

SQL Analysis Assessment

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Business Analysis with Structured Data

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Is the conglomerate of Whole Food brands underrepresented in any category?

Understanding the Business Problem

Founded in Texas and focused on small natural foods and produce, Whole Foods Market was created. Since then, it has developed and grown into a well renowned supermarket in North America that ensures that their products of the highest standards from ingredients to sourcing practices (“Our Core Values”, 2022). With significant number of Whole Food brands, throughout this analysis, “inhouse” brands will be referring to only “Whole Food Market” and the 365 brands including “365 by Whole Foods Market” and “365 Everyday” for example, and all other brands are considered as “other brands” (“A Non-exhaustive List of Whole Foods Market Trademarks”, 2022).

Whole Food Market has different categories that separates their products, and underrepresentation of Whole Food brands compared to all other brands in at least of the categories would mean that Whole Foods brands are being underrepresented. Underrepresented signifies that there are inadequate proportional representation of a certain type in a sampled area compared to the overall data set. Using proper sample sizes reduces that bias and improved the statistical tests (Abo-Zena, 2012). In fact, In this case, in house brands composes 28% of all products and therefore, if any individual category has less than that proportion, the in house brands are underrepresented.

Answering the Business Question

The conglomerate of Whole Food brands is underrepresented in most categories, which means that the proportion of in house brands compared to other brands is less than the overall average. Its important to note that Whole Foods Market does not have the same product quantity variety for all categories. For instance while Pantry Essentials is composed of 227, the Floral category is not their main focus with only 2 products. With different quantity categories sizes, it can be based on overall assumption that larger than sample size by category, the more reliable the data. However, while house brands does have a strong presence in some categories, like over 50% of the sample products in Prepared Foods, it's not as explored in other categories like Body Care with only 17% (Appendix A - SQL

code). With 95% confidence, proven by statistical tests, it's possible to say that there isn't a strong association between the categories and in house brands (Appendix B - Excel File).

Actionable Recommendations

Being one of the most significant relevant categories due to its sample size "Snacks, Chips, Salsas and Dips" its composed of 22% of in house brands and 78% of other brands. This category is composed of low cost products being all below \$19 and the majority being below \$10. It might be perhaps, why it not a category that has a lot of sales, in fact, the highest sale product is only \$1 difference and all the sales are from other brands. With this information, it's a great opportunity for Whole Foods Market to explore, that while 22% of products are their own brand, they don't have any sale. Promotional strategies, together with prices and availability, are one of the main factors that affect sales as it directly affect on consumer behavior and decision when groceries shopping (Hawkes, 2008). Providing sales in this category contributes on creating a stronger presence and becoming more competitive in a specific section, and therefore contribute to the increase of sales.

Another important consideration is that Whole Foods has different labels for dietary preferences, for example for vegan, gluten-free and dairy-free. Driven by environmental and health concerns, for example, what used to be a niched market, veganism became a significant market these past years and it directly impacts the food culture, especially in the North America, where the market is forecasted to only continue to grow (Saari, Herstatt, Tiwari, et al, 2021). For that reason, is it important that Whole Foods create a presence in all categories with vegan options, including the "Snacks, Chips, Salsas and Dips" category. From this category, there are 70 vegan options, 63%, however not all subcategories are explored by in house brands. In fact, for nutrition and granola bars subcategory, there is only 8.7% representation of their own brand. With this growing market, and the reputation of having healthy snacks, Whole Foods should invest in creating more vegan options in the snacks category that can continuously met market demand.

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