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The Future of the Luxury Supercar Market in Light of Secular Trends

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Abstract

Sales of luxury supercars have been growing in recent years, becoming the most valued luxury sector globally while receiving little attention from academics. This dissertation analyzed the impact of changing consumer behavior of Generation Z and secular trends on this industry. Respectively, the paper anticipated the outlook of the supercar market and how manufacturers could adapt to trends such as generational transition, the sharing economy, sustainability, and deglobalization. The study combined qualitative and quantitative research methods. The review of literature analyzed key findings of scholars which were tested by conducting semi-structured interviews with industry experts and an online survey capturing the perspective of potential customers using the triangulation method. The key findings of this study revealed that the behavior of Gen Z is different from other cohorts, especially in their greater sustainability awareness when placing a high value on responsible manufacturing and supply chain processes, the application of non-harmful materials, and their willingness to use alternative fuels. Moreover, Gen Zers prioritize access to supercars rather than their direct ownership while being receptive to the concept of sharing economy. The study further highlighted that the luxury car industry is resilient to deglobalization effects and suggested several attributes for manufacturers to incorporate into their strategy to remain competitive.

Key words:

Luxury supercars, Generation Z, Sharing economy, Sustainability, Deglobalization, Industry change

Title:

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Sumário

As vendas de supercarros de luxo têm crescido nos últimos anos, tornando-se o setor de luxo mais valorizado globalmente, recebendo pouca atenção dos acadêmicos. Esta dissertação analisou o impacto da mudança de comportamento do consumidor da Geração Z e as tendências seculares nesta indústria. Respetivamente, o estudo antecipou os aspetos do mercado de supercarros e como os fabricantes poderiam adaptar-se a tendências como transição geracional, economia compartilhada, sustentabilidade e desglobalização. A análise combinou métodos de pesquisa qualitativos e quantitativos. A revisão da literatura analisou as principais descobertas que foram testadas por meio de entrevistas semiestruturadas com especialistas do setor e um questionário online capturando a perspectiva de potenciais clientes usando o método de triangulação. As principais descobertas deste estudo revelaram que o comportamento da Geração Z é diferente de outras coortes, especialmente na sua maior consciência de sustentabilidade ao atribuir um alto valor à fabricação responsável e aos processos da cadeia de fornecimento, à aplicação de materiais não prejudiciais e à sua disposição para usar combustíveis alternativos. Além disso, a Geração Z prioriza o acesso a supercarros em vez de posse direta, sendo recetivos ao conceito de economia compartilhada. O estudo destacou ainda que a indústria de carros de luxo é resiliente aos efeitos da desglobalização e sugeriu vários atributos para os fabricantes incorporarem na sua estratégia para se manterem competitivos.

Palavras-chave:

Supercarros de luxo, Geração Z, Economia Compartilhada, Sustentabilidade, Desglobalização, Mudança industrial

Título:

O Futuro do Mercado de Supercarros de Luxo à Luz de Tendências Seculares

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List of abbreviations

CA	Competitive Advantage
CRM	Customer Relationship Management
DC	Dynamic Capabilities
DI	Disruptive Innovation
EBIT	Earnings Before Interest and Taxes
EV	Electric Vehicle
ICE	Internal Combustion Engine
MSRP	Manufacturer's Suggested Retail Price
P/E	Price/Earnings
PPU	Pay Per Use
R&D	Research & Development
SCA	Sustained Competitive Advantage
SUV	Sport Utility Vehicle
UHNWI	Ultra-High-Net-Worth Individual
WTP	Willingness To Pay

1 Introduction

People have been fascinated with luxury supercars from the early 1900s, ever since the Bugatti Type 35 was released in 1924. Luxury supercars have become increasingly popular and sought after, with new models released every year. No matter the age or gender, individuals have been attracted to their beautiful design lines, strong engines, and rare materials. Dreams on wheels not only provide a supreme driving experience but can also represent social status. A beautiful car is a synonym for power, success, and wealth. Although several researchers have analyzed the luxury supercar market, it has received much less attention than electric vehicles (EVs). Given that it is the most profitable segment within the automotive industry (Guan et al., 2022), the future of this market is an interesting area for study. On average, luxury car makers' EBIT increased from 20% to 35% compared to the mass car market which stagnated at 8% in 2016-2021 (2022). Further, data suggest an overall trend towards increases in luxury purchases, showing growing demand that further bolsters the topic's relevance.

It is also reasonable to argue that the luxury supercar market will significantly change in the future from what is known today. Four secular trends will likely cause this. These are: Generation Z tendency not to want to own anything. Gen Z's luxury consumption is growing annually, from 4% of the global luxury market in 2019 to 10-15% in 2025 (BCG x Altgamma, 2021). On the other hand, there is a transition from mass consumption and ownership associated with older generations towards Gen Z's lower desires about "owning stuff". Gen Zers will become increasingly important for businesses as this demographic is on track to outnumber every other (Wood, 2018). Therefore, this Gen Zers are key for understanding future consumption trends.

Secondly, there is a push to make ridesharing or carsharing the new normal. The sharing economy entails using products without owning them (Puschmann & Alt, 2016). More importantly, sharing mobility services has become a trend promoted by ride-hailing apps like Uber, which has disrupted the traditional taxi market, or car rental services with pay-per-use (PPU) or subscription business models like Share Now (2016). Both of these also challenge traditional car ownership and represent what Porter terms a threat of substitution (Porter, 1979). Hence, one can assert that there is a rising threat or opportunity for the luxury supercar market that needs to be examined.

The third trend is the increased importance of sustainability. There are differing opinions on the relationship between luxury and sustainability. On one side, the ten-fifty notion posits that the wealthiest top 10% account for almost 50 % of the entire world's emissions (Piketty & Chancel, 2015). Alternatively, Sun et al. (2021) suggest that luxury products tend to be timeless and more durable, resulting in lower mass consumption. Even though luxury supercars are produced annually in much lower numbers compared to the mass market, one may argue that their production requires rarer materials and more unique processes.

Academics continue to debate whether there is a positive correlation between luxury and sustainability, hence a gap in the research exists. Considering this, increasing environmental requirements in the automotive industry are another significant factor shaping the future of the luxury automotive segment.

Additionally, deglobalization is another emerging secular trend. Its importance expanded after the pandemic, and the trend has been to reduce economic integration across the global supply chain (Lamba, 2021). An important catalyst was the world's chip crisis that negatively impacted production across industries (2021). This crisis particularly affected the automotive sector, and geopolitical issues and trade frictions might prolong these shortages in the future (Wu et al., 2021). The authors also note that although globalization positively affected cost efficiencies in the automobile industry, the chip shortage was an unanticipated hidden risk, especially by European carmakers (Wu et al., 2021). Since these events recently occurred, it remains to be seen how this will shape the future luxury automotive market.

As a global standard of car classification does not exist, there is a need to frame the category. Classifications across some categories overlap. Euro car market categories relevant for this research are the following: Segment F (Luxury), Segment J (SUV), and Segment S (Sports). The luxury car segment has also been defined in terms of specific criteria, namely sleek design, ultimate engineering, exclusivity, extended differentiation, and image (Nunes et al., 2016). While it is clear that luxury cars or supercars exist, the segment still needs to be more clearly defined.

Traditionally, a luxury sector combines status signaling, symbolic value, and the meanings it evokes (Turunen, 2018). The concept of “Veblen goods” describes luxury items having higher demand when their prices increase, due to the perception that this makes them more exclusive and desirable. Veblen (1899) further introduced the idea of conspicuous consumption to the

economic lexicon whereby people buy items to show off their wealth and status rather than merely for practical use or enjoyment. Mortelmans (2005) also notes that luxury is a form of symbolic capital used as status-seeking behavior to differentiate oneself from others and to demonstrate wealth and power. Status signaling is particularly relevant for luxury cars when people associate financial success with driving a nice car without further information about the driver (2018). Some academics argue that there is a need to broaden the definition of luxury. For instance, Ko et al. (2019) state that luxury is complex and difficult to define as it implicates a combination of tangible and intangible elements, such as quality, rarity, exclusivity, and status. The authors also suggest that luxury is a subjective concept, experienced differently by different people. Thus, several theories describing the drivers of luxury exist. In summary, studying the specific drivers of luxury car consumption not only gives a better understanding of its importance and relevance to various fields (like strategy and marketing) but also describes what motivates Gen Z, the most significant future consumption demographic.

Overall, researchers have yet to treat the luxury supercar market in much detail. It is a novel topic both in and of itself and when coupled with Gen Zers, a cohort in early adulthood, or still in their childhood, presently lacking the resources for luxury consumption. Although there is scholarship about the luxury market, supercars, Gen Z, carsharing, sustainability, and deglobalization, these vectors have not been connected to deliver a larger picture of the supercar world in transition which we presently face.

The topic of the luxury supercar sector in the future is relevant for managers across companies in the automotive universe as well as for asset management and the luxury sector *writ large*. The effects and impact of the four identified trends on luxury supercars remain relatively unresearched. Lastly, this work's practical relevance lies in helping managers make informed decisions about emerging trends that could critically influence organizational competitiveness, as the luxury car market is a dynamically evolving sector (Warren, 2014). Thus, the following research questions will be examined:

RQ: How will Gen Zers influence the luxury supercar market in light of changing consumer preferences and emerging trends?

2 Literature review

2.1 Luxury

Luxury is not just selling fashion or cars; it is a culture necessary for conducting business and serving customers correctly (Kapferer & Bastien, 2009). Luxury brands carefully develop and maintain their authenticity and strong identity (Chevalier & Mazzalovo (2008). A critical aspect associated with the concept of luxury is the meanings it creates and how customers interpret them (Turunen, 2018). Today, luxury is affordable to the masses, but the brands' messages and identities help customers differentiate themselves (Han et al., 2010).

Chevalier and Mazzalovo (2008) suggest three types of luxury consumption exist. First, an intermediate luxury available to the masses. Second, ostentatious consumption exemplified by the extremely loud, bright red Ferrari. Lastly, truly authentic items like Patek Philippe with hidden messages (2008). Kapferer and Bastien (2009) argue that the increase in luxury consumption is mainly caused by an increase in spending power, both in terms of money and time. Additionally, academics continue to debate why people desire luxury products (2008). A partial explanation can be a combination of uniqueness, high prices, and exclusivity; however, more is needed to provide a complete answer.

2.2 Definition

Heine (2012) notes that luxury may be defined as objects admired above basic daily needs and ordinary subjects. Luxury is a way of escaping from everyday life by consuming higher quality items (Chevalier & Mazzalovo, 2008). Further, luxury products possess more symbolic characteristics, such as beauty, extraordinariness, and scarcity (2012). Luxury is relative, not a specific category (Turunen, 2018). That is in line with Kapferer and Bastien (2009), who suggest humans subjectively assess what is luxurious for them or not. Moreover, De Barnier et al. (2012) state that this subjectivity relates to scarcity. They assume that if a brand despite broad popularity has an image of exclusivity, customers find the brand luxurious. Similarly, if the product is easily accessible, customers will denigrate its value (Lojacono & Pan, 2021). Turunen (2018) discusses that it does not matter whether the scarcity is authentic or artificial, it helps to back up superior prices and prestige. However, Kapferer (2008) concludes that rarity alone is not sufficient for success; brands must be desirable.

Furthermore, luxury is a dynamic concept which continuously evolves, as what was considered luxurious in the past may no longer be that way in the future. (Chevalier & Mazzalovo, 2008). Traditionally associated attributes are aesthetics, quality, timelessness, heritage, expensiveness, delicacy, and charm (2018). De Barnier et al. (2012, p. 12). aligned a hybrid scale of “elitism, distinction, unicity, reputation, creativity, power, hedonism, refinement.” Nevertheless, researchers do not have a widely accepted definition (Ko et al., 2019). As these authors examined other definitions, they offer their own version wherein luxury products or services must be of superior quality, authentic, prestigious, worth the price, and inspiring. (2019).

2.2.1 Conspicuous consumption

Veblen (1899), in his study of the leisure class, introduced the idea of conspicuous consumption, wherein people waste their resources (money and time) to show off their wealth and status. Eckhardt et al. (2015) define conspicuous luxury brands as showy and loud with big and bright logos. Truong et al. (2008) differentiate between the rich, who consume luxury to maintain their elite status, and the modest, who aim for the sole purpose of gaining that status conspicuously. The two reasons for status-seeking consumption exist: first, an internal desire to improve self-regard and dignity, and second, a focus on social image and mien (2008). In addition, Han et al. (2010) explored that brands charge more for less showy products. For instance, Mercedes places larger logos on lower-price models and vice versa, implying that different consumers have varying interests in brand visibility. Besides, conspicuous consumption is particularly relevant for men regarding luxury sports cars, as they assume that a beautiful automobile will provide them with higher social status (Hennighausen et al. 2016). However, Wang and Griskevicius (2014) argue that the prime reason for males' conspicuous consumption is to attract women. Whereas for women, the reason is to use products to discourage other females from taking actions on their partners, as this shows a devoted relationship (2014). Alternatively, there has been a rising trend of inconspicuous luxury consumption since the relationship between brands and conspicuous luxury has diminished (Eckhardt et al., 2015). Moreover, there has been a growing prominence of brands that are less easily recognized. Furthermore, inconspicuous consumption lowers levels of envy (2015).

2.2.2 Self-concept theory

Ko et al. (2019) point out that people purchase luxury items to enhance their self-respect and self-esteem. Wiedemann et al. (2009) explore how a group of customers view luxury goods as a way to improve their quality of life and happiness. Furthermore, a self-concept is viewed as a powerful motivator resulting in luxury purchases (Gil et al., 2012), and different self-perceptions lead to varying brand preferences (Shukla & Purani, 2012). However, Shukla and Purani (2012) argue that customers' primary driver is quality and utility rather than pleasure. Truong and McColl (2011) state that those who buy luxury for personal motives are influenced by personal self-enjoyment and quality. Furthermore, there is a correlation between luxurious self-gratification and increased self-esteem, highlighting that higher self-esteem is not driven by conspicuous consumption (2011). Additionally, luxury goods and services help customers project and become who they want to be (2019).

2.2.3 A desire for uniqueness

The desire to be unique and different is another major driving force behind luxury consumption. Luxury provides an excellent opportunity for customers to stand out, due to its high cost and limited availability (Bian & Forsythe, 2012). This idea aligns with luxury being rare and exclusive as a great source of personal differentiation from crowds (Turunen, 2018). Individualization and personalization can further support uniqueness (Heine, 2012). However, if the product or brand becomes too familiar, customers lose interest in them (2018), and the luxurious image is gone (Wiedmann et al., 2009). Therefore, luxury products should not be widely accessible to everyone to avoid losing superior status (Wiedmann et al., 2007). Nevertheless, the aspiration to be unique varies across continents as it is one of the critical drivers for the U.S. and Europe but not particularly relevant for Asia (Lojacono & Pan, 2021). Contrarily, the optimum scenario for luxury companies is a balance between bandwagon consumption - where demand grows with a product's popularity - and the snob effect - where a specific group of customers stops buying if the product is too standard (Kastanakis & Balabanis, 2014). However, the boundaries between bandwagonism and snobbism are blurred (Turunen, 2018). Although, Kapferer and Valette-Florence (2016) object that, in today's luxury world, exclusivity is only virtual.

2.2.4 Social comparison theory

According to social comparison theory, buyers acquire luxury brands to mimic the behaviors of reference groups to become part of them. The study of Zhang and Kim (2013) shows the

positive effect of social comparison on luxury consumption, for example, what celebrities, successful people, or friends wear and buy. One's future success is connected to luxury brand purchases, as people imagine themselves with top watches or cars and associate them with high earnings (Mandel et al., 2006). Additionally, YouTube vloggers have a substantial impact on luxury purchases. If a luxury product receives a positive review from a vlogger, the customer is more likely to give a positive evaluation and buy, especially for small brands (Lee & Watkins, 2016). All in all, Chinese luxury customers are more driven by social group memberships than those in the U.S., who are driven by a need for uniqueness (Bian & Forsythe, 2012).

2.3 Global Luxury Market

The global luxury market has experienced constant growth over the past 20 years (Turunen, 2018), with projections to reach €1.384 trillion in 2022 (D'Arpizio et al., 2023). Moreover, the three youngest generations (Y, Z and Alpha) are expected to account for 80% of the global luxury market by 2030 (2023). BCG x Altagamma (2021) project that Gen Y and Gen Z will make up 60% of the luxury market by 2025. Following the trend of increasing luxury consumption, the never-before-reached limit of €1 trillion sales was exceeded in 2015, driven by the luxury cars segment (D'Arpizio et al., 2015). Like many other industries, the luxury market was strongly impacted by the Covid-19 pandemic, dropping by 20-22% in 2020 (D'Arpizio et al., 2021). The personal luxury market is highly concentrated, as the TOP 5 largest companies account for more than 40% of the Top 100 most prominent luxury brands' annual sales (Deloitte, 2022). The segment has shown flexibility by erasing the pandemic-low revenues (Deloitte, 2022). Since the luxury market is so vast, Turunen questions whether the market is not too democratized and accessible to everyone (2018).

2.3.1 Global Car Market

The pandemic significantly impacted the global car market, with a drop of 11.1 million units in 2020 and a slow recovery in 2021 and 2022 (Statista Research Development, 2023). The latest estimates for 2023 are around 70 million cars, still significantly lower than pre-Covid sales (2023). Additionally, the Russian-Ukrainian war, semiconductor disruptions, and supply chain delays have exacerbated the problematic situation in the automotive industry (2023). Furthermore, new legal requirements, such as the ban on combustion engines of new cars sold in Europe by 2035, have drastically changed the nature of the industry (European Parliament,

2023). Kapferer and Bastien (2009) distinguish between the luxury and upper-premium segments, where the latter is determined by clients' needs, such as the latest infotainment or extra comfort features. Whereas luxury cars are a source of push innovation based on designer and engineering inspirations, not clients' orders. Furthermore, luxury sports cars are not flawless, often missing basic features like A/C or navigation (2009). Another criterion to distinguish is that upper-scale cars have an excellent price/performance ratio which is qualitatively legitimate compared to the emotional value regarding luxury cars (2009).

2.3.2 Luxury Car Market

According to D'Arpizio et al. (2023), luxury car sales account for almost 41% of the worldwide €1.384 trillion luxury market. The luxury car segment has been among the best performing throughout the years. Although Covid-19 significantly impacted the luxury world, the car segment proved its resilience with the lowest decrease among all luxury sectors (D'Arpizio et al., 2021). On the other hand, luxury cars have a challenging future ahead, as they are among the three slowest growing luxury sectors in 2023 (2023). However, the growth is strong when compared to the standard automobile market. The dominance of the luxury segment in terms of growth and profitability is evident (Guan et al., 2022). There is a difference in margins in favor of luxury cars compared to the standard car market (2022). Data from stock markets show higher trust of investors in luxury automobile manufacturers than regular ones. For instance, Ferrari, a brand that delivered 11,155 cars in 2021, has a Price/Earnings (P/E) ratio of 50.37 with a market cap of €49.72 billion (Financial Times, 2023a). Compared to Stellantis, the world's third largest car manufacturer and conglomerate of 14 brands, which has a 3.35 P/E ratio with a market cap of \$56.77 billion (Financial Times, 2023b).

Besides, large automakers merge and acquire luxury brands to fight increasing research & development (R&D) costs and legal or environmental requirements (Kapferer & Bastien, 2009). For example, BMW acquired Rolls Royce; or Volkswagen owning Bugatti, Lamborghini, Porsche, and Audi (2009). On the other hand, several independent luxury car makers exist, especially among sportscars like Koenigsegg, Pagani, or McLaren. Additionally, there is a difference in production strategy when a luxury brand like Ferrari manufactures just enough cars to maintain rarity (Lojacono & Pan, 2021). This exclusivity tactic is based on the sophisticated customer relationship management (CRM) between

dealerships and loyal clients, where a customer desires to be invited to purchase a limited edition (2021).

2.4 Generation Z

Generation Z, sometimes referred to as the iGeneration, is the first generation to be competent in both the virtual and real worlds, quickly seeking information online or sharing it with others (Dolot, 2018). However, the definition in terms of time boundaries of Generation Z differs among academics (Cameron & Pagnattaro, 2017) and there is not an officially accepted one (Dimock, 2019). For example, Cilliers (2017) refers to this connected generation of digital natives as people born between 1995 and the early 2010s. On the other hand, Dimock (2019) suggests Gen Zers were born between 1997 and 2012, however some others argue that this generation includes people born in 2000 and later (Berkup, 2014; Ozkan & Solmaz, 2015; Shatto & Erwin, 2017). Furthermore, Taylor and Keeter (2010) note that creating exact chronological boundaries between generations may be misleading, as one-year difference between two generations does not have a significant impact on their behavior. Gen Z is the world's most populated generation (Wood, 2018), who emphasize their uniqueness and avoid being labeled, while companies must provide personalized solutions (Francis & Hoefel, 2018). Furthermore, Gen Zers do not need to own things, as having unlimited access is enough. They are aware of ethical and sustainable consumption issues and aim to differentiate themselves (Francis & Hoefel, 2018). This generation presents a challenge for businesses, as their consumption habits differ from those of previous generations (Priporas et al., 2017).

2.5 Sharing economy

Customers' understanding of purchasing and consuming goods has changed since owning a product is no longer the most desired option (Matzler et al., 2014). This evolution is fueled by immediate access to digital technology (Sutherland & Jarrahi, 2018). The key to making sharing a norm is to raise benefits such as cars' functions and available locations and decrease costs by emphasizing that sharing is not worse than owning a car (Lamberton & Rose, 2012). Besides, the sharing economy disrupts several industries, including the automotive industry. It is often wrongly believed that the biggest threat to sharing businesses is technology, but the major one is regulators (Cannon & Summer, 2014). Although ridesharing is cost-efficient and

environmentally friendlier than other options, it is still only present in key destinations and not widely adopted across the globe (Teubner & Flath, 2015).

2.6 Sustainability

Sustainability is extremely relevant for the automotive market because it is causing one of the greatest transitions ever seen in the industry. The movement towards EVs is undisputed, with projections that 60% of all automobiles sold by 2030 will be EVs (IEA, 2022). The European car market is one of the toughest for carmakers, as sales of new internal combustion engines (ICE) seem to be forbidden from 2035 onwards (European Parliament, 2023). However, Qiao et al. (2017) point out that the greenhouse emissions of producing EVs are twice those of ICEs. The situation is complicated, as, for example, the Italian government is lobbying for Ferrari and Lamborghini to be exempted from this ban (Albanese et al., 2021). Luxury cars have enormous engines, but they are driven for fewer kilometers per year and produced in low volumes, and thus may emit less total CO₂ emissions (Nunes et al., 2016).

2.7 Deglobalization

Globalization brings several benefits, particularly a better standard of living with higher salaries from export-related sectors, but it also enhances many risks, such as national energy security or global players forcing out small local businesses (Stiglitz, 2017). The tendency towards a deglobalized world emerged after the 2008 financial crisis, with significant actions happening during Brexit and Trump's presidency (Chaudhary & Sharma, 2021). Furthermore, the pandemic quickened the process while the world's trade steeply declined (2021). The global trade volume collapsed to numbers more than a decade old, with disrupted supply chains (Altman, 2020). This disturbance of the supply chain led to bottlenecks in the automobile industry, where a lack of chips was a major issue (Wu et al., 2021). Additionally, Stiglitz (2017) argues that deglobalization will cause an economic slowdown with a negative impact on employment. Hillebrand (2010) shows that deglobalization will result in reduced fairness, political uncertainty, and lower economic growth.

2.8 Management Theory

2.8.1 Competitiveness

According to Porter (1991, pp.99-100), a company's success depends on "the attractiveness of the industry and its relative position in that industry". Three ways of achieving competitive advantage (CA) exist: cost leadership, differentiation, and focus strategies (Porter, 1997). The essence lies in the company's ability to foresee the obsolescence of the original CA and start creating a new one (Christensen, 2001). However, it is harder to create strategic dominance within the current fierce environment (Barreto, 2010).

The concept of dynamic capabilities (DC) explains how companies reach sustained competitive advantage (SCA) in changing environments (Barreto, 2010; Eisenhardt & Martin, 2000). Since having competencies and assets relevant only to existing markets is no longer enough, businesses must capture emerging trends and create adequate capabilities to remain competitive (O'Reilly III. & Tushman, 2008). DCs are defined as modifiable skills, assets, and processes exploited by top managers, allowing the company to adapt to new trends and opportunities (Teece, 2007). O'Reilly III. and Tushman (2008) emphasize that sustainable prosperity of a firm is achieved through applying an ambidextrous perspective that includes both disruptive and established approaches. It is of particular importance for senior managers to be able to recognize new trends through routines and resources and act on them (2008).

Furthermore, Kim and Mauborgne came up with the blue ocean strategy, defined as no competition markets with significant growth potential (Barney & Hesterly, 2015). The creation of blue oceans is further enhanced by technological development and globalization (Kim & Mauborgne, 2005). They further point out that strategic moves are the only key variables that determine a company's success in the future (2005).

2.8.2 Disruptive innovation

Among the most frequent events in the business world is the continuous failure of market leaders to retain their position when disruptions arise (Bower & Christensen, 1995). Market leaders should focus their R&D on the next generation needs of their customers, but they only focus on sustaining their position through current customers' needs (1995). Christensen (1997) categorized innovation into two types: sustaining innovation involving the enhancement of existing products, and disruptive innovation (DI) that introduces new business models. The characteristics of DI often evolve over time as R&D expenditure increases, product/service features improve, and the majority of customers adapt (1997).

However, not all industry breakthroughs are disruptions, as this requires an insignificantly resourceful business to successfully confront established incumbents (Christensen et al., 2015). They further note that, for example, Uber is not a proper disruptor but only a provider of a more convenient solution according to the theory (2015). However, Markides (2006) states that there is still a lack of a generally accepted definition of DI and academics should differentiate between DI and disruptive business models. These business model innovations deliver financial benefits, attract new consumers, and redesign the service or product (2006). McKinsey's study predicts that the automotive industry will experience more disruption by 2023 compared to the previous 20 years, with dominant market players being unprepared for the change (2018).

2.8.3 Willingness to Pay

Willingness to Pay (WTP) refers to the amount of money that a person would spend for a particular product or service (Shogren et al., 1994). However, businesses tend to fail to identify customers' WTP and, therefore, create wrong strategies resulting in lower profitability (Breidert et al., 2006). Firms' "sales or marketing managers serve as experts in projecting customers' WTP" because they possess knowledge of market conditions, emerging trends, or competitiveness (2006, p.13). However, this raises the question of whether these experts can understand the purchase intentions of sometimes twice-younger generations with different habits. Homburg et al. (2005) finds that a high level of customer satisfaction correlates with high WTP. This is especially relevant for customized products, where the highest correlation is found (2005). Alternatively, in some cases, the name-your-own-price method might be sufficient, as it immediately shows customers' WTP. However, customers tend to mention lower prices to get a bargain (2006). Furthermore, pricing strategies like PPU or subscription models can be used. Iyengar et al. (2011) show that PPU results in higher customer retention due to the instant gratification associated with payment. A study by McKinsey (2018) shows that PPU and subscriptions will be among the most frequent business models.

2.8.4 How Industries Change

McGahan (2004) defines four kinds of industrial change: radical, progressive, creative, and intermediating. According to Gersch and Goeke (2007), industrial change means successfully changing pertinent market elements. Moreover, the incumbents are usually responsible for

changes in processes and products (Nadkarni & Narayanan (2007), which makes other industry participants react and thus speed up the transformation (Gersch & Goeke, 2007). However, the essence lies in knowing the new alterations within an industry, which can directly affect a company's profitability and survival (McGahan, 2000). Furthermore, there is a need to differentiate between two industry threats: obsolescence of core activities and of core assets (2004).

McGahan (2004) notes that progressive and intermediating changes are the most frequently present. The first is defined as innovation that happens within existing boundaries of the business over time, and the latter is where the most frequent kind of threat is subject to core activities, providing an example of car dealerships (2004). All in all, it is not easy to identify which of the four changes occurs in an industry (2004) as it is hard to set boundaries between them (McGahan, 2000). However, the critical point is in forecasting future emerging trends (2000), which is supported by Gersch and Goeke (2007) proposing that businesses need to anticipate future market requirements.

3 Methodology

This section explains the methodology used in this study including research design and data collection.

RQ: How will Gen Zers influence the luxury supercar market in light of changing consumer preferences and emerging trends?

3.1 Research design

The methodology consisted of primary and secondary data collection and analysis utilizing both quantitative and qualitative methods. The key purpose of using secondary data was to gather a comprehensive perception of the market and the industry, while primary data were used to support or reject these findings. More specifically, an online survey was conducted to analyze changing preferences of Generation Z consumers, the causal independent variable, in light of emerging trends regarding consumption of luxury supercars. The gathered data from the survey was analyzed using descriptive statistics, correlation tests, regressions, etc. Semi-structured interviews (SSIs) were used to gather industry experts' opinions on the future of the

market, considering Gen Z's tendency to not own stuff, sustainability, carsharing, and deglobalization.

3.2 Data collection

3.2.1 Primary data collection

This study undertook SSIs with industry experts. Firstly, interviews provide researchers with qualitative results of the examined area (Rowley, 2012). Furthermore, SSIs deliver “subjective responses from persons regarding a particular situation or phenomenon” (McIntosh & Morse, 2015, p. 1). SSIs provide an opportunity for not only following a list of prepared questions but also to further investigate responses as the conversation evolves. (Cachia & Millward, 2011). The use of technology to conduct interviews online is more logistically convenient for both sides rather than relying only on face-to-face interviews (2011). Rowley (2012, p. 262) suggests “six to 12 well-chosen and well-phrased questions” including minimum two sub questions per each to competently investigate main topics.

The study conducted 8 SSIs in accordance with Rowley’s recommendation. The expert interviews analyzed the research question through answering open ended questions. This type of questions enabled experts to provide more detailed and richer insights and therefore, examine more thoroughly important trends (Reja et al., 2003).

Table 1: Overview of interviewed industry experts

Interview ID	Platform	Date	Time	Duration	Expert information
Expert 1	Zoom	6 th April	8:00	62 minutes	Editor-in-chief of a car magazine. Member of the Car of the Year (COTY) Jury
Expert 2	Zoom	7 th April	9:00	68 minutes	Former BMW Marketing manager, Rolls Royce Country Brand Manager
Expert 3	Teams	12 th April	12:00	55 minutes	Bentley Country Brand Manager & Sales manager at Lamborghini
Expert 4	WhatsApp	13 th April	10:00	40 minutes	Ex-professional car racer and sales director of an independent supercar dealership
Expert 5	Zoom	21 st April	15:00	75 minutes	Car enthusiast, collector and TikTok influencer with expertise in luxury automobiles, car collections and car investments
Expert 6	Zoom	21 st April	17:00	35 minutes	Founding partner of luxury consultancy, Academic director of Luxury Brand Management course
Expert 7	Google Meet	25 th April	13:30	47 minutes	Luxury brand consultant with expertise in automotive industry
Expert 8	Phone call	26 th April	7:00	44 minutes	IT and innovation expert in the automotive industry, with experience at Porsche Holding

This research also entailed an online survey which resulted in primary data collection with the aim to capture trends (Rowley, 2012) regarding the luxury supercar market future consumption. As online surveys present an advantage of quickly accessing respondents, there is an opportunity to explore individuals with same interests and attitudes (Wright, 2005). In addition, Newcomer and Triplett (2010) state that web surveys are useful for scaling the sample while keeping costs low. Furthermore, an attention check question was present in the survey allowing the elimination of non-attentive participants to protect validity of the results (Gummer et al., 2018). All in all, data were collected from 147 respondents, however nine respondents did not pass the attention check question and therefore, their answers were excluded. The first part of the questionnaire asked about the overall opinion and interest in luxury supercar market, followed by questions about the impact of emerging trends on respondents' perception of the market. The last part of the survey asked about demographics. The list containing all questions can be found in Appendix A.

3.2.2 Secondary data collection

Secondary data helped to develop a comprehensive understanding of the luxury supercar industry and the market, which also served as a basis for the primary data analysis. The study used combination of A-Grade journals, academic books and reports created by renowned institutions.

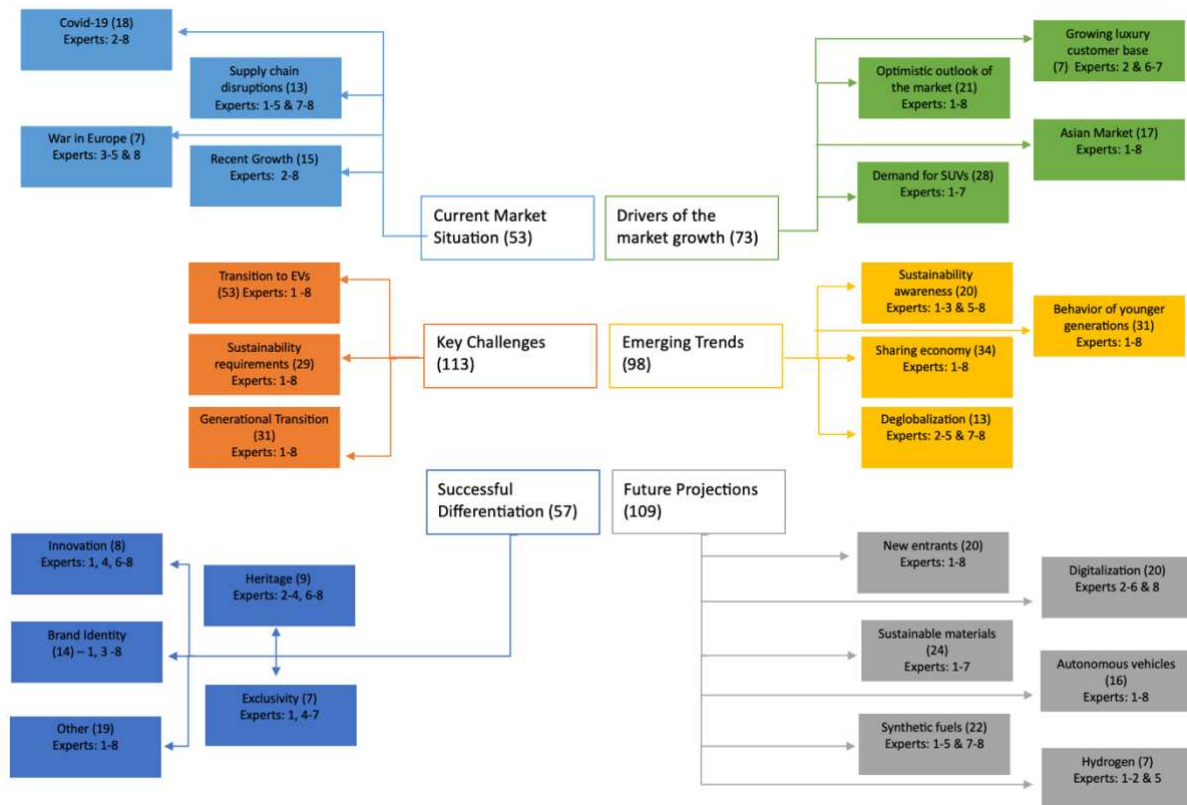
4 Analysis

This section is divided into two parts, where the first part elaborates on insights gained from expert interviews and the second part is about the information gathered from online survey.

4.1 Expert Interviews

The figure below shows the top and sub-top categories gathered mentions of certain topics by experts during SSIs. The level of interviews' abstraction was adjusted to meet the desired standard (See Appendix B).

Figure 1 The Top Codes



4.1.1 The current market situation

The SSIs showed that luxury supercar market has been experiencing good times (Experts 2-8), especially boomed after the Covid-19 Pandemic. One of the professionals highlighted the fact that the market is currently in better condition than five years ago (Expert 3). Two experts mentioned important factors such as the possibility of selling supercars above the manufacturers' suggested retail price (MSRP) and thus, gaining abnormal profits (Experts 4-5). Furthermore, experts predicted the market to continue growing due to factors such as an increasing number of wealthy people who can afford these products as their purchasing power grows (Experts 2 & 6-7).

A majority of professionals agreed that there is no precise definition of the luxury supercar market and that defining criteria are blurred and overlap (Experts 1, 3 & 5-7). A widely used definition based on price is not adequate, as more factors are needed (Experts 3, 5 & 6). Although two experts provided a starting price level of luxury supercars, their opinions differed significantly. One defined luxury supercars as being above €350,000 (Expert 2), while the other mentioned a price above \$200,000, emphasizing that looking only at the price would be a mistake (Expert 5). All in all, experts highlighted criteria such as exclusivity

(Expert 2 & 6), low production volumes (Experts 2 & 5-6), and aspirational or symbolic values as essential to understanding the market (Expert 5). Lastly, one of the interviewees pointed out that perception of luxury supercars varies geographically (Expert 7).

Since there is no clear boundary between entry level and true level of luxury vehicles, interviewees were asked to mention brands associated with both segments (as depicted in Figure 2). It is important to mention that among the entry luxury vehicles are the German big three (Audi, Mercedes, BMW), Lexus, and entry models of Porsche. At the true luxury level are brands such as Ferrari, Lamborghini, Bentley, Aston Martin, or high-end models of Porsche.

Figure 2 Entry luxury vs True luxury brand representation

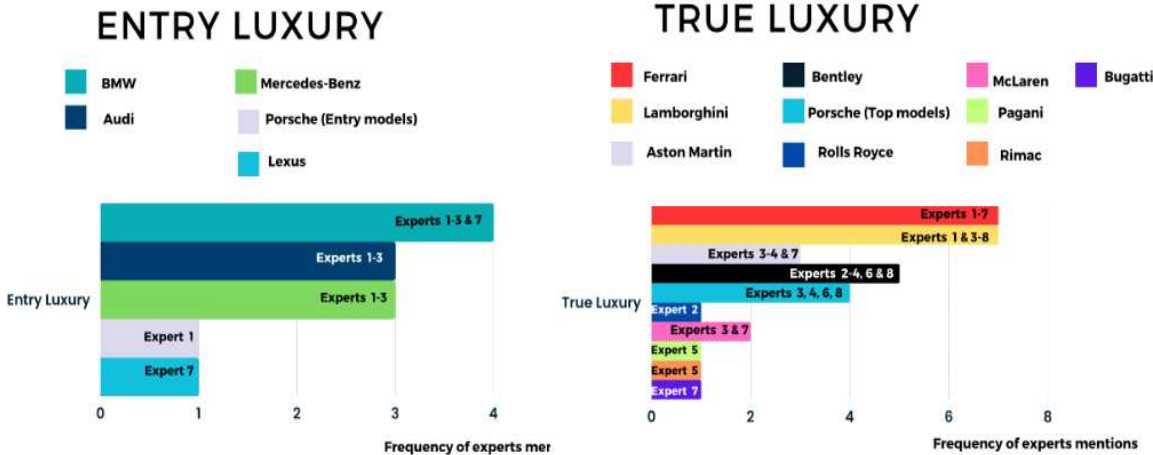
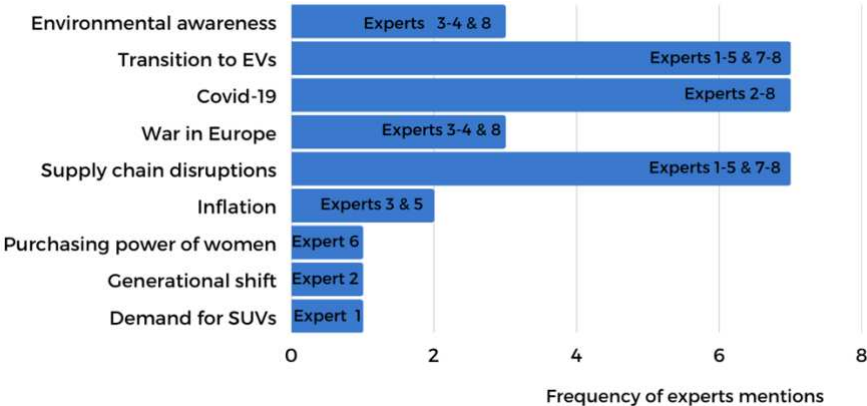


Figure 3 below provides information on experts’ opinions regarding the most significant recent events.

Figure 3 The most significant recent events



4.1.2 Drivers of market growth

From a geographic perspective of market growth, all eight experts perceived the Asian market as the most promising (Experts 1-8). Regarding specific countries, opinions varied, with two experts predicting slower growth in China (Experts 2-3), while six experts did not expect any problems with Chinese growth (Experts 1 & 4-8). Most interviewees anticipated the Indian market to be among the highest growing (Experts 1, 3-5 & 7), particularly in the long-term, with one expert highlighting the importance of more advanced infrastructure (Expert 6). It is also important to mention the South Korean and Japanese markets (Experts 2 & 5) as important players with high expenditure per capita.

In terms of the car segment, seven experts predicted the best growth to be from SUVs, which are expected to experience high demand in the future (Experts 1-7). Two experts saw a relationship between the rising demand for EVs and SUVs, as they seem to be the most complementary (Experts 1 & 5). Furthermore, extremely individualized cars (small-series or one-offs) are also expected to face enormous interest among Ultra-High-Net-Worth Individuals (UHNWIs) (Expert 2). Two experts also stated that the current demand for ICE supercars is driven by the possibility of not being able to buy them in the future (Experts 3-4). Lastly, three experts predicted positive trends for future growth with the increasing luxury customer base (Experts 2 & 6-7).

4.1.3 Emerging trends

4.1.3.1 Generation Z changes in consumer behavior

Although experts were critical of the sharing economy in the luxury supercar market, they remained aware of different behaviors relevant to younger generations, particularly Gen Z (Experts 1-8). Four of them highlighted that having access to the car is more important than having ownership rights for Gen Z (Experts 2 & 6-8). This relates to factors such as living across the globe and, therefore, the higher convenience of renting luxury vehicles while maintaining living standards (Expert 2). Another point was that the car is no longer a status symbol for Gen Zers, but more of a means of transportation (Experts 6 & 8). Furthermore, one expert predicted that UHNWIs of the Gen Z demographic will be more interested in high-tech EVs rather than ICEs (Expert 8). Likewise, two experts noted that despite the aspiration

of lower consumerism, some of Gen Zers will continue purchasing luxury supercars as a source of personal differentiation and status signaling (Experts 5 & 8).

Moreover, there is a rising trend towards seeking information online, thus lowering the need for a high number of showroom visits (Experts 2-3). Three experts believed that major channels for sales will be in-person in the future (Experts 2-4) as it is hard to capture the exclusivity and emotional experience online (Experts 3-4). On the other hand, Millennials and Gen Z are technologically savvy and therefore open to purchasing online (Experts 2 & 8), but this is not likely to become a major channel (Expert 4).

4.1.3.2 The impact of sharing economy on the market

Although all experts mentioned the term sharing economy, six agreed that generally none of the options will have a significant effect on the luxury market (Experts 1-5 & 8).

Professionals were even less positive about collective ownership, as this seems to be the least probable business model (Experts 1-3). Some predicted that this may affect the mainstream car market, but due to luxury customers' behavior and emotional connection with the brand, there is not much space for sharing solutions (Experts 2-5 & 8). A luxury supercar is usually a dream on wheels that is not intended to be shared with others (Experts 1, 4 & 8), and the financial situation of owners does not require them to move into sharing (Expert 8).

Moreover, carmakers have heavily invested in individualization and CRM, and the sharing concepts would reduce returns on this investment (Expert 5). However, three experts suggested that operating leasing might be a good solution for luxury supercars (Experts 1, 5 & 8), as the manufacturer would take on the risks connected with degradation of batteries (Expert 1). Another opinion was that the sharing model of luxury vehicles will happen on the secondary market with rentals in vacation places (Expert 2 & 6-7).

4.1.3.3 The impact of sustainability

Firstly, all eight experts were aware of the rising demand for sustainability. However, four experts did not foresee sustainable materials as a major trend within the luxury supercar manufacturing (Experts 1, 4 & 6-7). This is based on the following factors: firstly, recycled materials (e.g., seats fabric created from plastic bottles) cannot be processed again (Experts 1 & 4); secondly, sustainable materials do not appear to be as pleasing and comfortable as regular materials (Expert 6). Furthermore, this sector uses rare and resource-intensive

materials, and since clients spend tremendous amounts of money on their unique choices, brands need to satisfy their requests and wishes (Expert 7).

On the other hand, several experts claimed that sustainability awareness is a rising topic that could change the market (Experts 1-3 & 5-8). This is mainly relevant for younger generations who support ecological solutions (Experts 1-3). Such awareness triggers automakers to seek and offer more sustainable solutions by using natural or synthetic materials that are not harmful (Experts 2-3 & 5). Moreover, one expert proposed that this might even be a source of competitive advantage for luxury carmakers, because EVs will be more standardized and some manufacturers will try to recover excellence in the driving experience (Expert 1).

Similarly, half of the experts did not consider EVs as the best sustainable solution (Experts 1 & 3-5). This is illustrated by unsustainable mining and battery requirements and other negative externalities associated with EVs (Expert 5). Furthermore, being forced to produce only EVs by 2030 is not ideal either, since customers should be allowed to choose the options they want, and generally the transition tends to be hurried with poor consideration of outcomes (Experts 3-4). Furthermore, two experts argued that EVs are not the ultimate solution, while seeing hydrogen as more feasible (Experts 1 & 5).

All in all, a couple of experts were not sure about the impact of supercars on the environment (Experts 3-5) when compared to, say, aviation or shipping. Since usually these cars have low mileage (Experts 3 & 5), the pollution emitted does not seem to be that critical.

4.1.3.4 Deglobalization

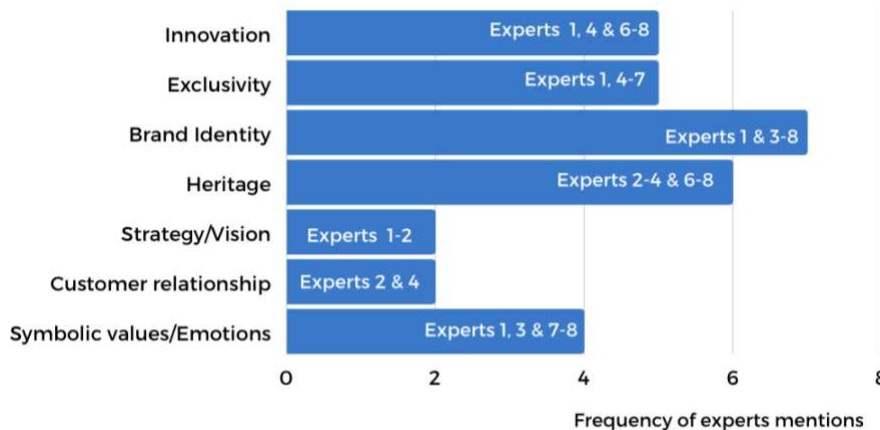
Although experts mentioned deglobalization tendencies during interviews (2-5 & 7-8), five experts did not view this as a major threat for luxury supercars (Experts 1-4 & 7). This is mainly caused by their strong brand identities, low production volumes, and unmistakable driving experience. However, for example, Chinese funds may purchase brands like Aston Martin and prioritize supplies of components to them (Expert 4). But Chinese manufacturers are a real threat for the mass production and entry-luxury carmaker sectors, further exacerbated by consolidation of EV companies (Experts 1-2). One expert argued that the market will become more geographically localized due to factors such lessons from Covid-19

crisis, chip shortages, geopolitical concerns, or changes in shipping such as the mandatory lowering of speed to emit less CO₂ (Expert 5).

4.1.4 Key sources of successful differentiation strategy in future

The experts' opinions on the sources of successful differentiation strategies of luxury supercar brands varied (as depicted in Figure 4).

Figure 4: Key sources of successful differentiation strategy in future



4.1.5 Autonomous driving

Three experts did not believe that full autonomous driving could be applied anytime soon (Experts 1 & 4-5). They argued that integration of such systems will happen in the more distant future, rather than what is being communicated by carmakers. This is because the later stages of development present significant challenges (Experts 1 & 5). On the other hand, another expert noted that carmakers are ready to implement autonomous driving, but infrastructure and legislation are the main game-stoppers (Expert 8).

In addition, some professionals stated that various luxury supercar drivers (such as owners of Ferraris and Lamborghinis) may not be inclined towards such features, as this would detract from the unique driving experience associated with interacting with the vehicle (Experts 2-4). One expert further claimed that if supercars were forced to be autonomous, the rationale for owning them would be weakened, so it should be optional to have and use this technology (Expert 3). On the other hand, two interviewees were of the opinion that autonomous driving will change the nature of transportation, and this is the direction in which the market is heading (Experts 6-7).

4.1.6 Synthetic Fuels

Six experts stated that synthetic fuels are likely to become a game-changer, allowing the use of ICEs in the future (Experts 1-5 & 8). This is important for supercar makers, as loud and powerful engines are part of brand identities, particularly for brands such as Ferrari or Lamborghini (Expert 5). Since wealthy clients of these brands can afford to pay high prices for synthetic gasoline, there is strong likelihood this solution will have a promising future (Experts 2 & 5). One expert was so positive about synthetic fuels that they seemed for him to be a more viable option than EVs in the supercar segment (Expert 4). However, two experts held that it is essential for synthetic fuels to be produced in an environmentally friendly way, using renewable resources (Experts 1 & 5).

4.1.7 Digitalization

Six experts agreed there would be higher digitalization of vehicles (Experts 2-6 & 8). There is a trend towards proliferation of screens in interiors (Expert 4-5). However, one expert noted that infotainment systems are now more complex and harder to operate (Expert 4). The overall technological experience will become more user-friendly (Expert 8) with adoption of larger screens (Expert 6). Furthermore, cars will become high-tech software products with a possible merging of big tech and car makers (Expert 8). Besides, the overall onboard experience will become more enjoyable (Experts 2 & 6) with one expert seeing a future in interaction with passengers' senses (scents, lights, music) (Expert 6). Furthermore, one expert anticipated watching movies while driving will become a future normal (Expert 2).

4.1.8 The impact of new entrants on the market

Five out of eight experts did not believe that new entrants (such as Rimac) will have a significant impact on the supercar luxury market (Experts 1, 3-4 & 6-7). This is due to several factors, such as the decades needed to create iconic models (Experts 3-4) or heritage (Expert 7). In contrast, three professionals considered the influence of new brands entering the market as a significant phenomenon. They disrupt the industry while changing market conditions (Expert 2), increasing pressure and competition (Expert 5), or bringing new added value (Expert 8).

4.2 Online survey

4.2.1 Sample demographics

The survey contained n=138 observations, with 92.03% of respondents aged between 18 and 34 years old. Of the total sample, 52.9% were female. In terms of current occupation, 50.72% of respondents were students and 36.23% were employed full-time. Furthermore, 125 respondents had completed at least a bachelor's degree, and household income was mostly distributed between two categories: less than €20,000 and €20,000–€49,999.

4.2.2 General findings luxury supercar market

From the total of 138 valid observations, 93 respondents were either neutral, interested, or very interested in luxury supercars, however only 24 had driven a luxury car before. Moreover, 88 respondents agreed or strongly agreed that they would purchase a luxury supercar if their financial situation allowed them to do so. Considering gender, men were more likely to purchase luxury supercars than women and were more likely to spend higher amounts of money on the purchase.

The top five essential factors when purchasing a luxury supercar were design, quality, performance, brand reputation, and environmental impact/sustainability (as depicted in Table 2).

Table 2 Frequency of the most important factors

Factor	Mentions by respondents	Factor	Mentions by respondents
1. Design	104 (75.36%)	7. Status/Prestige	40 (28.99%)
2. Quality	94 (68.12%)	8. Exclusivity	40 (28.99%)
3. Performance	81 (58.70%)	9. Emotional/Symbolic value	35 (25.36%)
4. Brand reputation	70 (50.72%)	10. Country of origin	16 (11.59%)
5. Environmental Impact/Sustainability	43 (31.16%)	11. Other	2 (1.45%)
6. Price	41 (29.71%)		

A Likert scale of five points (1 - Strongly Agree to 5 - Strongly Disagree) was used to determine whether owning/driving a luxury supercar can serve as an indicator of

success/status, with an overall mean of 2.64. However, when age was considered, this status was more relevant for people aged 35+ with a mean of 1.46 compared to 2.73 for people aged below 35.

4.2.3 General findings of emerging trends on the perception of the market

Regarding the impact of deglobalization on consumer willingness to purchase a supercar, 62.32% claimed little or no influence on their behavior. In terms of local or domestic production, 50 respondents would be more likely to purchase, whereas 61 would not be impacted, with 27 not being sure.

The impact of minimalism on the luxury super car purchase decisions showed a mean of 3.01 on a Likert scale (1 - None at all to 5 - A great deal), highlighting mixed opinions of respondents. Stronger opinions can be seen regarding the importance of a supercar brand to reflect customer values, where 62 (44.93%) people found it very, or extremely important. The sample showed indifference between customized and pre-built vehicles, with almost 78% of respondents being open to both options. However, the situation slightly changed when considering the importance respondents placed on owning a luxury supercar versus merely having access. Here 45% of people who found it very important to own a supercar would consider only customized vehicles, whereas only 14.29% of people who ascribed high importance to having access would consider a solely customized option.

With respect to ethical and sustainable supercar production and supply chain showed higher likelihood of purchase with a mean of 2.31 (1 - Extremely likely to 5 - Extremely unlikely), highlighting that people aged between 18-24 found a higher relevance in responsible behavior than people aged 25-34. Besides, such willingness to purchase responsibly produced supercars was enhanced in two groups of respondents who found themselves somewhat likely (69.81%) or extremely likely (95.46%) to purchase luxury supercars using alternative fuel. Looking solely at the interest in alternative fuels, there was a willingness of customers to purchase alt-fuel vehicles with a mean of 2.62 (1 - Extremely likely to 5 - Extremely unlikely).

In terms of method of purchasing, there was no visible trend towards changing the status quo, with 120 respondents preferring the option of in-person at a dealership, which did not show a

pivot towards buying online. People found it slightly more important to have access to a luxury supercar rather than owning, with a mean of 3.15 (1 - Very important to own to 5 - Very important to access). The mean was 3.24 for people aged 18-24 showing even higher preference for access. Looking more specifically at collective ownership of a luxury supercar, a majority of people (52.18%) were somewhat or extremely unlikely to participate in a carsharing scheme. On the other hand, the mean of 2.99 (1 - Extremely willing to 5 - Not willing at all) indicated that respondents were slightly more willing to take part in a subscription for a monthly fee instead of owning a luxury supercar. This was even more appealing to respondents who were somewhat or extremely likely to purchase responsibly produced and supplied supercars, with means of 2.77 and 2.5, respectively. Furthermore, the survey showed that only 29.71% of respondents would not be willing to pay an extra monthly fee to have access to a luxury supercar and not deal with the cost of ownership.

4.2.4 Statistical tests

After running a series of correlation tests, some of the independent variables showed statistically significant correlations with the dependent variable - willingness to purchase. However, checking for multicollinearity showed that the variable "willing to pay more for access" was 100% correlated with the dependent variable and was therefore excluded from further application. All in all, these were the most correlated variables at the 1% significance level: interest in luxury supercars (0.663); supercars as a success indicator (0.412); household income (0.410); maximum possible budget on the luxury supercar purchase (-0.388); willingness to participate in subscription model (0.377); and the impact of minimalism (0.326). On the other hand, the lowest correlation could be found among variables such as: likelihood to purchase supercars using alternative fuels (-0.042); personal values aligned with the brand's (0.049); and the impact of deglobalization (0.082), indicating lack of statistical significance.

Two series of regression analysis (logistic and linear) were conducted to find the most relevant results. The first analysis used logistic regression to test respondents' willingness to purchase a luxury supercar, while the second model (linear regression) was used to determine the extent to which respondents would purchase a luxury supercar. To identify the willing respondents, a dummy variable of "somewhat" and "strongly agree" to purchase a luxury car was created. However, using a dummy as a dependent variable showed the need to use

logistic regression, because linear regression produced probabilities lower than 0 (-0.11 in this case) and larger than 1 (1.22 in this case), which would not be correct. Moreover, the assumption of homoskedasticity was violated when using linear regression with a dummy, checked by running a Breusch-Pagan test with a P-value lower than 0.05. A dependent dummy variable "willingness to purchase a supercar" was tested with four independent variables, such as interest in supercars; the impact of minimalism; preferred purchase method; and willingness to participate in a subscription model. All four explanatory variables were statistically significant, ranging between the 1% and 10% in levels of significance (as shown in Figure 5). Due to high complexity of the logistic function, β cannot be directly interpreted. All in all, the model had a log likelihood between -55.561 and 121.122, suggesting a good fit.

Figure 5 Logistic regression summary

```

-----
                        Dependent variable:
                        -----
                        WTPurchase_dummy
-----
Interest                -1.355***
                        (0.290)
Minimalism              -0.481**
                        (0.214)
Purchase_method         -0.932*
                        (0.550)
Subscription            -0.615***
                        (0.218)
Constant                10.102***
                        (2.147)
-----
Observations            138
Log Likelihood          -55.561
Akaike Inf. Crit.      121.122
-----
Note:                    *p<0.1; **p<0.05; ***p<0.01

```

Therefore, an average partial effect was used by calculating a scale factor for every observation and taking the mean of those. For example, the coefficient for interest was -0.173889, meaning that an increase of one unit (Lower interest) would lead to a decrease in the predicted probability of the dependent variable by 0.173889, holding all other variables constant (see Figure 6).

Figure 6 Average Partial/Marginal Effects

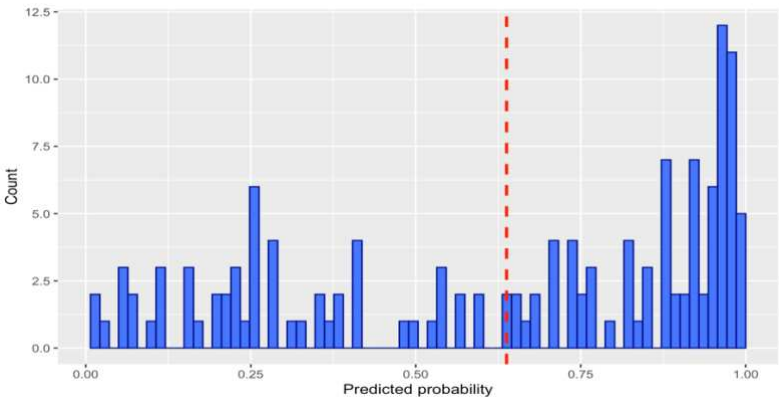
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Marginal Effects:
      dF/dx Std. Err.      z    P>|z|
Interest    -0.173889  0.055470  -3.1348  0.001719 **
Minimalism  -0.061687  0.030993  -1.9903  0.046553 *
Purchase_method -0.119635  0.075787  -1.5786  0.114436
Subscription -0.078958  0.033695  -2.3433  0.019113 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Furthermore, this model was used to predict probabilities of customers purchasing a supercar (As depicted in Figure 7) ranging from 0.0117 to 0.9964.

Figure 7 Predicted probability histogram



Secondly, the dependent variable, willingness to purchase a supercar, was tested against five independent variables using linear regression. With an increase by one unit (lower interest) in luxury supercar interest, the dependent variable would grow 0.551 units (willingness to purchase would become lower) at a 1% significance level, ceteris paribus. If the impact of minimalism increased by one unit (become more important on the Likert scale), the dependent variable would increase by 0.202 units (willingness to purchase would become lower) with a 99% level of confidence, holding all other variables constant. Therefore, if a person were more influenced by the minimalism concept, they would be less likely to purchase a supercar. Similarly, if the variable "supercar as a success indicator" increased by one unit (lower importance), the dependent variable would increase by 0.146 (willingness to purchase would become lower) with a 95% level of confidence. Furthermore, the model explains a substantial proportion of variance in the data, with an R squared of 0.524, and is a good fit as evidenced by the significant F-statistic.

Figure 8 Linear regression summary

Dependent variable:	
WTPurchase	
Interest	0.551*** (0.082)
Minimalism	0.202*** (0.066)
Subscription	0.133* (0.072)
Success_indic	0.146** (0.068)
CSR	0.183** (0.082)
Constant	-0.904*** (0.336)
Observations	138
R2	0.524
Adjusted R2	0.506
Residual Std. Error	0.919 (df = 132)
F Statistic	29.064*** (df = 5; 132)
Note:	*p<0.1; **p<0.05; ***p<0.01

5 Discussion

This section contains a general discussion combining insights from expert interviews, online survey and literature using the method of triangulation.

5.1 General Discussion

5.1.1 Gen Z

Generation Z represents one of the greatest challenges for businesses due to their distinctive consumer habits (Priporas et al., 2017). According to experts, this is caused by Gen Zers' preference for having access rather than owning stuff which is in line with Francis and Hoefel (2018). The results of a survey showed that Gen Z finds it more important to have access rather than owning a car, compared to older respondents. As one expert noted, this preference of renting might relate to the possibility of being able to live across the world while keeping the same lifestyle. Another aspect mentioned by experts was that the car is no longer a status symbol for this generation, but more of a means of transportation. This seems to contrast with Hennighausen et al.'s (2016) findings, in which traditionally luxury sports cars are sources of conspicuous consumption driven by high status seekers, especially men. Two experts noted that some of Gen Zers will continue purchasing luxury supercars to make themselves stand out, which is supported by Bian and Forsythe (2012), who saw luxury products' strength in allowing differentiation of individuals from the masses. This might be particularly important for this generation since they aim to be unique and use personalized solutions (2018).

Furthermore, as the first truly digital-savvy generation (Dolot, 2018), one might argue for their higher willingness to purchase supercars online. Although experts were aware of Gen Zers' ability to seek information online and lower the number of personal interactions, they did not see online sales as a major channel within the luxury vehicle market. This is in line with survey findings, where only 1.19% of Gen Z respondents would use an online method. Furthermore, Zhang et al. (2023) pointed out that the in-store purchase experience remains still important to Gen Zers.

Another aspect of different Gen Z behavior is their enhanced awareness of ethical and sustainable concerns (Francis & Hoefel, 2018), and as several experts mentioned, this younger generation will seek more ecological solutions. According to Zhang et al. (2023), Gen Z will be willing to pay premium for sustainable products. The insights from survey

showed that Gen Z was a willing group of respondents in terms of purchasing ethically and sustainably produced luxury supercars with high interest also in cars using alternative fuels.

5.1.2 Sharing economy

Matzler et al. (2014) proposed that customers no longer desire to only own products. However, six experts did not anticipate that sharing economy would change the status quo in terms of luxury supercar ownership. They highlighted that the situation is different for mass brands, where it might be a major trend. Mass car sharing may be further enhanced by immediate access to digital technology (Sutherland & Jarrahi, 2018). Besides, experts noted that luxury supercars are not intended to be shared with others. On the other hand, survey results indicated that respondents might have a different view. Firstly, the regressions showed that the impact of minimalism on the luxury supercar purchasing decision was statistically significant at a 99% level of confidence in linear regression and a 90% level of confidence in logistic regression. Secondly, the variable willingness to participate in a subscription model also became statistically significant, showing respondents' interest in this model. This is in line with McKinsey's (2018) study indicating that subscriptions will become one of the most prevalent business models. Furthermore, this business model was even more appealing to respondents who were in favor of responsibly produced vehicles. Zhang et al. (2023) projected that subscription and operating leasing will account for 15% of all sales in the U.S. and Europe. All in all, collective ownership does not seem to be a future trend according to industry experts and the survey.

Another argument for sharing may be that respondents did not distinguish between customized and pre-built vehicles (almost 78% would consider both options). On the other hand, people who prefer to own a supercar also preferred only customized solutions in line with factors like exclusivity and uniqueness associated with luxury (Turunen, 2018). All in all, Kapferer and Valette-Florence (2016) argued that exclusivity is now only a myth, but it would be interesting to see the impact of the bandwagon effect (Kastakanis & Balabanis, 2014). Lastly, the key to making sharing a norm is to emphasize that it is better than owning a car (Lamberton & Rose, 2012).

5.1.3 Sustainability

There are several conflicting opinions on luxury supercars and sustainability. Firstly, several experts claimed that sustainability awareness and requirements are one of the factors changing the industry. As Piketty and Chancel (2015) noted, the top 10% richest in the world account for almost 50% of total emissions. One expert emphasized the fact that the supercar industry uses rare and resource-intensive materials. On the other hand, experts mentioned a rising sustainability awareness pushing carmakers to come up with more responsible solutions, such as using natural or synthetic interior materials. However, four experts did not anticipate sustainable materials as a game-changer. In contrast, the data from linear regression showed that ethical and sustainable production has a statistically significant effect on the willingness to purchase a supercar with 95% level of confidence.

IEA (2022) stated that the transition towards EVs is undeniable, and almost all experts mentioned the importance of EVs transition. However, half of the experts did not find EVs to be the most viable solution, which is supported by Qiao et al. (2017) who emphasized double emissions of EVs compared to ICEs. Six experts rather saw a future in synthetic fuels keeping the luxury supercar's identity. This is further supported, for example, by the Italian government lobbying for Italian supercars to be exempt from termination of ICEs (Albanese et al., 2021). According to Zhang et al. (2023) ICEs will be discontinued due to EV incentives. Anyway, the survey showed people's higher willingness to purchase supercars powered by alternative fuels (mean 2.62). Although supercars have powerful engines, they are driven for fewer kilometers per year and produced in low volumes, and thus may emit less total CO₂ emissions (Nunes et al., 2016), which is in line with the opinion of three experts, who saw very limited impact compared to, for example, marine or aviation.

5.1.4 Deglobalization

Tendencies towards deglobalization have occurred in the past years (Chaudhary & Sharma, 2021), and the pandemic has enhanced the process while highlighting the weaknesses of global supply chains, leading to bottlenecks (Wu et al., 2021). Although most experts mentioned Covid-19 and supply chain disruption as one of the most critical recent events, five experts still do not see deglobalization as a major threat for luxury supercars, thanks to their strengths such as brand identity, exclusivity, and driving experience. On the other side, one expert anticipated a more geographically localized world in the future. However, Stiglitz

(2017) pointed to the negative economic impacts of a more deglobalized world. Insights from the survey showed that 62.32% of respondents saw little or no influence due to deglobalization. Furthermore, only 36.23% of people would consider locally or domestically produced vehicles. Lastly, by running regressions, the impact of deglobalization was not found to be statistically significant, not even at 10%, therefore it might be concluded that this does not tend to be a major trend changing the luxury supercar industry trajectory.

5.1.5 The future of industry

Experts highlighted five factors - identity, heritage, innovation, exclusivity, and symbolic values/emotions - as key sources of a successful differentiation strategy. This is in line with Turunen's (2018) findings who emphasized similar attributes like aesthetics, quality, timelessness, heritage and expensiveness. In contrast to these findings, survey respondents stated that the top five most essential factors are design, quality, performance, brand reputation, and environmental impact, showing a gap between the perspectives, possibly indicating perceptual change of important attributes. Furthermore, 57.25% respondents mentioned they would consider luxury super car below €249,999 while 22.46% mentioned €250,000 - €499,999. Therefore, it might be vital for brands to consider downward brand extensions to reach wider audiences of customers, especially from younger segments (Stankeviciute, 2012). However, the brand identity and quality standards must not be negatively impacted, and the carmaker should rather focus on e.g., higher technological innovation to attract younger individuals (2012). On the other hand, Zhang et al. (2023) predicted the largest market growth for luxury vehicles above \$500 000 with 14% CAGR, whereas luxury segments at lower price levels will only experience 10% CAGR.

All eight experts anticipated the biggest growth in Asian markets. According to O'Reilly III. and Tushman (2008), being relevant only to existing markets is not enough; businesses must create adequate capabilities to respond to emerging trends. Most interviewees believed that the Indian market would experience the fastest growth, followed by the Chinese market. However, Zhang et al. (2023) suggested that China was the fastest growing with 13% CAGR due to continuous growth of the luxury customer base. Although the luxury car segment has been among the best performing luxury sectors throughout the years, there is a challenging future ahead (D'Arpizio et al., 2023). Furthermore, luxury consumption by Generation Z and Y will account for 60% of total market by 2025 (BCG x Altagamma, 2021) In terms of the car

segment, seven experts anticipated that SUVs would experience the highest demand in the future in line with Guan et al. (2022).

A McKinsey study (2018) noted that market leaders are not ready for turbulent times ahead, with high likelihood of not maintaining leadership positions during disruption (Bower & Christensen, 1995). Although five experts did not find a threat from new market entrants as the luxury supercar market is specific and established, three experts saw their potential influence the future of the industry. Based on McGahan's (2004) classification of industry transformations, the supercar market is experiencing progressive transformation. Experts believed that autonomous driving, synthetic fuels, and digitalization would become game changers. Therefore, businesses need to foresee future market trajectory to remain competitive. (Gersch & Goeke, 2007), while not allowing CA (Christensen, 2001), key activities and assets to become obsolete (McGahan, 2004).

6 Conclusions

This final chapter summarizes key findings, academic and managerial implications, and identifies limitations while suggesting areas for further research.

6.1 Conclusion

This work showed several factors related to Generation Z as secular trends for the supercar luxury market. Firstly, it identified Generation Z's distinct consumer behavior, especially in areas of sustainability and carsharing. Although it can be concluded that sustainability is one of the industry game-changers due to increased requirements at both levels – regulators and customers – the topic is even more important for Gen Zers. Members of this generation require luxury vehicles to be more responsibly produced, seek alternative materials that have lower negative environmental impact, and are open to supercars powered by alt-fuels. Despite EVs causing one of the biggest industry transformations, their future may still not be entirely clear since questions arise about their sustainability and driving a supercar requires a certain kind of premium experience. The development of synthetic fuels and therefore keeping ICEs alive is not clear, leaving a loose end that is ultimately dependent on legislation.

Secondly, there is higher willingness of Generation Z only to seek access to luxury vehicles rather than necessarily owning them. This may be caused by their perception of supercars as a

means of moving from point A to point B rather than a status symbol. This behavior differs from the current norm, where customers still prefer to own their luxury supercars.

Thirdly, the study showed that deglobalization is not a major threat for this car market for several reasons. These include resilience and a strong position of the market, unmistakable brand identities, and having different positioning in customers' minds compared to the mass market.

Lastly, the most promising future within this industry is anticipated to be the SUV segment and Asian markets. Moreover, factors like autonomous driving, alt-fuels and digitization will have major impact.

6.2 Academic Implications

As mentioned at the outset, this € 566 billion market has been overlooked by scholars. This dissertation validated existing assumptions about idiosyncratic Gen Z behavioral patterns compared to other generations. These include higher awareness of sustainability concerns such as responsible manufacturing and supply chains, seeking alternative materials, or the tendency not to own stuff. Furthermore, it showed that Gen Zers are more oriented towards access and sharing luxury supercars than ownership. Moreover, the research provided an explanation of the luxury supercar market being resilient to deglobalization tendencies thanks to strong company identities, market uniqueness, and consumer perceptions of supercars. As the industry currently experiences major change, the study suggests several essential components to incorporate into luxury carmaker strategies to adapt to evolving customer behaviors and emerging trends.

6.3 Managerial Implications

Since this is the most valuable luxury market in the world, it is of interest to practitioners. Younger generations are open to new ways of using cars, so carmakers should consider relevant business models to monetize this opportunity. The analysis showed that consumers are open to alternative fuel luxury vehicle options, providing managers with maneuvering space for the turbulent times ahead. Furthermore, businesses should focus even more on Asian markets while offering a greater variety of SUV models, as these will be the fastest growing product segment. Additionally, the study showed that being present online is

necessary. Customers use the internet more for seeking information before purchases, but still prefer to make the actual purchase in person. Therefore, managers should consider improving their online presence by creating some sort of ecosystem, while still focusing on providing unforgettable personal experiences.

6.4 Limitations & Future Research

This research is subject to several limitations. Firstly, the project was undertaken within a short period of time, which might have had negative impact on its quality. Secondly, interviews were conducted with the majority of experts located in Europe (6/8), therefore their opinions may have been biased by events happening on this continent. With eight interviews in total, the ability to draw general conclusions also diminishes. Lastly, interviewees are often biased by their subjective perspectives which then skews results.

Another possible limitation is a lack of access to a demographically diverse population as the majority of respondents were under 24 and students at a similar stage of life. The sample had 138 respondents which might not be representative to draw general conclusions. Furthermore, the Likert scales were employed to quantify qualitative measures. The use of this method comes with several limitations, such as central tendency bias (respondents' redundancy of using options on either ends of scale) or acquiescence bias (higher agreement with statements than expressing true opinions) (Bertram, 2006).

To better understand the impact of such trends on the supercar industry, a transgenerational analysis containing a large sample of participants is needed to identify differences in behavior. Potential research could also focus on the preferences of Gen Zers in Asian markets and the opinions of experts from this area due to its importance in the long term.

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8 Appendices

8.1 Appendix A - Online Survey

Q1 How interested are you in luxury supercars?

- Very interested (1)
- Interested (2)
- Neutral (3)
- Uninterested (4)
- Very uninterested (5)

Q2 Have you ever driven any luxury supercars?

- Yes (Please specify) (1) _____
- No (2)
- Not sure (3)

Q3 If your financial situation allowed you, would you purchase a luxury supercar?

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q4 What is the maximum amount of money you would spend on a new luxury car?

- 150,000 – 249,999 € (1)
- 250,000 – 499,999 € (2)
- 500,000 – 999,999 € (3)
- 1,000,000 – 3,999,999 € (4)
- + 4,000,000 € (5)

Q5 Which of the following factors are the most important for you when purchasing a luxury supercar? You can select more than one answer.

- Brand reputation (1)
- Status/Prestige (2)
- Emotional/Symbolic value (3)
- Price (4)
- Performance (5)

- Environmental impact/Sustainability (6)
- Design (7)
- Exclusivity (8)
- Quality (9)
- Country of Origin (10)
- Other (Please specify) (11)

Q6 Do you agree with the following statement? Driving or owning a luxury supercar is a good indicator of one's success, social status and prestige.

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q7 How much of a role does the concept of deglobalization (e.g., a trend towards more local and regional production and consumption) play in your decision to purchase a luxury supercar?

- None at all (1)
- A little (2)
- A moderate amount (3)
- A lot (4)
- A great deal (5)

Q8 Would you more likely purchase a luxury supercar if it was produced locally or domestically?

- Yes, I would more likely purchase a luxury supercar if it was produced locally or domestically (1)
- No, it would not impact my decision to purchase a luxury supercar (2)
- Not sure (3)

Q9 How much of a role does the concept of minimalism (e.g., living with less and prioritizing experiences over material possessions) play in your decision to purchase a luxury supercar?

- None at all (1)
- A little (2)
- A moderate amount (3)
- A lot (4)
- A great deal (5)

Q10 How important is it for a luxury supercar brand to reflect your personal values and beliefs (such as uniqueness, environmentalism etc.)?

- Extremely important (1)
- Very important (2)
- Moderately important (3)
- Slightly important (4)
- Not at all important (5)

Q11 Would you be willing to wait for a luxury supercar to be built and customized according to your specifications, or would you prefer to purchase a pre-built?

- I would only consider a customized vehicle (1)
- I would consider both options (pre-built and customized) (2)
- I would only consider pre-built vehicle (3)

Q12 How likely are you to purchase a luxury supercar if it had an ethical and sustainable production and supply chain?

- Extremely likely (1)
- Somewhat likely (2)
- Neither likely nor unlikely (3)
- Somewhat unlikely (4)
- Extremely unlikely (5)

Q13 Please select strongly agree to check you are paying attention to this survey.

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q14 How likely are you to purchase a luxury supercar that uses alternative fuels (such as hydrogen and biofuels), electricity or hybrid power?

- Extremely unlikely (1)
- Somewhat unlikely (2)
- Neither likely nor unlikely (3)
- Somewhat likely (4)
- Extremely likely (5)

Q15 What method of purchasing a luxury supercar would you prefer?

- Online (1)
- In person at a dealership (2)
- In person at home (3)
- Virtual reality (4)
- Other (please specify) (5) _____

Q16 What is more important to you: owning a luxury supercar versus being able to access one when needed?

- Very important to own (1)
- Important to own (2)
- Neutral (3)
- Important to access (4)
- Very important to access (5)

Q17 How likely are you to participate in a luxury supercar sharing program, where a group of individuals collectively own a luxury supercar and share access to it on a rotating basis?

- Extremely likely (1)
- Somewhat likely (2)
- Neither likely nor unlikely (3)
- Somewhat unlikely (4)
- Extremely unlikely (5)

Q18 Would you be willing to participate in a subscription service where you have access to a range of luxury supercars for a monthly fee or rental instead of purchasing?

- Extremely willing (1)
- Willing (2)
- Neutral (3)
- Unwilling (4)
- Not willing at all (5)

Q19 Would you be willing to pay an extra monthly fee to access a luxury supercar, but save money on the cost of ownership (such as no service, insurance, maintenance)?

- Extremely willing (1)
- Willing (2)
- Neutral (3)
- Unwilling (4)

- Not willing at all (5)

Q20 What is your age?

- 18 - 24 (1)
- 25 - 34 (2)
- 35 - 44 (3)
- 45 - 54 (4)
- 55 - 64 (5)
- 65 or older (6)

Q21 What is your gender?

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer not to say (4)

Q22 What is your highest completed education?

- No degree (1)
- Elementary school (2)
- High school (3)
- Bachelor's degree (4)
- Master's degree (5)
- PhD. (6)
- Other (please specify) (7) _____

Q23 What is your marital status?

- Single (1)
- In relationship (2)
- Married (3)
- Divorced (4)
- Widowed (5)
- Other (Please specify) (6) _____

Q24 What is your current profession?

- Student (1)
- Employed (2)
- Self-employed (3)

- Entrepreneur (4)
- Unemployed (5)
- Retired (6)
- Disabled (7)
- Other (Please specify) (8) _____

Q25 What is your household income?

- Less than €20,000 (1)
- €20,000 - €49,999 (2)
- €50,000 - €99,999 (3)
- €100,000 - €149,999 (4)
- €150,000 - €199,999 (5)
- €200,000 - €249,999 (6)
- €250,000 - €299,999 (7)
- More than € 300,000 (8)

8.2 Appendix B – Expert Interviews Summary

Expert 1

6th April 2023

Editor-in-chief of a car magazine. Member of the Car Of The Year (COTY) Jury.

1) Current state of the market and its definition

It is difficult to specify the market due to the overlapping criteria. The entry-luxury market includes brands such as Audi, BMW, Mercedes-Benz, and entry models of Porsche. In terms of the true luxury market, carmakers such as Ferrari and Lamborghini seem to be good examples. Among the most important factors are an increased demand for SUVs, a transition towards EVs, and a lack of chips.

2) The main drivers of the growth in future

The luxury car segment will experience significant growth. There is a growing preference for luxury SUVs, which will be further boosted by the transition towards EVs, making it the

fastest-growing segment. China and India possess significant market potential due to the growing number of affluent individuals.

3) Changes in customer behavior, generational transition and sustainability awareness

There has been a shift from people who used to purchase diesel SUVs towards EVs, skipping the option of gasoline. Sustainability is an important topic for younger generations, who will support environmentally friendly solutions.

4) The impact of emerging trends (sustainability, deglobalization and sharing economy)

The strengths of luxury brands lie in their ability to increase prices without losing customers. Furthermore, these brands intend to become major players in this transition, having the best chances for success. However, the market is highly unpredictable.

All in all, EVs will not become the ultimate solution due to the insufficiency of large EVs, which will need to be combined with hydrogen fuel. Emotions associated with cars will diminish due to the transition to EVs, which is positive news for Chinese manufacturers. However, this poses a main threat for mass brands rather than luxury brands, which target different customer segments and have unique strategies built on their strong brand identities. This combination will allow them to survive during such turbulent times. A main issue is a semiconductor shortage. Luxury car manufacturers prefer to prioritize the production of more expensive models due to higher margins.

Certain individuals will prefer others not to drive their supercars, given the value and emotions attached. Carsharing will become a topic of regular discussion. Although collective ownership does not seem to be a viable solution, operating leasing could become an adequate alternative for luxury EVs. This would result in transferring the risks of value depreciation and battery degradation from customers to carmakers.

5) The key challenges ahead

Some groups, especially activists, try to negatively frame vehicles which is harmful for supercar owners. On the other hand, supercar owners will want to have powerful, noisy engines and ICEs will likely receive an exemption for eco-friendly fuels. The usage of synthetic fuels will become viable only if they are produced by renewable energy sources.

6) Innovations and advancements

Processing plastic bottles into seats does not seem to be ecologically viable due to the high amounts of CO₂ emitted on products that cannot be further recycled. However, certain groups of customers will appreciate ecological solutions, leading to good chances for carmakers who have lost their excellent driving experience. Using recycled materials combined with an EV transition is likely to be the next step. Autonomous driving has been one of the most discussed topics, with expectations of an autonomous experience occurring a couple of years ago. The further engineers proceed in R&D, the more obstacles they discover, requiring more sophisticated solutions.

7) Sources of successful differentiation strategy

A good example of a successful strategy is Ferrari, which evokes unmistakable emotions and a feeling of exclusivity. The company has a clear identity, capitalizing on a well-defined strategy. They are the best at integrating the latest technological solutions. Such brands will continue to use ICEs with eco-fuels, emphasizing their core values and identity. New entrants are unlikely to change the market, as this segment takes advantage of a high level of loyalty. New brands may attract younger generations with different preferences.

End of Expert 1

EXPERT 2

7th April 2023

Former BMW Marketing manager, Rolls Royce Country Brand Manager.

1) Current state of the market and its definition

Among entry-level luxury brands, the best models of BMW, Mercedes-Benz, and Audi belong. But the true luxury car market starts with cars over €350,000, which have limited production. The supercar industry has been growing and will continue to do so. Carmakers such as Bentley, Rolls Royce, and Ferrari offer exclusivity and attract different customer behaviors compared to regular markets.

During the Covid-19 pandemic, luxury carmakers also suffered from supply chain disruptions, but suppliers quickly prioritized these highly profitable customers. Furthermore, EVs seem to be a game-changer, transforming the entire sector. There is also a generational switch with different consumers' decision-making habits, which will impact the industry.

2) The main drivers of the growth in future

Continuous growth of a wealthy customer base will help drive demand. SUVs will continue to experience steady growth. Furthermore, UHNWIs will be attracted by extreme customization, seeking small-series or one-off projects. The Asian market will be the fastest growing, but the Chinese boom will slow down. South Korea and Taiwan currently experience the highest sales per capita, whereas India does not experience such growth per capita. Furthermore, the Middle East and the United States will maintain their important positions.

3) Changes in customer behavior, generational transition and sustainability awareness

Generations Y and Z do not find owning a car as important but prioritize access while maintaining their lifestyle across the globe. These customers like to use luxury rental services, and although they may rent a variety of luxury vehicles while abroad, they still have several supercars at home.

For generations Z and Y, sustainability is essential. Carmakers are using artificial leather, fabrics, and other natural materials while focusing on keeping up with quality standards. Various materials are being used in supercars, with the example of Rolls Royce replacing leather with silk or fabric.

4) The impact of emerging trends (sustainability, deglobalization and sharing economy)

The future will include digital visions using active pigments and pixels, allowing for color changes and "communication" with cars. Individualization is a source of competitive advantage, and such vehicles will be completely tailored to your wishes and dreams.

Synthetic fuels will emerge, especially among ICE hypercars. Hydrogen is on the way with the EV transition in progress. However, it remains unclear whether EVs will become the ultimate destination.

Brands like BMW and Mercedes-Benz can be negatively influenced by deglobalization tendencies. However, carmakers like Rolls-Royce or Ferrari, with strong tradition and identity, will not be affected. This is based on the fact that you cannot replace such icons because people want to have a true Ferrari with its DNA, not a Chinese imitation which will not have the heritage and emotions.

The models of sharing economy will mainly happen in the secondary market. In destinations like Dubai and Monaco, people can already rent fleets of supercars. Lastly, collective ownership is not adequate for real luxury, but may affect brands like BMW and Audi.

5) The key challenges ahead

Car dealers will face several challenges in maintaining their business as clients seek information online and the number of showrooms is reduced. For older cohorts, purchasing a luxury vehicle online is unimaginable, but the younger generations have a different opinion. There is still a demand for ICEs with V12 engines. If the legislation allows, ICEs will continue to exist. Tesla changed the status quo, resulting in all major brands considering direct sales models. For example, BMW has already started using agency models, but brands like Rolls Royce will continue to rely on building relationships with UNHWIs.

6) Innovations and advancements

Digital connectivity will be a major trend in the distant future. People may be able to watch movies while driving, providing a more enjoyable experience onboard. Some brands are moving in the direction of autonomous driving, but Ferrari and Lamborghini will probably never offer fully self-driving vehicles, as their customers want to enjoy the driving experience. Brands like Rolls Royce prefer to avoid any customer disappointment by releasing only 100% ready solutions.

7) Sources of successful differentiation strategy

The vision, leadership, and company heritage are among the most essential factors for success. Carmakers need to focus on both, building trust and long-term strong relationships with their customers, and they also need to produce the best products. In this segment, it is critical to know your customers and be aware of generational transitions.

Rimac and Tesla have different strategies compared to the established manufacturers, disrupting the segment and forcing others to adapt to the changing industry situation.

End of Expert 2

Bentley Country Brand Manager & Sales manager at Lamborghini. Experienced several roles throughout premium and luxury brands at VW concern.

1) Current state of the market and its definition

By looking solely at the price, it would be hard to define the luxury car market. Brands like BMW, Mercedes-Benz, and Audi belong among the lower tier of the luxury segment, while the true luxury market begins around the high-end models of Porsche. Bentley, Lamborghini, Ferrari, Aston Martin, and McLaren provide a good indication of the supercar market.

Although luxury cars have suffered due to the Covid-19 pandemic, the market is in better shape than it was five years ago. Supercars are now perceived as a means of value storage. The most important recent events include the Green Deal, emission limits, and the transition to electric vehicles. Furthermore, Covid-19 has had a major impact, particularly disrupting supply chains, and the war in Ukraine, along with inflation, are also influential.

2) The main drivers of the growth in future

Luxury carmakers are hesitant to introduce EVs, leaving customers who would like to purchase a V12 vehicle with a limited selection. Factors such as CO2 limits, synthetic fuels utilization, and EV technology will shape the future outlook of the supercar sector.

The SUV segment will remain the fastest-growing, accounting for more than one-third of all sales, despite emerging opinions about SUVs' drawbacks and incentives to forbid their urban usage. Geographically, the Asian market will experience the greatest growth, especially in India, with an enormous long-term impact caused by population expansion. On the other side, Chinese growth will decrease but continue to be significant.

3) Changes in customer behavior, generational transition and sustainability awareness

A large format carsharing scheme for supercars does not seem to be the optimal solution. Luxury car ownership is about the experience, and most customers do not want to share this. If carsharing becomes prevalent among mainstream cars, supercar owners may start using this for their needs in cities, but they will still keep their own luxury vehicles.

Purchasing a car used to be an important moment in life, but people now search for information online in advance. Despite this, they still prefer to purchase in person, as photos

cannot capture the feeling of exclusivity and luxury. There will not be any radical disruptions in preferred sales channels within the next 10 years in this segment, despite the different habits of new generations.

Sustainability is a major topic, so luxury brands are seeking ways to incorporate a CSR approach into their processes. Some carmakers already have carbon-neutral factories with the aim of having the entire supply chain sustainable. Furthermore, luxury brands are focused on transitioning to EVs and replacing genuine leather with eco-friendly and natural alternatives, such as fabric or recycled alcantara. The combination of natural, synthetic, and recyclable materials has emerged due to younger generations requiring more responsible behavior.

4) The impact of emerging trends (sustainability, deglobalization and sharing economy)

Current trends and events are predicted to have a significant impact on supply chains. Luxury brands have become more cautious, building up stocks and involving various suppliers to secure production processes and diversify risks. Brands such as Lamborghini and Ferrari, which have strong identities, will not suffer from deglobalization. However, for regular EVs, there is a possibility of anticipating some changes, such as prioritization of Chinese manufacturers by Chinese suppliers.

5) The key challenges ahead

The main challenges facing luxury carmakers are sustainability requirements and emission limits. It is vital to see a shift towards more sustainable solutions, but it must be sophisticated and well-planned. Both EVs and ICEs should remain available to customers for them to decide. Terminating ICEs by 2030 does not seem to be the best solution. The availability of synthetic fuels could remain ICEs as an option for luxury supercars. Furthermore, since the owner of a luxury supercar only drives approximately 3,000 km annually, the impact on the environment is not that critical. Carsharing models may disrupt the way we use mass cars, but collective ownership does not seem to be a viable option.

6) Innovations and advancements

Existing technologies are likely to experience evolutionary innovation, such as self-driving and safety systems incorporating more technology. The use of these features may even become obligatory in the future. In the case of supercars, it may be difficult to give up driving, as the emotions associated are essential.

7) Sources of successful differentiation strategy

Luxury supercar brands are built on their uniqueness and strong brand identity. The brands focus on maintaining their unique characteristics, evoking emotions, and symbolic values. New entrants, such as Rimac have enriched the segment, while established brands rely on their history, reputation, and iconic models, which can take decades to establish and maintain. Brands like Rimac will need to develop at least five iconic models to receive the same status.

End of Expert 3

EXPERT 4

13th April 2023

An ex-professional car racer and sales director of an independent supercar dealership specializing in brands like Ferrari, Lamborghini, Koenigsegg, and McLaren.

1) Current state of the market and its definition

The industry is hard to predict due to its unstable and volatile nature, but recently it has been experiencing high demand with prices above MSRP. The entry luxury segment begins around €100,000, but the true luxury starts with top models of Porsche, followed by brands such as Ferrari, Lamborghini, Bentley, Aston Martin, and others. Among the most important events are Covid-19, which disrupted supply chains and affected the availability of chips and components, and the war in Ukraine, which negatively impacted the buying sentiment in Europe. Furthermore, car manufacturers are offering fully or partially electric vehicles to meet European emission limits.

2) The main drivers of the growth in future

There is a rising customer base of younger entrepreneurs who do not mind driving supercar EVs. On one side, this may lower sales of ICEs, but this will make luxury ICEs rarer and the ones with low mileage will have increased value. People often try EVs due to their curiosity. However, the situation is different in terms of supercars, as carmakers and customers would like to maintain selling ICEs for as long as possible. Lastly, the fastest-growing segment will be SUVs, with the decline of low car sales. In addition, luxury supercar makers will focus on markets where environmental limits are not as strict. The fastest-growing markets will be Asia (especially China and India), followed by the U.S., and slowly Africa. Europe is no longer a major market.

3) Changes in customer behavior, generational transition and sustainability awareness

Although purchasing habits of customers are evolving, the process of buying a supercar is an unforgettable experience, where the exclusivity and driving characteristics cannot be fully experienced online. Generations Y and Z are likely to buy more online, but this will not become a major sales channel.

The transition to EVs and the use of recycled materials does not seem to be well thought out and may evoke greenwashing attempts. Firstly, people do not find super powerful EVs with big batteries to be a viable option. Furthermore, comparing supercars with aviation or shipping, which are far heavier pollutants, does not support the transition to EVs either.

4) The impact of emerging trends (sustainability, deglobalization and sharing economy)

There is a higher probability that synthetic gasoline will become a prevalent solution in the luxury supercar industry, not EVs. EVs seem to be just an alternative or option, but you cannot terminate ICEs. This would mean a confiscation of all ICEs across the globe. If the current car fleet was gradually replaced by "greener" cars, the results could have been better.

Carsharing is doable among cheap cars, but it is unlikely in the luxury supercar segment. People who buy luxury cars do not intend to share them with others, but they want to fulfill their own dreams. It would be very complicated because not everyone would treat these supercars nicely. Moreover, scaling up this this solution would result in luxury vehicles losing their status of exclusivity.

5) The key challenges ahead

The biggest threat for manufacturers is suppliers, as car production requires thousands of components which are usually produced in China. Furthermore, the industry is too interconnected, with disruptions of suppliers affecting entire manufacturing processes. It may happen that Chinese companies will dominate the regular mass market while prioritizing Chinese car manufacturers. Since luxury supercars are not direct competitors to Chinese cars, they seem to be safe. This is because Chinese are not likely to ever produce vehicles like Ferrari or Lamborghini. However, they may acquire e.g., Aston Martin and prioritize supplies of components to them. Lastly, eco-fuels may solve the environmental requirements. Moreover, with the growing demand for internal ICEs, there will be an increase in prices and margins for manufacturers. It seems that this is one of the last moments to purchase a supercar

with a V12 engine. Lastly, UHNWIs who can afford to buy Ferrari or Bentley will not struggle with purchasing expensive synthetic fuels.

6) Innovations and advancements

Carmakers invest heavily in EVs, which causes limitations in the manufacturing processes of ICE vehicles. This transition towards partially or fully electric vehicles has led to lower availability of ICEs, making the production processes unnecessarily more complicated. Moreover, the digitalization trends are causing major challenges regarding vehicle control and driver concentration, as the infotainment systems have become more complex and harder to operate. However, this goes in line with customers' preference for displays. Lastly, autonomous vehicles still do not seem ready to be utilized in terms of safety. Making autonomous driving a norm would not make sense for luxury sportscars, as it would destroy the driving experience and reason to own such vehicles.

7) Sources of successful differentiation strategy

Artificial scarcity has helped create higher demand than can be served, leading to greater exclusivity and symbolic values. For example, Ferrari is a great example of strong brand identity, starting with the racing Ferrari Scuderia team, where various innovative solutions are tested and later implemented in their road cars. The sales of road cars allow them to fund their racing activities and R&D. The brand has developed a clear identity, several iconic models, and built a rich tradition. Furthermore, they have a clear marketing communication and effectively build relationships with their customers through CRM and dealership network.

New entrants are not strong enough to change the market. The essence lies in building a clear identity and market positions, which can take decades. UHNWIs are interested in hyper carmakers such as Rimac, but these manufacturers must produce in extremely low volumes to not lose the status of exclusivity. Furthermore, luxury supercar customers are loyal. A good strategy might include extreme customization and personalization, craftsmanship, tradition, and legacy delivered through excellent customer service.

End of Expert 4

Car enthusiast, collector and TikTok influencer with expertise in luxury automobiles, car collections, car investments, and market analysis.

1) Current state of the market and its definition

The past decade has been considerably positive for the luxury supercar market in terms of growth, with Ferrari and Lamborghini doubling their production. The Covid-19 pandemic had a strong influence on the industry, allowing prices of supercars to go above the MSRP.

You cannot define the market solely on price; factors like symbolic, aspirational values, low production numbers, and evocation of emotions should also be considered. However, in terms of price, the luxury supercar market begins above \$200,000, with examples of brands such as Ferrari and Lamborghini traditionally dominating the market, and emerging hypercar brands like Pagani and Rimac.

The biggest moment happening in the industry, the transition towards EVs, is affecting the supercar segment as well, with carmakers offering, for example, partially electric Ferrari SF90 and fully electric Maserati MC20. Moreover, inflation, scarcity, combined with the growing desirability of these vehicles, have also increased prices.

2) The main drivers of the growth in future

Supercars are no longer available only in the Western part of the world; they are now international products. India will continue to experience explosive growth, followed by China, which continues to demand more vehicles. Furthermore, growing demand from countries such as South Korea and Japan is also increasing production numbers. The situation in the US market is stable. SUVs will be the fastest-growing segment. Supercar brands' sales are driven by SUVs, with examples such as Porsche's two SUV models accounting for almost all sales, or Ferrari, which has limited production of Purosangue to not overcome one-third of its total turnover. Moreover, the transition to EVs will further enhance the boom of SUVs, as they are easy to drive. However, luxury carmakers will need to keep offering sports cars, which are part of their brand identity. The electrification will be further driven by UHNWIs' growing preferences for "green" cars to avoid negative perceptions of the wealthy, as well as the growing awareness of sustainability trends.

3) Changes in customer behavior, generational transition and sustainability awareness

Increased sustainability awareness has changed consumer habits. However, supercars are not heavy polluters due to their long lifespan, low mileage, and low emissions when compared to aviation and marine. Furthermore, EVs do not seem to be a better option since the environment would not benefit from producing a large 200 kW battery.

Luxury carmakers have not managed their digital presence properly, thus missing out on potential new revenue streams. The net worth of supercar owners needed has been increasing continuously, and luxury car manufacturers are focusing their marketing on younger customers to create aspirations through their advertisements. The EV market is too standardized, and the vehicles are too identical, forcing carmakers to find new sources of differentiation. E: g., Lamborghini may not be able to maintain its core identity without its loud and powerful engine.

4) The impact of emerging trends (sustainability, deglobalization and sharing economy)

The Western world (the EU and U.S.) will increase their cooperation, especially in sourcing and manufacturing processes of batteries. The sustainability impacts suppliers as they need to offer natural or synthetic materials instead of, for example, leather driven by customer demand and therefore offered by car manufacturers. Several factors such as Covid-19, chip shortages, geopolitical problems, and the "greener" requirements in shipping (lower speed limits to emit less CO₂) will result in a more geolocalized world of supply chain. Since hyperwealthy individuals prefer to own their stuff, the shared ownership in the supercar segments seems unlikely. The Covid-19 pandemic has changed our view on the sharing economy, as it seemed five years ago that all parts of our lives were going towards sharing. For example, Porsche is currently trying operating leasing. Carsharing will probably happen in the regular car segment, but not within supercars because these luxury carmakers have invested a tremendous amount of money into individualization and sophisticated CRM. This source of differentiation, emotions, exclusivity, and higher profitability will be ruined by the sharing concepts.

5) The key challenges ahead

The well-thought-out planning in car manufacturing processes is essential due to long-term contracts with suppliers. Climate change and scarcity of resources will become major issues within the next 50 years. If synthetic fuels are available, ICEs will continue to be noisy. This

is part of their brand identity, as even a very small engine can create the necessary noise attached to, e.g., Lamborghini. Therefore, supercar makers are lobbying for avoiding the termination of ICEs. The mining of lithium needed for EVs is enormous, and this transition may result in illegal mining even more harmful for the environment. The major trend towards EVs is in the cities, but it may take up to the next three decades to completely terminate ICEs in the developing world. It is likely that all vehicles will be either partially or fully electric.

The situation will not be easy for car manufacturers. Porsche is investigating the use of a common architecture for hybrids, EVs, and ICEs, which BMW is currently experimenting with. Brands need to diversify to hedge risks, and they are getting ready for the worst scenarios by giving financial incentives and using more technology and screens. However, market demand will always be more important than regulatory requirements. The future of the supply chain is in agility, affecting agreements with suppliers. They will face several logistical challenges, resulting in more mergers. Musk has shown that startups are possible in this industry, and the situation is even less complicated with EVs, as the production is easier, and you can apply a direct sales model.

6) Innovations and advancements

The buzz about autonomous driving has died down, as it appears to be much more difficult to overcome challenges in the last 10% of R&D compared to the previous 90%. The increased utilization of technology and proliferation of screens will emerge. It seems that it may take another 10-20 years for cars to become fully autonomous. However, a disruptive battery innovation appears to be unlikely. The demand for autonomous driving is driven by heavy EVs being worse for pedestrians and cyclists. The future will involve higher efficiency of materials needed for batteries. Nevertheless, hydrogen might be the solution, but it needs to come from efficient and clean nuclear sources.

7) Sources of successful differentiation strategy

Recreating the brand identities of supercars will be critical, as Lamborghini, for example, would not be the same without ICE. Lamborghini is about dreams and entrepreneurship, while Ferrari is about passion and racing, making it the strongest brand. Diversifying revenues through the metaverse, gaming, or presence in the digital world will be crucial. Design will continue to be a source of differentiation, but the focus will be pushed further onto interior materials, optics, and technological connectivity.

Successful brands need to have a strong brand identity, which might be difficult for Lotus, McLaren, or Mercedes-Benz, having obvious identity clash between their trucks and AMG divisions. New entrants will increase competition and requirements, leading to better outputs for customers. These new hypercar brands need to remain ultra-limited to keep their competitiveness. Although Gen Zers are idealistic, they will still desire luxury supercars and want to differentiate themselves through luxury supercars.

End of expert 5

Expert 6

21st April 2023

Founding partner of luxury consultancy, Academic director of Luxury Brand Management course taught across 3 continents

1) Current state of the market and its definition

The luxury customer base is growing and wealthy individuals have more purchasing power. For them, cars are still affordable, although they are expensive. Part of luxury carmakers' strategy is to have higher demand than the available stock.

The exclusivity of the market and the brands participating define the market. Price is not the only criterion that will define a supercar. Factors such as exclusivity, design, feeling of scarcity and limited production are also crucial. The market starts with top-end models of Porsche, and brands like Ferrari, Lamborghini, and Bentley are true representations of the true luxury supercar market.

The COVID-19 pandemic has shown us the importance of owning a car. Furthermore, women's purchasing power has been growing, making the market no longer only for men.

2) The main drivers of the growth in future

The growing demand for SUVs is driven by people's desire to show off their status by purchasing luxury SUVs, making it the most-growing segment. The Asian market seems to be the most promising, with continuously growing sales in China. For success in India, a more advanced infrastructure is necessarily required. People in the Middle East and the U.S. prefer cars for long-distance travels and both geographical markets already have solid infrastructure. The situation in Europe will differ from country to country. And Japanese rely on public transportation without seeing cars as status symbols.

3) Changes in customer behavior, generational transition and sustainability awareness

Younger generations prefer having access over purchasing a vehicle because they see cars as a way to get from point A to B, not a status symbol, which is different from Baby Boomers and Generation X. Today's world allows one to rent a better vehicle when needed, replacing the necessity to purchase them. Furthermore, this might lead to people focusing on quality (fewer, better cars) over quantity.

Newer generations are aware of sustainability and the harmful impacts of cars and fashion on the environment. People have replaced status cars with statement cars (such as Tesla) to show that they agree with not causing harm to the planet, demonstrating that using an EV is a good option. EVs used to be ugly, but since people like nice things, the sleek design has changed this perception.

4) The impact of emerging trends (sustainability, deglobalization and sharing economy)

Customers usually struggle with sustainable materials because they are not as pleasing and comfortable as regular ones. They must reach the same level of attractiveness to be widely accepted. UNWHIs will continue to purchase their supercars, not sharing them. However, this might work for the second-hand market, which is already developed, and brands emphasize this market due to financial and ecological reasons.

The market growth is correlated with consumers' spending. Renting is aspirational for people who would like to buy supercars but cannot afford them. The current perception is that you only rent if you cannot afford it. This will change in the future, when people will rent because they can, and by overcoming this stereotype, even the wealthy will do it. The trend of consuming without owning will emerge.

5) The key challenges ahead

The future means of transportation will influence the market. Autonomous vehicles will become prevalent. ICEs will be kept as a source of brand identity, making them collectable pieces with much higher price points. This will create an aspiration for customers to have them. By moving towards artificial intelligence, we will become more focused on old, hand-made things. There will still be a place in the future for supercars.

6) Innovations and advancements

Autonomous driving will change the way we move. Cars will become digitalized, equipped with large screens. The driving experience will be more fun, entertaining and immersive. The future experience onboard might include interactions with the surroundings, such as matching appropriate music, lights, and scents, for example, when riding through a forest.

7) Sources of successful differentiation strategy

The definition of luxury includes a continuous desire for further innovation and exclusivity. However, this is not always the case. Luxury businesses are usually among the last to adapt to the latest trends. There is a need to redefine the pleasure of driving, as supercars are beautiful objects, but pleasure from driving is essential. When cars become self-driving, the need for finding fun onboard will emerge.

New entrants are not likely to affect the market. Their strength lies in being technologically advanced, but not as appealing as established brands. They differ from well-known supercar makers which have their iconic models and status. Supercar makers need to be innovative while transitioning from ICEs to EVs, capitalizing on technology utilization.

End of expert 6

Expert 7

25th of April 2023

Luxury brand consultant with expertise in automotive industry

1) Current state of the market and its definition

There is a rapid growth in demand for luxury cars. More people can afford luxury cars, and more UHNIs are getting richer and spending more on luxury items.

Different countries have different definitions of supercar markets. In some countries, it might include brands such as BMW and Lexus, while in more developed markets it includes brands like Lamborghini, Bugatti, Ferrari, Aston Martin, and McLaren.

The Covid was a major event when the luxury car market dropped, but luxury brands were able to recover quickly from such disruptions. Since then, luxury companies have been performing extremely well. EVs are becoming increasingly popular, and this is important for

all brands. Supercar brands want to maintain ICEs and the standard of driving experience and noise.

2) The main drivers of the growth in future

It will depend on demographics and the rising number of UHNWIs. India and China are expected to experience the highest growth, with Asian countries overall having greater growth than the Western world and the Middle East.

Carmakers are engaging in more active cross-industrial collaborations to make more money and diversify revenue streams. Brands are also working to increase the presence of the brand across channels to increase the desirability of the brand. Carmakers are shifting towards SUVs, aiming to deliver a sportscar experience. In many countries, there is not enough infrastructure to drive sportscars, but people have the means to afford SUVs, which allows them to do so.

3) Changes in customer behavior, generational transition and sustainability awareness

A behavior of customers varies significantly within generations. Gen Z is interested in shared services and renting. They do not want to spend money on purchases, but having access is enough. When you look at the materials used in supercars, which are very rare and resource-intensive, there are a lot of problems. Sustainability in luxury is an area where no brands will be super sustainable anytime soon. One way is going electric since luxury supercars burn a lot of fuel, which is unsustainable. A bridge between sustainability, quality, and experience must be found.

4) The impact of emerging trends (sustainability, deglobalization and sharing economy)

There are a few businesses that offer rentals, which will do phenomenally well in terms of the secondary market, better than in the new market. The attractiveness of the sharing economy depends on the generation and country. Baby Boomers and Gen X find sharing luxury supercars unimaginable, as they want privacy and comfort. However, later Millennials and Gen Z, who have very similar traits, will be interested in these things.

Deglobalization will not really affect the luxury supercar market. They are not mass brands, but low-volume brands. They are doing okay with stock and have a strong brand identity. They are not facing any troubles compared to mass brands as the Chinese brands will not pose a threat to them.

5) The key challenges ahead

Transition to EVs will differ in individual countries. Another key aspect is infrastructure; producing an EV is not a problem, the real problem is the needed infrastructure. By 2050, it will not be possible to remove ICEs. This is very complicated situation for supercar makers as their brand identity is built on the noise and enjoyment from driving ICEs.

6) Innovations and advancements

One of the biggest innovations will be autonomous vehicles as this is where the market is heading. In the more distant future, we could see modifiable cars (from SUVs to sports cars). Materials will depend on culture. In this market, you cannot be 100% sustainable or vegan. If the client spends a lot of money and wants unique solutions, you need to offer them, otherwise another brand will. If the client wants sustainability, then you should show them options (such as natural materials or synthetic). Looking at these price points, it will not happen soon. But in the future, they will adapt later, which is typical for the luxury industry.

7) Sources of successful differentiation strategy

To be successful globally, carmakers need to be glo-cal and authentic. Customization is key as it offers higher profitability and desire for exclusivity from clients. Clear marketing built on brand heritage and identity is another key aspect. Furthermore, this is an extremely innovative segment, so delivering the best engineering solutions and experience will remain critical. Lastly, incorporate sustainability requirements into your brand.

E.g., Ferrari and other supercars are status symbols. It is not about functionality, but about aspirational, symbolic values and experience. There is a difference between new entrants and old, well-known brands with heritage, and they will not change the market.

End of Expert 7

Expert 8

26th April 2023

Experienced IT and innovation expert in the automotive industry, having held roles such as IT manager, and innovation manager at Porsche Holding (Lamborghini, Bentley and Porsche)

1) Current state of the market and its definition

Luxury brands have always been and will remain successful. The situation was even clearer when UNHWIs could not spend money on their hobbies during the Covid-19 pandemic and

the demand for supercars increased. The true luxury market starts at the top models of Porsche and includes better representation of brands such as Lamborghini, Bentley, etc.

Among the most important recent events is Covid-19, which disrupted the manufacturing of chips and components needed for cars. Furthermore, production of EVs or hybrids is further enhanced by environmental legislation and requirements.

2) The main drivers of the growth in future

Based on the demographic and economic indicators correlated with the quality of life, the fastest growth is anticipated for the Asian market. More specifically, countries like China, the U.S., Africa will experience rapid growth.

3) Changes in customer behavior, generational transition and sustainability awareness

Generations Z and Y prefer access over ownership of cars, as they are no longer motivated by the social status associated with owning things. The market will change according to their different consumer habits. On the other hand, ultra-wealthy individuals from Generation Z will continue to purchase supercars to show off. However, these wealthy Gen Zers will prefer high-tech electric supercars over ICE cars. Additionally, operating leasing will become more common helping to fight emissions, and more direct and online sales channels will emerge.

4) The impact of emerging trends (sustainability, deglobalization and sharing economy)

It is impossible to anticipate the impact of deglobalization. There is an observable tight cooperation between the EU and the USA. This might have been triggered by the VW Group's Dieselgate scandal, as this collaboration allowed them to avoid enormous fines. Therefore, a transition to EVs seems to be a logical step as carmakers no longer need to pay emission fines and can diversify their portfolios and cut costs as production of EVs is cheaper.

There is a future for carsharing models among regular mass cars, where people do not mind others driving their vehicles. However, this will not work for luxury supercars due to their unique nature, such as the emotions attached to the brand. Furthermore, luxury vehicles are not intended to be shared, as they are highly valued. Besides, supercar owners are not in financial need of carsharing models, and these vehicles are more than just means of transportation.

5) The key challenges ahead

The future will contain a space for ultra-expensive, heavily regulated ICE supercars. However, they will be rarer due to environmental taxation. Such vehicles will become collectables and status symbols. Moreover, the use of sustainably produced synthetic fuels will emerge, allowing ICEs to remain. In addition, an even more environmentally regulated market with the aim of reducing CO₂ will occur, with partially or fully electric vehicles. Consumer behavior in this market will be different, attracting younger generations who will not see supercars as a status symbol.

6) Innovations and advancements

The cars will become more intuitive and user-friendly. Touchless technology and compatibility with phones will dominate the way we use them. Furthermore, autonomous vehicles will become prevalent delivering better experience. Currently, the legislation and infrastructure present main game-stoppers as most of the functions are already implemented in vehicles but we are not allowed to utilize them.

The utilization of genetic modifications will emerge allowing more personalized experience (e.g., changing colors) to deliver improved features. E.g., genetically modified leather, causing no harm to environment, will replace traditional leather in interiors.

7) Sources of successful differentiation strategy

Supercar makers will need to remain flexible and agile to swiftly identify emerging trends. Furthermore, they will need to incorporate the latest technological innovations that are aligned with their brand identity and heritage. Carmakers are predicted to become hi-tech software companies, with possible mergers between them and giants like Apple and Google.

New brands may influence the industry, but it will depend on creating aspiration. Customers may start purchasing them if they offer a sleek design, an excellent experience, and the latest features. This might be particularly attractive to younger generations, for whom tradition and heritage are less important.

End of Expert 8