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ANALYSIS OF BRAND PORTFOLIOS OF AUTOMOTIVE CONCERNS USING THE BCG MATRIX

Abstract

The purpose of this paper is an attempt to answer the question of whether an extended brand portfolio of an automotive concern allows it to gain an advantage and a larger market share in comparison with a competitor with a simpler brand portfolio.

A research tool in the form of the Boston Consulting Group's BCG Matrix will be used as a research tool for the brand portfolios of the selected concerns and the determination of the companies' situation on the Polish market.

On the basis of the data obtained, it can be seen that the two brands of the Toyota Motor Corporation exceed with their market share, by as much as 4%, all the brands of the Stellantis concern. It is noteworthy that Toyota alone has a market share of as much as 15 per cent, dominating all other brands participating in the study. In general terms, it can be seen that the extensive brand portfolio currently does not represent a construct that allows a competitive advantage. The performance of the two TMC brands clearly deviates from the indications for the entire Stellantis portfolio.

The results presented have a practical dimension by indicating the strategic situation of individual brands as well as the portfolio of the concern as a whole. Visualisation using the BCG matrix allows deeper analysis and decision-making in relation to the group's brands. In the case of stakeholders, this analysis can be one of the determinants of purchasing or investment decisions.

Keywords: *automotive concern, Stellantis, Toyota, brand portfolio, automotive market, BCG matrix*

Introduction

The automotive industry and market are undergoing one of the biggest changes in the entire history of motoring. Digitisation and autonomisation of traffic, electrification of propulsion and the closed-cycle economy are a few of the contemporary trends having a significant impact on the shape of the industry. Political and social events, such as the SARS-COV-2 pandemic or the military conflict between Ukraine and Russia, also have a direct impact on the market. One of the oldest and most recognisable to consumers in the automotive industry, the brand, operates in such conditions. It can be considered that the marking of a vehicle with a distinctive and model designation is as old as the invention of the car itself. In addition, practically from the beginning, they have played a promotional role, indicating the entity responsible for the manufacture of a given vehicle as well as highlighting the feature that distinguishes a given product from its competitors. Cars, automotive parts and accessories as well as services have their own brands and other special designations. Companies take a variety of strategic branding decisions with a view to gaining market advantage, promoting completely new products and solutions, as well as attempting to enter foreign markets through a completely new designation. This results in offers in which all products are branded with a single brand, as well as complex sets of labels for different lines and subgroups of similar product groups in the organisation's offer.

The purpose of this article is to attempt to answer the question of whether an extensive brand portfolio of an automotive concern allows it to gain an advantage and a larger market share compared to a competitor with a simpler brand offering. For this purpose, the automotive concerns selected for the study were: Toyota Motor Corporation, which in the Polish market has two brands, Toyota and Lexus, and the Stellantis concern, which in the Polish market is represented by such brands as Abarth, Fiat, Alfa Romeo, Peugeot, Citroen, DS. Automobiles, Jeep and Opel. Both organisations use different strategies related to their brands. The research hypothesis is: an extensive portfolio of automotive brands does not guarantee an advantage and greater market share.

Research methods

The previously mentioned organisations were selected for the analysis: Toyota Motor Company and Stellantis N.V. TMP is a Japanese car manufacturer, currently a leader in the automotive industry (Wprost, 2022). Stellantis N.V. is an automotive concern formed in 2021 as a result of the merger of Fiat Chrysler Automobiles and PSA Groupe. The choice of companies has been dictated by the way each concern operates. As noted above, TMC has two brands on the Polish market, while globally it has four. Stellantis on the Polish market is represented by nine brands, while on a global scale there are sixteen.

The Boston Consulting Group's BCG Matrix, or BCG for short, will be used as a research tool for the brand portfolios of the selected concerns and the determination of the companies' situation on the Polish market.

In its basic form, the BCG matrix is a method of presenting a company's product portfolio. It can also serve as a strategic controlling tool. The method was developed in the 1960s, previously called the growth share matrix, now BCG after the abbreviation of the organisation responsible for its creation.(Hilde, 2008, p. 95). The standard values that are used as coordinates are:

- relative market share: determined most often by two methods, as the ratio of the revenue from the sale of a specific product to the revenue from the sale of an analogous product of a major competitor or a greater variety of competitors.
- market growth rate: this is a figure that expresses the growth rate of sales of a product. It is most often used in the form of value ranges.

There are also more developed versions that operate on four variables. The additional two values are:

- return on capital,
- capital needs.

The BCG matrix uses a tabular notation, forming characteristic four boxes representing the structure of the company's product portfolio. Their description is presented as follows:

- *Stars*: these are products that are characterised by an increasing rate of sales and profitability. Most often, products that represent a catchy novelty fall into this category. As such, they require significant managerial attention and investment.
- *Dilemmas*, *Question marks*: products with a high sales rate but a low market share are included in this group. They are also not very profitable and require significant financial investments. Because of their unstable sales, they can be described as products with the potential to become *Stars*, but are also at risk of failure in the market.
- *Milking cows*: this is used to describe products with a stable market position, low sales growth rate, significant market share and high profitability. They do not need large financial investments, while they can serve as a source of support for other products in the portfolio, e.g. *Stars* or *Dilemmas*.
- ‚Balls at their feet', ‚Ballasts', ‚Dogs': products that are not profitable or are on the verge of profitability and have a low market share are placed in this field. in the market is low. More often than not, such products are eliminated from the portfolio or undergo an extensive change.

The BCG matrix is used in three main ways:

- as a diagnostic tool for the product portfolio: it provides the possibility to classify products and analyse them from selected angles, and it is also possible to assess a competitive company using this method,
- as a tool for product portfolio management: depending on the diagnostic findings, a company can, with the help of the BCG matrix, carry out a variety of management activities in relation to its products, mainly decisions concerning the direction of product portfolio development,
- as an element of long-term management: the BCG matrix, thanks to its characteristics, can be used over a wide range of time periods, making it possible to create projections of the company's development direction.

The BCG matrix is one of the most popular tools in the field of portfolio analysis. It is simple to use and easy to interpret. However, it also has some limitations. The main caveat is that it applies a significant simplification of reality to two variables. This is too little information for a full-fledged analysis of a company's situation. Also, the construction of the matrix itself can generate problems, as there are discrepancies in the interpretation of the ‚growth market'.

In this study, a modified version of the BCG matrix method will be used. This is dictated in part by the limitations of being able to obtain market data, as well as by the specifics of the issue at hand.

The variables used in the matrix will be:

- market share: calculated by dividing the number of cars sold of a given brand by the number of all cars sold between 2019 and 2022 as an indicator of brand strength;
- the average of the change in sales of cars of a given brand, calculated by taking the difference between the sales volumes of the periods 2019-2020. 2020-2021, 2021-2022 and calculating the average, as an indicator of brand development.

The above variables will make it possible to determine in which situation a given brand of the Stellantis concern and TMC is in the Polish market. The study was limited to the Polish market and passenger cars due to data limitations as well as the need to extend the analysis to larger market areas. The data was obtained from GUS data sheets, reports of the Polish Automotive Industry Association, as well as materials made available by automotive concerns.

Brands and the automotive market

One of the main elements in brand management is brand positioning. The core of this activity is to build a brand identity that significantly differentiates the brand from the others existing on the market within a given product or service category (Staszyńska, 2013, p.33). The brand image must convey a clear message that it meets the standard characteristics within its product category. Convincing the customer that the product not only fulfils standard features, but also additional features will influence their purchase decision. Those product features that the organisation wants to make a key premise of consumer choice should communicate that the brand is consistent with the lifestyle and values for the target buyer group.

As the company's portfolio expands, there is a need to differentiate marketing messages. The organisation's portfolio must meet the expectations of different customer groups. It becomes necessary to create further product brands, which in practice means creating a brand portfolio for the organisation. The aim of brand portfolio management is to improve the strength of the brand (awareness, image) and to increase the ability of the portfolio as a whole to generate profits in the long term (Kłeczek, 2013, p.177)". Two main types of brand portfolio strategies can be identified in the literature: brand house and brand house (Aaker, 2004). The choice of a particular portfolio strategy is significantly dependent on the strategy of the entire company.

In order to properly carry out the process of creating a new brand, the organisation should at first segment the market in which it operates. *Market segmentation is the process of dividing the market according to specific criteria into possibly homogeneous groups of buyers, the so-called market segments, which require different marketing strategies in order to influence the purchases made by the buyers. The task of any enterprise is to identify such a group of consumers that will best achieve the objectives set by the company. In order to meet differentiated needs, it is first necessary to divide the market into relatively homogeneous groups and then to tailor the marketing offer to the specified groups. In this way, supply adapts to demand.*(Gurgul, Tuesday, 2023). The quoted definition indicates that the process of market segmentation is the starting point for determining the activities of a given company. By segregating consumers into target groups, managers will have a picture of the set of customers to whom they want to target their products. This provides the information needed to determine the portfolio strategy and the number of brands.

New concepts related to the creation and management of brands are also emerging. One example is the concepts of B. Sharp, in which the author largely rejects previous patterns of operation. e.g. market segmentation, considering that it is only a kind of ‚snapshot', capturing the state of the market at the time of the study, which constitutes too modest a set of information for strategic decision-making by the organisation (Sharp, 2010, pp.57-66). Instead, the researcher proposes the following categories, which he calls pillars (Sharp, 2010, pp.191-196):

1. mental accessibility: the quantity and quality of brand associations that are fixed in the minds of consumers;
2. Physical accessibility: physically easy to access and noticeable in a shopping situation, e.g. shelf space;
3. distinctiveness: distinguishability of the brand by means of its characteristics e.g. colours, names, instead of being completely separate, the brand should evoke associations in a shopping circumstance.

As can be seen, branding is an issue that arouses the interest and involvement of researchers in the search for the most effective methods . At the same time, it can be seen that, despite many years of research, it is not possible to point to a single universal, near-perfect solution.

The automotive market has been around for more than 100 years. During this time it has undergone significant changes, adapting and also creating consumer needs. Nowadays, as indicated earlier in the text, we can also observe progressive changes, some of which in the automotive field were, until not long ago, only visions of the future.

One of the characteristics of the automotive industry is the functioning of the most important players as concerns. This organisational form is defined as a large economic organisation, which groups together under a common central management a significant number of different enterprises (from several to even several hundred entities), which are similar in their operational profile or intended to complement each other. It is worth noting that the enterprises in question are linked to each other by financial shares, which constitute an integrating element, while legally they are independent of each other (Wiechoczek, 2003, p.13). Nowadays, the vast majority of the main players in the automotive market are corporations. These include car manufacturers such as Toyota Motor Company, Volkswagen A.G. and Stellantis, as well as component manufacturers such as ZF Friedrichshafen A.G. and Bosch GmbH. or Bosch GmbH.

It is also worth pointing out the sheer size of the automotive market. *If the automotive industry were an independent economy, it would rank as the sixth largest country in the world,* estimates the OICA (International Organisation of Motor Vehicle Manufacturers) (Abranczyk, 2016). According to the aforementioned estimates, the industry's annual revenue is around €2.7 trillion, car production reaches 90 million units, and around 12 million people work in the manufacture of components alone, representing 5% of all employed people in the world. These figures represent only a part of the automotive market record, but at the same time they clearly show how large an area the automotive industry occupies and how important it is in the global economy. The scale of costs is also an important issue. For example, the development of a new car model represents a major challenge for all areas of the company. Specialists from different disciplines, using different tools and working methods, are involved in the design. As a result, the development of a new model can represent an expense running into in the billions of euros (Lewandowski, 2018). The development of the vehicle chassis alone can account for up to 30% of the overall cost (Wiechoczek, 2003, 81).

Results

The following tables present the data summaries that were used to build the BCG matrix for the Toyota Motor Corporation and Stellantis concern brands.

Table 1. *Annual sales results of the TMC and Stellantis brands in 2019-2022*

Brands/ annual sales	2019	2020````	2021	2022	Suma
Toyota	62771	61331	74512	73900	272514
Lexus	3952	4449	6154	5600	20155
Fiat	14800	12564	9079	6340	42783
Peugeot	15465	11744	10637	9800	47646
Citroen	11887	8082	7678	6125	33772
Opel	33806	14908	14862	9300	72876
Abarth	101	77	112	102	392
Jeep	4091	2940	3131	1953	12115
DS Automobiles	316	271	366	897	1850
Alfa Romeo	1550	1344	1749	1700	6343
Sprzedaż w roku	**555598**	**428347**	**446647**	**419749**	**1850341**

Table 2. *Percentage share of brands on the Polish market*

Brands	Market share
Toyota	14,73%
Lexus	1,09%
Fiat	2,31%
Peugeot	2,57%
Citroen	1,83%
Opel	3,94%
Abarth	0,02%
Jeep	0,65%
DS Automobiles	0,10%
Alfa Romeo	0,34%

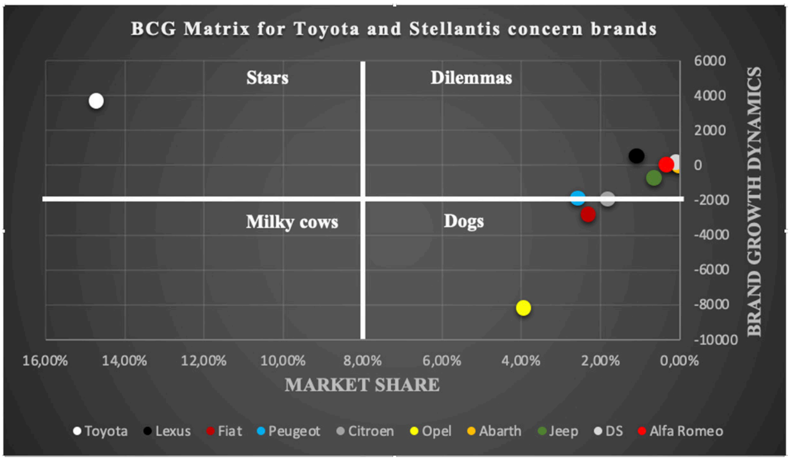
Table 3. *Total market share of concerns on the Polish market*

Concern	Total market share
Toyota Motor Corporation	16%
Stellantis	12%

Table 4. *Sales changes of the TMC and Stellantis brands in 2019-2022*

Brand/sales change	2022/2021	2021/2020	2020/2019	averagea
Toyota	-612	13181	-1440	3709,667
Lexus	-554	1705	497	549,3333
Fiat	-2739	-3485	-2236	-2820
Peugeot	-837	-1107	-3721	-1888,33
Citroen	-1553	-404	-3805	-1920,67
Opel	-5562	-46	-18898	-8168,67
Abarth	-10	35	-24	0,333333
Jeep	-1178	191	-1151	-712,667
DS Automobiles	531	95	-45	193,6667
Alfa Romeo	-49	405	-206	50

Figure 1. *BCG matrix for the TMC and Stellantis brands on the Polish market*



Conclusions

On the above-presented results of the analysis, the following conclusions can be reached: the hypothesis posed in the article: an extensive portfolio of car brands does not guarantee an advantage and a larger market share, has been confirmed. On the basis of the data obtained, it can be seen that the two brands of the Toyota Motor Corporation concern exceed with their market share, as far as 4%, all the brands of the Stellantis concern. It is noteworthy that Toyota alone has a market share of as much as 15%, dominating all other brands participating in the study.

The brands of the TMC concern increased their market potential between 2019 and 2022 with average scores of: 3710 for Toyota and 549 for Lexus. These values are above all of the Stellantis group brands. The largest average increase was recorded by the DS brand: 194, which is less than half the score of the Lexus brand, its direct competitor;

The Toyota brand was in the ‚Star' area, thanks to its high market share and growth rates. This demonstrates the considerable strength of the brand in the market and the potential for further growth through appropriate management and investment. The Lexus brand was placed in the question mark area. This is dictated by the results achieved, although they are clearly above the competition. This indication should be interpreted in this case as a signal to pay attention to the brand promotion strategy, as, although not mentioned in the study, competitors boast higher achievements, e.g. BMW or Mercedes-Benz.

Most of the Stellantis Group's brands have experienced a significant decline in growth. Their market share also looks much more modest than that of their competitors. The Opel brand, which has less than 4% of the market share, at the same time experienced the biggest drop in sales, with an average result of – 8189, putting the brand in the dogs/ballasts area. This should be a wake-up call for decision-makers.

Overall, it can be seen that the extensive portfolio of brands is currently not a construct to gain a competitive advantage. The performance of the two TMC brands clearly deviates from the indications for the entire Stellantis portfolio. The best results were achieved by the brands defined by the premium segment in the form of: Alfa Romeo and DS Automobiles. The Abarth brand, despite gaining a place in the question mark section, has a negligible market share and its importance is practically marginal. An important observation is that the Fiat, Peugeot, Citroen and Opel brands, which are defined as popular and should form the core of the group's offer, have market shares below 4% and are experiencing significant sales declines. The situation for the Jeep brand is similar, with sales declines and a loss of market share from 2019 onwards.

An in-depth study of the individual brand portfolios of both organisations would need to be carried out in order to gain a more accurate picture of the situation. The research presented here could provide a starting point for this type of analysis in the future. There are also opportunities to extend the current research formula by broadening the range of organisations surveyed or introducing additional analytical indicators into the matrix.

The presented results have a practical dimension by indicating the strategic situation of individual brands as well as the offer of a given concern as a whole. Visualisation using the BCG matrix allows for more in-depth analysis and decision-making in relation to the group's brands. In the case of stakeholders, this analysis can be one of the determinants of purchasing or investment decisions.

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