Data Analysis

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1. Overview

I performed analysis on all products in all the franchise based on the brand name attached to each product.

In the initial space reported I performed the intersection of the same brand across multiple franchise. Some of the brands overlap in many franchise and to what extend the brands overlap between any fixed set of two franchise and how many brands exist unique to one particular category.

With regard to the intersecting brands across multiple categories, the comparison of overall score of that particular brand was measured in all intersecting franchise and some disparity was found with regard to the average of overall score in the brand to the average overall scored to the other intersecting franchise.

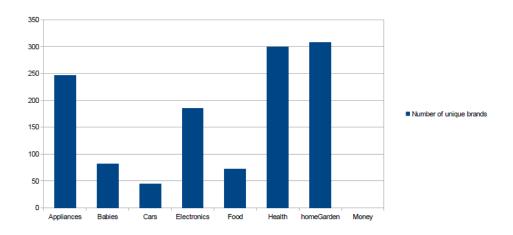
2. Details - Brand Intersection and Brand uniqueness.

Brand count:

The following tables shows the results of the intersection of brands in one franchise in comparison with other franchise. It was noted that "Appliances" and "homeGarden" had the most intersecting brands count at 30.

	Applia nces	Babie s	Cars	Electronics	Food	Health	home Garde n	Money
Appliances	300	2	2	6	3	8	30	2
Babies		98	0	3	0	6	5	0
Cars			55	2	1	2	3	0
Electronics				221	2	7	15	1
Food					87	5	4	0
Health						335	8	0
homeGard en							375	1
money								1

Brand uniqueness: The following bar graph gives the distribution of number of brands unique to one particular franchise [not found in other franchise].



3. Details - Brand "overall score" variability by franchise

In this section the the intersecting brands "overall score" in its parent category [where maximum number of count of products was obtained] with other products of the same brand in different franchise was obtained. The results showed that, the "overall score" for a brand in one franchise did not have the same range and reported higher or lower values when averaged in other franchise.

Example analysis for 3 brands:

Brand Name	Avergae in appliance	Average outside appliance
Whirlpool	64.26	82.5
GE	62.7	69.2
Haier	54.45	46.1

The following results were obtained when all the products with intersecting brands were tested.

Franchise	Common-brands average inside franchise	Common-brands average outside franchise	Devaition
Appliances	56.68	61.05	+4.37
Babies-Kids	67.53	62.71	-4.82
Cars	67.16	71.75	+4.59
EC	55.29	69.089	+13.799
Food	66.49	50.73	-15.76
Health	58.22	54.19	-4.03
homeGarden	65.72	59.99	-5.73
Money	84.72	66.76	-17.96

The franchise of Electronics and computers and Money had the largest deviation compared to all products with the same intersecting brands.