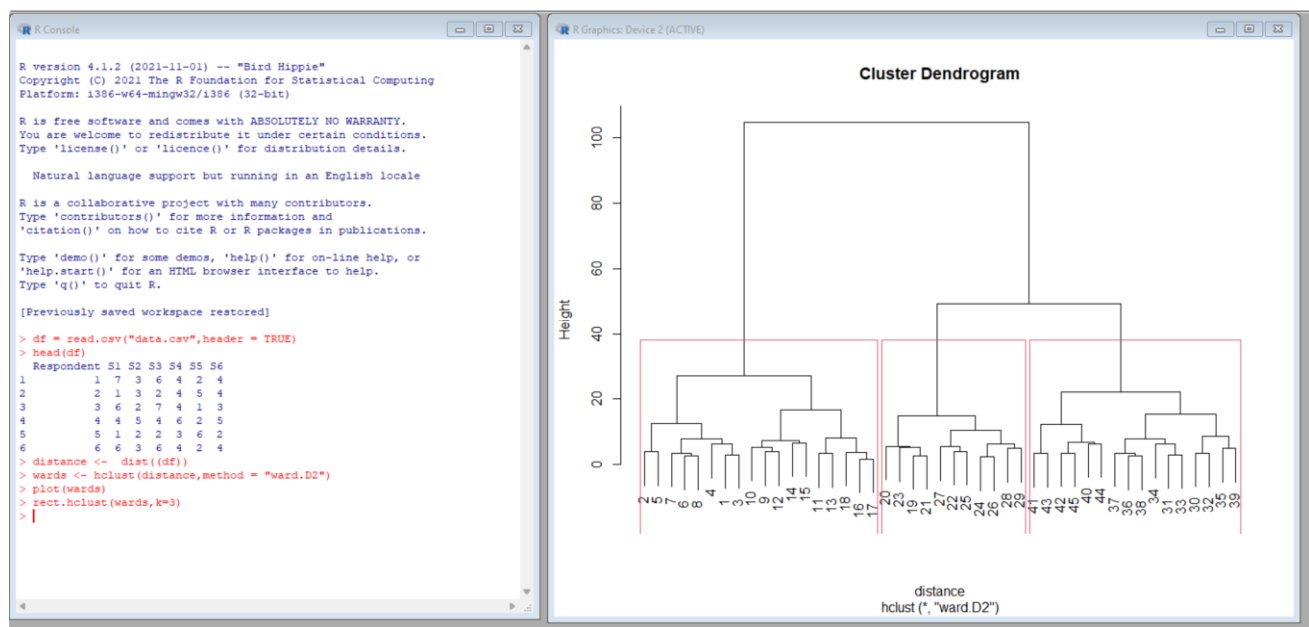
Findings

The findings in this study are that there are three segments of dog owners regarding purchasing dog food in this study. There are, however, as many as 10 sub-clusters with greater granularity. An interesting item to note about this dataset is that respondents 1-17 are a segment, roughly 19-29 are a segment, and 30 to 45 are a segment. This indicates that the respondents in this study may have been derived from a similar demographic.

Research Comparison

Dog owners of recent have exhibited greater involvement with their dogs than ever before (Boya et. al., 2012). More specifically, dog owners have exhibited a sense of humanization or anthropomorphism in increasing numbers. This phenomenon has driven some dog owners to increasingly purchase high-end dog foods (Boya et al., 2012). Some families have become so attached to their dogs that they consider the dogs to be a member of the family, with some even referring to the dog as their child. Boya et. al. contend that the amount of money spent on dog food is correlated to the owner's relationship with the dog.

In many ways, dog owners' relationships resemble that of human relationships. Boya et. al. state that research indicates that while some dog owners exhibit strong relationships with their dog, the level of bonds vary widely among dog owners. Another study cited by Boya et. al., separates dog owners into three segments based on the owner's attitudes and behaviors towards consumption. Furthermore, dog owners with strong bonds to their pet tend to spare no expense when it comes to consumption purchases. As of the writing of the literature, the US dog owners spent $50B per year on their dogs, with $20B spent on food.

The comparison study herein selects two variables to segment the target demographic due to trends in dog food purchases. The two variables used to segment dog owners in the comparison study were anthropomorphism and dog-oriented self-concept. Anthropomorphism is when the dog owner views and treats their dog as a person. Dog-oriented self-concept is a qualitative measure of the view of yourself and to what extent the owner sees the dog as an extension of themselves.

The comparison study went on to develop a cluster analysis to create segments of dog owners. The researchers used five variables to assess the dog-oriented self-concept and six to assess anthropomorphism, producing three different groups of dog owners. The analysis created three clusters: Dog people, Dog Parents, and Pet owners.

The study then grouped the three clusters in a matrix table that assessed the importance of dog food choice criteria. The outcome of the researcher's cluster analysis was that cluster 1 placed importance on freshness, taste, and quality. Cluster 2 found nutrition and quality to be of greatest importance. Finally, cluster 3 found nutrition and quality to be of importance but scored lower in the area than cluster 2.

The researchers' conclusion proved that there is a difference in segments of dog owners. Additionally, dog owners are segmented based on their relationships with the dog regarding how the dog owner sees themselves. The results indicated that the three segments of dog owners display strikingly different dog food purchasing patterns as determined by their relationship with the dog.

Conclusion

This study indeed has applications in market segmentation. The analyst can conduct a survey, clean, and prepare the data, and create a dendrogram. The dendrogram can then be used to identify market segments and directed marketing campaigns.

Reference

Boya, U. O., Dotson, M. J., & Hyatt, E. M. (2015). A comparison of dog food choice criteria across dog owner segments: an exploratory study. International Journal of Consumer Studies, 39(1), 74–82. https://doi.org/10.1111/ijcs.12145

ANINDITA, S. (2021, July 21). *Ward's Hierarchical Clustering Method using R Studio*. Medium. https://medium.com/@sukmaanindita/wards-hierarchical-clustering-method-using-r-studio-a47b5a79cb4d

Pet Food Market Size, Share, Trends, Research Analysis, 2027. (n.d.). Www.fortunebusinessinsights.com. https://www.fortunebusinessinsights.com/industry-reports/pet-food-market-100554