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NOVA SCHOOL OF BUSINESS & ECONOMICS

HOW CAN PREMIUM AUTOMOTIVE BRANDS MAINTAIN THEIR STATUS, WHILE SHARING TECHNOLOGY WITH THEIR RESPECTIVE AUTO GROUPS?

The case of Audi and the Volkswagen Automotive Group

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Abstract

Automotive groups with large portfolios face growing branding challenges in the premium market. Currently, premium brands need to pursue digital innovation to maintain their status, but technology by itself does not lead to a higher positioning: other attributes like comfort, safety, material quality, and design are still valued. Based on the study of Audi and the Volkswagen Automotive Group, this Work Project demonstrates that autonomous driving, integrated smartphone connectivity, and media consumption applications are likely to increasingly act as differentiators in the future. Also, the identity of premium brands needs to remain strong to justify the consumers' personal brand preferences.

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Keywords:

Premium Automotive Brands; Digital Innovation and Technology; Premium Status Attributes; Automotive Market Segmentation.

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1. Introduction

Premium automotive has historically been dominated by established corporations, much of them owned by large groups that manage very diversified brand portfolios, such as the Volkswagen Automotive Group [VAG], Daimler, or BMW Group. VAG comprises brands ranging from lower price segments like Seat and Skoda, to middle market brands such as Volkswagen, to the premium segment with Porsche and Audi, and luxury brands like Bentley, Lamborghini and Bugatti.

Such a wide range of commercial brands causes strategic branding challenges: how can an automotive group like VAG manage such a diversified portfolio? And what is the role of higher-end brands within each group? While premium brands are usually the catalyst for innovation efforts, technology is commonly shared within their respective automotive group, meaning that innovative brands need to find another way of differentiating their offerings in order to maintain their status and identity.

Shifts in consumer behavior and changing regulations are shaping what Original Equipment Manufacturers [OEMs], or automakers, can sell. Disruptive forces are mostly related to Connected, Autonomous, Shared and Electric [CASE] trends (McKinsey & Company, 2020, p. 2-4), which are highly technological factors, and so R&D expenditure has mainly been focused on improving the vehicle's digital capabilities. Given the large size of automotive groups such as Daimler, the Volkswagen Automotive Group, or the BMW Group, economies of scale and scope are crucial for the profitable development of innovation.

To explore the implications of these challenges, Audi is used in this Work Project as a case study. The brand belongs to VAG, which is known for taking advantage of economies of scale and scope, exploring synergies between its owned brands. Audi's example in the path to differentiation is insightful when considering the characteristics of the market.

2. Contextual Background

a. The Automotive Market

Firstly, an overview of the market is needed. Most of the new vehicle registrations in 2019 were for passenger cars that belong to the aforementioned automotive groups, namely, Volkswagen Automotive Group (Seat, Skoda, Volkswagen, Audi, Porsche, Lamborghini, Bentley and Bugatti), PSA (Opel/Vauxhall, Peugeot, Citroen and DS), the Renault-Nissan-Mitsubishi Alliance (Renault, Nissan, Mitsubishi, Lada and Dacia), the BMW Group (Mini, BMW and Rolls-Royce), and Daimler (Smart, Mercedes and Maybach). An idea of their market share can be drawn from looking at Figures 1 and 2.

Figure 1: Share of New Passenger Car Registrations in the European Union, in 2019, by Automotive Group

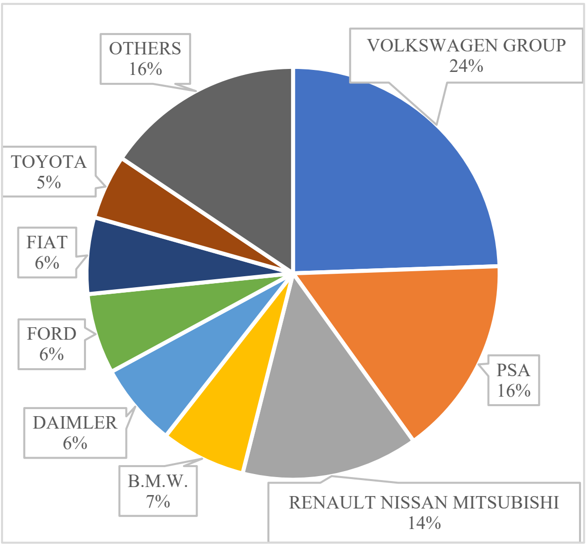
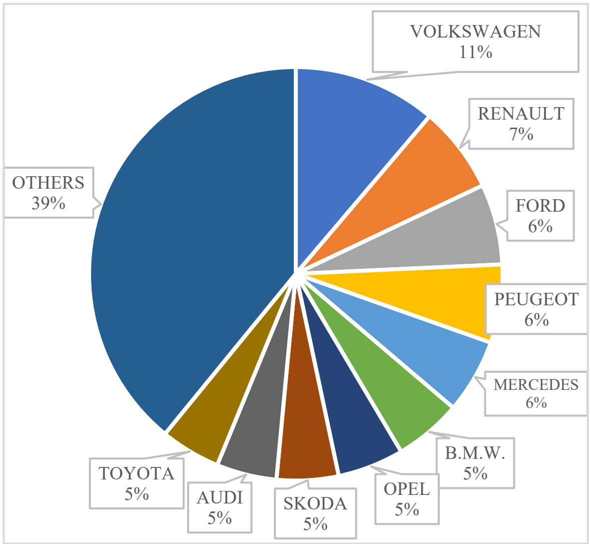


Figure 2: Share of New Passenger Car Registrations in the European Union, in 2019, by Automotive Brand



WP Author (Tiago Fonseca). Data Source: ACEA – European Automobile Manufacturer's Association, 2020

Not all of these brands compete directly, as each targets a different segment of customers. There are several segments in the market, but there is not a clear definition for "premium" nor for "luxury" brands. These concepts are subjective and continuously evolving. According to the "New Luxury Paradigm" (da Silveira, 2019), in order to be defined as luxury, an item should carry two necessary dimensions: "Substance" and "Status". The former regards the consumer's desire for self/individual pleasure in the form of a better overall experience when ordering, acquiring and using the product; while Status is the ability to make a social statement toward peers by owning a luxury item (it shows to others who the consumer is, through what he/she has). This is still a rather subjective concept, as both high- and low-profile statements can characterize a luxury brand: it all depends on the execution of the brand, its value delivery and the "buzz" it can create around its products, while remaining exclusive and selective. In the luxury sphere, a product's price and its functional quality may not be correlated, and thus the value proposition of a luxury brand needs to be "'superlative' and not 'comparative'" (Kapferer & Bastien, 2012, p. 62).

This definition can also be used for the evaluation of premium brands to a certain extent: premium is "a business model that rests on the willingness to create the objectively best product in the category" (da Silveira, 2019), relying on comparisons with other brands and on the balance between price and functionality. Contrary to luxury, which is superlative, and which prices are often not correlated with function, premium brands tend to attain higher volumes while asking for prices higher than standard as well, but not reaching luxury prices (Appendix 1). However, relatively to this luxury definition, in order to truly assess the status of different brands, a deep and long study would be required. "Status" and "Substance" are subjective concepts that are difficult to quantify and to analyze, meaning that researching about these concepts would not be within the scope of this Work Project.

Thus, the "*price premium*" concept is used. "Price premium" is an objective measure that has also been used by The Boston Consulting Group (2017, p.3) as a proxy to distinguish premium brands from non-premium brands. Aaker (1996, p.253) mentions that "one convenient aspect of the price premium is that it can be the basis for a crude estimate of brand value", concluding that there is a two-way relationship between *perceived quality* and *price*: "a strong brand commands a price premium, and a price premium is an important quality cue. Raising the price when perceived quality has been (or can be) created not only provides margin dollars but also aids perceptions" (Aaker, 1996, p.246).

This price premium is often associated with the notions of Brand Equity and Brand Identity: "the price premium may be the best single measure of brand equity available, because it directly captures the loyalty of customers in a most relevant way" (Aaker, 1996, p.253). Equity can be defined as "brand assets (awareness, image, consideration as a whole), (…) from a customer point of view", in which "image" refers to "the way in which certain groups perceive a product, a brand, a politician, a company or a country" (Kapferer, 1995, p.174); while Brand Identity is "the common element sending a single message amid the wide variety of [a brand's] products, actions and communications" (Kapferer, 1995, p.171). The power of established brands in the automotive market is one of the historical differentiators that has been considered by consumers: some brands represent a luxurious lifestyle, while others can provide a sense of reliability and performance, for instance.

b. The Volkswagen Automotive Group

Volkswagen Automotive Group's car brands (Seat, Skoda, Volkswagen, Audi, Porsche, Bentley, Lamborghini and Bugatti) span a wide array of offerings that try to maximize the group's network potential, meaning that some overlap of features, vehicle chassis, technology, and know-how is present between the different brands, so as to attain economies of scale/scope and gain an edge over the group's competitors.

Table 1. Overview of Volkswagen Automotive Groups' Brands

Volkswagen Group's Brands	**Positioning**	**Volume sold (2019)**	**% of group's sales**	**Average price per vehicle (2018)**	**Operating Result (2019) (in €M)**
Seat	Lower Market	504 607	19,5%	€24 000	€445
Skoda	Low/Middle Market	745 302	28,9%	€25 000	€1 660
Volkswagen	Mass-Market	1 757 429	68,1%	€29 000	€3 785
Audi	Premium	740 796	28,7%	€43 000	€4 509
Porsche	Premium/Sports	77 529	3,0%	€95 000	€4 210
Bentley	Luxury	3 363	0,1%	€300 000	€65
Lamborghini	Luxury/Sports	2 166	0,1%	€350 000	N.A.
Bugatti	Luxury/Sports	28	0,0%	N.A.	N.A.

WP Author (Tiago Fonseca). Data Sources: Volume sold – Volkswagen Group Europe Sales Figures, carsalesbase.com, 2019; Average Vehicle Price – EU car prices by brand, Statista, 2019; Operating Result by Brand – Volkswagen Konzern, AR 2019, Brands and Business Fields, 2020.

It is worth noting that VAG also owns Ducati, Scania, MAN and Volkswagen Commercial Vehicles, which are not within the scope of this Work Project. In Table 1, it can be seen that Audi sold ten times the vehicles that Porsche sold in 2019, but at a much lower average price, which attained a lower operating result for the former. Skoda sold more cars than Audi in 2019, at almost half the average price, though still resulting in higher operating profit for Audi.

c. Audi

"The Audi Automotive Group stands for sporty vehicles, high build quality and progressive design – for 'Vorsprung durch Technik'. The Audi Group is among the world's leading producers of premium cars. To play an instrumental role in shaping the transformation as we head into a new age of mobility, the Company is implementing its strategy step by step" (Audi AG, 2020). Audi is seen as one of the brands that uses its inherent German prestige to strive in the premium automotive market, and it voices its commitment toward innovation and driving experience in its communication, as it can be seen in the company's website.

At a point in time, Audi was a pure middle-market brand; however, "around 1980, Audi started a campaign to become a leading premium car manufacturer, and it proved more successful than any other attempt in modern auto brand history" (Parment, 2014, p.178). By being associated with Volkswagen since the sixties, its strategy focuses on being clearly distinct from its middle market high-volume counterpart, leveraging innovation, design, and branding to appeal to customers in higher segments of the market.

Aiming to differentiate itself, the brand invested in the development of marketing strategies that further enhanced its brand identity and status among its target market: "an important part of the Audi brand's upward stretch is the reorientation of marketing channel strategies that was emphasized around 2000" (Parment, 2014, p.180). The brand has carefully managed the balance between consumer expectations and delivered value, meeting its claims for the implementation of digital tools in its vehicles, modernizing the car as a whole, while still maintaining the mechanical reliability that premium clients have come to take for granted.

3. Addressing the Work Project Topic

a. Research Methodology

To address the Work Project topic, *How can Premium Automotive Brands maintain their Status, while sharing Technology with their respective Auto Groups?*, Audi is used as a case study: “in general, case studies are the preferred strategy when ‘how’ or ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context" (Yin, 2014, p.1), matching the characteristics of this Work Project.

For this case study in particular, two sources of information are considered: secondary data analysis and qualitative research. The first comprises academic and non-academic articles, journals, books and other written references that yield relevant insights regarding the topic in question. This information is then used to formulate hypotheses that are tested through qualitative research. Such qualitative research is based on in-depth non-directed semi-structured interviews, which enable the researcher to explore insights with higher fidelity to the subjects’ views. Crossing different answers can lead to a better understanding of the biases, preferences and opinions of the interviewees, as Yin (2014, p.90) mentions: “case study interviews are of an open-ended nature, in which you can ask key respondents about the facts of a matter as well as their opinions about events. (…) Such persons not only provide the case study investigator with insights into a matter but also can suggest sources of corroboratory or contrary evidence – and also initiate the access to such sources”.

Three different groups of people were interviewed:

1. *European Audi Managers and Industry Experts*: they have deep knowledge about the market and the trends shaping its players.

2. *Audi Clients*: they are the people that know, from experience, how expectations are connected to the value that is delivered by the brand in question.

3. *Clients from Competitor Premium Brands* [Competitor Clients] (such as Mercedes and BMW): This group provides a more subjectively comparative point of view, which also helps in understanding the overall customer' views towards the market.

Pre-recruiting questionnaires and interview guides were built for each of the identified groups (see appendix 2, 3, 4, 5 and 6). Relevant interviewee attributes can be found in the tables below. Regarding gender, 76% of interviewees were male and 24% were female.

Tables 2 and 3. Distribution of interviewees per age category, group, and role.

Age Categories	Number of interviewees
Audi Clients	**18**
18 - 25	7
26 - 35	5
36 - 50	3
51 - 60	2
60 +	1
Competitor Clients	**8**
18 - 25	3
26 - 35	2
51 - 60	3
Managers / Industry Experts	**7**
Total Number of Interviewees	**33**

Managers and Industry Experts	Roles (number of interviewees)
Industry Experts	Digital Strategy (1)
	Automotive Consulting (1)
	Solutions Strategy (1)
European Audi Managers	Product Manager (3)
	Marketing Director (1)
Total	**7 interviewees**

WP Author (Tiago Fonseca). Data Sources: Qualitative Research carried out for the Work Project.

b. Secondary Data Analysis

i. Study of the Premium Automotive Segment

OEMs have fought for market share in a fierce industry while observing a shift in consumer preferences: "premium car brand buyers were traditionally satisfied with a high-performing, safe, and luxurious driving experience. However, in the digital age, drivers increasingly expect their car to also be a smart device on wheels that keeps them constantly connected, makes them safer and better-informed drivers, while also entertaining them" (Xu and Liu, 2018, p.3). This means that there is pressure on traditional OEMs to innovate and adopt the latest technology in their cars, in order to satisfy the needs of premium customers. This is especially true after the entry of new brands with the potential to disrupt the market, such as Tesla, which has created and implemented new features into its vehicles, like its “Autopilot”, that are now being demanded by customers from other brands as well, mainly in the premium segment.

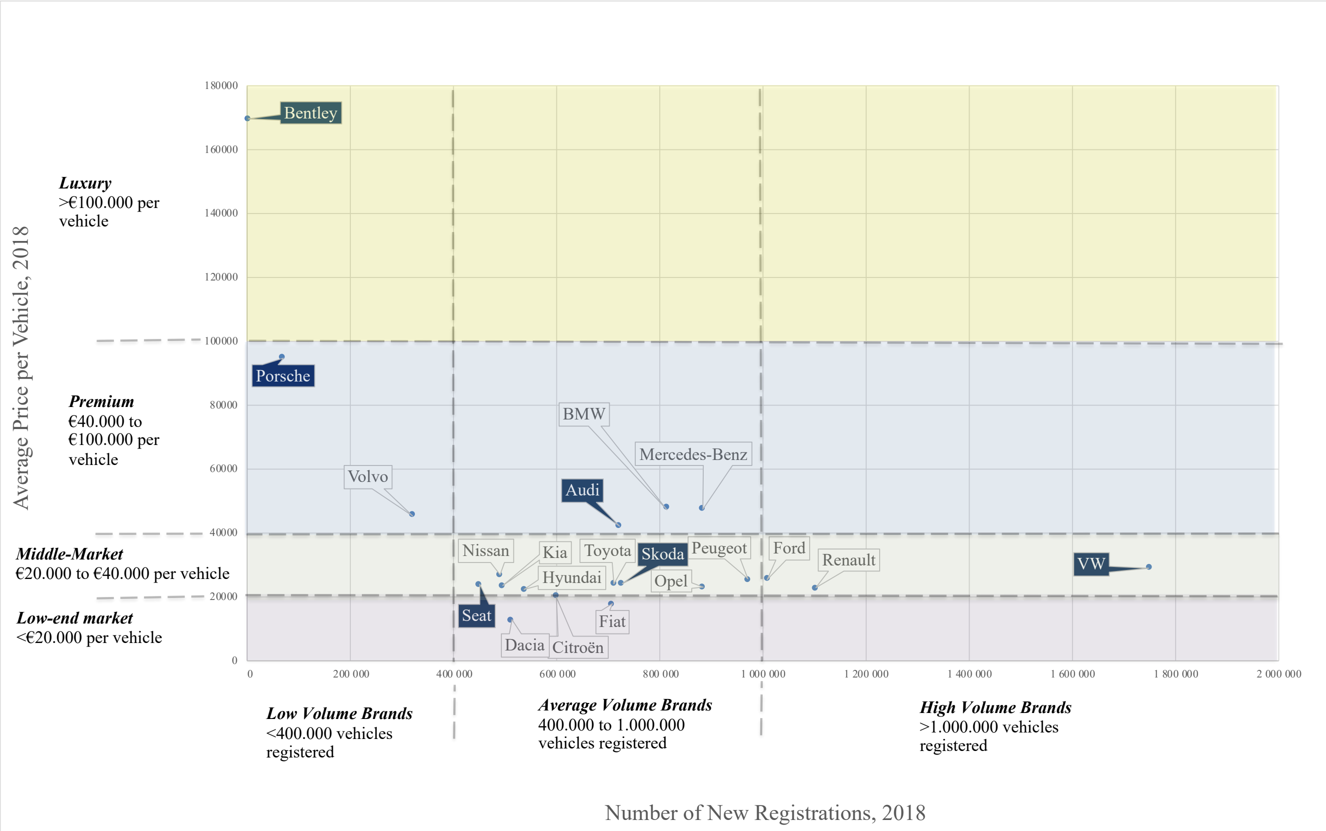
Both academic- and business-oriented literature highlight the benefit of being perceived as a premium brand by the market. “If a brand is seen as premium, the manufacturer can dramatically raise prices and boost its profit margins. Premium carmakers such as BMW, Porsche and Audi have done better financially than most mass-market manufacturers” (Ciferri, 2005, p.1). Regarding the automotive industry, the “price premium”, as defined earlier, can be understood as being the difference in price of a certain car model from a premium brand, when compared to the price of a similar car, offered by a mass-market or lower-end brand; Simply put, it can act as a scale for the consumer’s willingness to pay “a premium” or “an extra” in price for a given brand’s vehicle.

ii. Evaluating Volkswagen Automotive Group’s Brand Positionings

Each one of VAG’s brands tries to aim at a specific target, differentiating their vehicles accordingly. In order to gain insights about the brand positionings of VAG’s brands and compare them to others in the market, a graph was built. The “Number of New Registrations” on the x-axis can serve as a proxy for new market share gained in 2018, as it quantifies the volume sold in Europe; the “Average Price per Vehicle” on the y-axis can illustrate the price premium and status of each brand. In Figure 3, VAG’s brands are highlighted in dark blue.

Several segments can thus be identified, allowing for a better understanding of which brands might engage in direct competition, especially in volume and asked prices.

Figure 3. Assessing the Brands' Positionings: VAG Brands and the Market



WP Author (Tiago Fonseca). Data Sources: Number of New Registrations: ACEA – European Automobile Manufacturer's Association, 2020; Average Vehicle Price: EU Car Prices by Brand, Statista, 2019.

Taking a closer look at the premium offerings from VAG: both Audi and higher-end Volkswagen vehicles cater to this premium segment, in addition to some relatively more affordable Porsche models. Audi may also face challenges from Seat and Skoda, which are increasingly making use of technology and are implementing features in their upmarket models that were otherwise almost exclusive to higher-end brands. "There are already signs that VW's management is concerned about the overlap between some brands and resultant 'sales cannibalization' (…). It is this task – of managing this increasingly diverse brand portfolio to maximize synergies and efficiencies while ensuring that the brands remain separate and distinct – that is perhaps the biggest challenge the company faces" (BBC News, 2011).

Usually, the development of new technologies in the group is the result of a collaboration between the two premium marques, Porsche and Audi: "it gives VW a powerful R&D pool at its high margin divisions, with the benefits [that] working together will bring, whose improved tech can then filter down to benefitting its VW, Seat, Skoda and other brands" (Autovista Group, 2017). However, by being included in a larger group, it means that the developed technology is later adopted by both lower-end brands and higher segment brands. Oliver Blume, chairman of the Board of Management at Porsche, said "we will also be very careful to maintain the differentiation between our brands. A Porsche is always a Porsche, and that will remain so in the future" (Autovista Group, 2017), meaning that the group is highly motivated to maintain the differentiation between its higher-end brands.

iii. Analysis of Audi's Positioning and Comparison with the Competition

Despite the brand's investment in marketing communications and customer relationship development, Audi has stuck with its slogan "Vorsprung durch Technik" which can be roughly translated to "Advancement Through Engineering", since 1971, as mentioned by Majury (2020). Nowadays, the concept of *engineering* is rather outdated, as it is more easily associated to mechanics and powertrains, which are not the current focus of modern digital innovation. It made sense in the year 2000, as the *Audi Quattro* commercials were being released, showcasing engineering at its best, and demonstrating the clear advantage of all-wheel drive, especially in adverse environments. On the other hand, Audi's slogan now falls short of the image that needs to be conveyed to the consumer that the brand is engaged in technology, connectivity, efficiency, comfort, and safety, in addition to its valued German engineering.

This sense of German engineering, however, is also present in its major rivals in the market: BMW and Mercedes; the level of competition between the three brands is fierce, which means that a new innovation in one of the brands is quickly matched by the others. In addition to this competitive balance between BMW, Mercedes and Audi, the latter is also facing threats from an upper-premium segment brand – Porsche, despite belonging to the same automotive group; and from technologically adept brands, such as the not-so-new entrant Tesla.

Audi needs to respond in several fronts in order to correspond to consumer expectations and to not lag behind its rivals, while some of the benefits of its digital innovation are also being realized by most brands within the VAG, which can possibly cripple Audi's brand equity.

iv. Critical Assessment of R&D within the Volkswagen Automotive Group

With changing market trends, VAG changed its priorities when it comes to R&D: Audi and Porsche have been the core innovator brands up until now; however, Volkswagen is taking the reins on electrification. The latter is the group's center for the development of electric vehicle platforms, which are flexible enough to be applied in offerings for most segments in the market. Thus, most VAG brands' cars are expected to be built on the same foundations in the future, independently of their positioning in the market.

The fact that electric vehicles from VAG are likely to share more architectures, systems and technology, creates a growing tension in the fight for differentiation within the group. Brands like Audi, which already share a great deal of components (which are present in most of their high-volume selling cars), try to justify their prices and maintain brand status through the implementation of new features that are often the result of digital R&D investment. The first research hypothesis can then be drawn: **H1. *Audi is highly dependent on technology as a differentiating factor* from other premium brands, and from other possible competitors.**

Sharing vehicle platforms and features is so common that Parment (2014, p.183) stated that "the Seat Mii is the same car as the Volkswagen Up! – and it is very obvious, which is an interesting change from the strategy applied by the Volkswagen Group for several decades".

The situation in which automotive conglomerates sell the same vehicle under different brands and model names is usually called *rebadging* or *badge engineering*. This allows OEM groups to charge different prices for virtually the same car, benefiting from larger scale: "for instance, the Seat Alhambra is a slightly cheaper but not a significantly different version of the Volkswagen Sharan; and they are built in the same factory" (Parment, 2014, p.184).

Additionally, the importance of a car’s brand is clearly observed in these cases, where “branding – ‘the visible’ – and product development and engineering – ‘the invisible’ – become detached” (Parment, 2014, p.183). Despite the similarities between two cars, consumers have their preferences regarding the brands that sell them. This means that some consumers are more inclined to pay a premium for almost an exactly equal car, only due to the brand logo displayed on the bonnet of the car, despite both using the same components.

v. Identifying the Shift from Old to New Premium Attributes

Until recently, OEMs have mainly focused on improving value delivery through performance, comfort and safety, as premium vehicles need to be reliable in each of these areas in order to fulfill consumer expectations. Nevertheless, CASE disruptive forces (Connected, Autonomous, Shared, Electric) are shaping demand and supply in the market. According to McKinsey & Company’s report *The New Realities of Premium Mobility* (2019, p.11), “we see that connectivity and design are becoming the critical differentiators for premium customers in choosing premium vehicles. The former is so important that customers are willing to switch premium brands to get the connectivity they desire”. Previously, the powertrain, which, “in a motorized vehicle, is the whole mechanism by which power is generated and transmitted to the road” (Collins English Dictionary, 2020), was “the classic differentiator” and is now “losing its edge”, contrasting with “autopilot capabilities and automated guidance to available parking spots, which will be a differentiating factor for one in five premium consumers” (McKinsey & Company, 2019, p.13). Despite all of this, performance still comes in third when ranking premium consumers’ preferences, according to the same report.

These new market trends are highly praised for their environmental contribution for a massive reduction in the carbon footprint of the industry and of its products. Sustainability is therefore of the utmost importance, and regulators have been forcing the market to go in that direction, where Europe is the prime example. Automakers need to restrict emissions in order not to pay expensive fines, and consumers are ever more conscious of the environmental impact of the automotive sector. Brands promote their new electric solutions and communicate their advantages, while governments support the purchase of these vehicles through tax incentives. Then, the second research hypothesis can be drawn: **H2. Premium customers are likely to value digital services, productivity features, safety, and Advanced Driver-Assistance Systems [ADAS] *increasingly more in the coming future*, as opposed to performance, powertrain and fuel economy, which were crucial factors until recently.**

Understanding and being first movers into the new premium reality can grant OEMs a competitive advantage, cementing brand identity and capturing the consumer's attention since an early stage, from an innovation point of view, as long as new features and attributes are appropriately communicated and their advantages are clearly defined. Disruptive innovation can be crucial for a premium brand, as long as perceptions are aligned with reality. The third research hypothesis can be drawn: **H3. There is a relationship between the *perceived Premium Status* of a brand and the *perceived Digital Innovation* that it offers in its vehicles.**

vi. Concepts of Technology and Digital Innovation

Throughout this Work Project, two terms are often used: Technology and Digital Innovation. The former is a byproduct of the latter, meaning that, firstly, creative firms come up with new *innovations* that fulfill the consumers' needs. However, these new capabilities are expensive in their first stages of development. When production prices drop, innovation becomes more commonly applied throughout the different offerings from various brands, becoming *technology* that OEMs can choose whether to adapt to their vehicles or not. Therefore, *technology* can be understood to be the available digital capabilities that can be realistically applied to brands (should they choose to do so), whereas *digital innovation* regards actual creation of modern solutions through R&D efforts, which results are not at every brands' reach, but rather only to those which invest heavily in these activities.

c. Hypotheses

Some key hypotheses have therefore been inferred from the secondary data analysis:

H1. *Audi is highly dependent on technology as a differentiating factor* from other premium brands, and from other possible competitors.

H2. Premium customers are likely to value digital services, productivity features, safety, and Advanced Driver-Assistance Systems [ADAS] *increasingly more in the coming future*, as opposed to performance, powertrain and fuel economy, which were crucial factors until recently.

H3. There is a relationship between the *perceived Premium Status* of a brand and the *perceived Digital Innovation* that it offers in its vehicles.

Qualitative Research Insights

d.1. *General Insights*. From the conducted interviews, some general insights were found. Audi Clients can be said to value the brand's *exterior design, interior quality, and comfortable ride*, which make Audi's cars *desirable and recognizable*. The brand is commonly said to *fulfill expectations* by all Audi Clients – "I am happy to drive Audi, because in every situation, I feel good about it" (Audi Client, M, 31). Also, Managers and Industry Experts mostly agreed that the brand is likely to offer new cars that come fully equipped as standard, even if not all features are readily available. It will be possible to download and unlock digitally enabled features after the car has been purchased, following a subscription payment model, making the product more flexible and customizable.

d.2. *Assessing the Research Hypotheses.*

H1. *Audi is highly dependent on technology as a differentiating factor* from other premium brands, and from other possible competitors.

To assess this *first hypothesis*, premium customers (Audi and other competitor clients) and managers/experts were asked what a premium automotive brand is, in their view. All groups were mostly aligned – "to be premium, it has to create an important visual impact: it has to be imposing, it has to be respected" (Competitor Client, M, 45). So, *interior and exterior design* need to be distinctive, and *overall high product quality* should also reflect the perceived brand status – "the detailed attention to the finish in the interior and even the care that the brand has during the assembly of each car is something that sets premium brands apart" (Audi Manager, M, 53). The *higher price level* is another factor that was mentioned – "a premium brand probably needs to have a price tag: it shows the confidence of the business in the brand" (Audi Manager, M, 59). Customers usually expect these higher-end brands to *focus on innovation* – "whenever there is a new technology, you expect premium brands to adopt that right away" (Audi Client, M, 31), whereas managers/experts mentioned their *customization* capabilities – "when you buy a new premium car, you are spending more money, so you will want to customize it to your liking" (Audi Manager, M, 53).

Relatively to Audi, clients and managers/experts considered it to have a *clear premium identity* that is widely recognized. Some reasons for this notion are: its connection to *motorsports* and *driving dynamics* – "Audi definitely has a rich tradition when it comes to the driving experience; especially if you think of their competitive racing and rallying with Quattro, their cars are well capable" (Audi Client, M, 24); the *material quality* in the interior and the cars' *design language* – "I cannot imagine that an Audi at some point would not give you the highest quality seats, or the highest interior standard. You don't get that with a Peugeot or a Ford" (Audi Client, M, 31); the brand's perceived focus on *innovation* and the respective *price tag* – "Audi certainly has the price level and the technology that a premium brand should have" (Audi Client, F, 22); the fact that clients market the brand – "clients start being brand ambassadors; one client for example, whose family has *Audis* and have always had *Audis*. They love the brand and they almost do the salesmen's jobs!" (Audi Manager, M, 42); and attributes that are an underlying requirement for a brand to be in this premium space, such as *reliability*, consistent *performance* and good post-sale *service* and *maintenance*.

Interviewees were selected so that they had knowledge about the brands that constitute the VAG. When questioned about the perceived relationship between these brands, the sharing of components and technology within the group was *obvious*, even for consumers – "I think that everything that is not visible to the eye is being shared" (Audi Client, M, 31) – but the application of features is perceived to *reflect each brand's identity* – "Seat might have the same technological level as Audi, but you don't feel it, you don't breathe technology when you get in a Seat like you do when in an Audi" (Competitor Client, M, 45). However, consumer perceptions and reality differ when it comes to the brands that carry out new innovation within the group. While consumers expect that higher-end brands, especially premium brands like Porsche and Audi, are the group's innovators – "I feel that everything that is new within the group, always comes from Porsche, Audi or VW" (Audi Client, F, 55) – managers revealed that this is not always the case - "[the group] matches the type of technology to the brand that would more appropriately develop and use it, according to their positioning, sharing it with the group later on" (Audi Manager, M, 53). For example, if a digital feature is more likely to be beneficial in the lower-end market, then Skoda or Seat would probably develop it, rather than Porsche, even if, after some time, that feature is available in all VAG brands.

Regarding Audi's main competition, as expected, all interviewees mentioned Mercedes and BMW as its closest rivals. The general feeling, from customers and managers, is that differences between premium brands, especially between these three brands, are not life-changing – "they are all very alike. They mostly have the same level of technology. What differentiates them comes to personal taste: the looks and the driving experience" (Competitor Client, M, 53). Additionally, Audi customers are also perceived as being *more interested in technology* than most clients from other premium brands, with the exception of Tesla's.

When specifically comparing Audi with its two premium German counterparts (BMW and Mercedes), there are certain characteristics that set their identities apart. A visual summary of the overall perceptions regarding each of these 3 can be seen in appendix 7. Overall, BMW is associated to *fast* and *exciting sports cars*, *driving dynamics*, and *a sporty premium status*; Mercedes retains a *traditional premium status*, connected to *reliability*, *comfort*, and an instantly *recognizable design*; Audi is usually positioned somewhere between the 2 – "there is an old saying in the premium automotive world: a dream car would have Audi's build quality, driving dynamics from BMW, and Mercedes' brand image. Each has its personality, even though the end products may be similar" (Audi Manager, M, 53). Audi is perceived to be targeted at a *younger consumer* than Mercedes, while being more focused on *technology* than BMW, carrying an *executive premium status*, *innovative design* and *great build quality*.

It can be inferred from these insights that **H1** is *not validated*, as premium brands are perceived to be very well-balanced in terms of competitive advantages, namely when it comes to the technology level that each brand employs in its cars. Also, "technology isn't determinant for whether a brand is premium or not, but premium brands will always be connected to advanced technology" (Audi Client, F, 22); this view was shared by all interviewees, meaning that technology is mostly seen as a *requirement*, rather than being a differentiator. Audi may be perceived as being more visual in the digital capabilities of its cars, having an intuitive infotainment interface and designing its interiors according to the features in the car; however, its premium status is still highly dependent on its *history*, *brand identity*, *perceptions*, *material quality*, and *competitive price levels* in the premium segment.

H2. Premium customers are likely to value digital services, productivity features, safety, and Advanced Driver-Assistance Systems [ADAS] *increasingly more in the coming future*, as opposed to performance, powertrain and fuel economy.

The attributes that define a premium automotive brand are expected to change in the near future. Consumers generally expect that “the standard technology level in a car will be increasing in the future, in order to keep up with the innovation that we experience in our lives” (Audi Client, F, 22) and “brands will find other differentiators to set their offers apart, namely on the technological and comfort sides” (Competitor Client, M, 45). Most consumers have digital requirements, which are non-negotiable for a car to be considered, such as GPS, Bluetooth connectivity and, in some cases, even autopilot capabilities – “if I were to buy a car in the future, a good autopilot would influence my decision” (Competitor Client, M, 30); some of these requirements are also expected to come as *standard* in a new premium car.

Consumers and managers alike believe that car models are updated/renewed very often due to technological and digital innovation advancements, not necessarily due to mechanical improvements; the latter has a rather stagnant rate of development, as combustion engines have been perfected throughout the years and have become more reliable, powerful, efficient, and responsive. Regarding the importance of technology in a premium car, managers and industry experts agreed that “previously, you’d want a car to be comfortable, quick, and good looking. Nowadays, in addition to those, drivers need to be connected to the infotainment system, the whole family has to have access to the internet; we do not only sell the car, but also all the services that make up that car” (Audi Manager, M, 42). This is also related to the fact that automakers are working to take advantage of subscription models and the ability of unlocking certain features in a car, even after purchase: a new premium car can be viewed as a *service hub* besides being a mean of transportation, where you can organize your personal and professional life and be entertained. Having a smarter car is also correlated with increased *safety*, according to interviewees, where modern technology can prevent accidents by removing or enhancing human input, improving perceptions regarding the brands that apply it.

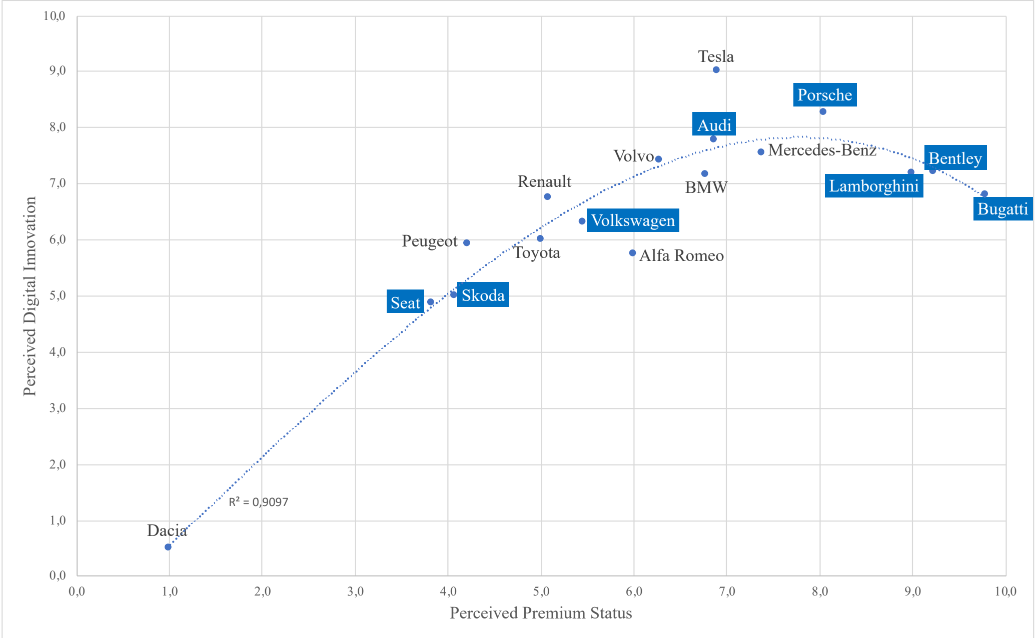
The premium concept is increasingly more related to a certain level of base technology, encompassing features that are requirements for new cars to be considered by premium customers. Hypothesis **H2.** is therefore *validated*.

H3. There is a relationship between the *perceived Premium Status* of a brand and the *perceived Digital Innovation* that it offers in its vehicles.

When questioned about the perceived relationship between brand status and the application of digital innovation in a brand's vehicles, interviewees identified two relevant perspectives. Currently, managers and consumers consider that technology is *not a sufficient condition for a brand to be premium* – "you need good technology to be considered premium, but I don't think that with technology alone, you can bring a brand into the premium group" (Industry Expert, M, 56); "I think technology is a non-negotiable addition. You see non-premium brands putting technology in their cars as well, but that doesn't make them premium" (Audi Client, F, 22). Thus, it can be concluded that, today, there are other relevant factors for defining the status of a brand, such as *price, comfort, material quality* and all other discussed elements, making it a *one-way relationship* between the two variables in question, as shown in appendix 8. Premium brands need digital innovation to maintain their status, but the fact that a brand is technologically innovative does not mean that it belongs to the premium segment.

Interviewees were asked to place a number of brands in a conceptual map with the two variables, and the average scores were plotted in Figure 4. Digital innovation and premium status are connected, but brands with a higher status do not necessarily have a higher level of innovation and vice-versa. Investing in digital capabilities will only take a brand so far in terms of status, as brands need other attributes such as great design and material quality in order to be considered by customers, in addition to brand *reputation* and *identity*, for example.

Figure 4. Average Conceptual Map



WP Author (Tiago Fonseca). Data Source: Qualitative Research carried out for the Work Project

On the other hand, when asked about the future trend in the market, and relating these ideas with the insights from **H2.**, interviewees recognize that *this relationship is going to be strengthened*, as technology starts delivering more *convenience*, *comfort*, *entertainment*, and *functionality* in a vehicle – "for me, luxury/premium will always be related to innovation in the future: if you can watch Netflix on your self-driving car, that's a game changer for how we perceive cars, mobility and even the simple road trips become something different" (Audi Client, M, 28); "in the future, your car will almost have to be your office and your living room" (Industry Expert, M, 28). As technology plays an increasingly more important role in the market and in consumers' lives, a *two-way relationship* between the two variables in question is expected to gain traction in the future, as in appendix 9, in which premium brands can be defined by the digital advances that they implement, making for a stronger correlation.

When mentioning technology in this market, Tesla always comes to mind. Interviewees show opposing views: consumers are mostly receptive to the idea that Tesla is a premium brand, whereas managers are hesitant to fully consider the brand as premium. Managers mentioned that "Tesla did not come to disrupt the meaning of *Premium* in the market because this notion also goes through the quality of the materials, reliability, service, and the build of the car" (Audi Manager, M, 24), meaning that *technology*, *pricing and branding* by themselves *do not* make a premium car. One particular area where Tesla noticeably falls behind the traditional premium brands is on resale value; electric vehicles have quickly degradable batteries, hurting second-hand prices. Audi, BMW and Mercedes are able to sustain a higher second-hand price, influencing perceptions. Consumers, on the other hand, immediately thought of Tesla as being the technological premium competitor for Audi – "I'd say Tesla is premium, mainly because of the price and innovation, where it differentiates the most from other premium brands" (Competitor Client, M, 30). The difference between the interviewees' answers yields important insights about the contrast between what brands perceive as being the focus of the market, and what consumers value in their in-car experience.

Hypothesis **H3.** is therefore *validated*. However, premium brands need to excel in different areas besides technological prowess, pricing, and branding. Comfort, reliability, performance and resale value, will continue to be key focus points for the consumers in the near future.

4. Implications

In sum, what do premium brands need to do in order to achieve differentiation within their respective automotive groups, while also fending off their competitors and maintaining their premium status? Premium brands cannot fall behind in terms of innovation: although it is currently not a major differentiation factor between premium brands, innovation is still a requirement which importance is growing. It is expected that digital features which improve *convenience*, *comfort*, *entertainment* and *productivity* will be more valued by consumers in the future. *Media consumption applications*, *autonomous driving*, *AI-enabled features*, and *smartphone integration* are likely to be the main focus of premium customers going forward.

On the other hand, clients still highly value the *build* and *material quality* present in premium brands, the *design* of their offerings, and the *feeling* of the driving experience. Brands need to understand their customer base, in order to cater their offerings to each unique customer: while some might value digital and autonomous features, others may focus on the driving pleasure and the looks of the car, for example.

Innovation needs to be implemented in a way that reflects each brand's identity as well, especially when brands are part of larger automotive groups that share technology and components across their commercial brands, increasing margins and leveraging economies of scale and scope. From Audi's instructive case, we learn that premium standards are high, and brands need to be able to fulfill customers' desires in several fronts. Despite competing closely with its German rivals BMW and Mercedes, *personal preference* still plays a crucial role when comparing the three brands. This *personal preference* notion can be extended to the premium segment in general. Thus, a brand's *marketing efforts* are important in conveying brand identity, which can strengthen the relationship between (potential) clients and premium brands.

Automotive groups try to maximize their use of economies of scale, but there are limits that these groups cannot surpass, as doing so may hinder differentiation. If consumers perceive that all cars offered by an automotive group are the same, then higher margin brands lose their power. Differentiation must then come from *identifiable* attributes: an appealing exterior and interior design, higher quality materials, and intuitive advanced technology, for example.

Established premium brands must leverage their *history* and *achievements* to maintain consumers' trust in the products they sell, while facing competition from new brands that are hyped due to the implementation of advanced digital features. Tesla's case is notorious, as it is an example of how a new brand can attain a sizable market share by appealing to digitally focused consumers, to the detriment of entrenched premium automotive brands. Also, first movers into exciting technology will be rewarded by consumers, in terms of brand image and purchase. This innovation should be *exclusive* and *difficult to implement*, favoring the *driving experience* required by each driver and contributing for *sustainability* in the automotive market, where focus is shifting from the traditional premium attributes like *performance*, *comfort* and *safety*, to advanced features, like *connectivity*, *autopilot*, *media consumption*, and *productivity*.

5. Work Project's Main Limitations and Directions for Future Research

Younger generations of drivers (or potential drivers) are not the focus of this Work Project. They should be studied in further detail due to their specific characteristics, which remove some of the emphasis placed on the driving experience and enhance the relevance of mobility solution providers like *Uber* – "younger customers nowadays don't even think about getting their driver's licenses: there are so many mobility solutions that are convenient, taking them from A to B. They don't need to worry about the car, insurance, parking nor maintenance" (Audi Manager, M, 42).

Additionally, the second-hand car market was not taken into account in this Work Project, due to the complexity and breadth of options at different price points, inhibiting the possibility of identifying premium customers or vehicles. It can be interesting to assess the influence that this market has on the perceived brand status of automotive companies, as higher-end brands tend to devalue/depreciate less as time passes.

Finding interviewees that had sufficient knowledge about the different brands and innovation in the market, VAG, and the brands that comprise this group was a challenge given the constraints regarding Covid-19 restrictions and scheduling difficulties. Studying a larger interviewee base can yield insights to further develop the ideas presented in this Work Project.

"Going forward, with all the focus on the environment, people start questioning *'do I need a car?'*, particularly people in the cities" (Industry Expert, M, 56). Establishing a connection between the premium status of an automotive brand and its commitment to sustainable products, and their production, is a topic that should be studied further as well.

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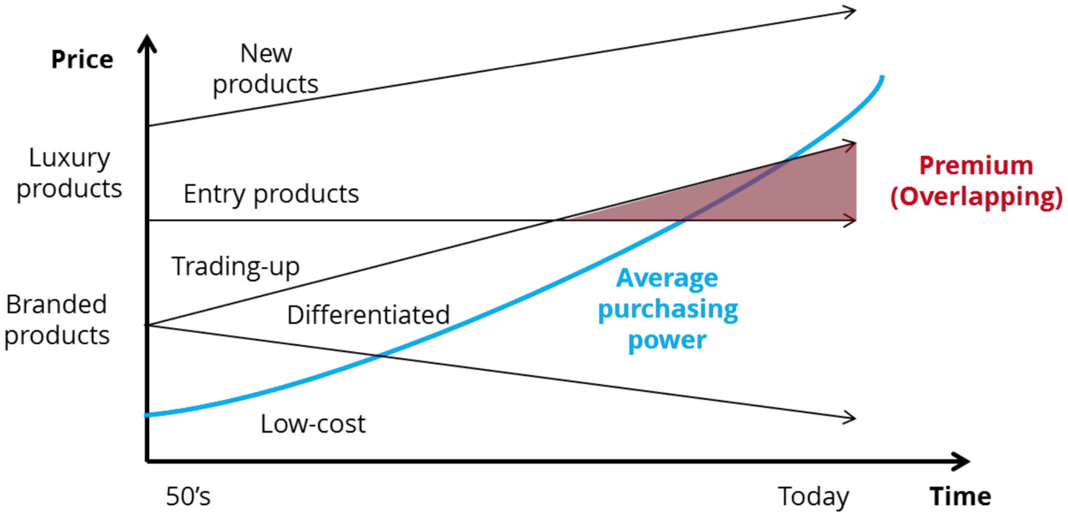
7. Appendix

1. Premium and Luxury in a graph.



- Source: Da Silveira, C. (2019) Luxury and Fashion Marketing course, *Approaches to the Concept of Luxury and Specificities of the Luxury Business Model*

2. Pre-recruiting Questionnaire for Premium Automotive Consumers

Pre-Recruiting Questionnaire

Good morning / afternoon / evening. My name is Tiago Fonseca and I am currently a Master's in Management student at Nova School of Business and Economics (Portugal). I am conducting research related to my Final Work Project / Thesis and need to select people to talk about the automotive industry. Note that, if you are selected (given your answers to this questionnaire), you may be contacted further to participate in one of those talks.

Filter 1:

Do you own a personal car?

☐ Yes

☐ No

Filter 2:

Which of these brands do you know at least the name? (select all that apply)

☑	Brand	Logo	☑	Brand	Logo
☐	Porsche		☐	Range Rover	
☐	Volkswagen		☐	Alfa Romeo	
☐	Mercedes-Benz		☐	Mini	
☐	BMW		☐	Acura	
☐	Lexus		☐	DS Automobiles	
☐	Maserati		☐	Hyundai	

☐	Seat	SEAT	☐	Toyota	TOYOTA
☑	**Brand**	**Logo**	☑	**Brand**	**Logo**
☐	Jeep	Jeep	☐	Tesla	TESLA
☐	Jaguar	JAGUAR	☐	Volvo	VOLVO
☐	Skoda	ŠKODA	☐	Renault	RENAULT
☐	Rolls-Royce	ROLLS ROYCE	☐	Peugeot	PEUGEOT
☐	Audi	Audi	☐	Kia Motors	KIA MOTORS
☐	Dacia	DACIA	☐	Lamborghini	LAMBORGHINI
☐	Opel/Vauxhall	OPEL VAUXHALL	☐	Bentley	BENTLEY
☐	Bugatti	BUGATTI	☐	Ferrari	Ferrari

Filter 3:

What is the current brand of your car(s)? (refer to the previous filter for the brands' logos)

☐	Porsche	☐	Skoda	☐	Jaguar
☐	Volkswagen	☐	Rolls-Royce	☐	Land Rover
☐	Mercedes-Benz	☐	Audi	☐	Alfa Romeo
☐	BMW	☐	Dacia	☐	Mini
☐	Lexus	☐	Opel/Vauxhall	☐	Acura
☐	Maserati	☐	Bugatti	☐	DS Automobiles
☐	Seat	☐	Range Rover	☐	Hyundai

- [ ] Toyota
- [ ] Renault
- [ ] Peugeot
- [ ] Kia Motors
- [ ] Lamborghini
- [ ] Bentley
- [ ] Ferrari
- [ ] Other:

Filter 4:

What was the brand of your car before this one? (refer to the previous filter for the brands' logos)

- [ ] Porsche
- [ ] Volkswagen
- [ ] Mercedes-Benz
- [ ] BMW
- [ ] Lexus
- [ ] Maserati
- [ ] Seat
- [ ] Skoda
- [ ] Rolls-Royce
- [ ] Audi
- [ ] Suzuki
- [ ] Dacia
- [ ] Opel/Vauxhall
- [ ] Bugatti
- [ ] Range Rover
- [ ] Jaguar
- [ ] Land Rover
- [ ] Alfa Romeo
- [ ] Mini
- [ ] Acura
- [ ] DS Automobiles
- [ ] Hyundai
- [ ] Toyota
- [ ] Renault
- [ ] Peugeot
- [ ] Kia Motors
- [ ] Lamborghini
- [ ] Bentley
- [ ] Ferrari
- [ ] Other:

Filter 5:

Do you have digital extras in your vehicle?

- [ ] GPS
- [ ] Parking Sensors
- [ ] Heated Seats
- [ ] Heated steering wheel
- [ ] Digital dashboard dials (digital cockpit)
- [ ] Bluetooth connectivity
- [ ] Apple CarPlay / Android Auto

- ☐ Aesthetic Packs [M pack (BMW), AMG pack (Mercedes), GT Line (Renault, Peugeot), S line (Audi), …]
- ☐ LED lights or Xenon Lights (as opposed to ordinary headlights)
- ☐ Modern sweeping turn indicators
- ☐ Large wheel rims (larger than 17 inches)
- ☐ Automatic lights
- ☐ Automatic windscreen wipers
- ☐ Standard Cruise Control
- ☐ Adaptive Cruise Control and lane keeping
- ☐ Mild autopilot capabilities
- ☐ Automatic emergency brakes
- ☐ Automatic climate control with various zones
- ☐ Self-parking
- ☐ Memory-adjustable seats
- ☐ Other:

Comments:

3. Interview Guide: Audi Clients

Interview Guide – Audi Clients

Good morning / afternoon / evening. My name is Tiago Fonseca and I am currently a Master's in Management student at Nova School of Business and Economics (Portugal). For my final Work Project, I am doing a thesis about the automotive industry.

For this purpose, I would like to interview you for approximately 30 minutes to 1 hour, by means of an in-depth interview, which means that I will ask you several questions, to which there are no right or wrong answers and you are free to say whatever comes to your mind on the subject. This is supposed to help the flow of the conversation, making it more spontaneous and truthful. For the purpose of analyzing our interviews later, I would like to record our conversation. It will remain anonymous.

Section 1:

Initial Question:

Can you please tell me how you came to purchase an Audi car? When was it and why did you do it?

What were the optional extras and/or attributes that you required that vehicle to have?

How well do you think that your Audi has fulfilled your expectations?

Section 2: Perceptions of innovation and technology

What is a premium automotive brand for you? How well does Audi integrate that definition?

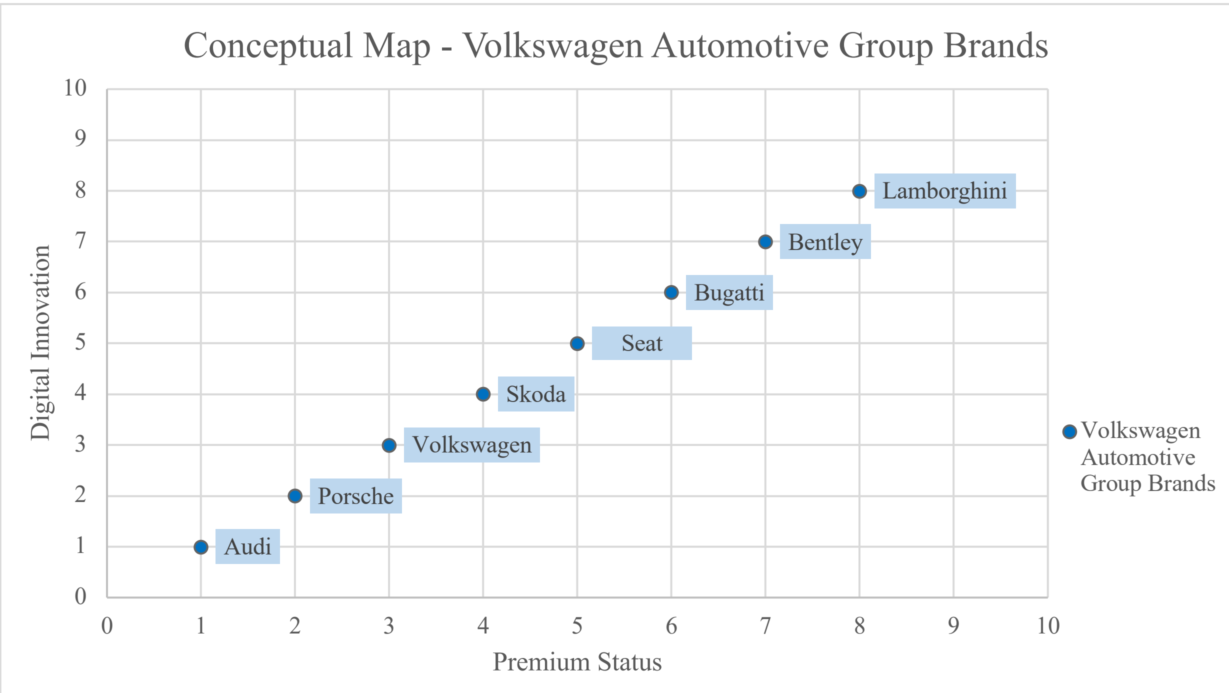
What is the relationship between digital innovation and the premium status of a brand, in your opinion?

Section 3: Audi and the VW group

Audi is part of a larger group – Volkswagen Automotive Group [VAG]. Here is a list of the other car brands that are also owned by VAG:

- Lamborghini
- Bentley
- Seat
- Skoda
- Volkswagen
- Audi
- Bugatti
- Porsche

1. How would you rank each of them, according to the following 2 variables?
   a. Premium Status, from 0 (belonging to the lower-end of the market) to 10 (belonging to the higher-end of the market)?
   b. Digital Innovation, from 0 (meaning that the brand is not innovative) to 10 (meaning that the brand if one of the most innovative in the market)?
2. Why did you rank them this way? Please verbalize your thoughts as you place each brand.



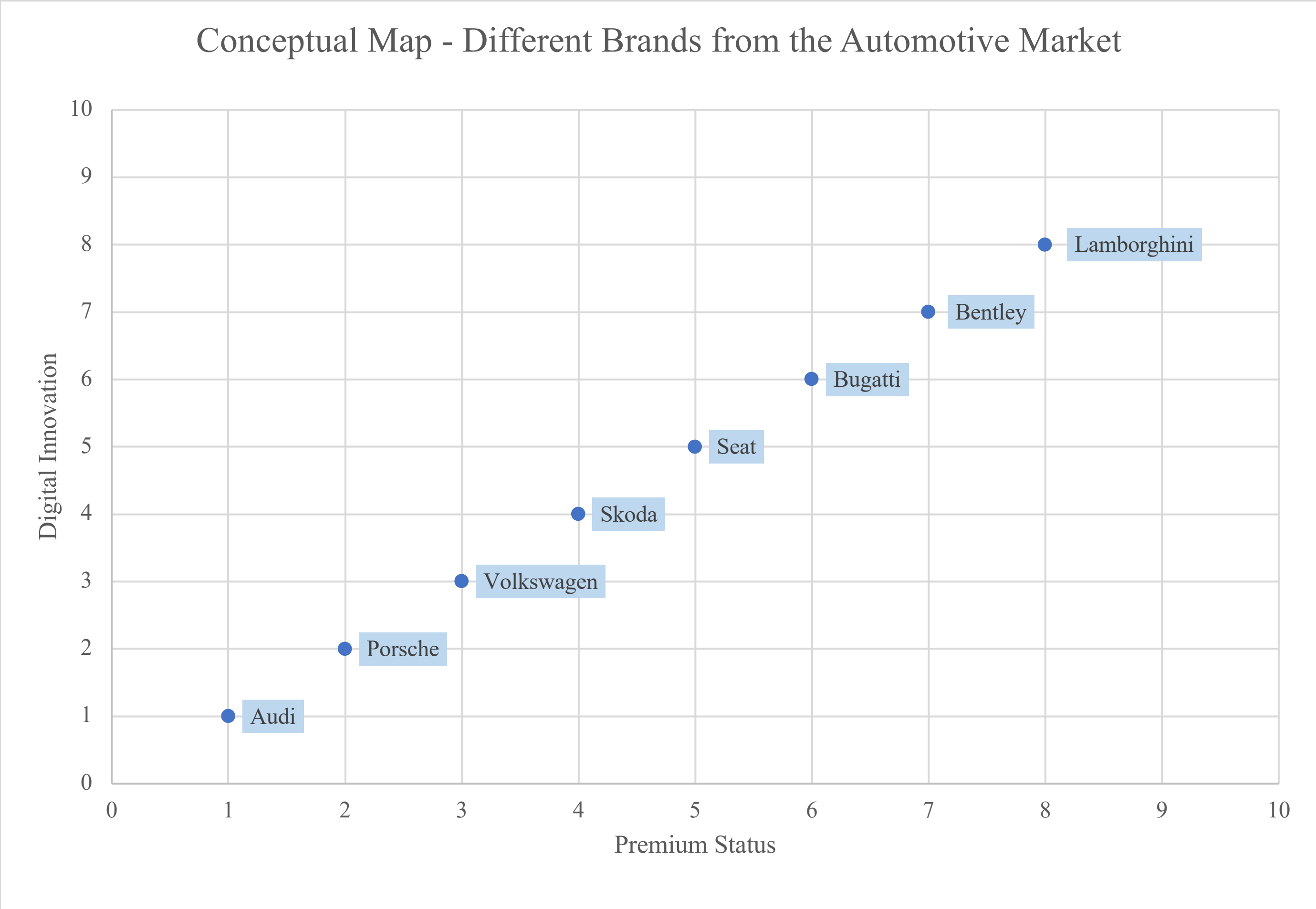
Section 4: from VAG to the overall market

In your opinion, what are the relationships between these brands like, within the Volkswagen Automotive Group? Think of brands like:

- Seat and Volkswagen; Audi and VW; Audi and Porsche, Skoda and VW, Audi and Lamborghini…

Who do you think are the main competitors for Audi in the market and how do you think the brand copes with this competition?

You can see a table of different brands that are present in the market in appendix 3. Can you choose 3 brands from that table and place them on the following conceptual map, as you did before, apart from the ones shaded in blue (they are VAG brands, which you placed in a similar graph previously), according to the same 2 variables?



Section 5: Projective Technique

If Audi was a house what kind of house would it be?

If Mercedes/BMW was a house, what kind of house would it be?

DEMOGRAPHICS

Gender:

- ☐ Female
- ☐ Male

Nationality: _____________; Country of residence: ______________.

Age:

- ☐ 18-25 years old
- ☐ 26-35 years old
- ☐ 36-50 years old
- ☐ 51-60 years old
- ☐ 61 years old or above

Including yourself, how many people live in your household?: ______________________

Do you have children younger than 18 years old? How many?: ______________________

Education:

- ☐ Less than secondary education
- ☐ Secondary education
- ☐ Professional degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ PhD

What was your occupation before the Covid-19 pandemic?

- ☐ Full-time employment
- ☐ Top management
- ☐ Tertiary sector worker
- ☐ Skilled worker
- ☐ Unskilled worker
- ☐ Part-time employment
- ☐ Student
- ☐ Unemployed
- ☐ Retired

4. Interview Guide: Clients from other Competitor Premium Brands

Interview Guide – Clients from other Premium Competitor Brands

Good morning / afternoon / evening. My name is Tiago Fonseca and I am currently a Master's in Management student at Nova School of Business and Economics (Portugal). For my final Work Project, I am doing a thesis about the automotive industry.

For this purpose, I would like to interview you for approximately 30 minutes to 1 hour, by means of an in-depth interview, which means that I will ask you several questions, to which there are no right or wrong answers and you are free to say whatever comes to your mind on the subject. This is supposed to help the flow of the conversation, making it more spontaneous and truthful. For the purpose of analyzing our interviews later, I would like to record our conversation. It will remain anonymous.

Section 1:

Initial Question:

Can you please tell me what is your car's brand and how you came to purchase a premium vehicle? When was it and why did you do it?

What were the optional extras and/or attributes that you required that vehicle to have?

How well do you think that your car brand has fulfilled your expectations?

Section 2: Perceptions of innovation and technology

What is a premium automotive brand for you? How well does your car's brand integrate that definition?

Would you say that Audi also complies with those premium requisites?

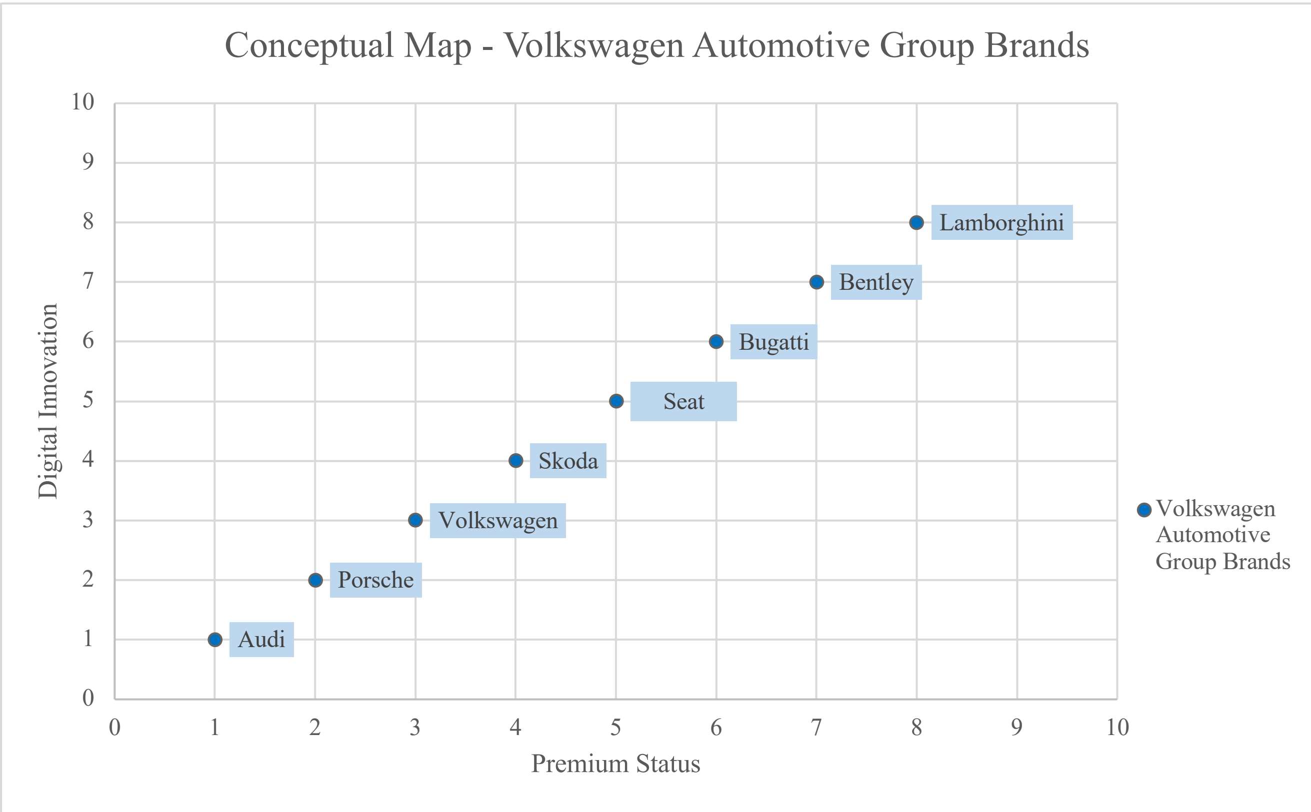
What is the relationship between digital innovation and the premium status of a brand, in your opinion?

Section 3: Audi and the VW group

Audi is part of a larger group – Volkswagen Automotive Group [VAG]. Here is a list of the other car brands that are also owned by VAG:

- Lamborghini
- Bentley
- Seat
- Skoda
- Volkswagen
- Audi
- Bugatti
- Porsche

1. How would you rank each of them, according to the following 2 variables?
   a. Premium Status, from 0 (belonging to the lower-end of the market) to 10 (belonging to the higher-end of the market)?
   b. Digital Innovation, from 0 (meaning that the brand is not innovative) to 10 (meaning that the brand if one of the most innovative in the market)?
2. Why did you rank them this way? Please verbalize your thoughts as you place each brand.



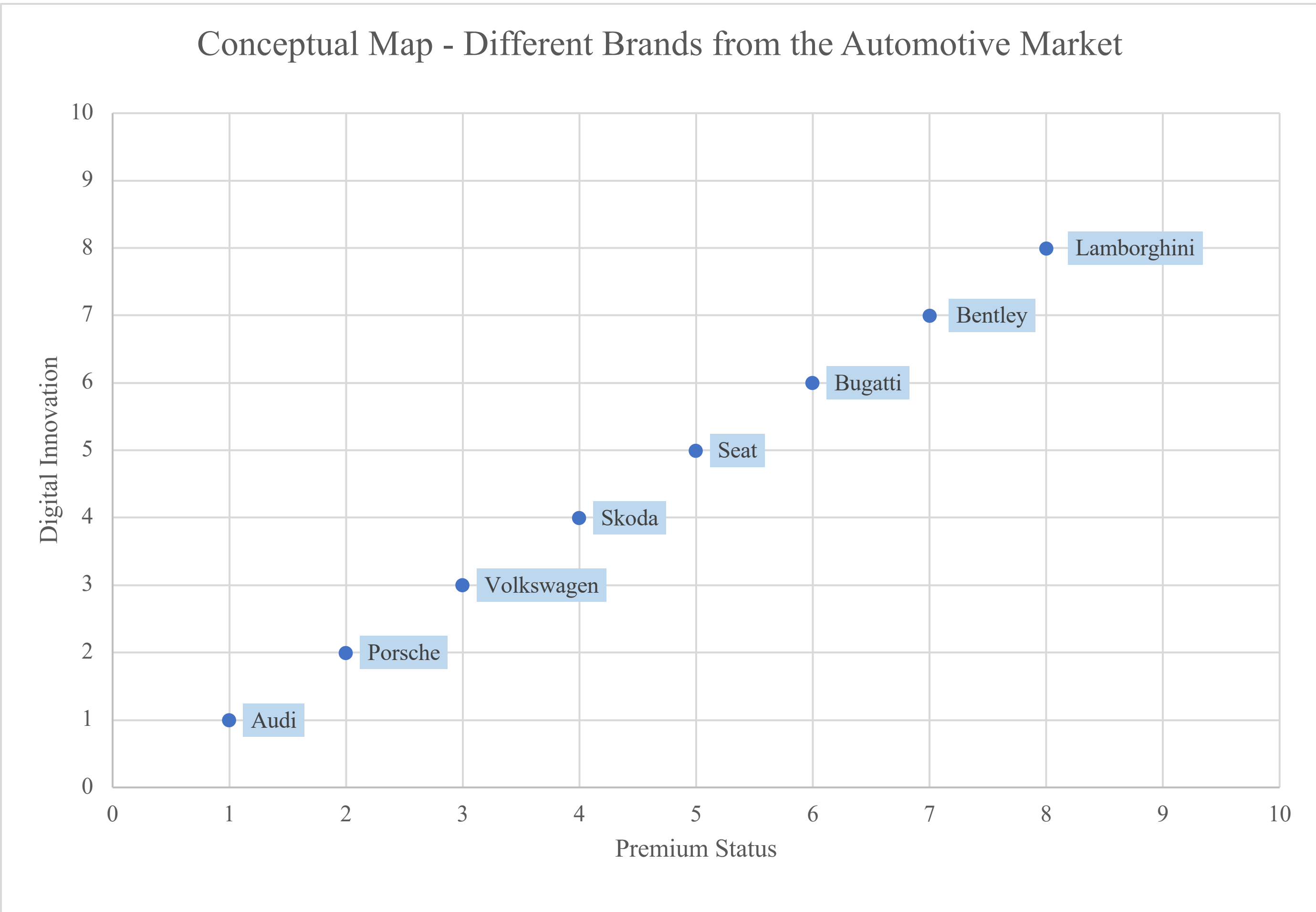
Section 4: from VAG to the overall market

In your opinion, what are the relationships between these brands like, within the Volkswagen Automotive Group? Think of brands like:

- Seat and Volkswagen; Audi and VW; Audi and Porsche, Skoda and VW, Audi and Lamborghini…

Who do you think are the main competitors for Audi in the market and how do you think the brand copes with this competition?

You can see a table of different brands that are present in the market in appendix 3. Can you choose 3 brands from that table and place them on the following conceptual map, as you did before, apart from the ones shaded in blue (they are VAG brands, which you placed in a similar graph previously), according to the same 2 variables?



Section 5: Projective Technique

If your car brand was a house, what kind of house would it be?

If Audi was a house what kind of house would it be?

If Mercedes/BMW was a house, what kind of house would it be?

DEMOGRAPHICS

Gender:

- ☐ Female
- ☐ Male

Nationality: _____________; Country of residence: ______________.

Age:

- ☐ 18-25 years old
- ☐ 26-35 years old
- ☐ 36-50 years old
- ☐ 51-60 years old
- ☐ 61 years old or above

Including yourself, how many people live in your household?: _____________________

Do you have children younger than 18 years old? How many?: _____________________

Education:

- ☐ Less than secondary education
- ☐ Secondary education
- ☐ Professional degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ PhD

What was your occupation before the Covid-19 pandemic?

- ☐ Full-time employment
- ☐ Top management

- ☐ Tertiary sector worker
- ☐ Skilled worker
- ☐ Unskilled worker
- ☐ Part-time employment
- ☐ Student
- ☐ Unemployed
- ☐ Retired

5. Interview Guide: European Audi Managers and Industry Experts

Interview Guide – European Audi Managers and Industry Experts

Good morning / afternoon / evening. My name is Tiago Fonseca and I am currently a Master's in Management student at Nova School of Business and Economics (Portugal). For my final Thesis about the premium automotive industry, I am studying the effects of sharing technology across an automotive group's brands. In this particular case, my objective is to assess Audi's competitiveness, its positioning compared to that of other of Volkswagen Automotive Group's [VAG] brands, and its positioning in the overall market.

For this purpose, I would like to interview you for approximately 30 minutes to 1 hour, by means of an in-depth interview, which means that I will ask you several questions, to which there are no right or wrong answers and you are free to say whatever comes to your mind on the subject. This is supposed to help the flow of the conversation, making it more spontaneous and truthful. For the purpose of analyzing our interviews later, I would like to record our conversation. It will remain anonymous.

Role within the company: ______________.

Section 1:

Initial Question:

What is a "premium" automotive brand for you, and how well does Audi fulfill those premium criteria?

What is the relationship that you think Audi clients have with the brand?

What do you think are the main attributes that define a premium vehicle nowadays? Do you think these attributes will be different in the future?

Section 2: Perceptions of Innovation and Technology

What role do you think technology plays in developing brand status? How is this relationship going to change in the future, in your opinion?

How will Advanced Driver Assistance Systems [ADAS] shape consumers' preferences in the future?

What is your opinion about Audi's potential of being successful in the new digital era of CASE [Connected, Autonomous, Shared, Electric] and ADAS trends?

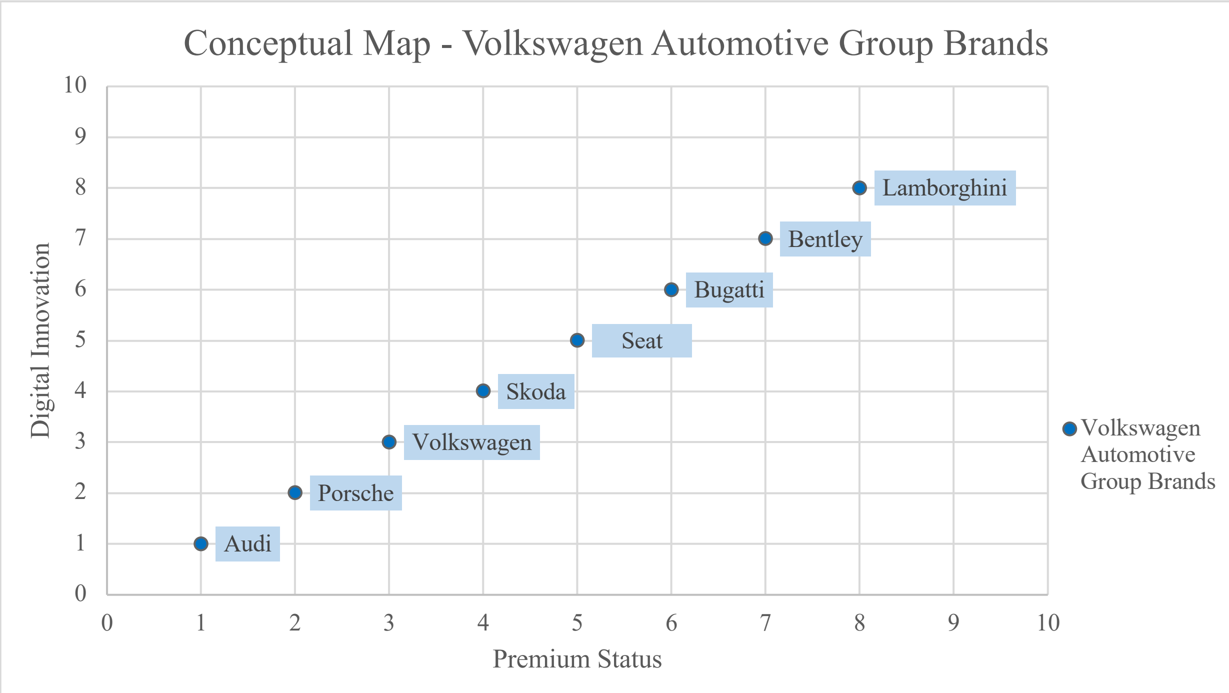
Section 3: Audi and the VW group

Audi is part of a larger group – Volkswagen Automotive Group [VAG]. Here is a list of the other car brands that are also owned by VAG:

- Lamborghini
- Bentley
- Seat
- Skoda
- Volkswagen
- Audi
- Bugatti
- Porsche

3. How would you rank each of them, according to the following 2 variables?
    a. Premium Status, from 0 (belonging to the lower-end of the market) to 10 (belonging to the higher-end of the market)?
    b. Digital Innovation, from 0 (meaning that the brand is not innovative) to 10 (meaning that the brand if one of the most innovative in the market)?

4. Why did you rank them this way? Please verbalize your thoughts as you place each brand.

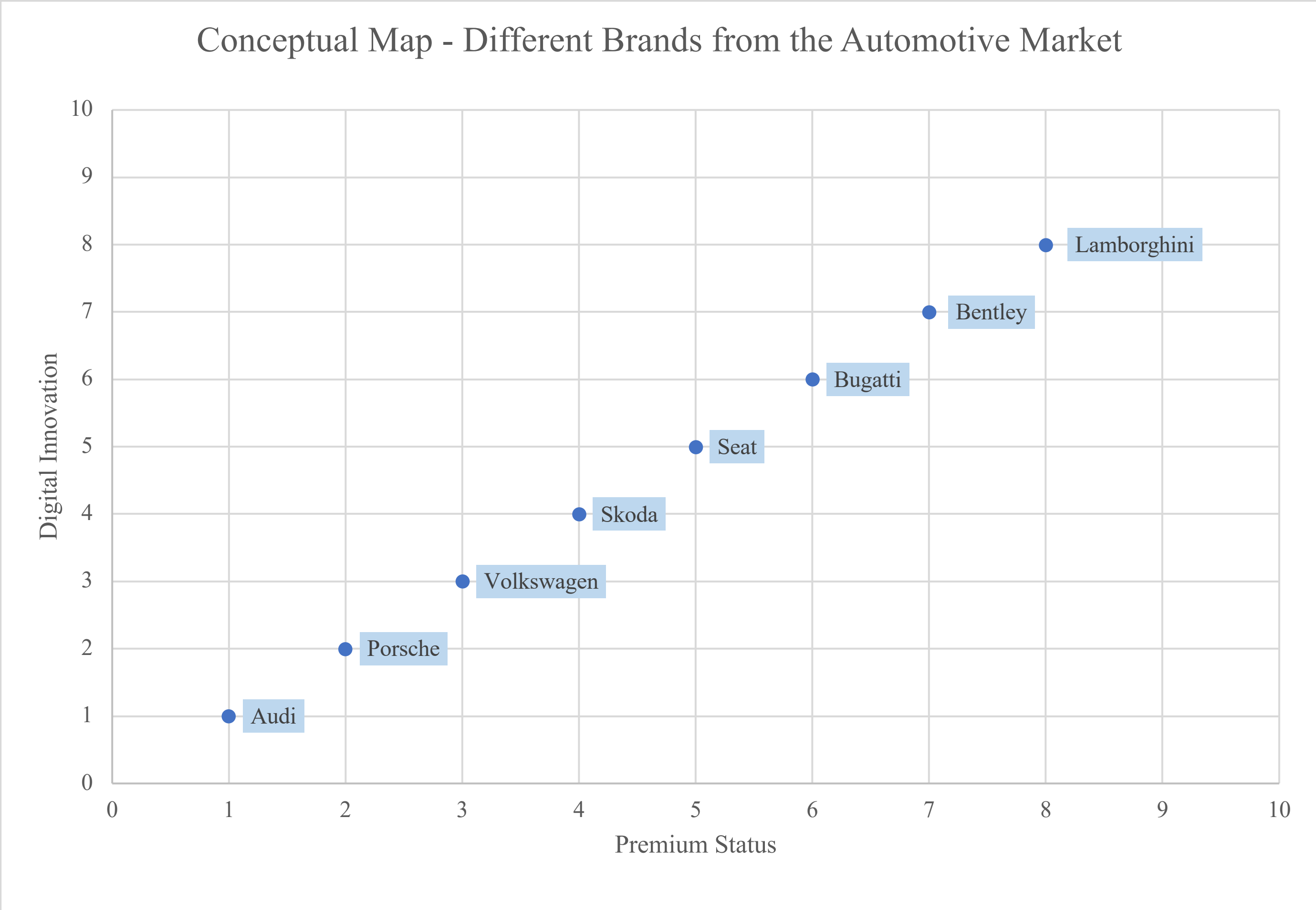


Section 4: from VAG to the overall market

In your opinion, what is the relationship between these brands within the Volkswagen Automotive Group?

- To which degree are the synergies that exist within the group explored?

You can see a table of different brands that are present in the market in appendix 3. Can you choose 3 brands from that table and place them on the following conceptual map, as you did before, apart from the ones shaded in blue (they are VAG brands, which you placed in a similar graph previously), according to the same 2 variables?



Who do you think are the main competitors for Audi in the market and how well do you think Audi is able to compete with its direct rivals (namely, BMW and Mercedes-Benz)?

Section 5: Projective Technique

If Audi was a house what kind of house would it be?

If Mercedes/BMW was a house, what kind of house would it be?

DEMOGRAPHICS

Gender:

- ☐ Female
- ☐ Male

Nationality: _____________; Country of residence: ______________.

Age:

- ☐ 18-25 years old
- ☐ 26-35 years old
- ☐ 36-50 years old
- ☐ 51-60 years old
- ☐ 61 years old or above

Education:

- ☐ Less than secondary education
- ☐ Secondary education
- ☐ Professional degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ PhD

What was your occupation before the Covid-19 pandemic?

- ☐ Full-time employment
- ☐ Top management
- ☐ Tertiary sector worker
- ☐ Skilled worker
- ☐ Unskilled worker
- ☐ Part-time employment
- ☐ Student
- ☐ Unemployed
- ☐ Retired

6. Aiding materials for interviews

Aid 1: list of attributes/features/optional extras

List of attributes/features:

- Brand
- Driving performance
- Widespread certified maintenance centers
- Interior design
- Exterior design
- Powertrain (BEV, PHEV, ICE)
- Available extras
  - GPS
  - Parking Sensors
  - Heated Seats
  - Heated steering wheel
  - Digital dashboard dials (digital cockpit)
  - Bluetooth connectivity
  - Apple CarPlay / Android Auto
  - Aesthetic Packs [M pack (BMW), AMG pack (Mercedes), GT Line (Renault, Peugeot), S line (Audi), …]
  - LED lights or Xenon Lights (as opposed to ordinary headlights)
  - Modern sweeping turn indicators
  - Large wheel rims (larger than 17 inches)
  - Automatic lights
  - Automatic windscreen wipers
  - Standard Cruise Control
  - Adaptive Cruise Control and lane keeping
  - Mild autopilot capabilities
  - Automatic emergency brakes
  - Automatic climate control with various zones
  - Self-parking
  - Memory-adjustable seats
- Fuel economy
- Range

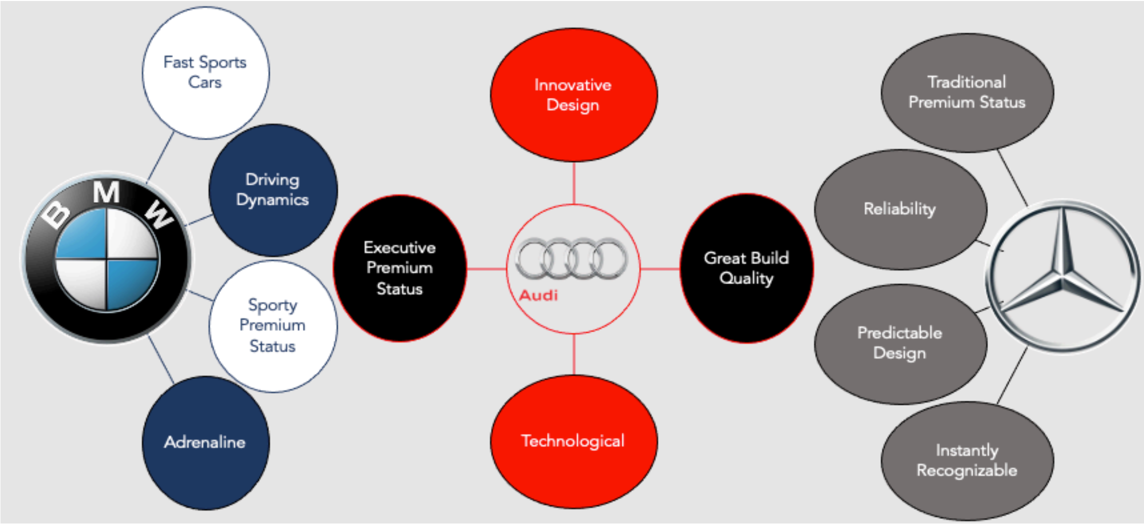
- Comfort

Aid 2: similar cars by different brands, all from VAG

Aid 3: some of the different brands in the market

☑	Brand	Logo	☑	Brand	Logo
☐	Porsche		☐	Range Rover	
☐	Volkswagen		☐	Alfa Romeo	
☐	Mercedes-Benz		☐	Mini	
☐	BMW		☐	Acura	
☐	Lexus		☐	DS Automobiles	
☐	Maserati		☐	Hyundai	
☐	Seat		☐	Toyota	
☐	Skoda		☐	Renault	
☐	Rolls-Royce		☐	Peugeot	
☐	Audi		☐	Kia Motors	
☐	Dacia		☐	Lamborghini	
☐	Opel/Vauxhall		☐	Bentley	
☐	Bugatti		☐	Ferrari	
☐	Jaguar		☐	Citroen	

7. Overall perceptions regarding the 3 main premium German brands, summarized.



- Author: Tiago Fonseca (Thesis Author), based on qualitative research carried out for the purpose of this thesis.

8. Current Relationship between Premium Status and Digital Innovation

Premium Status → Digital Innovation

- WP Author (Tiago Fonseca). Data Source: Qualitative Research carried out for the Work Project

9. Future Relationship between Premium Status and Digital Innovation

Premium Status ↔ Digital Innovation

- WP Author (Tiago Fonseca). Data Source: Qualitative Research carried out for the Work Project