

Group Assignment

Jiaxuan Wang, Zhiming Zhang, Xiaorong Tian, Siqi Wang, Tashfeen Ahmed

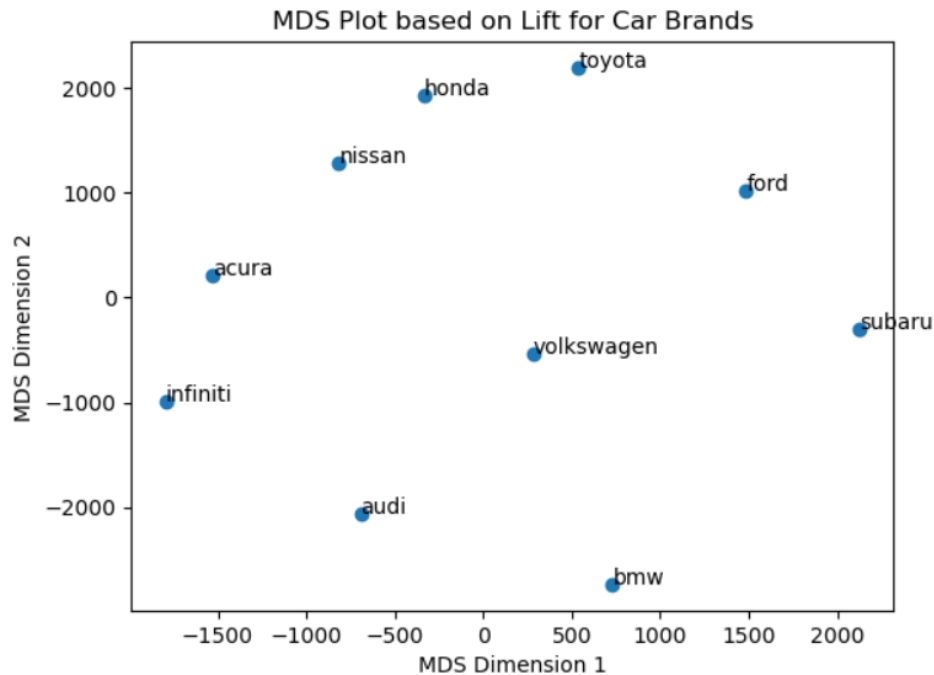
1. For this group assignment, we chose “Entry Level Luxury Performance Sedans” for our forum. <https://forums.edmunds.com/discussion/2864/general/x/entry-level-luxury-performancesedans>
2. We choose BMW, Acura, Honda, Audi, Infiniti, Toyota, Nissan, Subaru, Volkswagen, and Ford as our 10 brands based on frequency.

	Brand	Frequency
0	bmw	1417
1	acura	606
2	honda	550
3	audi	479
4	infiniti	420
5	toyota	345
6	nissan	320
7	subaru	216
8	volkswagen	204
9	ford	163

3. Then we calculate all lift values for each brand

	bmw	acura	honda	audi	infiniti	toyota	nissan	subaru	volkswagen	ford
bmw	0.000706	0.000283	0.000244	0.000346	0.000373	0.000274	0.000240	0.000232	0.000318	0.000286
acura	0.000283	0.001650	0.000498	0.000389	0.000558	0.000330	0.000438	0.000374	0.000340	0.000364
honda	0.000244	0.000498	0.001818	0.000239	0.000281	0.000675	0.000659	0.000303	0.000428	0.000446
audi	0.000346	0.000389	0.000239	0.002088	0.000447	0.000206	0.000267	0.000309	0.000921	0.000307
infiniti	0.000373	0.000558	0.000281	0.000447	0.002381	0.000242	0.000551	0.000309	0.000362	0.000278
toyota	0.000274	0.000330	0.000675	0.000206	0.000242	0.002899	0.000716	0.000282	0.000440	0.000462
nissan	0.000240	0.000438	0.000659	0.000267	0.000551	0.000716	0.003125	0.000318	0.000475	0.000383
subaru	0.000232	0.000374	0.000303	0.000309	0.000309	0.000282	0.000318	0.004630	0.000431	0.000398
volkswagen	0.000318	0.000340	0.000428	0.000921	0.000362	0.000440	0.000475	0.000431	0.004902	0.000361
ford	0.000286	0.000364	0.000446	0.000307	0.000278	0.000462	0.000383	0.000398	0.000361	0.006135

4. And we draw the MDS map based on lifts between different brands.



From the MDS map, we can gain insights into the similarity of brand positioning from the consumer's perspective. For instance, we can conduct Cluster Analysis for brands that are close together on the MDS map. Brands often mentioned together, such as Honda and Nissan, are similar in some respects, such as price range, quality, target market, etc. On the other hand, companies that are very far apart, like Honda and BMW, are usually non-competing entities in different market segments. They have different price ranges and selling points; hence consumers have very different brand perceptions of them.

This understanding can help brand managers better position their brand and identify competitors, try to find breakthrough selling points, differentiate themselves from other competitors with similar positionings, and finally make their unique aspects stand out. Additionally, brands that are frequently mentioned alongside are not necessarily just competitors. Brand managers can also seek to cooperate with substitutable or complementary brands to achieve a win-win situation. This cooperation might include promotional or publicity content at the downstream sales end or could result in R&D cooperation or resource sharing upstream.

We would like to focus mainly on Subaru and Honda. Subaru has a unique positioning. In the clustering, we can see the degree of similarity between brands, but Subaru exists almost at a distance from all other brands because it is relatively isolated. Subaru's isolated position on the MDS map provides an opportunity to shape a unique brand image. Subaru brand managers can emphasize the characteristics of their cars, such as their safety record and exceptional all-wheel-drive performance, the traits that are valued by Subaru's loyal customers. By focusing more on outdoor activities and adventure travel communities in its marketing, Subaru can differentiate its niche market from other more mainstream vehicles as much as possible, attracting consumers looking

for vehicles suitable for a variety of driving conditions, thereby strengthening its position as a brand of vehicles that are suitable for both everyday driving and adverse conditions. In this way, when people think of outdoor activities, they will quickly recall Subaru. Considering the trend of increasing popularity of outdoor activities in recent years, this is a good brand development strategy.

Additionally, we want to discuss Honda. It is close to Nissan on the MDS map, indicating their similarity in the consumer's perspective. Honda brand managers can use this similarity to reinforce the brand's position in the minds of consumers, such as providing reliable cars with high cost-performance. At the same time, Honda can also differentiate itself by emphasizing its investment in environmental technology and innovation, an area where Nissan may not be as prominent. For example, Honda could promote its hybrid and electric vehicle series more, which may build a stronger brand image among consumers interested in these technologies.

On the other hand, some brands are far away from Honda on the MDS map, such as BMW, showing a significant difference in brand positioning in the eyes of consumers.

BMW is typically regarded as a high-end luxury car brand, emphasizing performance, craftsmanship, and status symbol. Compared to BMW, Honda is seen as a brand that provides high-quality, efficient, and cost-effective vehicles. They have clearly different target markets and consumer groups. Honda's cars are usually seen as synonymous with everyday use and reliability, rather than status symbols like BMW.

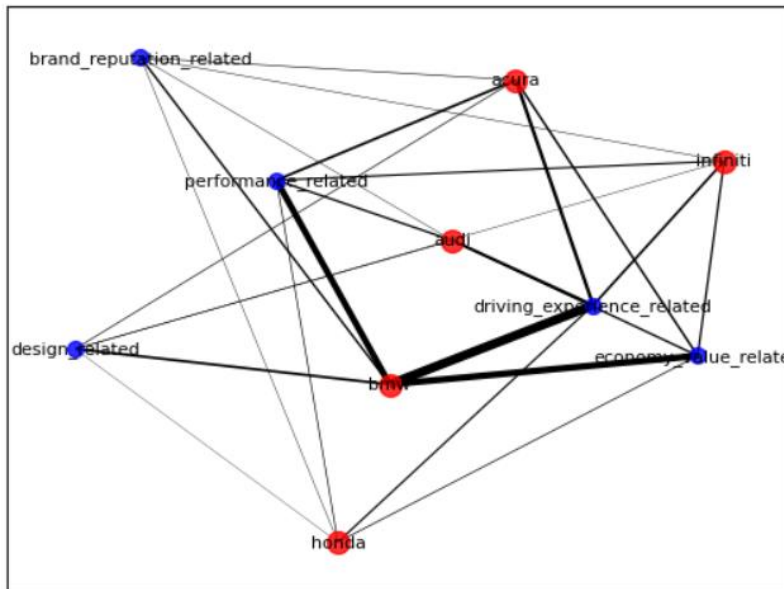
This distant brand positioning provides Honda with a strategic advantage. Honda can use this to attract consumers looking for economical, reliable, and low-maintenance cost vehicles, who may not be as concerned with the status and high performance provided by luxury brands. For instance, Honda could focus on the promotion of its hybrid models, emphasizing their advantages in reducing operational costs and environmental friendliness. In terms of marketing, Honda could focus on the practicality and reliability of its products rather than a sense of luxury or status symbol. For example, Honda could strengthen its image as the preferred family car by promoting its safety, spacious interior, and long-term durability. Meanwhile, Honda could also highlight its achievements in environmental technology and innovation, such as its development in fuel cell vehicles and electric cars, which are market segments that are increasingly gaining attention.

In this way, Honda could attract consumers who value these attributes. Such a strategy not only helps Honda maintain its position in the market but also opens doors to new customer groups who might not consider luxury brands.

5. We choose economy, experience, reputation, performance, and design as our five attributes based on the frequency.

attributes	Mentioned frequency
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Economy	25263
Experience	21589
Reputation	13346
Performance	1980
Design	540



6. In the analysis, the posts were preprocessed to standardize text and replace car models with their corresponding brands for consistency. Utilizing sentiment analysis with the VADER tool, we filtered the dataset to retain only those posts with a positive sentiment score, specifically using a threshold of 0.6 to focus on highly positive discussions. This approach was crucial for several reasons. First, it effectively excluded posts with mixed or ambiguous sentiments, particularly those containing negations like "not good" or "don't like," ensuring that the analysis focused only on clearly positive discussions. Second, by targeting posts with strong positive sentiment, we homed in on expressions of genuine enthusiasm and aspiration towards brands, rather than mere satisfaction or mild approval

Our methodology involved identifying mentions of aspirational keywords within these positively toned posts. The keywords, indicative of desirability and positive consumer sentiment, included terms such as "wish," "dream," "aspire," "hope," and "love," among others. These keywords were expanded to include synonyms and related terms, ensuring a comprehensive search within the posts. Top sentiment posts were manually analyzed to make this list more comprehensive

By computing the frequency of these keywords alongside brand mentions, we constructed a matrix that captured the association strength between brands and aspirational sentiments. Each brand's score was determined by the sum of keyword mentions, reflecting its prevalence in aspirational conversations

The analysis clearly positioned BMW as the leading brand in terms of aspirational appeal. It emerged at the forefront with a remarkable tally of 771 mentions associated with aspirational keywords. Furthermore, the analysis revealed that BMW not only dominated in terms of aspirational keyword connections but also excelled in overall positive mentions, accumulating 858 occurrences. This dominance in positive sentiment posts underscores BMW's robust appeal and favorable image, reinforcing its standing as a highly desired brand among consumers.

From a business perspective, this insight indicates that BMW holds a significant aspirational appeal among potential buyers, which can be leveraged in marketing strategies to reinforce brand desirability. It suggests that BMW's marketing messaging resonates with consumers' aspirations, potentially influencing their purchase intentions. The brand could further capitalize on this aspirational positioning by tailoring its promotional content to amplify the attributes most associated with positive sentiments, thereby strengthening its competitive advantage in the luxury automotive market. From task C we can find the attributes most mentioned with BMW and product manager can focus on these. Furthermore, if we can gather data on users who posted these BMW aspirational posts, we can construct detailed customer profile which enable creation of target marketing strategies.

7. Based on the results we get, here's some advice for a product manager and a marketing/advertising manager of these brands.

For a Product Manager:

Focus on Strengths and Address Weaknesses:

BMW: Your brand is closely associated with performance and driving experience, which shows that customers appreciate these aspects, and you can continue to innovate in these areas. However, also consider improving aspects related to economy and design, as these are rarely mentioned.

Acura: Your brand has a good balance between driving experience and performance. Focus on enhancing these attributes while also improving economic aspects, as they are less prominent.

Honda: Economy and brand reputation are your strengths. To compete better with luxury brands, consider enhancing the performance and design aspects of your cars.

Audi: Driving experience and performance are well-regarded. Look into ways to further differentiate in these areas and improve the economy and brand reputation aspects.

Infiniti: There's a need to boost perception in all areas, especially in performance and

design. Focusing on these could help in building a more distinct brand identity.

Balanced Development: Understand that while some attributes like 'performance' and 'design' are less frequently mentioned overall, they are crucial for brand differentiation and appeal in certain segments.

Innovation Targeting Specific Attributes: Innovate in areas that are less mentioned for your brand but are generally important in the industry (e.g., 'economy' for BMW or 'performance' for Honda).

For a Marketing/Advertising Manager:

Highlight Key Strengths in Brand Messaging: Tailor your marketing campaigns to emphasize the strongest attributes associated with your brand. For instance, BMW should highlight its performance and driving experience, while Honda should focus on economy and brand reputation.

Address Consumer Perceptions: Use marketing to alter or enhance consumer perceptions in weaker areas. For example, if a brand like Infiniti is less associated with design, create campaigns that showcase its design innovations.

Targeted Advertising: Use the data to target specific demographics. For example, if a brand is popular among consumers valuing 'economy', target marketing efforts to budget-conscious buyers.

Customer Engagement: Engage with customers on platforms where these conversations are happening. Use their feedback for more nuanced marketing strategies.

Storytelling Around Brand Values: Create narratives that align with the brand's strongest attributes. For BMW, stories could revolve around exhilarating driving experiences, while for Honda, it could be about reliability and value.